DRAFT
P-SITE CHARACTERIZATION REPORT
CORNING REFRACTORIES PLANT

NYSDEC Project ID 851048, Corning, New York

SETTLEMENT CONFIDENTIAL
INADMISSIBLE IN THIS OR ANY OTHER PROCEEDING

Prepared for
Corning Incorporated
Corning, NY

Prepared by

31 West 34th Street
Suite 7196
New York, NY 10001

October 11, 2024

Affiliated with Integral Consulting Inc.

CERTIFICATION

I, Jeffrey Marsh, P.E., certify that I am currently a Qualified Environmental Professional as defined in 6 NYCRR Part 375 and that this Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

Signature

Date

CONTENTS

CERTIFICATION ..... **ii**

LIST OF FIGURES ..... **v**

LIST OF TABLES ..... **vi**

ACRONYMS AND ABBREVIATIONS ..... **vii**

EXECUTIVE SUMMARY ..... **ix**

1 INTRODUCTION **1-1**

1.1 CHARACTERIZATION REPORT ORGANIZATION 1-1
1.2 BACKGROUND 1-2
1.3 REFRACTORIES OPERATIONAL HISTORY 1-2
1.4 ENVIRONMENTAL SETTING 1-3
1.4.1 Land Use 1-3
1.4.2 Topography and Drainage 1-4
1.4.3 Geology and Soils 1-4
1.4.4 Hydrogeology 1-5

2 PREVIOUS INVESTIGATIONS **2-1**

2.1 PHASE I/II ENVIRONMENTAL SITE ASSESSMENTS 2-1
2.2 FIELD RECONNISSANCE AND DECOMMISSIONING ACTIVITIES 2-3

3 CONCEPTUAL SITE MODEL **3-1**

4 CHARACTERIZATION ACTIVITIES **4-1**

4.1 BOUNDARY SURVEY 4-1
4.2 GEOPHYSICAL SURVEY 4-1
4.3 GPS MAPPING 4-1
4.4 COMMUNITY AIR MONITORING 4-1
4.5 WASTE HANDLING 4-2
4.6 FIELD REPORTS 4-2
4.7 SOIL AND GROUNDWATER ACTIVITIES 4-2
4.7.1 Soil Sampling and Subsurface Boring Activities 4-3
4.7.2 Monitoring Well Installation 4-5
4.7.3 Groundwater Monitoring 4-7
4.8 WORK PLAN DEVIATIONS 4-7
4.9 QUALITY ASSURANCE AND QUALITY CONTROL 4-8
4.10 LABORATORY ANALYSIS AND DATA VALIDATION 4-9

5 DATA MANAGEMENT AND DUSR 5-1

6 NATURE AND EXTENT OF CONTAMINATION 6-1

6.1 SOIL BORING RESULTS 6-1
6.2 GROUNDWATER RESULTS 6-6

7 SITE CHARACTERIZATION FINDINGS 7-1

7.1 SUMMARY 7-1
7.2 FATE AND TRANSPORT/MIGRATION PATHWAYS 7-3
7.3 EXPOSURE PATHWAYS 7-3
7.4 CONCLUSIONS 7-4

8 REFERENCES 8-1

Appendix A. Property Boundary Survey Map

Appendix B. Weekly Update Reports

Appendix C. Disposal Documentation

Appendix D. Photo Log

Appendix E. Boring/Monitoring Well Logs

Appendix F. ~~Laboratory Reports~~Well Development Logs and Groundwater Sampling Logs

Appendix G. Final Data Usability Summary Report

Appendix H. Laboratory Reports

LIST OF FIGURES

Figure 1-1. Location of Corning Refractories Plant

Figure 1-2. Former NYSEG MGP Boundaries and Features

Figure 2-1. Plant Features

Figure 4-1. Sample Locations

Figure 6-1. Shallow Soil Sample Exceedances

Figure 6-2. Subsurface Soil Boring Sample Exceedances

Figure 6-3. Groundwater Sample Exceedances

Figure 7-1. Historical and Planned Sample Locations

LIST OF TABLES

Table 4-1. Sample Locations

Table 4-2. Groundwater Elevation Data

Table 6-1. Validated Analytical Results—Soil

Table 6-2. Validated Analytical Results—Groundwater

ACRONYMS AND ABBREVIATIONS

ACM	asbestos containing material
bgs	below ground surface
CAMP	community air monitoring plan
Colden	Colden Corporation
Corning	Corning Incorporated
CSM	conceptual site model
DUSR	data usability summary report
EDD	electronic data deliverable
ESA	environmental site assessment
Eurofins	Eurofins TestAmerica Laboratories, Inc. in Buffalo, New York
GPS	global positioning system
IDW	investigative-derived waste
Integral	Integral Engineering, P.C.
MGP	manufactured gas plant
NAPL	nonaqueous-phase liquid
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSEG	New York State Electric & Gas Corporation
PAH	polycyclic aromatic hydrocarbons
PCE	tetrachloroethene
PFAS	per- and polyfluoroalkyl substances
PID	photoionization detector
PVC	polyvinyl chloride
QAPP	quality assurance project plan
QA/QC	quality assurance and quality control
REC	recognized environmental condition
Refractories	Corning Refractories Plant
SCO	soil cleanup objective

SVOC	semivolatile organic compound
TAL	target analyte list
TCE	trichloroethene
TCL	target compound list
TCLP	toxicity characteristic leaching procedure
UIC	underground injection control
USGS	U.S. Geological Survey
VOC	volatile organic compound
Work Plan	P-Site Characterization Work Plan: Corning Refractories Plant

EXECUTIVE SUMMARY

Integral Engineering, P.C. (Integral), on behalf of Corning Incorporated (Corning), has prepared this Site Characterization Report (Report) to provide the results of the 2022 and 2023 investigation work performed at the former Corning Refractories Plant (Refractories) (New York State Department of Environmental Conservation [NYSDEC] Site No. 851048). Refractories is located at 1 Front Street in Corning, Steuben County, New York (the Property). The site characterization was conducted in accordance with the NYSDEC-approved P-Site Characterization Work Plan (Work Plan; Integral 2022), and included a boundary survey, geophysical survey, drilling of soil borings, logging of soil cores, installation of monitoring wells, and soil and groundwater sampling.

The investigations performed to date, including the Phase I and Phase II site investigations (Haley & Aldrich 2014 a,b) and this site characterization, have included 33 soil sample locations and 12 groundwater sample locations for a total of 107 soil samples and 16 groundwater samples collected for laboratory analysis. These investigations provide consistent findings and offer a comprehensive characterization of subsurface and groundwater conditions at the Property. ~~The results of these investigations serve to fully delineate the nature and extent of any impacts on the Property (excluding those associated with the former manufactured gas plant [MGP] facility). The findings of these investigations confirm that there are no impacts associated with the former Refractories operations that pose a threat to human health or the environment. The site characterization has fulfilled the scope of work required under the Work Plan, and the results indicate that a remedial investigation is not warranted on the Property. Within the former MGP footprint, the NYSEG MGP site investigation includes data collection to further characterize impacts associated with the former MGP facility~~The requirements of the Site Characterization, as per the NYSDEC-approved Site Characterization Work Plan, have been met and the Site Characterization is complete.

The results of the site characterization are summarized below:

- The Property is underlain by ~~generally high-quality~~ construction fill material that largely consists of sand and sandy silt with incidental ash or building brick, typical of industrial fill material. There is no clear layer or pattern of ash, brick, and/or glass that may be associated with Corning-related material used on the Property. The ~~high-quality~~ construction fill present at the Property was likely brought in during historical construction activities and is not associated with historical disposal or floodplain development. Non-native fill materials such as incidental ~~red building~~ brick (primarily red building brick), slag, glass, ash, and coal were observed and documented in the boring logs in discontinuous zones or pockets of material, not consistent with disposal.
- There are widespread occurrences of low-level exceedances of the relevant soil cleanup objectives (SCOs; industrial and protection of groundwater) for metals and polycyclic

aromatic hydrocarbons (PAHs) that are consistent with historical industrial use. Potential sources include:

  - Metals and PAHs associated with the former New York Central Railroad along and adjacent to the former rail tracks and historical foundry operations.
  - Metals and PAHs associated with industrial fill containing various types of incidental ash and combustion byproducts, which are typically observed at historical industrial-use locations.
  - PAHs, volatile organic compounds, and metals associated with the former ~~MGP~~manufactured gas plant (MGP) facility in the southeast corner of the Property, and potentially migrating horizontally and vertically through the subsurface.

- There are sporadic elevated lead concentrations that appear to be associated with observations of incidental ash in fill material.
- There is no pattern of SCO exceedances horizontally or vertically in the soil column, indicating the soil has been reworked over time, and that specific sources (e.g., cracks in impervious surfaces or concrete or masonry that is not completely watertight) of historical or ongoing contamination are not likely (with the exception of the former MGP facility).
- The constituents observed in the soil are consistent with those found during previous investigations. There is no indication of use or disposal of hazardous substances beyond the limited use understood from historical operations (Corning 1967).
- Two soil boring locations seem to have a different analytical signature, SB4 and SB6. SB4 was located on the northern boundary of the Property and installed inside one of the buildings. Shallow fill was observed in this boring from 0 to 2.5 ft below ground surface (bgs). The laboratory results showed high levels of lead and dibenz[*a*,*h*]anthracene. SB6 was drilled in the grass on the southeastern corner of the Property. This location is associated with a historical MGP. The analytical results at SB6 have multiple PAH and metals exceedances, which would be associated with material from the former MGP operations. The surface and subsurface of the southeastern corner in the vicinity of the SB6 location is within the footprint of the MGP site characterization.
- There were limited groundwater exceedances found during the site characterization, and only for sodium, with one exception. A single benzene exceedance was observed in one location, and that was notably within the footprint of the former MGP site. These results confirm the lack of current or future mobility of the substances detected in the soil investigation and the matrix in which they were detected (i.e., no observations of indications of the presence of product/nonaqueous-phase liquid); none of the constituents that exceeded the protection of groundwater SCO in soils were observed to exceed the Class GA groundwater water quality standard.

- There were no direct observations of evidence of spills of regulated substances in soils or dissolved-phase plumes in groundwater, or indirect evidence that would be indicated by elevated concentrations declining with distance away from a potential source to groundwater.
- The relatively uniform elevated arsenic signature across the Property suggests some influence on the soil chemical characteristics attributable to the black shales native to the region, which are enriched in sulfides and metals such as arsenic and cadmium (Paikaray 2012; Duan et al. 2020). Lead is also a known element in the minerals commonly associated with such rocks in the region. Evidence of the presence of these and similar source rocks (e.g., silt particles, subangular gravels) in soil borings was observed at multiple locations.

The generally limited soil and groundwater exceedances and the presence of concrete slabs~~,~~ and pavement~~, or grass cover~~ that span ~~the totality~~approximately 80–85 percent of the Property limit contaminant fate and transport pathways. There is limited ~~or no~~ water infiltration, and therefore limited opportunity for ~~and no indication of~~ horizontal or vertical transport of contaminants through the soil. The limited transport of contaminants through the soil to groundwater is confirmed by the general lack of ~~meaningful~~ water quality exceedances in groundwater.

Potential exposure pathways at the Property could include contact with soil and/or groundwater. However, it should be noted that the Property is located within a secure fenced area, and the concrete slabs, pavement, and grass cover are present over the entirety of the Property, thus limiting current exposure to soil. Exposure to groundwater is an incomplete pathway ~~due to the general lack of water quality exceedances in~~because groundwater~~.~~[1] is not used for potable purposes at or around the site.

[1] ~~The one exception is benzene in the former MGP footprint; this area is part of the New York State Electric & Gas Corporation MGP site investigation.~~

1 INTRODUCTION

Integral Engineering, P.C. (Integral), on behalf of Corning Incorporated (Corning), has prepared this Site Characterization Report (Report) to provide the results of the 2022 and 2023 investigation work performed at the former Corning Refractories Plant (Refractories) (New York State Department of Environmental Conservation [NYSDEC] Site No. 851048). Refractories is located at 1 Front Street in Corning, Steuben County, New York (Figure 1-1) (the Property). The site characterization was conducted in accordance with the NYSDEC approved P-Site Characterization Work Plan (Work Plan; Integral 2022), and included a boundary survey, geophysical survey, drilling of soil borings, logging of soil cores, installation of monitoring wells, and soil and groundwater sampling.

1.1 CHARACTERIZATION REPORT ORGANIZATION

This Report follows the guidance for investigation work plans as described in Section 3.3 of DER-10 (NYSDEC 2010). This Report includes the following:

- Section 1—Introduction
- Section 2—Previous Investigations
- Section 3—Conceptual Site Model
- Section 4—Characterization Activities
- Section 5—Data Management and DUSR
- Section 6—Nature and Extent of Contamination
- Section 7—Site Characterization Findings
- Section 8—References.

The following appendices are included in this Report:

- Appendix A—Property Boundary Survey Map
- Appendix B—Weekly Update Reports
- Appendix C—Disposal Documentation
- Appendix D—Photo Log
- Appendix E—Boring/Monitoring Well Logs
- Appendix F~~—Laboratory Reports~~—Well Development Logs and Groundwater Sampling Logs

- Appendix G—Final Data Usability Summary Report
- Appendix H—Laboratory Reports. ~~Final Data Usability Summary Report.~~

1.2 BACKGROUND

In 2015, NYSDEC classified the Property as a State Superfund Program Classification P (potential) site. The P site classification was based on the findings of Phase I/II environmental site assessments (ESAs) performed in 2014 (Haley & Aldrich 2014 a,b); a 1967 report, *Report on Industrial Waste Water Discharges to the Chemung River from Corning Glass Works Plants Located in Corning, New York*~~,~~ (Corning 1967); and an environmental spill reported to NYSDEC Spills Division in June 2014 (Spills #1402937) (NYSDEC 2015). This site characterization was performed in accordance with DER-10 to determine if the Property poses a threat to public health or the environment and if further investigation is required.

1.3 REFRACTORIES OPERATIONAL HISTORY

Refractories manufactured refractories materials from the 1930s until it was shut down in 2014. Operations consisted of mixing, forming, baking, and finishing refractory-type material (i.e., temperature-resistant material such as bricks to be used in kilns or furnaces) and using ceramic material in the production of cast items such as heater panels and drain casts (Corning 1967).

Materials used in the previous Refractories manufacturing process include alumina, zircon, and clay (Corning 1967). Rinse water from operations was discharged to dry wells, and water from cooling operations was discharged to floor drains and/or sump pits (Corning 1967). Most of the waste/rinse water contained dry solid material (listed above) consistent with Refractories' operations. The water-borne wastes from ~~the~~ Refractories~~y Plant~~ were discharged to the Chemung River through a 12-in. pipe identified as Outfall #13 (Corning 1967). The waste discharged included wash water and floor scrapings, which was first transferred to a settling tank in the floor that then overflowed to the storm sewer. Cooling water and floor scrapings from the Ball Mill were transferred to a settling tank in the floor, and overflow from this tank discharged to Outfall #13. Cooling water was transferred to waste drains, and then trench drains connected to a manhole (cleaned every 3 months); overflow from the manhole led to a catch basin (cleaned every 6 months) and then to Outfall #13 (Tables 5 and 6, Corning 1967). Some solvent and paint strippers were generated from the forming room and mineral solids from the casting room. The finishing area operations had minimal use of petroleum products (water soluble oil) for machine and cutting equipment (Integral 2022). ~~The~~ Refractories ~~Plant~~ had many drains/drainage structures, not all of which discharged to the Chemung River, as shown on the Corning Refractories Plant Multi-Sector General Permit (NYR00E145) Storm Water Map included in the Risk Logic Inc. Property Loss Prevention Report, which is Appendix B of the Haley & Aldrich (2014a) Phase I Environmental Site Assessment. The City of Corning

issued an Industrial Sewer Use Permit for Refractories' discharges to the sewer system (Permit No. SIU-04, effective 2/1/2012–2/6/2017) and NYSDEC issued a SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity for Refractories' stormwater discharges (GP-0-12-001) (Haley & Aldrich 2014a).

Another industrial facility that operated on the southeast portion of the Property was a former manufactured gas plant (MGP) with large gas holders (Figure 1-2). This portion of the Property is part of the investigation and sampling by New York State Electric & Gas Corporation (NYSEG) under NYSDEC Site #851035 Corning Chestnut Street Former Manufactured Gas Plant Site.

1.4 ENVIRONMENTAL SETTING

The Property consists of a ±102,882-ft^2 slab-on-grade structure situated on 3.87 acres of land. The Property is located on the eastern side of Bridge Street, on the south side of Front Street and approximately 350 ft south of the Chemung River (Figure 1-1). Refractories comprises 13 interconnected buildings/additions and was used by Corning for the manufacture of refractory brick for Corning use. Refractory manufacturing occurred between the 1930s, when Corning acquired the property, and 2014. Historically, the Property was used for industrial and residential purposes since the late 1800s. The historical industrial uses include a foundry, railroad tracks, and lumber yard (Haley ~~and~~& Aldrich 2014a).

1.4.1 Land Use

The Property is located in a primarily commercial area in the City of Corning. The Property is composed of two different tax parcels, both of which are zoned as business development by the City of Corning. The northwestern portion of the property that contains Refractories is approximately 3.21 acres, and the City property class is high-tech manufacturing (Tax Map ID 317.08-01-057.000). The southeastern portion of the Property, which was separated by the former New York Central Railroad line until the mid-1990s, is approximately 0.66 acre, and the City property class is vacant land in commercial area (Tax Map ID 317.08-01-053.200) (Integral 2022). The current industrial manufacturing end use is acceptable under business development zoning. There are no current plans to change the use of the Property.

The Property has undergone considerable changes in industrial use and development since the late 1880s. In particular, the Property has a long history of railroad operations (construction, maintenance, and demolition of railroad tracks and ancillary infrastructure, and locomotive, freight, and other railway vehicle transportation on and across the property) first recorded in the 1893 Sanborn map. The 1893 Sanborn map showed multiple railroad tracks bisecting the Property, entering from the southwest corner near Bridge Street, turning northward, and exiting at the northeast corner. The multiple rail tracks converged down to one track to go over the

Chemung River on a rail bridge. The rail line was still present dividing the Property through at least 1968 as shown on the 1968 Sanborn map and 1968 aerial image. The next aerial image was taken in 1995 and shows the Property underwent significant changes during the 27-year period. There was no longer a rail yard on the western side of Bridge Street, and the railroad tracks that bisected the Property had been removed along with the rail bridge over the Chemung River (Integral 2022).

The properties adjacent to the Property include other parcels zoned as business development and commercial. The parcel north of the Property is zoned as business development (City of Corning 2022) and consists of a parking area and Front Street. Further north, the land adjacent to the Chemung River is zoned as public/conservation land and includes the NYS Flood Control Levee (City of Corning 2022). The property immediately east of the Property includes a New York State Electric & Gas Corporation electric substation, parking lots, and Corning Headquarters building, all zoned as business development (City of Corning 2022). The properties immediately south of the Property include railroad tracks beyond which is a credit union, Market Street, and public parking lots zoned as business development and commercial. Bridge Street is located immediately west of the Property and beyond is Wegmans Food Markets Inc. zoned as commercial (City of Corning 2022).

1.4.2 Topography and Drainage

The Property is generally flat, with gentle slope to the north toward the Chemung River. The Corning, New York, 1976 U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle map indicates that the Property is approximately 934 ft above mean sea level.

The USGS land cover maps classify the area land cover as "high intensity developed" (https://www.mrlc.gov/viewer/). The Property is south of the Chemung River and the flood control berm. The Property is not located within the Federal Emergency Management Agency 100-year or 500-year flood zones (Integral 2022).

1.4.3 Geology and Soils

The Property is located in the Chemung River valley and contains predominantly sand, silt, and gravel deposits of glaciofluvial origin and more recent alluvial deposits (Miller et al. 1982). In the vicinity of the Property, alluvial silt, sand, and gravel overlie high-permeability glacial outwash sand and gravel that is present at a depth of approximately 16 to 20 ft below ground surface (bgs). An approximate 10-ft-thick lens of low-permeability lake silt and clay is present within the glacial outwash sand and gravel throughout the site and much of Steuben County (Miller et al. 1982). At the Property, the lake silt and clay lens is present at approximately 26 to 30 ft bgs.

Bedrock underlying the area consists of flat-lying shale, limestone, siltstone, and sandstone that was eroded by preglacial drainage and is present in the vicinity of the Property at approximately 100 ft bgs (Olcot 1995). The mineralogic composition of the regional siltstone and shales is known to contain trace concentrations of naturally occurring metals, including but not limited to arsenic and lead. (Paikaray 2012; Roen 1984).

The presence of fill has been observed at the Property: "Fill soil comprised predominantly of reworked soil with lesser amount of ash derived from coal and small to trace amount of red brick fragments at some locations" (Haley & Aldrich 2014b).

1.4.4 Hydrogeology

The saturated portions of the Chemung River valley deposits are recharged principally through the infiltration of precipitation. This valley-filled glacial/alluvial aquifer is generally unconfined (i.e., the water table forms the upper boundary of the aquifer) and saturated approximately to the elevation of nearby rivers. Groundwater in the valley-filled glacial/alluvial aquifer generally flows toward and discharges to principal streams (Olcot 1995).

2 PREVIOUS INVESTIGATIONS

Previous studies at the Property have included Phase I and Phase II ESAs, and field reconnaissance and decommissioning work completed in 2021. The findings of these investigations are summarized below.

2.1 PHASE I/II ENVIRONMENTAL SITE ASSESSMENTS

Haley ~~and~~& Aldrich, on behalf of Corning, performed Phase I and Phase II ESAs of the Property[2] (Haley ~~and~~& Aldrich 2014a,b). The Phase I ESA identified recognized environmental conditions (RECs) relating to former operations of Refractories, as well as potential impacts from historical activities on and off the Property. The RECs included ~~subsurface~~an undocumented site drainage system with five drainage structures ~~identified~~shown as ~~suspected~~unconfirmed/possible dry wells on a drawing provided by Corning, the unknown nature of surface soil fill material on the Property from historical use and development, and the possibility for the presence of waste material associated with a historical MGP near the Property (Figure 1-2~~), and reported spills in the general area of the Property associated with chlorinated solvents (trichloroethene [TCE] and tetrachloroethene [PCE]) from unidentified sources (Haley and Aldrich 2014a).~~) (Haley & Aldrich 2014a).

A Phase II ESA was performed to assess the potential for release of substances associated with the RECs identified in the Phase I ESA. Key findings of the Phase II ESA are ~~quoted below~~ as follows:

- "Fill soil comprised predominantly of reworked soil with lesser amount of ash derived from coal and small to trace amount of red brick fragments at some locations. This material appears characteristic of fill historically used during development and was encountered throughout the Site at depths of 4 to 10 feet across the ~~Refractories p~~Property. In general, results of composite samples intended to characterize the fill strata did not indicate detectable levels of the analyzed parameters with exception of slight exceedances of several naturally occurring metals. These detections appear to be indicative of ambient conditions and not related to the Refractories operation. Several discreet fill samples were also collected targeted to the locations where elevated photoionization detector (PID) readings and/or black staining was observed during drilling indicating potentially impacted soil. The results of discreet fill samples did not indicate detectable levels of the analyzed parameters with exception of several metals and semi-volatile organic compounds (SVOCs). A cyanide detection and several inorganics detections were detected above the comparison criteria as were the SVOCs. These substances are characteristic of MGP waste that were obtained in the area of the P

[2] The Phase II ESA included the Refractories Property as well as a small area off-site to the north.

~~Refractories p~~roperty where the historic MGP waste is identified, and do not appear associated with the Refractories operation.

- Contaminants were detected in soil and groundwater on the property that appear linked to MGP waste based on observations of naphthalene/tar-like odors and low level PID readings during drilling. Cyanide was also detected and is linked to MGP as related to ferro-cyanide generation from gas filtration associated with the gas purification process. MGP impacts may extend broadly within the ~~Refractories p~~Property based the Phase II ESA. We understand a responsible party other than Corning has been identified who will undertake the investigation and remediation of MGP waste with Corning's review and approval. Nevertheless, Corning should anticipate that future investigation and remediation of the MGP waste may significantly affect/disturb the P~~Refractories p~~roperty as well as other Corning property. The scope and timing of these activities will need to be taken in account relative to demolition and future development of the ~~Refractories p~~Property.
- Five drainage interior and exterior structures are shown on a figure provided by the facility that are identified as "suspected dry wells" in the Phase I ESA. Facility personnel were not certain of the origin of the figure or information depicted or the purpose and function of these structures. One drainage structure had solid sidewalls and an open bottom, two other contiguous structures appear to be interconnected and may function as a dry well possibly associated with stormwater discharge; one structure appears to have a solid concrete bottom and sidewalls (apparent sump); and one of the interior structures was previously closed and sealed/covered by concrete level with the floor surface. Additional assessment would be required to confirm construction of these structures as dry wells. Soil and groundwater sampling at these locations were mostly reported as non-detect with the exception of two metals and certain SVOCs detected in samples obtained within the drainage structures. These detections appear incidental lacking detection of any of these or other substances in soil and groundwater samples obtained from adjacent and nearby borings and temporary wells.

  From a regulatory perspective, unless further confirmation can be obtained to determine that the purpose and function of these structures are not as dry wells, regulatory exposure may be needed to notice the closure of these structures under the USEPA Underground Injection Control (UIC) program. This program requires filing of a work plan with advance approval by USEPA that provides pertinent background and describes the closure and assessment process for these structures. Filing of a closure report after the work is done is also required. In our experience with this program, USEPA will copy/inform the New York State Department of Environmental Conservation (NYSDEC) Division of Water on communications who may or may not choose to become involved or provide additional requirements on the closure process. While results of the Phase II sampling within and/or directly adjacent to each of the drainage structures do not indicate presence of environmental impact from prior use,

closure may necessitate regulatory exposure and response to the extent that additional investigation or closure/remedial action is required by the agencies.

- The comprehensive suite of volatile organic compounds (VOCs), including the chlorinated substances associated with the reported spills in the area of the Property, ~~Refractories facility~~ were analyzed in soil and ground water samples obtained broadly across the P~~Refractories p~~roperty including in soil samples obtained from within the suspected dry wells. The ground water samples were obtained from locations within and at each outside perimeter boundary of the P~~p~~roperty. Other than the petroleum related BTEX compounds obtained in the MGP area there were no VOCs detected above laboratory detection limits in any of the samples obtained during this investigation.
- Apparent petroleum was observed during the Phase II boring program ~~that~~and was reported to the NYSDEC Bureau of Spill Response upon discovery ~~and~~. NYSDEC Spill File Number 1402937 was assigned to this matter. ~~Response and/or closure of this Spill File will require follow-up and reporting to NYSDEC to document~~ Based on the ~~nature of the apparent spill, its significance relative to NYS standards, and whether additional~~Phase II investigation ~~or remedial action is warranted to mitigate the condition. Based on this Phase II, it appears the conditions reported are~~, the spill appeared to be linked to ~~the~~ MGP ~~waste~~residuals and thus will be investigated and managed by the party responsible ~~party. Any future requirements by NYSDEC~~ for ~~further investigation to support closure of the associated Spill File will be determined based on future Corning submittals and NYSDEC concurrence with the findings, which at this point indicate the reported petroleum~~the former MGP site. The spill ~~to be associated with MGP residuals~~record was closed on May 12, 2022.
- The Phase II ESA included a pre-demolition asbestos survey of the Refractories building and fixed equipment contained therein. The survey was performed by Colden Corporation (Colden) of Syracuse, New York under subcontract to Haley & Aldrich. Results of this survey which identifies the location, quantity, and condition of asbestos containing material (ACM) is contained in an asbestos survey report by Colden dated 31 July 2014. Colden identifies several ACMs with recommendations for abatement of this material and provided an estimate for abatement of the ACM as necessary for demolition of the Refractories building dated 4 August 2014.The Colden reports have been provided to Corning under separate cover~~."~~.

2.2 FIELD RECONNISSANCE AND DECOMMISSIONING ACTIVITIES

Integral performed a field reconnaissance and visual inspection of the Property on April 13, 2021. The objective of the reconnaissance was to confirm the locations of the dry wells for sampling. The structures identified as "suspected dry wells" in the Phase II ESA (Haley ~~and~~& Aldrich 2014b) were inspected to determine whether they were used as dry wells (Figure 2-1). The following observations were made:

- Suspected Dry Well #1—This structure is located in the southeast portion of Building #1. It has a dirt bottom below concrete structure walls with little accumulated material. This structure was confirmed to be a dry well. No material was observed in this dry well.
- Suspected Dry Well #2—This structure is located in the north part of Building #1, which conflicts with the location presented in the Phase II ESA. It has brick side walls and a hard bottom (likely brick) with accumulated material. This structure was confirmed not to be a dry well.
- Suspected Dry Wells #3&4—This structure is located outside of Building #7. It is a single structure with one cover and an internal cinder block baffle. The bottom appears to be soft with accumulated material. The bottom of the suspected dry well (3&4) was probed, and a hard bottom could not be identified. This structure is suspected to be a single dry well. This suspected dry well is referred to as Dry Well #3 in the remainder of this Report.
- Suspected Dry Well #5—This structure is located in Building #8. It has concrete sidewalls and a concrete bottom. This structure was confirmed not to be a dry well.
- A crawl space beneath the slab in the vicinity of the boundary between Buildings #6 and #9 was observed during the field reconnaissance. This crawl space is located in the northwest corner of Refractories. It is composed of a solid brick wall, three open sides, and a hard bottom (likely concrete). Solid, light-colored material was observed in this crawl space.

Samples from the material in each structure were collected for the purposes of waste characterization and laboratory analyses included toxicity characteristic leaching procedure (TCLP) metals, TCLP pesticides, TCLP herbicides, TCLP VOCs, TCLP SVOCs, target compound list (TCL) VOCs, TCL SVOCs, ignitability/flashpoint, pH, and percent moisture. Materials from each suspected dry well were excavated and transported offsite for disposal. The ~~sample locations,~~ laboratory results~~,~~ and disposal documents are presented in Appendix F of the Work Plan.

3 CONCEPTUAL SITE MODEL

A preliminary conceptual site model (CSM) was developed based on available information to characterize historical uses of the Property, the potential for hazardous materials and constituents to be present on the Property, potential contamination sources, constituent migration pathways to the surface and subsurface, ~~and~~ the nature and extent of observed hazardous constituents~~. The preliminary CSM was used to develop the site characterization objectives and related activities described in the Work Plan (Integral 2022) to obtain the necessary data to understand,~~ the current Property conditions, and ~~assess~~ potential exposure pathways for humans or other environmental receptors.

~~As previously discussed, (Section 1.3), since~~Since the 1930s, the Property has contained primarily industrial-use structures situated on a concre~~a~~te slab of various thicknesses (10–11 in. or greater), and the exterior areas consisting of impermeable (concrete and asphalt) pavements with minimal pervious areas (grass and mulched landscaped). The Property is not currently situated in the 100-year floodplain. Constituent migration pathways for surface and subsurface soils are thus primarily limited to those associated with the minimal grassed/mulched areas of the Property and have been assessed accordingly by this site characterization.

~~Constituent migration~~ Surface soils that contain historical waste materials (ash, brick, glass, or other wastes) could potentially serve as a source of contamination via migration to subsurface soils and groundwater. In addition, constituent migration pathways to the subsurface soils and groundwater ~~would only~~could be available via slab penetrations, such as dry wells, sumps, pits, and drains, ~~and only~~ if the bottoms of those features were structurally compromised or soil disturbed~~, allowing access to~~. Cracks in impervious surfaces at the Property~~subsurface soils~~ could also provide migration pathways. Constituent migration is possible through the sides or bottom of structures such as dry wells, sumps, pits, and ~~only~~drains even if ~~those constituents or materials would be considered significantly mobile in the environment~~not structurally compromised, as concrete, masonry, and other materials of construction are not completely impervious. The current locations, construction, and condition of existing structures are not necessarily the same as throughout the history of the Property. Field observations indicate current conditions and do not necessarily represent prior conditions and potential historical migration locations or pathways. Of note, the evidence gathered to date supports the conclusion that the Property—especially in the southeastern corner—has been historically exposed to constituents sourced from a former MGP site partially located on and to the east of the Property.

The results of the site characterization were evaluated to refine the CSM (Section 7). The following summarizes the preliminary CSM, based on historical information:

1. **Significant historical industrial use**. The Property has a long history of industrial use and development since the 1880s. The historical use of the northern portion of the

Property was as a foundry (kilns, dryers, annealing room), and for more than 100 years, the New York Central Railroad rail track and related operations bisected the Property over a large area. Historically, railroad operations (construction, maintenance, and demolition of railroad tracks and ancillary infrastructure, and locomotive, freight, and other railway vehicle transportation on and across the Property) are generally considered a source of regulated constituents (e.g., polycyclic aromatic hydrocarbons [PAHs] and metals) to the environment, as well as substantial industrial fill, including railroad ties and ballast.

The southeast corner of the Property was used as an MGP beginning in at least 1898 when the first iron gasometer (aka gas holder) was shown on the relevant Sanborn map. A second gasometer was installed in this area in 1921, and in 1948, both gasometers were removed by the New York Electric Corporation.

These MGP-related activities, including related release and migration of hazardous dense and light nonaqueous-phase liquids (NAPLs) as well as associated dissolved-phase constituents from the gas holders would likely have resulted in the NAPLS, metals, PAHs, VOCs, and other regulated constituents being present in soil and potentially groundwater at the Property. Note that MGP-related NAPLs are well-documented in their ability to migrate significant distances horizontally, as well as above and below the water table.

An objective of the site characterization was to assess the nature and extent of the potential historical conditions in fill and soil~~, and~~ across the entire Property including the former MGP portion of the Property. MGP-related impacts were reported as observed.

2. **No record of disposal associated with the Property development or operations.** There is no documentation of disposal at the Property. Fill (e.g., generally sands/silty sands of various textures, with occasional ~~red building~~ brick (primarily red building brick), and various types of coal, ash, and glass) observed during prior environmental and geotechnical soil boring programs ~~is likely~~may be residual materials left behind from foundation development and/or post-use structure demolition and reworking of fill associated with prior industrial use on the Property. In addition, this material ~~is likely to~~may have been reworked and compacted in the course of development of portions of the Refractories operation itself. Additional clean/engineered fill (e.g., sand with specific geotechnical properties) may have been emplaced during this period as well. Records regarding the types or origins of fill materials are not available.

   Characterization of shallow soils and fill was an objective of the site characterization.

3. **Minimal hazardous materials/substances used at the Property.** Refractories manufactured refractories materials, primarily different types of refractory bricks, from the 1930s until it was shut down in 2014.

The vast majority of materials stored and used at Refractories consisted of substances such as alumina-rich clays and silica products used in forming, firing, and shaping various types of refractory bricks. The hazardous materials stored onsite were generally composed of lubricants, cutting oils, and solvents for operations and maintenance purposes, such as machine maintenance and painting. As noted above, potential release and migration of these materials to the subsurface would have occurred via the facility dry well system~~. It should be noted that most of these materials would have had limited solubility and/or insignificant mobility in the subsurface if released, as well as minimal potential to generate meaningful concentrations of dissolved-phase constituents in groundwater.~~, cracks in impervious surfaces, concrete or other masonry materials that may not have been watertight, or direct discharge to the ground surface.

Confirmatory identification, location, and characterization of the dry wells/system and associated soils and groundwater was an objective of the site characterization.

4. **No historical or current open spills.** The available information indicates that there are no open historical NYSDEC-regulated spills or spill numbers for the Property. In addition, there is no indication in the record of any petroleum substances or regulated constituent releases to the subsurface from the historical Refractories operations.

   Notably, black oily staining and/or "naphthalene tar-like odors" and PID readings increasing with depth in soils indicative of MGP-related impacts were observed at three locations in the southeast during the 2014 Phase II investigation work; the observations were reported to NYSDEC, and a spill number was opened. This spill record was closed on May 12, 2022.

   The potential nature and extent of impacts related to the reported spill was characterized as part of the soil and groundwater investigation portion of the site characterization, and MGP-related impacts have been reported accordingly if observed. Note that the southeast corner of the Property is within the footprint of the Corning Chestnut Street Former Manufactured Gas Plant Site investigation work (NYSDEC Site #851035).

5. **MGP-related impacts are not associated with Refractories operations.** Impacts in the southeast corner of the Property are due to former MGP operations and are distinguished by their physical disposition in the subsurface, as well as a characteristic analytical signature (several PAH compounds, discussed more in the Nature and Extent of Contamination in Section 6) different from petroleum products. Minimal use of petroleum products onsite from Refractories operations included various lubricants and oils for machinery and routine operations for manufacturing of various types of refractory brick.

   Identifying the nature and extent of soil and groundwater impacts from such substances, if any, was an objective of the site characterization.

6. **Regional soil constituent influences from bedrock mineralogical sources.** The soil boring laboratory analytical results show shallow (2 ft or less), low level arsenic exceedances of NYSDEC Soil Cleanup Objective (SCO) commercial use criteria (NYSDEC 2006). The bedrock of the region consists of Devonian marine shales, siltstones, and sandstones of the Allegheny Plateau. Black shales that are enriched in sulfides and metals, such as arsenic and cadmium, weather faster than other rocks and minerals. As a result, sediments in the region can be naturally enriched with these metals (Paikaray 2012; Duan et al. 2020). An objective of the site characterization was to support characterization of the shallow soil and fill.

4 CHARACTERIZATION ACTIVITIES

Characterization at the Property included surveying, and soil and groundwater sampling, as described in the sections below. These activities were completed to address the four data gaps identified in the NYSDEC-approved Work Plan: 1) confirm the dry wells were identified and the structures characterized; 2) characterize the soil and groundwater beneath the dry wells; 3) determine groundwater flow and characterize metals concentrations; and 4) characterize shallow soil/fill.

4.1 BOUNDARY SURVEY

A boundary survey of the Property was completed on July 22, 2022, by C.T. Male Associates Engineering, Surveying, Architecture, Landscape Architecture and Geology, DPC. The property lines and corners were marked prior to the drilling investigation work. The boundary survey is included as Appendix A.

4.2 GEOPHYSICAL SURVEY

Prior to drilling activities, New York State One-Call system was notified to clear public buried utilities in the vicinity of the drilling area. The soil boring locations were also cleared during a private utility mark out completed by Ground Penetrating Radar Systems, LLC, using geophysical and ground-penetrating radar methods. No subsurface anomalies were identified during the geophysical and ground penetrating radar surveys. Gas lines, storm sewer, water, and sanitary sewer lines were located near some of the boring locations and marked with spray paint.

4.3 GPS MAPPING

Each monitoring well location was horizontally and vertically (top of casing) surveyed by a professional New York State licensed land surveyor after installation. The spatial information for each sample location is reported in Table 4-1.

4.4 COMMUNITY AIR MONITORING

The community air monitoring plan (CAMP) was implemented during ground intrusive activities to provide a measure of protection for the downwind community and residents from potential airborne particulate or contaminant releases. One individual alert was triggered for particulates on July 29, 2022, but the alarm condition lasted for 1 minute and is not considered an exceedance per DER-10 Appendix 1A, which considers an exceedance to be a 15-minute

average concentration period that is over background levels. No intrusive work was being performed during this alarm, and it was considered a false positive detection related to the startup/warmup process of the equipment. This alarm was reported to NYSDEC and the New York State Department of Health (NYSDOH) the same day it occurred. VOC and particulates measurements for the remainder of the subsurface investigation work were compiled and included in the weekly progress reports included as Appendix B.

4.5 WASTE HANDLING

Soil and water investigation-derived waste (IDW) were handled in accordance with DER-10 Section 3.3(e). Soil drill cuttings, water, and decontamination fluids generated during investigation activities (including dedicated/disposable sampling equipment and personal protective equipment) were collected and placed in sealed 55-gallon drums. The drums were staged onsite, pending offsite disposal, in accordance with regulatory requirements.

Non-dedicated sampling equipment (e.g., drill-cutting shoe and stainless-steel hand trowel) was decontaminated by washing with Alconox detergent and rinsed with distilled water prior to and between sampling locations. Dedicated disposable sampling equipment (e.g., spoons, bowls, Macro-core sleeves) were used and containerized for disposal. Drilling equipment (drill rods and augers) were decontaminated by washing with a pressure washer prior to and between sampling locations. All decontamination rinse water, well development water, and purge water were collected and containerized pending offsite disposal in accordance with regulatory requirements. Copies of the IDW disposal documents are attached as Appendix C.

4.6 FIELD REPORTS

Weekly progress reports were prepared and submitted to NYSDEC and NYSDOH to summarize field activities performed during the week. These documents outlined the activities performed, discussed any modifications to the Work Plan, and included air monitoring results and an updated schedule for remaining work onsite. The false positive alarm related to the CAMP startup/warmup process was also communicated to NYSDEC and NYSDOH within 12 hours of occurrence. The weekly progress reports are attached as Appendix B.

4.7 SOIL AND GROUNDWATER ACTIVITIES

Field activities were performed ~~in accordance with~~following the NYSDEC-approved Work Plan (Integral 2022~~).~~); however, minor deviations occurred during the field implementation due to site conditions and Property constraints but had no material impacts on the data. These deviations are described in Section 4.8. A summary of the field activities and laboratory analysis is provided below.

4.7.1 Soil Sampling and Subsurface Boring Activities

Soil sampling activities were conducted from July 2022 to January 2023 and consisted of collecting soil of three types: surface soil, shallow soil, and soil borings.

Surface soil samples were collected using a stainless-steel hand trowel. Shallow soil and subsurface soil ~~boring~~ samples were collected using a direct-push Geoprobe® drill rig for continuous sample collection in acetate Macro-core sleeves. The direct-push drill method was used to preserve the soil structure to identify a 1-in. interval of ash, brick, and/or glass, if present.

The soil lithology at each location was described, noting the color, moisture content, texturing, layering, and evidence of non-native material, and the soil was screened with a PID. If present, ~~layers of~~ fill material containing ash, brick, and/or glass ~~were~~was noted in the field logs, including observations of layers of fill material. A "layer" of fill is defined as non-native material containing ash, brick, and/or glass with a thickness of greater than 1 in. in accordance with the NYSDEC-approved Work Plan (Integral 2022). Samples were analyzed for target analyte list (TAL) metals, VOCs, and SVOCs. Twenty percent of samples were analyzed for per- and polyfluoroalkyl substances (PFAS) and 1,4-dioxane in accordance with the quality assurance project plan (QAPP).

The location of each sample was recorded using a handheld global positioning system (GPS) unit with submeter accuracy (Table 4-1). Field photographic logs are provided in Appendix D. Soil boring logs are provided in Appendix E.

4.7.1.1 Surface and Shallow Soil Sampling

Surface soil and shallow soil samples were collected from seven locations along the building exteriors (Figure 4-1). Surface soil samples were collected from the ground surface, as measured below the vegetative cover or sod layer, to a depth of 2 in. bgs. The surface soil samples were collected with a stainless-steel trowel that was decontaminated prior to collecting each sample. The collected surface soil was transferred to a new stainless-steel bowl to homogenize with a new stainless-steel spoon prior to placing in the appropriate laboratory-prepared sample containers, except for the VOC sample. The VOC sample was collected using a Terra Core Soil Sampler *in situ* from the sidewall of the 2-in. excavation used to collect the surface soil. The stainless-steel trowel was decontaminated prior to collecting each surface soil sample and the stainless-steel bowls and spoons were new and not reused. The lithology of the 0- to 2-in. interval was described using the shallow soil core collected via Geoprobe® at each location.

Shallow soil samples were collected using a direct-push Geoprobe® drill rig. Multiple cores were collected from each shallow soil sample location to obtain sufficient sample volume for

analysis. Some shallow soil sample locations, SS1 to 3 ft bgs, SS3 to 3 ft bgs, SS4 to 3 ft bgs, and SS5 to 4 ft bgs, were over drilled to ensure 2 ft of soil recovery was achieved.

The cores were reviewed, and the lithologic descriptions are reflective of the observations from each core. Visually similar core intervals were identified and combined for sampling. Shallow soil samples were collected from 0 to 6 in. bgs, 6 to 12 in. bgs, and 12 to 24 in. bgs, as measured below the vegetative cover or sod layer. The shallow cores were logged and scanned with a PID as described in Section 4.7, and the shallow soil sample intervals were collected from the core with a new stainless-steel spoon and transferred to a new stainless-steel bowl for homogenization prior to placing the samples in the appropriate laboratory-prepared sample containers, except for the VOC sample. VOC samples were collected directly from the soil core upon opening using a Terra Core Soil Sampler.

4.7.1.2 Subsurface Soil Boring Sampling

~~Soil~~Subsurface soil borings were advanced at six locations at the Property using a direct-push Geoprobe® rig (Figure 4-1). ~~Soil~~Subsurface soil borings intended to be completed as monitoring wells (SB1, SB2, SB3, and SB5) were advanced to target a completion depth 10 ft beyond the water table; however, the water table information at the Property is limited, and boring termination depths were targeted for 10 ft beyond groundwater encountered in the water bearing zone. Additionally, the termination depth varied based on the depth at which the water-bearing zone was encountered and the thick lacustrine clay lens underlying the water-bearing zone at the site. The six soil borings were completed as follows:

- SB1 was advanced to a depth of approximately 25 ft bgs. Groundwater was encountered at approximately 16 ft bgs, but the boring was terminated at approximately 25 ft bgs because the lacustrine clay lens was encountered~~.~~ at approximately 17 ft bgs. Soil boring SB1 was advanced at the structure identified as Dry Well #1.
- SB2 was originally advanced inside the Refractories building; however, refusal was encountered at a depth of 16.5 ft bgs after multiple attempts. An alternative location was selected outside the building (Figure 4-1). The alternative location was advanced to a target depth of approximately 32 ft bgs. Groundwater was encountered in the 20- to 24-ft bgs interval but the boring was terminated at 32 ft bgs because the lacustrine clay lens was encountered~~.~~ at approximately 29.5 ft bgs.
- SB3 was installed at the structure identified as Dry Well #3. Dry Well #3 was previously backfilled with clean gravel fill, performed as part of decommissioning activities mentioned in Section 2.2 above, to approximately 10 ft bgs, which resulted in a lack of recovery from 0 to 10 ft bgs during boring installations~~.~~, and no samples being collected from the shallow intervals (0–0.5, 0.5–1, and 1–2 ft). In July 2022, SB3 was advanced to a depth of 20 ft bgs, and an attempt was made to install a monitoring well, but the borehole collapsed~~. An~~ as the augers were pulled back. The borehole was abandoned

with grout. A second attempt was made in September 2022 to install ~~a monitoring well~~MW3 to a depth of 20 ft bgs using a 10-ft sand pre-pack and 5-ft bentonite pre-pack, but the well was dry. ~~In~~ A third attempt approximately 5 ft west of the second attempt to install MW3 was successful in January 2023~~,~~. SB3 was advanced in the same former dry well structure to a depth of approximately 30 ft bgs. Sampling and logging of SB3 was completed and a 2-in. PVC well was installed. Groundwater was encountered at approximately 20 ft bgs and the boring was terminated at approximately 30 ft bgs upon encountering the lacustrine clay lens at approximately 26.25 ft bgs.

- SB4 was advanced inside the Refractories building until refusal was reached at approximately 8 ft below the upper surface of the subsurface soils after multiple attempts. The concrete floor at ground surface inside the building (upper concrete floor) was cut to access subsurface soil, but a layer of select gravel and sand fill was observed between the upper concrete floor and a second concrete subfloor below the select fill. Subsurface soils were encountered below the second concrete floor at a depth of approximately 32 in. below the upper concrete floor in the building. The boring was advanced from the upper surface of the subsurface soil encountered below the second concrete floor. The material at the bottom of the boring was dry, and no soil sample was collected from the interval 2 ft above the water table because it was not encountered. The lacustrine clay was not encountered at this location.
- SB5 was advanced to a depth of approximately 30 ft bgs. Groundwater was encountered at approximately 15 ft bgs, and the boring was advanced to 30 ft bgs for well installation. The lacustrine clay was not encountered at this location.
- SB6 was advanced into the water-bearing zone to a termination depth of 20 ft bgs. The water-bearing zone at this location was not targeted, but the boring was advanced to 20 ft bgs to confirm native material was reached. The lacustrine clay was not encountered at this location. One sample, SB-6(15-20), was collected for archive based on field observations, but not analyzed.

Soil boring samples were collected from four intervals: 0 to 6 in. bgs, 6 to 12 in. bgs, 12 to 24 in. bgs, and 24 in. above the water table or water-bearing zone. The soil boring cores were logged and scanned with a PID, and the ~~shallow~~ soil sample intervals were collected from the core with a new stainless-steel spoon and transferred to a new stainless-steel bowl for homogenization (no bowls or spoons were reused) prior to placing the samples in the appropriate laboratory-prepared sample containers, except for the VOC sample. VOC samples were collected directly from the soil core upon opening using a Terra Core Soil Sampler.

4.7.2 Monitoring Well Installation

Four monitoring wells (MW1, MW2, MW3 and MW5) were installed at the corresponding soil boring locations (SB1, SB2, SB3, and SB5, respectively) to characterize groundwater flow direction and collect groundwater samples. Upon completing sampling at the soil borings via

direct-push methods, the borings were ~~overdrilled~~over drilled using hollow stem augers to a target depth of approximately 10 ft below the first observation of water in the water-bearing zone, which was encountered in a sand and/or gravel layer between approximately ~~16 to~~15 and 25 ft bgs.

Monitoring wells were installed and constructed in accordance with the NYSDEC-approved work plan as follows:

- MW1 was installed as a piezometer inside Dry Well #1 located inside Building 1 due to access limitations with the drill rig. MW1 was constructed using a 1-in.-diameter, flush threaded, schedule 40 polyvinyl chloride (PVC) casing with a schedule 40 PVC 10-ft 0.010-in slot screen. Following placement of the screen and riser, a filter pack consisting of clean quartz sand was placed from the bottom of the well screen to approximately 2 ft above the top of the well screen. A bentonite seal (approximately 2 ft thick) was placed above the filter pack and hydrated. The remainder of the annular space above the bentonite seal was backfilled with a cement/bentonite grout mixture to ground surface. MW1 was completed as a stick-up well inside the dry well.
- For MW2, an initial attempt in September 2022 was unsuccessful at installing a monitoring well inside the building. Refusal was encountered at 16.5 ft bgs. A 1-in. PVC piezometer was installed because of the moist to wet material observed at the bottom of the boring. The next day, a water level indicator revealed that the well was dry. An alternative location outside the building was selected to install MW2 deeper, to reach the water table. MW2 was installed in December 2022, approximately 60 ft northwest at a location outside the building and clear of buried utilities.
- MW4 was not installed because the water table was not encountered due to refusal at 8 ft. MW2, MW3, and MW5 were constructed using 2-in.-diameter, flush-threaded, schedule 40 PVC casing with 10 ft of 2-in.-diameter, 0.010-in. slot PVC screen. Following placement of the screen and riser, a filter pack consisting of clean quartz sand was placed from the bottom of the well screen to approximately 2 ft above the top of the well screen. A bentonite seal (approximately 2 ft thick) was placed above the filter pack and hydrated. The remainder of the annular space above the bentonite seal was backfilled with a cement/bentonite grout mixture to ground surface. These wells were completed as flush-mount wells.

Monitoring wells MW1 and MW5 were installed in July 2022 and developed in September 2022. MW2 was installed in December 2022, and MW3 was installed in January 2023. Both MW2 and MW3 were ~~installed and~~ developed in January 2023. Detailed well construction drawings are provided in Appendix E.

The monitoring wells were developed using a submersible pump to surge and pump the well until the purged groundwater was relatively clear (10 nephelometric turbidity units or less), as practical. Well Development Logs are included in Appendix F.

4.7.3 Groundwater Monitoring

Groundwater monitoring activities consisted of collecting groundwater samples from the monitoring wells and collecting quarterly groundwater elevation measurements. Following installation and development, MW1 and MW5 were sampled on October 5, 2022. Following the installation of MW2 and MW3 in January 2023, groundwater samples were collected from MW1, MW2, MW3 and MW5 on January 31, 2023. Prior to sampling, water level measurements were collected from each ~~of~~ well using an electronic water level sounder and measured from the surveyed top of the well casing. Additional quarterly groundwater measurements were collected in April 2023 ~~and~~, July 2023, and October 2023. Groundwater elevation measurements are provided in Table 4-2.

The monitoring wells were purged and sampled using low-flow sampling techniques, a peristaltic pump, and dedicated equipment. Dissolved metal samples were collected with dedicated disposable 0.45-micron filters. New low-density polyethylene tubing was placed inside the wells to the approximate center of the well screen, and water quality parameters (temperature, pH, dissolved oxygen, and specific conductance) were collected through a flow-through cell and allowed to stabilize in accordance with the criteria in Low Stress Purging and Sampling Procedure (USEPA 2017), prior to sampling. Once the parameters stabilized, the flow-through cell was removed, and the samples were collected directly from the peristaltic pump into laboratory-supplied sample containers. Groundwater Sampling Logs are included in Appendix F.

The groundwater samples were analyzed for total and dissolved metals, VOCs, and SVOCs. Twenty percent of samples were analyzed for PFAS and 1,4-dioxane in accordance with the QAPP.

4.8 WORK PLAN DEVIATIONS

Minor work plan deviations occurred during the implementation of the site characterization investigation. These deviations generally occurred because of Property constraints and conditions where samples were collected; they had no material impacts on the data. NYSDEC oversight staff were made aware of the deviations during the performance of field activities. Work Plan deviations included:

- MW1 was constructed with 1-in. PVC due to limitations drilling inside the building.

- The location of SS1 was moved approximately 20 ft southeast to avoid buried utilities and to remain within the Property boundary.
- The following shallow soil sample locations were over drilled: SS1 to 3 ft bgs, SS3 to 3 ft bgs, SS4 to 3 ft bgs, and SS5 to 4 ft bgs. These locations were over drilled to ensure 2 ft of soil recovery was achieved.
- Installation of MW2 inside the building was attempted in September 2022, and refusal was encountered at 16.5 ft bgs. ~~A 1-in. PVC piezometer was installed because of the moist to wet material observed at the bottom of the boring. The next day, a water level indicator was used to measure the water level in the well, but it was dry.~~ An alternative location outside the building was selected ~~to install MW2 deeper to reach the water table.~~ and MW2 was installed in December 2022~~, approximately 60 ft northwest to a location outside the building and clear of buried utilities~~.
- SB3 was installed in July 2022. No samples were collected from the shallow intervals (0–0.5, 0.5–1, and 1–2 ft) ~~as there was insufficient~~since no material was recovered from the ~~specified sample intervals.~~first 10 ft. Installation of MW3 was attempted, but ~~the borehole collapsed as the augers were pulled back and the bore hole was abandoned with grout.~~unsuccessful. In September ~~2022~~, a second attempt to install MW3, was performed, using a 10-ft sand pre-pack and 5-ft bentonite pre-pack~~.~~, but the well was dry. A third attempt to install MW3 was ~~installed to a depth~~successful in January 2023. Sampling and logging of ~~20 ft bgs. The depth to water~~SB3 was ~~measured the day after the~~completed and a 2-in. PVC well was installed~~, and the well was dry.~~.
- MW4 was not installed, and no soil sample was collected from the interval 2 ft above the water table due to refusal encountered at 8 ft below the upper surface of the subsurface soils.

4.9 QUALITY ASSURANCE AND QUALITY CONTROL

The following laboratory quality assurance and quality control (QA/QC) samples were collected during this field effort:

- Field duplicates at a rate of 1 per 20 samples
- Matrix spike/matrix spike duplicates at a rate of 1 per 20 samples
- Equipment rinsate blanks at a rate of 1 per 20 samples per type of equipment used
- Field blanks at a rate of 1 per day
- One trip blank per cooler containing VOC samples.

The data usability summary report (DUSR) for these data is discussed in Section 5 and provided in Appendix G.

4.10 LABORATORY ANALYSIS AND DATA VALIDATION

The analytical methods and protocols used during this project, as well as the expanded list of constituents for analysis, were provided in the Work Plan QAPP (Integral 2022). Samples and appropriate quality control samples (e.g., duplicate samples) were placed in appropriate laboratory-prepared containers, properly labeled, packed on ice, and shipped with completed chain-of-custody documentation to Eurofins TestAmerica Laboratories, Inc. in Buffalo, New York (Eurofins) for analysis. The laboratory reports are provided in Appendix ~~F~~H.

Data validation information is provided within the DUSR in Section 5 and Appendix G.

5 DATA MANAGEMENT AND DUSR

Field measurements and laboratory analytical data are managed in an electronic database and were uploaded to the NYSDEC's EQuIS database in an electronic data deliverable (EDD) format.

In accordance with the Work Plan, laboratory analytical data produced during the site characterization was validated by an Integral data validator in accordance with DER-10 Appendix 2B DUSR requirements. The validation indicated that all data are valid and usable for the purposes of the site characterization with the exceptions described in the data validation report. Of more than 13,814 analyses performed, 151 volatile organic analysis results were rejected because of associated internal standard recoveries for a completeness of 99 percent. All other results are acceptable for their intended use, as qualified.

The final DUSR was accepted by the NYSDEC on July 12, 2023, and a copy is attached as Appendix G.

6 NATURE AND EXTENT OF CONTAMINATION

The soil and groundwater analytical results are summarized below from the July 2022 to January 2023 field activities.

6.1 SOIL BORING RESULTS

PID readings and odor observations documented during completion of the soil borings are provided in the table below.

PID Readings and Odor Observations

Location	PID readings
SB1	0.6–12.2 ppm.
SB2 (Attempt 2)	2.6–18.5 ppm
SB2/MW2	0–8.3 ppm
SB3	6.7–15.3 ppm
SB3/MW3	0.1–0.2 ppm
SB4	0.1–3.0 ppm
SB5/MW5	6.3–11.1ppm
SB6	0.1–32.5 ppm Slight petroleum-like odor from 7.9 to 20 ft bgs.
SS1–SS5	0–0.1 ppm
SS6	0.2–3 ppm

Laboratory analytical results show generally shallow (2 ft or less) and ~~generally~~ low-level exceedances of some metals and PAHs above NYSDEC SCO unrestricted use, industrial use, and protection of groundwater criteria (NYSDEC 2006).

~~Limited low-level~~ Shallow and subsurface soil sample results exceeding the applicable SCOs are shown on Figure 6-1 and Figure 6-2, respectively. SCO exceedances were observed for arsenic, barium, cadmium, copper, lead, manganese, mercury, nickel, and silver, as discussed below:

- **Arsenic** ~~exceedances were measured~~exceeded the unrestricted SCO of 13 mg/kg across most of the Property, except ~~in the northwest corner of the Property~~ at ~~SS2~~SB1, SB3, and ~~SB2~~SS5. The low-level arsenic exceedances ranged from ~~16.2~~13.8 to 27.7 mg/kg~~, compared with~~. Exceedances of the industrial use and protection of groundwater SCOs of 16 mg/kg~~.~~

- ~~**Cadmium** exceeded the protection of groundwater SCO~~ occurred at SB4, SB5, SB6, SS1, SS3, SS4, SS6 and SS7.
- **Barium** exceeded the unrestricted SCO of 350 mg/kg at one location (SB~~16~~) in two of the ~~0~~shallow soil intervals~~ to 0.5 ft interval~~, with ~~a~~ concentrations ranging from ~~of 11.6 mg/kg compared with the SCO of 7.5 mg/kg.~~426 to 445 mg/kg. No samples exceeded the industrial use SCO of 10,000 mg/kg or the protection of groundwater SCO of 820 mg/kg.
- **Cadmium** exceeded the unrestricted SCO of 2.5 mg/kg at two locations: SB1 with a concentration of 11.6 mg/kg, and SB4 with a concentration of 4.3 mg/kg. The protection of groundwater SCO of 7.5 mg/kg was also exceeded at SB1. There were no exceedances of the industrial use SCO of 60 mg/kg.
- **Copper** exceeded the unrestricted SCO of 50 mg/kg across most of the Property, except at SB1, SB3, SS2, and SS7, with concentrations ranging from 50.9 to 334 mg/kg. No samples exceeded the industrial use SCO of 10,000 mg/kg or the protection of groundwater SCO of 1,720 mg/kg.
- **Lead** ~~SCO exceedances~~exceeded the unrestricted SCO of 63 mg/kg across most of the Property, except at SB3 and SS5. The lead concentrations ranged from 65.3 to 9,670 mg/kg. The protection of groundwater SCO of 450 mg/kg was exceeded at five locations (SB2, SB4, SB6, SS2, and SS6) with concentrations ranging from 492 to 9,670 mg/kg~~, compared with the industrial and protection of groundwater SCOs of 3,900 mg/kg and 450 mg/kg, respectively.~~ . Only one sample, SB4 ~~the 1- to 2-ft interval at SB4,~~ had a concentration of lead (9,670 mg/kg) above the industrial SCO of 3,900 mg/kg.
- **Manganese** exceeded the unrestricted SCO of 1,600 mg/kg at one location (SS6) with a concentration of 1,950 mg/kg. There were no exceedances of the industrial use SCO of 10,000 mg/kg or the protection of groundwater SCO of 2,000 mg/kg.
- **Mercury** exceeded the ~~protection of groundwater~~unrestricted SCO of 0.18 mg/kg at ~~one soil sample location. In~~six locations (SB1, SB4 ~~the soil sample collected~~, SB5, SB6, SS3, and SS7) with concentrations ranging from ~~1~~0.19 to ~~2 ft bgs, the concentration of mercury was~~ 0.79 mg/kg~~, compared with the~~. The protection of groundwater SCO of 0.73 mg/kg~~.~~ was exceeded at SB4 with a concentration of 0.79 mg/kg. There were no exceedances of the industrial use SCO of 5.7 mg/kg.
- **Nickel** exceeded the unrestricted SCO of 30 mg/kg at one location (SB2, in two intervals), with concentrations ranging from 39.60 to 50.4 mg/kg. There were no exceedances of the industrial use SCO of 10,000 mg/kg or the protection of groundwater SCO of 2,480 mg/kg.
- **Silver** exceeded the unrestricted SCO of 2 mg/kg at two locations, SS3 and SS5, with concentrations ranging from 2.70 to 10.20 mg/kg. One sample, SS5 exceeded the protection of groundwater ~~criteria in one sample, SS5~~SCO of 8.3 mg/kg, with a ~~measured~~

concentration of 10.2 mg/kg ~~compared with the SCO of 8.3 mg/kg.~~. There were no exceedances of the industrial use SCO of 6,800 mg/kg.

- **Zinc** exceeded the unrestricted SCO of 109 mg/kg at five locations (SB1, SB4, SB6, SS1, and SS3) with concentrations ranging from 119 to 333 mg/kg. There were no exceedances of the industrial use SCO of 10,000 mg/kg or the protection of groundwater SCO of 2,480 mg/kg.

PAH compounds that exceeded the unrestricted, industrial, and/or protection of groundwater criteria include benz[*a*]anthracene, benzo[*a*]pyrene, benzo[*b*]fluoranthene, benzo[*k*]fluoranthene, ~~and~~ chrysene, dibenz[*a,h*]anthracene and indeno[1,2,3-*cd*]pyrene. The distribution of these exceedances varies across the Property; however, multiple compounds exceed in the northwest and southeast of the Property:

- **Benz[*a*]anthracene** ~~exceedances were found~~ exceeded the unrestricted and protection of groundwater SCOs of 1 mg/kg at six locations ~~and ranged~~(SB2, SB4, SB6, SS2, SS3, and SS7), with concentrations ranging from 1.2 to 8.2 mg/kg ~~when compared to the protection of groundwater SCO of 1 mg/kg.~~. There were no exceedances of the industrial use SCO of 11 mg/kg.
- **Benzo[*a*]pyrene** exceeded the unrestricted SCO of 1 mg/kg and industrial ~~SCOs~~ SCO of 1.1 mg/kg at ~~five~~six sample locations~~, primarily in the northwest and southeast corners of the Property. Exceedances ranged~~ (SB2, SB4, SB6, SS2, SS3, and SS7), with concentrations ranging from 1.2 to 8.9 mg/kg~~, compared with the industrial use SCO of 1.1 mg/kg~~. There were no exceedances of the protection of groundwater SCO of 22 mg/kg.
- **Benzo[*b*]fluoranthene** exceeded the ~~protection of groundwater~~unrestricted SCO of 1~~.7~~ mg/kg at ~~five~~seven locations (~~SS3, SS7,~~ SB2, SB4, ~~and~~ SB6, SS2, SS3, SS5, and SS7), with concentrations ranging from 1.2 to 10 mg/kg. Five locations (SB2, SB4, SB6, SS3, and SS7) exceeded the protection of groundwater SCO of 1.7 mg/kg, with concentrations ranging from 2.4 to 10 mg/kg. There were no exceedances of the industrial use SCO of 11 mg/kg.
- ~~**Benzo[*k*]fluoranthene** exceeded the protection of groundwater SCOs at four locations (SS3, SB2, SB4, and SB6). Concentrations ranged from 1.9 to 4.1 mg/kg, compared with the protection of groundwater SCO of 1.7 mg/kg. There were no exceedances of the industrial use~~unrestricted SCO of ~~110 mg/kg.~~
- ~~**Chrysene** exceeded the~~ 0.8 mg/kg at five locations (SB2, SB4, SB6, SS3, and SS7), with concentrations ranging from 1.1 to 4.1 mg/kg. Four locations (SB2, SB4, SB6, and SS3) exceeded the protection of groundwater SCO ~~criterion~~ of 1.7 mg/kg ~~at seven locations (SS2, SS3, SS5, SS7, SB2, SB4 and SB6). Concentrations ranged~~, with concentrations ranging from 1.~~9~~ to ~~7.5~~ 4.1 mg/kg. There were no exceedances of the industrial use SCO of 110 mg/kg.

- **Chrysene** exceeded the unrestricted and the protection of groundwater SCOs of 1 mg/kg at seven locations (SB2, SB4 SB6, SS2, SS3, SS5, and SS7), with concentrations ranging from 1.1 to 7.5 mg/kg. There were no exceedances of the industrial use SCO of 110 mg/kg.
- **Dibenz[*a*,*h*]anthracene** exceeded the unrestricted SCO of 0.33 mg/kg at four locations (SB4, SB6, SS3, and SS7), with concentrations ranging from 0.35 to 2.1 mg/kg. One location (SB6) exceeded the industrial use ~~SCOs in one sample at location SB6. The~~ SCO of 1.1 mg/kg with a concentration ~~was 2.1 mg/kg, compared with the industrial use SCO of 1.7 mg/kg.~~of 2.1mg/kg. There were no exceedances of the protection of groundwater SCO of 1,000 mg/kg.
- **Indeno[1,2,3-cd]pyrene** exceeded the unrestricted SCO of 0.5 mg/kg at eight locations (SB2, SB4, SB5, SB6, SS2, SS3, SS5, and SS7), with concentrations ranging from 0.55 to 5.80 mg/kg. There were no exceedances of the protection of groundwater SCO of 8.2 mg/kg or the industrial SCO of 11 mg/kg.

The soil concentration~~s~~ results do not show a horizontal or vertical pattern~~, and~~ based on visual observation, and based on groundwater results (Section 6.2), constituents ~~were~~do not ~~observed~~appear to be in a matrix that had potential for downward migration of the compound.

Industrial fill, as described below, was observed in all soil boring locations except SB1, SB3, and SS5. The depth of fill encountered at most locations was shallow (within the top 3 ft bgs or less); however, some fill was observed at deeper intervals. Fill was encountered at the Property (e.g., SB-2 and SB-4) in discontinuous zones or pockets and was composed variously of sand and sandy silt with incidental ash, cinder, glass, slag, coal particles, and ~~large gravel sized red building~~ brick fragments (primarily red building brick). The deepest intervals where fill was observed were in the SB2 location installed inside the building under the concrete floor. Ash, cinder, and slag were observed in SB2 at the 8.0- to 9.1-ft bgs interval, as well as in the 13.0- to 14.0-ft bgs interval. There was no evidence to suggest continuous layers of fill between borings indicative of intentional disposal; rather, reworked, industrial fill and/or waste materials with incidental occurrences of ash, brick, or glass were observed at the Property. Non-native fill materials such as incidental ~~red building~~ brick (primarily red building brick), slag, glass, ash, and coal were observed and documented in the boring logs (Appendix E).

Apparent petroleum (black oily staining) was observed at two locations in the southeast of the Property during the 2014 Phase II investigation work. In July 2022, SB5/MW5, SB6, and SS7 borings were installed to evaluate the southeast corner of the Property. Soil boring results from SB6 location reported several PAH (benz[*a*]anthracene, benzo[*b*]fluoranthene, benzo[*k*]fluoranthene, and chrysene) and metals exceedances (arsenic and lead) with a different chemical signature when compared to soil results from the other borings installed in the southeastern side of the Property. SB6 had the highest benz[*a*]anthracene exceedance onsite (8.2 mg/kg) when compared to the protection of groundwater SCO criterion of 1 mg/kg. Chrysene

exceedances ranged from 1.1 to 7.5 mg/kg when compared to the protection of groundwater SCO of 1 mg/kg. The highest chrysene concentrations were found in SB6. Arsenic exceedances were 17.6 and 18.3 mg/kg, compared with the protection of groundwater SCO criterion of 16 mg/kg. SB6 had a lead concentration of 2,370 mg/kg, exceeding the protection of groundwater SCO criterion of 450 mg/kg.

Two of the borings (SB4 and SB6) had analytical signatures that differed from the majority of the borings. The boring on the northern boundary of the property (SB4) was installed inside one of the buildings. Shallow fill was observed in this boring from 0 to 2.5 ft bgs. The laboratory results showed high levels of lead and dibenz[*a,h*]anthracene compared with other boring locations. SB4 had the highest concentration of lead on the Property in the 1- to 2-ft interval, measured at 9,670 mg/kg, compared with detected concentrations at other locations that ranged from 7.6 to 2,370 mg/kg. SB4 was the location with the second highest concentration (lower only to SB6) of dibenz[*a,h*]anthracene was measured at 0.67 mg/kg in the 0- to 0.5-ft interval, compared with concentrations below 0.53 mg/kg at the other locations where it was detected.

The boring drilled in the grass on the southeastern corner of the Property (SB6) was in a location associated with the historical MGP. The analytical results at this location show more PAH (benz[*a*]anthracene, benzo[*a*]pyrene, benzo[*b*]fluoranthene, dibenz[*a,h*]anthracene, and indeno[1,2,3-*cd*]pyrene) and metal (arsenic, barium, and lead) exceedances compared to the other boring locations. Specifically:

- Benz[*a*]anthracene was 8.2 mg/kg in the 1- to 2- ft interval and 6.5 mg/kg in the 0.5- to 1- ft interval, compared with 0.06 to 4.0 mg/kg in other samples where it was detected.
- Benzo[*a*]pyrene in the 1- to 2- ft interval was 8.9 and 5.0 mg/kg in the 0.5- to 1- ft interval, compared with 0.05 to 4.4 mg/kg in other samples where it was detected.
- Indeno[1,2,3-*cd*]pyrene in the 1- to 2- ft interval was 5.8 mg/kg, compared with 0.03 to 3.4 mg/kg in other samples where it was detected.
- Benzo[*b*]fluoranthene in the 1- to 2- ft interval was 10 and 6.1 mg/kg in the 0.5- to 1-ft interval, compared with 0.05 to 5.4 mg/kg in other samples where it was detected.
- Arsenic in the 1- to 2-ft interval was 17.6 mg/kg and ranged from 10.3 to 18.3 mg/kg in the surface intervals.
- Lead in the 1- to 2-ft interval was 2,370 mg/kg, the second highest on the Property.
- Barium in the 1- to 2-ft interval was 445 mg/kg and 198 mg/kg to 426 mg/kg in the surface intervals, compared to 15.9 to 172 mg/kg in other samples where it was detected

The validated soil results are summarized in Table 6-1 and the full laboratory reports are included in Appendix ~~F~~H.

6.2 GROUNDWATER RESULTS

Groundwater sampling was performed in October 2022 (MW1 and MW5) and January 2023 (MW1, MW2, MW3 and MW5). Three rounds of water level measurements were collected using an electronic water-level indicator from the four monitoring wells on January 31, April 12, and July 25, 2023. These measurements were used to calculate the groundwater elevation using the surveyed top of casing elevation.

Groundwater was typically encountered in sand and gravel at the Property, although perched water was encountered under the Refractories building at depths of approximately 6 to 8 ft bgs in the northeastern portion of the Property and approximately 14 ft bgs in the western portion of the Property. Groundwater elevation at the Property was observed during the monitoring period to be approximately 909 to 915 ft, or approximately 16 to 25 ft bgs. Groundwater elevation data are tabulated in Table 4-2.

The groundwater elevation results from MW1, MW2, and MW5 are all within a few tenths of a foot of each other. The groundwater elevation at MW3 was observed to fluctuate at least a foot higher or lower than the other wells. The groundwater results, when considered together with the glacial, fluvial-influenced lithology in the region, suggest heterogeneous local hydrogeology with perched water conditions, as previously observed, and disconnected zones of high transmissivity. A fourth and final quarter of water level measurements will be collected in the fourth quarter of 2023.

One analyte, sodium, was detected in exceedance of the NYSDEC Ambient Groundwater Standards and Guidance Values contained in the Technical & Operational Guidance Series (TOGS) Water Quality Standards Table 1, Class GA (NYSDEC 1998) in all samples. MW5 also had an exceedance of benzene during the January 2023 sampling event. The benzene result was 3.10 µg/L and the Class GA standard is 1.0 µg/L. No other exceedances of the Class GA criteria were detected. Figure 6-3 shows the groundwater parameters that exceed the NYSDEC Class GA criteria.

The validated groundwater sample results are summarized in Table 6-2, and the full laboratory reports are included in Appendix ~~F~~H.

7 SITE CHARACTERIZATION FINDINGS

This section provides a summary of the findings and the conclusions that can be drawn from the investigations.

7.1 SUMMARY

The results of the site characterization are generally consistent with the historical data findings of the Phase II ESA and confirm the CSM presented in Section 4:

- The Property is underlain by ~~generally high quality~~ construction fill material that largely consists of sand and sandy silt with incidental ash or building brick, typical of industrial fill material. There is no clear layer or pattern of ash, brick, and/or glass that may be associated with Corning-related material used on the Property. The fill present at the Property was likely brought in during historical construction activities and is not associated with historical disposal of material or filling associated with historical floodplain development. Non-native fill materials, such as incidental ~~red building~~ brick (primarily red building brick), slag, glass, ash, and coal, were observed and documented in the boring logs (Appendix E) in discontinuous zones or pockets of material, not consistent with disposal.
- There are widespread occurrences of low-level exceedances of the relevant SCOs (industrial and protection of groundwater) for metals and PAHs that are consistent with historical industrial use. Potential sources include:
  - Metals and PAHs associated with the former New York Central Railroad along and adjacent to the former rail tracks and historical foundry operations.
  - Metals and PAHs associated with industrial fill containing various types of incidental ash and combustion byproducts, which are typically observed at historical industrial-use locations.
  - PAHs, VOCs, and metals associated with the former MGP facility in the southeast corner of the Property, and potentially migrating horizontally and vertically through the subsurface.
- There are sporadic elevated lead concentrations that appear to be associated with observations of incidental ash in fill material.
- There is no pattern of SCO exceedances horizontally or vertically in the soil column, indicating soil that has been reworked over time, and that there are not likely specific sources (e.g., cracks in impervious surfaces or concrete or masonry that is not completely watertight) of historical or ongoing contamination (with the exception of the former MGP facility).

- The constituents observed in the soil are consistent with those found during previous investigations. There is no indication of use or disposal of hazardous substances beyond the limited use understood from historical operations (Corning 1967).
- Two soil boring locations seem to have a different analytical signature, SB4 and SB6. (see Section 6.1 for a detailed discussion). SB4 was located on the northern boundary of the Property and installed inside one of the buildings. Shallow fill was observed in this boring from 0 to 2.5 ft bgs. The laboratory results showed high levels of lead and dibenz[*a*,*h*]anthracene. SB6 was drilled in the grass on the southeastern corner of the Property. This location is associated with a historical MGP. The analytical results at SB6 have multiple PAH and metals exceedances, which would be associated with material from the former MGP operations. The surface and subsurface of the southeastern corner in the vicinity of the SB6 location is within the footprint of the MGP site characterization (NYSDEC Site #851035, Figure 7-1).
- There were limited groundwater exceedances found during the site characterization, and only for sodium, with one exception. A single benzene exceedance was observed in one location, and that was notably within the footprint of the former MGP site.[3] These results confirm the lack of current or future mobility of the substances detected in the soil investigation and the matrix in which they were detected (i.e., no observations of indications of the presence of product/NAPL); none of the constituents that exceeded the protection of groundwater SCO in soils was observed to exceed the Class GA groundwater water quality standard.
- There were no direct observations of evidence of spills of regulated substances in soils or dissolved-phase plumes in groundwater, or indirect evidence that would be indicated by elevated concentrations declining with distance away from a potential source to groundwater.
- The relatively uniform elevated arsenic signature across the Property suggests some influence on the soil chemical characteristics attributable to the black shales native to the region, which are enriched in sulfides and metals such as arsenic and cadmium (Paikaray 2012; Duan et al. 2020). Lead is also a known element in the minerals commonly associated with such rocks in the region. Evidence of the presence of these and similar source rocks (e.g., silt particles, subangular gravels) in soil borings was observed at multiple locations. (e.g., SB2, SS2, SS3, and SS4 where exceedances of arsenic and/or lead were also observed).

[3] Results of the Phase II investigation indicated groundwater exceedances at multiple wells for multiple constituents; however, this was likely due to sampling of temporary wells at that time, resulting in overestimates of groundwater concentrations.

7.2 FATE AND TRANSPORT/MIGRATION PATHWAYS

The fate and transport and potential offsite migration pathways for the constituents observed in the soil and groundwater are summarized below.

There is limited opportunity for surface soil and associated constituents to migrate offsite, as the totality of the Property is overlain with concrete slabs, pavement, or grass cover, preventing erosion of surface soil. There is no indication of spills in the surface soil that would have migrated offsite (which would be evidenced by an area of high concentrations declining with distance). The lack of vertical concentration patterns indicates that there is no significant or ongoing vertical transport of contaminants (which would generally be limited in areal extent to the grass-covered areas subject to infiltration and potentially, historically, the now inactive dry wells).

Transport of constituents through the subsurface soil is limited. A potential historical pathway, through the drywell structures, is no longer viable due to the removal of any remaining material within the structures during the decommissioning activities and the cessation of water or other carrier fluid through the structure that may have occurred during the operation of the facility. As discussed above, there is limited or no infiltration, and therefore limited opportunity for and no indication of downward transport of contaminants through the soil.

The limited transport of contaminants through the soil to groundwater is confirmed by the ~~lack~~nature of water quality exceedances in groundwater. Although the SCO for groundwater protection is exceeded for several metals and PAHs at multiple locations around the site, there are no exceedances of the groundwater standards for any of these constituents. Groundwater quality exceedances are limited to sodium at four locations, and benzene in one location, the latter which is within the footprint of the former MGP facility.

The glacial, fluvial-influenced lithology in the region results in heterogeneous local hydrogeology with perched water conditions, as previously observed, and disconnected zones of high transmissivity. Net regional groundwater flow is influenced by the Chemung River, and the net flow direction is likely towards the Chemung River in a northerly or northeasterly direction. Groundwater migration offsite is not a pathway of concern due to the lack of constituents in the groundwater (with the exception of the MGP-related benzene occurrence).

7.3 EXPOSURE PATHWAYS

Potential exposure pathways at the Property could include contact with soil and/or groundwater. The Property is located within a secure fenced area, and concrete slabs, pavement, and grass cover are present over the entirety of the Property, thus limiting exposure to soil. Exposure to groundwater is an incomplete pathway ~~due to the general lack of water~~

~~quality exceedances in~~because groundwater.[4] is not used for potable purposes at or around the Property.

7.4 CONCLUSIONS

The investigations performed to date, including the Phase II site investigation and this site characterization, have included 33 soil sample locations and 12 groundwater sample locations for a total of 107 soil samples and 16 groundwater samples collected for laboratory analysis (Figure 7-1). These investigations provided consistent findings and a comprehensive characterization of subsurface and groundwater conditions at the Property. ~~The results of these investigations serve to fully delineate the nature and extent of any impacts on the Property (excluding those associated with the former MGP facility).~~ The requirements of the Site Characterization, as per the NYSDEC-approved Site Characterization Work Plan, have been met and the Site Characterization is complete.

~~The findings of these investigations confirm that there is no significant contamination associated with the former Refractories operations that poses a threat to human health or the environment. The site characterization has fulfilled the scope of work required under the Work Plan, and the results indicate that a remedial investigation is not warranted on the Property. Within the former MGP footprint, the NYSEG MGP site investigation includes data collection to further characterize impacts associated with the former MGP facility (Figure 7-1).~~

[4] ~~The one exception is benzene in the former MGP footprint, this area part of the NYSEG MGP site investigation.~~

8 REFERENCES

Corning. 1967. Report on industrial waste water discharges to the Chemung River from Corning Glass Works plants located in Corning, New York. Addendum No. 1. May 12.

City of Corning. 2022. City of Corning Zoning Map. Available at: https://www.cityofcorning.com/vertical/sites/%7BBE0E976C-81B9-4F4C-8763-A90E76CF4D33%7D/uploads/City_of_Corning_Zoning_Map.pdf. City of Corning, Corning, NY. December 5.

Duan Y., Z. Yang, T. Yu, Q. Yang, X. Liu, W. Ji, H. Jiang, X. Zhuo, T. Wu, J. Qin, and L. Wang. 2020. Geogenic cadmium pollution in multi-medians caused by black shales in Luzhai, Guangxi. *Environmental Pollution* Volume 260, 113905. May

Haley ~~and~~& Aldrich. 2014a. ASTM Phase I environmental site assessment, Corning Refractories Plant. File No. 40617-000. Prepared for Corning Incorporated, Corning, NY. Haley & Aldrich, Rochester, NY. March 6.

Haley ~~and~~& Aldrich. 2014b. Phase II environmental site assessment, Corning Refractories Facility. File No. 40617-000. Prepared for Corning Incorporated, Corning, NY. Haley & Aldrich, Rochester, NY. August 13.

Integral. 2022. P-site characterization work plan Corning Refractories Plant, NYSDEC Project ID 851048, Corning, New York. Integral Engineering, P.C., New York, NY. April 14.

Miller, T.S., J.L. Belli, and R.V. Allen. 1982. Geohydrology of the valley fill aquifer in the Corning area, Steuben County, New York. USGS Open-File Report 82-85, 6 sheets, scale 1:24000. Available at: https://pubs.er.usgs.gov/publication/ofr8285. U.S. Geological Survey.

NYSDEC. 1998. Division of Water Technical and Operational Guidance Series (1.1.1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. John Zambrano/Scott Stoner. New York State Department of Environmental Conservation. June.

NYSDEC. 2006. 6 NYCRR PART 375 Environmental Remediation Programs, Table 375-6.8(b): Commercial Use Soil Cleanup Objectives, Protection of Ecological Resources. New York State Department of Environmental Conservation

NYSDEC. 2010. DER-10 / technical guidance for site investigation and remediation. DEC Program Policy. New York State Department of Environmental Conservation, Division of Environmental Remediation. Issued May 3, 2010. Errata issued November 7, 2017.

NYSDEC. 2015. Executive summary site briefing report, Corning Refractories Plant. New York State Department of Environmental Conservation. January 5.

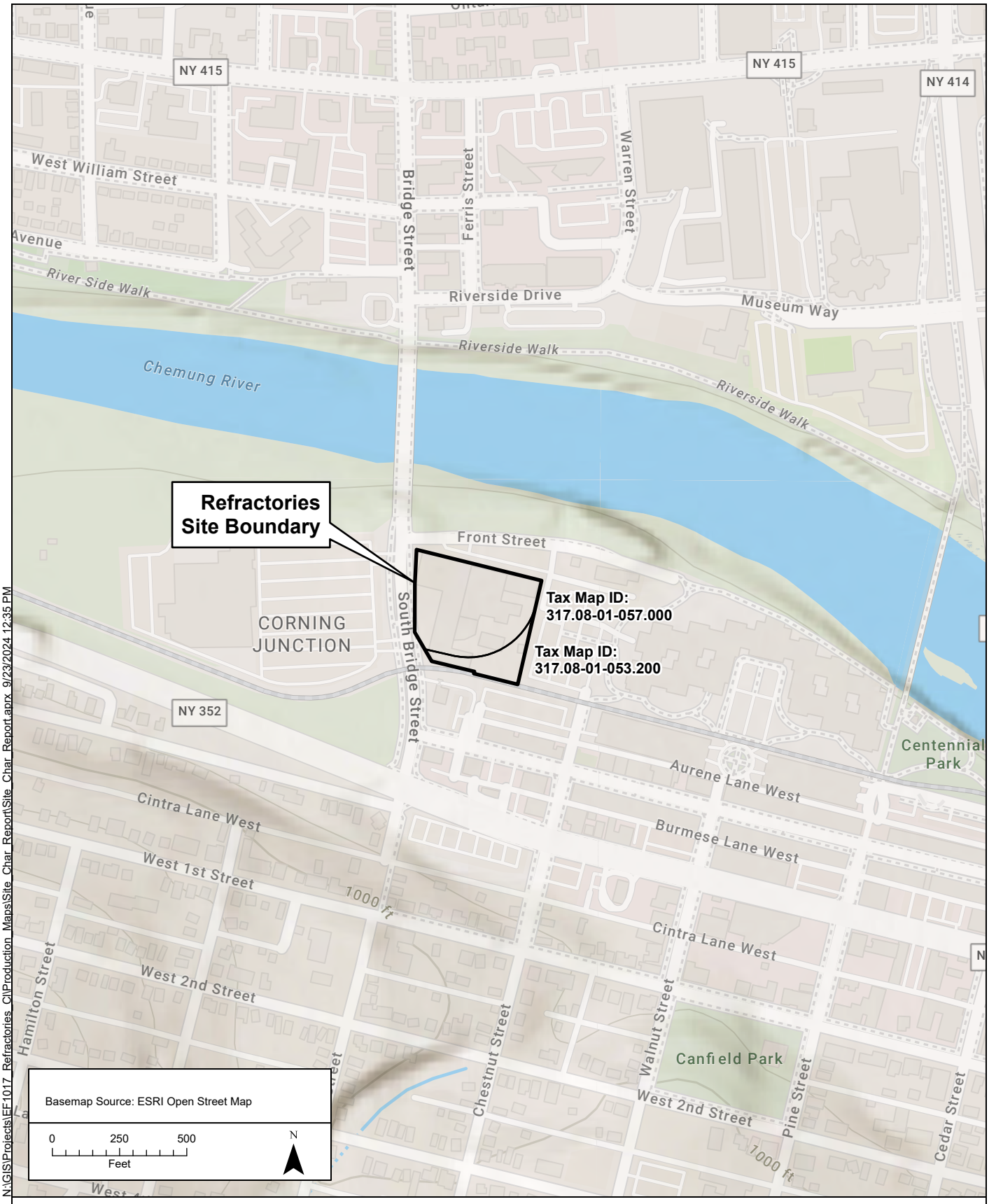
Olcot, P.G. 1995. Ground Water Atlas of the United States: Segment 12, Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, Vermont, Hydrologic Investigations Atlas, 730-M. U.S. Geological Survey, Reston, VA.

Paikaray, S. 2012. Environmental hazards of arsenic associated with black shales: A review on geochemistry, enrichment and leaching mechanism. *Reviews in Environmental Science and Biotechnology* 11(3):289-303.

Roen, J.B. 1984. Geology of the Devonian black shales of the Appalachian Basin. *Organic Geochemistry 5*(4):241-254.

USEPA. 2017. Low stress (low flow) purging and sampling procedure for the collection of groundwater samples from monitoring wells. U.S. Environmental Protection Agency Region I. September 19.

Figures

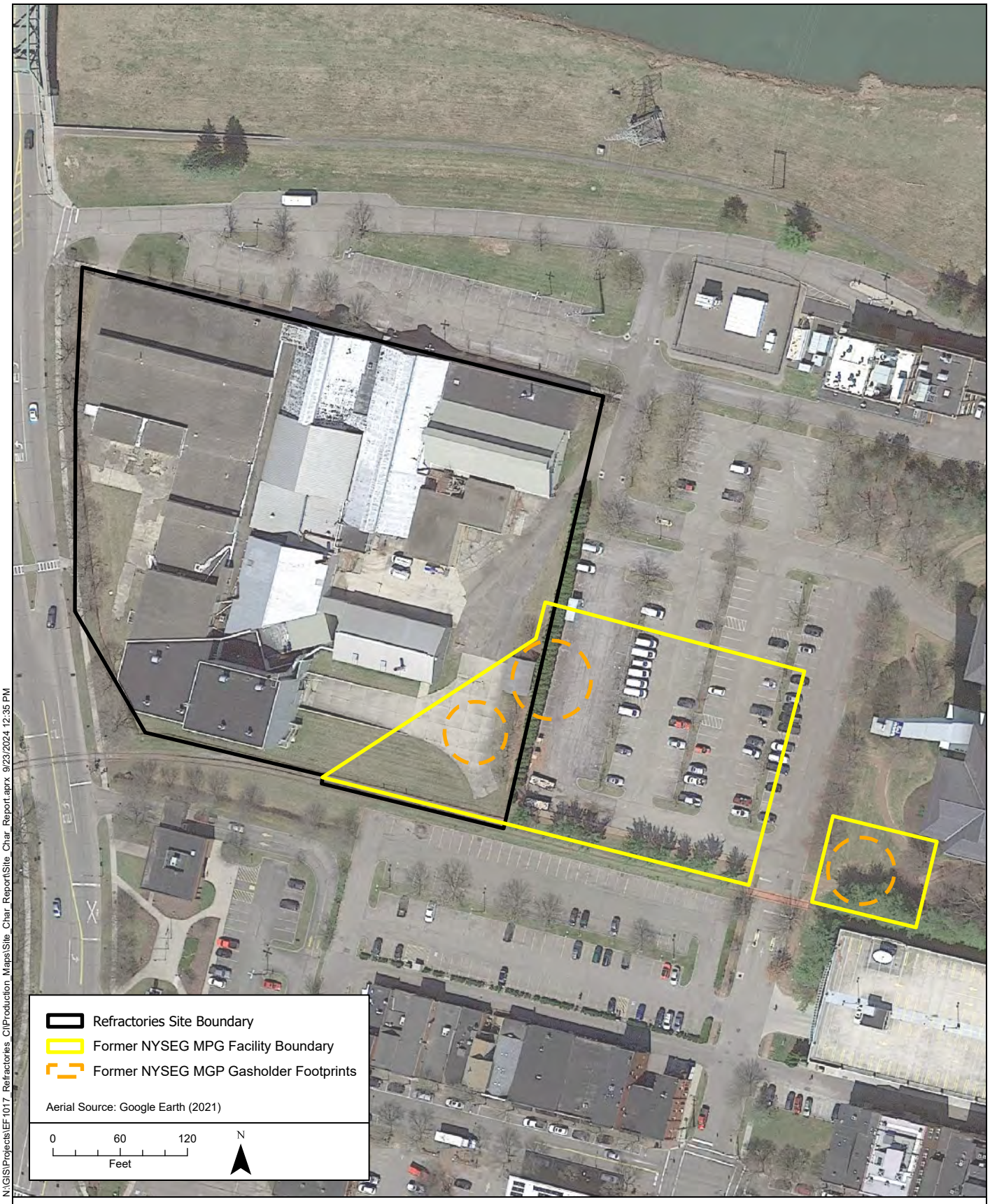


N:\GIS\Projects\EF1017_Refractories_CI\Production_Maps\Site_Char_Report\Site_Char_Report.aprx 9/23/2024 12:35 PM

integral engineering p.c.

DRAFT

Figure 1-1.
Location of Corning Refractories Plant
Refractories P-Site Characterization Report



N:\GIS\Projects\EF1017_Refractories_CI\Production_Maps\Site_Char_Report\Site_Char_Report.aprx 9/23/2024 12:35 PM

integral engineering p.c.

DRAFT

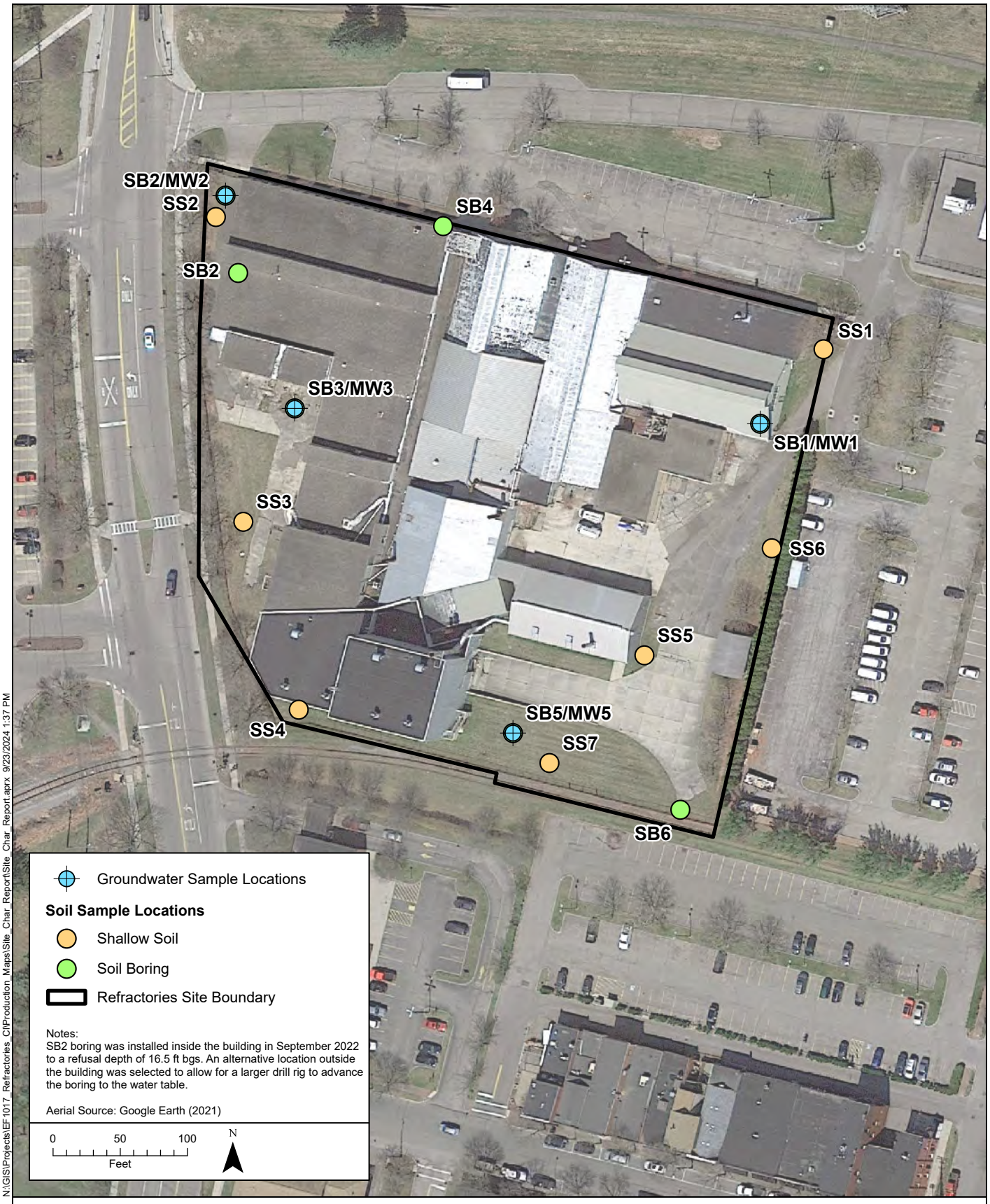
Figure 1-2.
Former NYSEG MGP Boundaries and Features
Refractories P-Site Characterization Report



N:\GIS\Projects\EF1017_Refractories_CI\Production_Maps\Site_Char_Report\Site_Char_Report.aprx 9/23/2024 1:37 PM

DRAFT

Figure 2-1.
Refractories Plant Features
Refractories P-Site Characterization Report

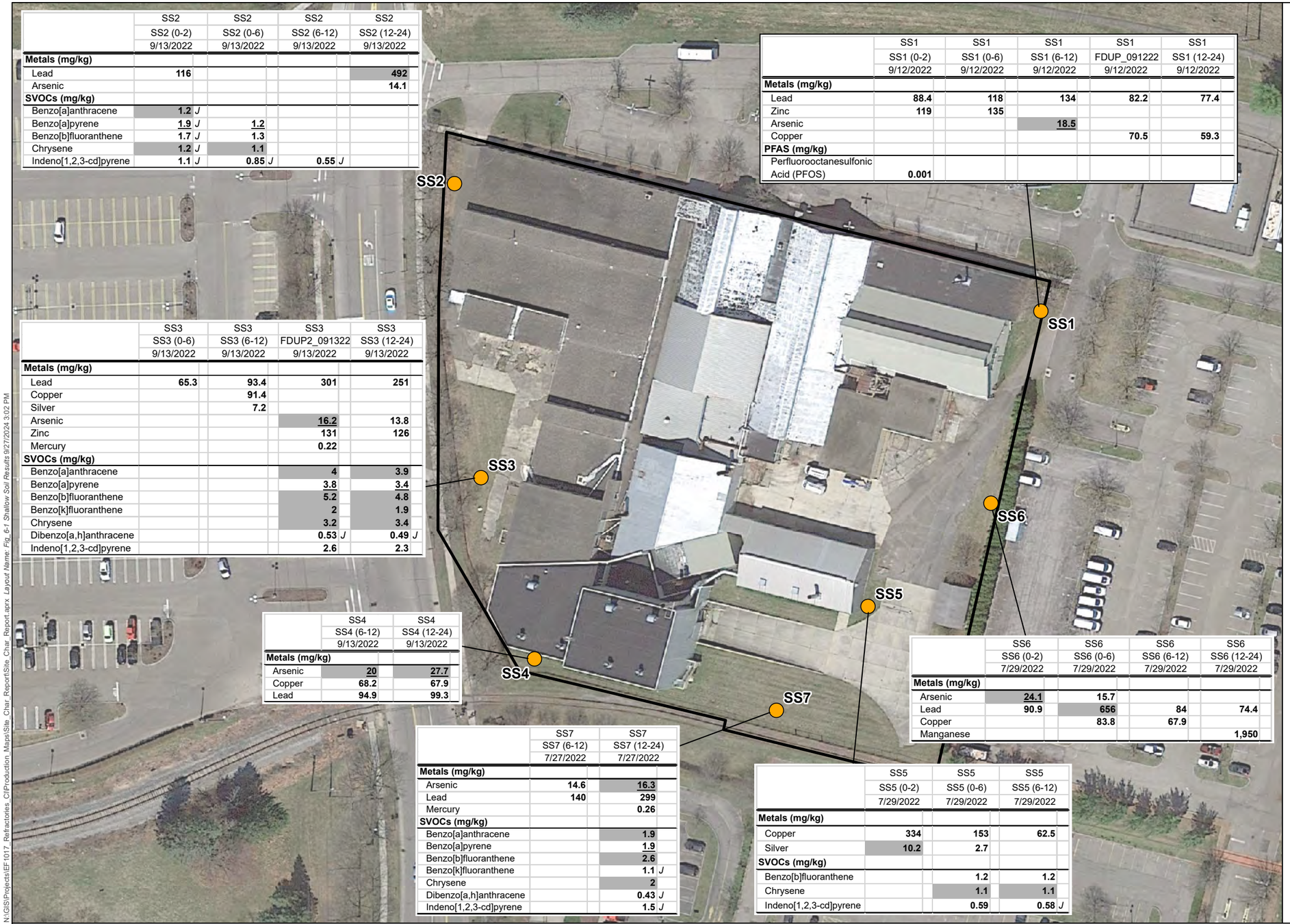


N:\GIS\Projects\EF1017_Refractories_CI\Production_Maps\Site_Char_Report\Site_Char_Report.aprx 9/23/2024 1:37 PM

integral engineering pc.

DRAFT

Figure 4-1.
Sample Locations
Refractories P-Site Characterization Report



	SS2	SS2	SS2	SS2
	SS2 (0-2)	SS2 (0-6)	SS2 (6-12)	SS2 (12-24)
	9/13/2022	9/13/2022	9/13/2022	9/13/2022
Metals (mg/kg)				
Lead	**116**			**492**
Arsenic				**14.1**
SVOCs (mg/kg)				
Benzo[a]anthracene	**1.2** J			
Benzo[a]pyrene	**1.9** J	**1.2**		
Benzo[b]fluoranthene	**1.7** J	**1.3**		
Chrysene	**1.2** J	**1.1**		
Indeno[1,2,3-cd]pyrene	**1.1** J	**0.85** J	**0.55** J	

	SS1	SS1	SS1	SS1	SS1
	SS1 (0-2)	SS1 (0-6)	SS1 (6-12)	FDUP_091222	SS1 (12-24)
	9/12/2022	9/12/2022	9/12/2022	9/12/2022	9/12/2022
Metals (mg/kg)					
Lead	**88.4**	**118**	**134**	**82.2**	**77.4**
Zinc	**119**	**135**			
Arsenic			**18.5**		
Copper				**70.5**	**59.3**
PFAS (mg/kg)					
Perfluorooctanesulfonic Acid (PFOS)	**0.001**				

	SS3	SS3	SS3	SS3
	SS3 (0-6)	SS3 (6-12)	FDUP2_091322	SS3 (12-24)
	9/13/2022	9/13/2022	9/13/2022	9/13/2022
Metals (mg/kg)				
Lead	**65.3**	**93.4**	**301**	**251**
Copper		**91.4**		
Silver		**7.2**		
Arsenic			**16.2**	**13.8**
Zinc			**131**	**126**
Mercury			**0.22**	
SVOCs (mg/kg)				
Benzo[a]anthracene			**4**	**3.9**
Benzo[a]pyrene			**3.8**	**3.4**
Benzo[b]fluoranthene			**5.2**	**4.8**
Benzo[k]fluoranthene			**2**	**1.9**
Chrysene			**3.2**	**3.4**
Dibenzo[a,h]anthracene			**0.53** J	**0.49** J
Indeno[1,2,3-cd]pyrene			**2.6**	**2.3**

	SS4	SS4
	SS4 (6-12)	SS4 (12-24)
	9/13/2022	9/13/2022
Metals (mg/kg)		
Arsenic	**20**	**27.7**
Copper	**68.2**	**67.9**
Lead	**94.9**	**99.3**

	SS7	SS7
	SS7 (6-12)	SS7 (12-24)
	7/27/2022	7/27/2022
Metals (mg/kg)		
Arsenic	**14.6**	**16.3**
Lead	**140**	**299**
Mercury		**0.26**
SVOCs (mg/kg)		
Benzo[a]anthracene		**1.9**
Benzo[a]pyrene		**1.9**
Benzo[b]fluoranthene		**2.6**
Benzo[k]fluoranthene		**1.1** J
Chrysene		**2**
Dibenzo[a,h]anthracene		**0.43** J
Indeno[1,2,3-cd]pyrene		**1.5** J

	SS6	SS6	SS6	SS6
	SS6 (0-2)	SS6 (0-6)	SS6 (6-12)	SS6 (12-24)
	7/29/2022	7/29/2022	7/29/2022	7/29/2022
Metals (mg/kg)				
Arsenic	**24.1**	**15.7**		
Lead	**90.9**	**656**	**84**	**74.4**
Copper		**83.8**	**67.9**	
Manganese				**1,950**

	SS5	SS5	SS5
	SS5 (0-2)	SS5 (0-6)	SS5 (6-12)
	7/29/2022	7/29/2022	7/29/2022
Metals (mg/kg)			
Copper	**334**	**153**	**62.5**
Silver	**10.2**	**2.7**	
SVOCs (mg/kg)			
Benzo[b]fluoranthene		**1.2**	**1.2**
Chrysene		**1.1**	**1.1**
Indeno[1,2,3-cd]pyrene		**0.59**	**0.58** J

2022 Shallow Soil Sample Location

Refractories Site Boundary

Location ID → SS1
Sample ID → SS1 (0-2)
Sample Date → 9/12/2022

Chemical Name	NYSDEC SCO Industrial [a,b]	NYSDEC SCO Protection of Groundwater [b,c]	NYSDEC SCO Unrestricted [b,d]
Metals (mg/kg)			
Arsenic	16	16	13
Copper	10,000	1,720	50
Lead	3,900	450	63
Manganese	10,000	2,000	1,600
Mercury	5.7	0.73	0.18
Silver	6,800	8.3	2
Zinc	10,000	2,480	109
PFAS (mg/kg)			
Perfluorooctanesulfonic Acid (PFOS)	--	0.001	0.00088
SVOCs (mg/kg)			
Benzo[a]anthracene	11	1	1
Benzo[a]pyrene	1.1	22	1
Benzo[b]fluoranthene	11	1.7	1
Benzo[k]fluoranthene	110	1.7	0.8
Chrysene	110	1	1
Dibenzo[a,h]anthracene	1.1	1,000	0.33
Indeno[1,2,3-cd]pyrene	11	8.2	0.5

Notes:
1. J = estimated value
2. Underline = detected concentration exceeds NYSDEC SCOs 2006 Industrial Soil
3. Shading = detected concentration exceeds NYSDEC SCOs 2006 Protection of Groundwater
4. **Bold** = detected concentration exceeds NYSDEC SCOs 2006 Unrestricted Soil
5. PFAS = per- and polyfluoroalkyl substances
6. SCO = soil cleanup objective
7. SVOC = semivolatile organic compounds

[a] NYSDEC, 2006, 6 NYCRR PART 375 Environmental Remediation Programs, Table 375-6.8(b): Restricted Use Soil Cleanup Objectives, Industrial

[b] NYSDEC, 2023, 6 NYCRR PART 375 Environmental Remediation Programs, Sampling, Analysis, and Assessment of Per-and Polyfluoroalkyl Substances (PFAS), Guidance Values for Anticipated Site Use

[c] NYSDEC, 2006, 6 NYCRR PART 375 Environmental Remediation Programs, Table 375-6.8(b): Restricted Use Soil Cleanup Objectives, Protection of Groundwater

[d] NYSDEC, 2006, 6 NYCRR PART 375 Environmental Remediation Programs, Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives

Aerial Source: Google Earth (2021)

0 40 80
Feet

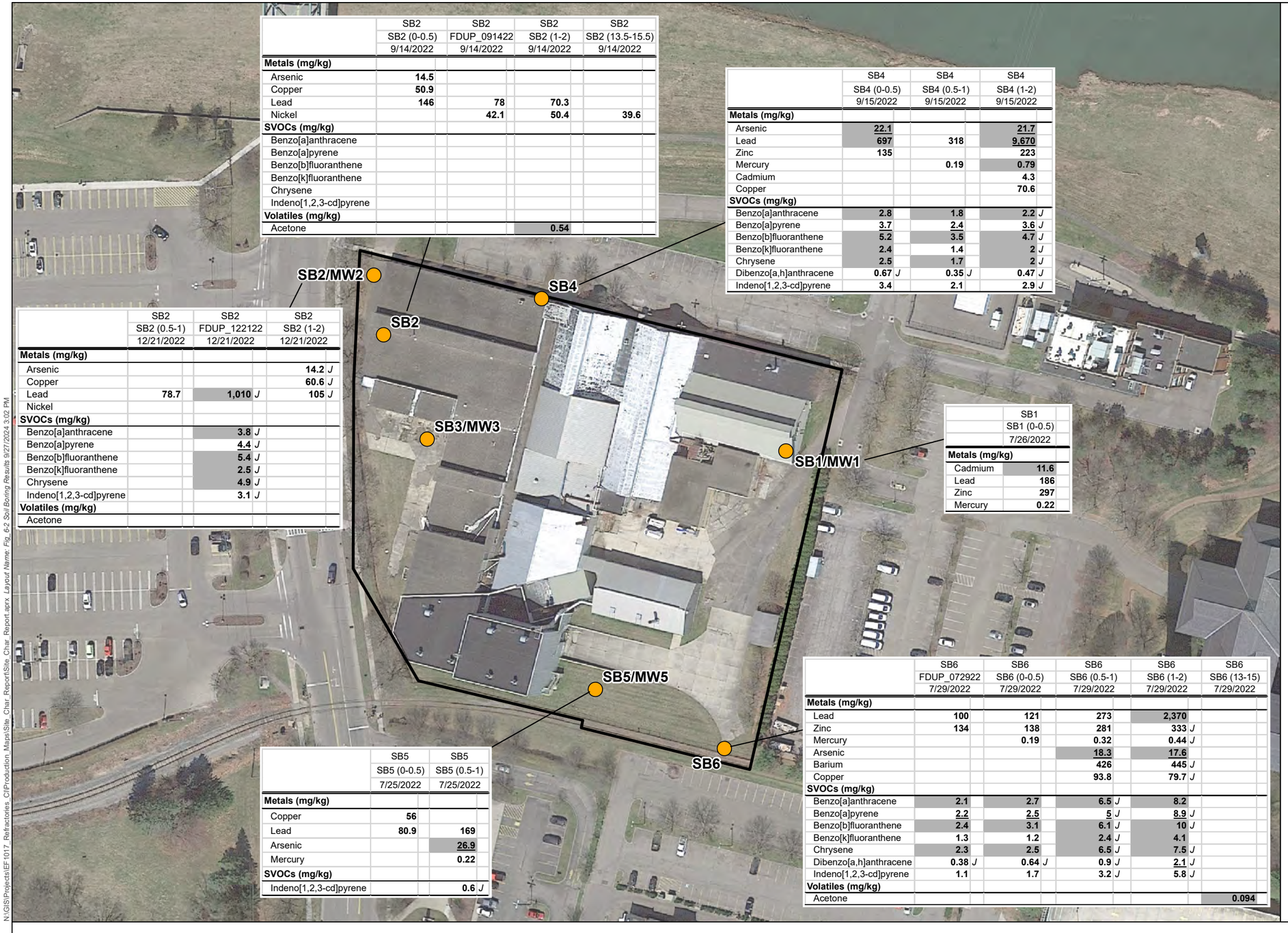
N

N:\GIS\Projects\EF1017_Refractories_CII\Production_Maps\Site_Char_Report\Site_Char_Report.aprx *Layout Name: Fig_6-1_Shallow Soil Results* 9/27/2024 3:02 PM

integral engineering p.c.

DRAFT

Figure 6-1.
Shallow Soil Sample Exceedances
Refractories P-Site Characterization Report



	SB2	SB2	SB2	SB2
	SB2 (0-0.5)	FDUP_091422	SB2 (1-2)	SB2 (13.5-15.5)
	9/14/2022	9/14/2022	9/14/2022	9/14/2022
Metals (mg/kg)				
Arsenic	**14.5**			
Copper	**50.9**			
Lead	**146**	**78**	**70.3**	
Nickel		**42.1**	**50.4**	**39.6**
SVOCs (mg/kg)				
Benzo[a]anthracene				
Benzo[a]pyrene				
Benzo[b]fluoranthene				
Benzo[k]fluoranthene				
Chrysene				
Indeno[1,2,3-cd]pyrene				
Volatiles (mg/kg)				
Acetone			**0.54**	

	SB4	SB4	SB4
	SB4 (0-0.5)	SB4 (0.5-1)	SB4 (1-2)
	9/15/2022	9/15/2022	9/15/2022
Metals (mg/kg)			
Arsenic	**22.1**		**21.7**
Lead	**697**	**318**	**9,670**
Zinc	**135**		**223**
Mercury		**0.19**	**0.79**
Cadmium			**4.3**
Copper			**70.6**
SVOCs (mg/kg)			
Benzo[a]anthracene	**2.8**	**1.8**	**2.2** *J*
Benzo[a]pyrene	**3.7**	**2.4**	**3.6** *J*
Benzo[b]fluoranthene	**5.2**	**3.5**	**4.7** *J*
Benzo[k]fluoranthene	**2.4**	**1.4**	**2** *J*
Chrysene	**2.5**	**1.7**	**2** *J*
Dibenzo[a,h]anthracene	**0.67** *J*	**0.35** *J*	**0.47** *J*
Indeno[1,2,3-cd]pyrene	**3.4**	**2.1**	**2.9** *J*

	SB2	SB2	SB2
	SB2 (0.5-1)	FDUP_122122	SB2 (1-2)
	12/21/2022	12/21/2022	12/21/2022
Metals (mg/kg)			
Arsenic			**14.2** *J*
Copper			**60.6** *J*
Lead	**78.7**	**1,010** *J*	**105** *J*
Nickel			
SVOCs (mg/kg)			
Benzo[a]anthracene		**3.8** *J*	
Benzo[a]pyrene		**4.4** *J*	
Benzo[b]fluoranthene		**5.4** *J*	
Benzo[k]fluoranthene		**2.5** *J*	
Chrysene		**4.9** *J*	
Indeno[1,2,3-cd]pyrene		**3.1** *J*	
Volatiles (mg/kg)			
Acetone			

	SB1
	SB1 (0-0.5)
	7/26/2022
Metals (mg/kg)	
Cadmium	**11.6**
Lead	**186**
Zinc	**297**
Mercury	**0.22**

	SB5	SB5
	SB5 (0-0.5)	SB5 (0.5-1)
	7/25/2022	7/25/2022
Metals (mg/kg)		
Copper	**56**	
Lead	**80.9**	**169**
Arsenic		**26.9**
Mercury		**0.22**
SVOCs (mg/kg)		
Indeno[1,2,3-cd]pyrene		**0.6** *J*

	SB6	SB6	SB6	SB6	SB6
	FDUP_072922	SB6 (0-0.5)	SB6 (0.5-1)	SB6 (1-2)	SB6 (13-15)
	7/29/2022	7/29/2022	7/29/2022	7/29/2022	7/29/2022
Metals (mg/kg)					
Lead	**100**	**121**	**273**	**2,370**	
Zinc	**134**	**138**	**281**	**333** *J*	
Mercury		**0.19**	**0.32**	**0.44** *J*	
Arsenic			**18.3**	**17.6**	
Barium			**426**	**445** *J*	
Copper			**93.8**	**79.7** *J*	
SVOCs (mg/kg)					
Benzo[a]anthracene	**2.1**	**2.7**	**6.5** *J*	**8.2**	
Benzo[a]pyrene	**2.2**	**2.5**	**5** *J*	**8.9** *J*	
Benzo[b]fluoranthene	**2.4**	**3.1**	**6.1** *J*	**10** *J*	
Benzo[k]fluoranthene	**1.3**	**1.2**	**2.4** *J*	**4.1**	
Chrysene	**2.3**	**2.5**	**6.5** *J*	**7.5** *J*	
Dibenzo[a,h]anthracene	**0.38** *J*	**0.64** *J*	**0.9** *J*	**2.1** *J*	
Indeno[1,2,3-cd]pyrene	**1.1**	**1.7**	**3.2** *J*	**5.8** *J*	
Volatiles (mg/kg)					
Acetone					**0.094**

2022 Shallow Soil Sample Location

Refractories Site Boundary

Location ID →	SB1
Sample ID →	SB1 (0-0.5)
Sample Date →	7/26/2022

Chemical Name	NYSDEC SCO Industrial [a,b]	NYSDEC SCO Protection of Groundwater [b,c]	NYSDEC SCO Unrestricted [b,d]
Metals (mg/kg)			
Arsenic	16	16	13
Barium	10,000	820	350
Cadmiium	60	7.5	2.5
Copper	10,000	1,720	50
Lead	3,900	450	63
Mercury	5.7	0.73	0.18
Nickel	10,000	130	30
Zinc	10,000	2,480	109
SVOCs (mg/kg)			
Benzo[a]anthracene	11	1	1
Benzo[a]pyrene	1.1	22	1
Benzo[b]fluoranthene	11	1.7	1
Benzo[k]fluoranthene	110	1.7	0.8
Chrysene	110	1	1
Dibenzo[a,h]anthracene	1.1	1,000	0.33
Indeno[1,2,3-cd]pyrene	11	8.2	0.5
Volatiles			
Acetone	1,000	0.05	0.05

Notes:
1. J = estimated value
2. Underline = detected concentration exceeds NYSDEC SCOs 2006 Industrial Soil
3. Shading = detected concentration exceeds NYSDEC SCOs 2006 Protection of Groundwater
4. **Bold** = detected concentration exceeds NYSDEC SCOs 2006 Unrestricted Soil
5. PFAS = per- and polyfluoroalkyl substances
6. SCO = soil cleanup objective
7. SVOC = semivolatile organic compounds

[a] NYSDEC, 2006, 6 NYCRR PART 375 Environmental Remediation Programs, Table 375-6.8(b): Restricted Use Soil Cleanup Objectives, Industrial

[b] NYSDEC, 2023, 6 NYCRR PART 375 Environmental Remediation Programs, Sampling, Analysis, and Assessment of Per-and Polyfluoroalkyl Substances (PFAS), Guidance Values for Anticipated Site Use

[c] NYSDEC, 2006, 6 NYCRR PART 375 Environmental Remediation Programs, Table 375-6.8(b): Restricted Use Soil Cleanup Objectives, Protection of Groundwater

[d] NYSDEC, 2006, 6 NYCRR PART 375 Environmental Remediation Programs, Table 375-6.8(a): Unrestricted Use Soil Cleanup Objectives

Aerial Source: Google Earth (2021)

0 50 100 Feet

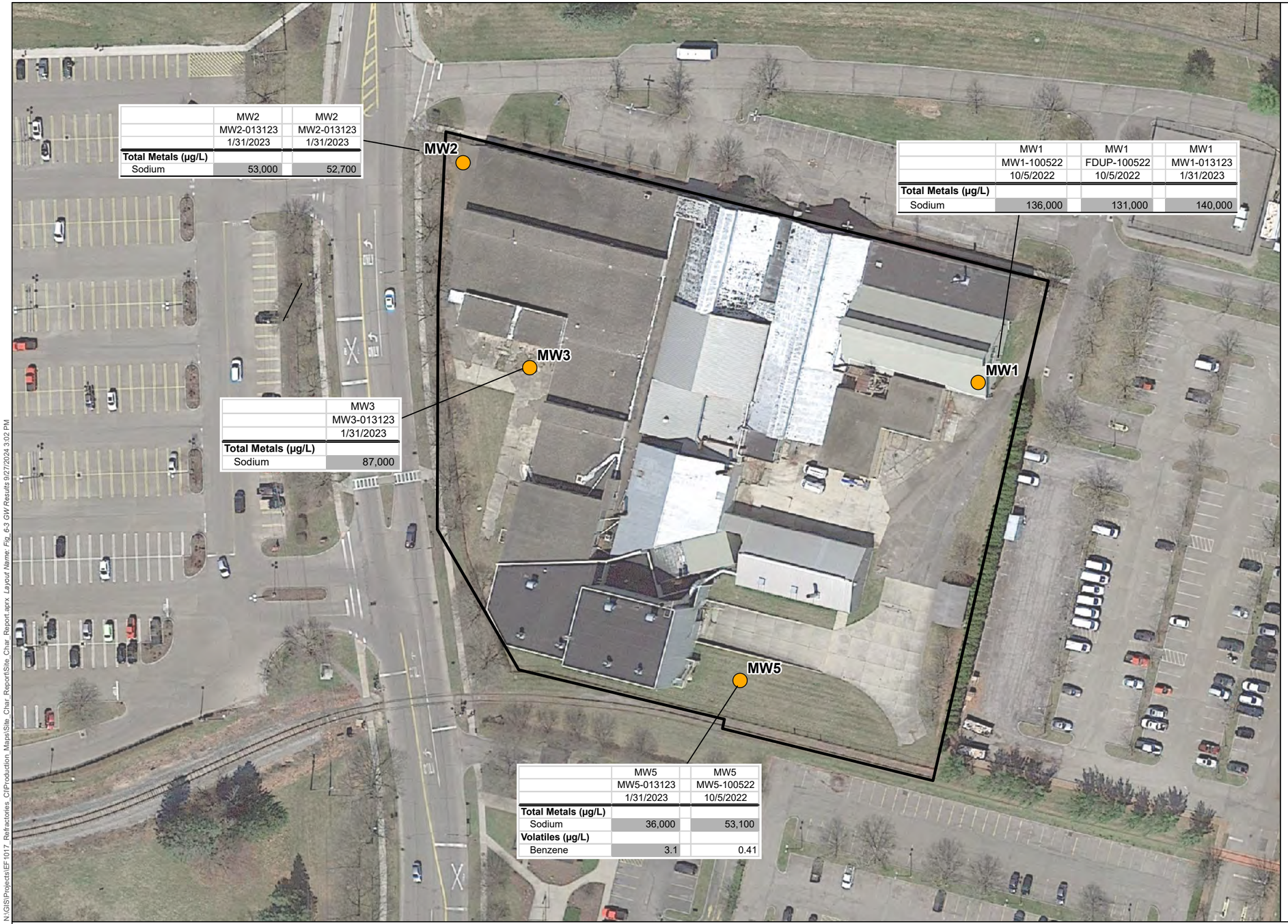
N

N:\GIS\Projects\EF1017_Refractories_CIP\Production_Maps\Site_Char_Report\Site_Char_Report.aprx *Layout Name: Fig_6-2 Soil Boring Results* 9/27/2024 3:02 PM

integral engineering p.c.

DRAFT

Figure 6-2.
Subsurface Soil Boring Sample Exceedances
Refractories P-Site Characterization Report



	MW2	MW2
	MW2-013123	MW2-013123
	1/31/2023	1/31/2023
Total Metals (µg/L)		
Sodium	53,000	52,700

	MW3
	MW3-013123
	1/31/2023
Total Metals (µg/L)	
Sodium	87,000

	MW1	MW1	MW1
	MW1-100522	FDUP-100522	MW1-013123
	10/5/2022	10/5/2022	1/31/2023
Total Metals (µg/L)			
Sodium	136,000	131,000	140,000

	MW5	MW5
	MW5-013123	MW5-100522
	1/31/2023	10/5/2022
Total Metals (µg/L)		
Sodium	36,000	53,100
Volatiles (µg/L)		
Benzene	3.1	0.41

2022 Groundwater Sample Location

Refractories Site Boundary

Sample Location →	SS1
Sample ID →	SS1 (0-2)
Sample Date →	9/12/2022

Analyte	NYSDEC WQS 1998 Class GA
Total Metals (µg/L)	
Sodium	20,000
Volatiles (µg/L)	
Benzene	1

Notes:
1. Shading = exceeds NYSDEC WQS 1998 Class GA
2. WGS = water quality standard

Aerial Source: Google Earth (2021)

0 40 80
Feet

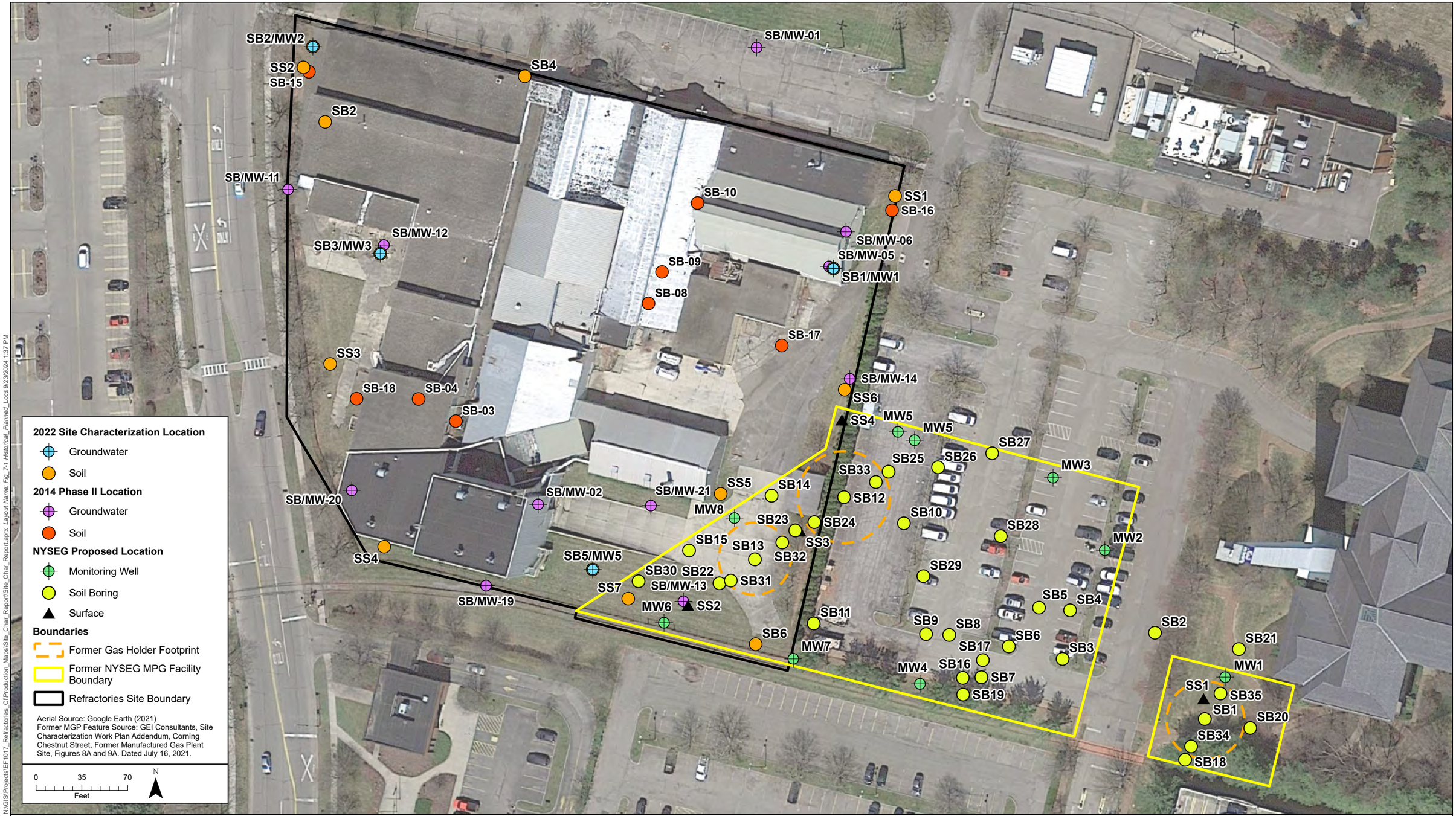
N

N:\GIS\Projects\EF1017_Refractories_CIP\Production_Maps\Site_Char_Report\Site_Char_Report.aprx Layout Name: Fig_6-3 GW Results 9/27/2024 3:02 PM

integral engineering p.c.

DRAFT

Figure 6-3.
Groundwater Sample Exceedances
Refractories P-Site Characterization Report



N:\GIS\Projects\EF1017_Refractories_CI\Production_Maps\Site_Char_Report\Site_Char_Report.aprx Layout Name: Fig_7-1 Historical_Planned_Locs 9/23/2024 1:37 PM

integral engineering p.c.

DRAFT

Figure 7-1.
Historic and Planned Sample Locations
Refractories P-Site Characterization Report

Tables

Table 4-1. Sample Locations

		Coordinates	
Sample ID	Sample Type	Latitude	Longitude
SS1	Surface Soil	42.14602	-77.05893
SS2	Surface Soil	42.14628	-77.06060
SS3	Surface Soil	42.14566	-77.06052
SS4	Surface Soil	42.14528	-77.06036
SS5	Surface Soil	42.14539	-77.05942
SS6	Surface Soil	42.14561	-77.05907
SS7	Surface Soil	42.14517	-77.05968
SB1/MW1	Soil Boring/ Monitoring Well	42.14587	-77.05910
SB2[a]	Soil Boring	42.14617	-77.06054
SB2/MW2[b]	Soil Boring/ Monitoring Well	42.14633	-77.06057
SB3/MW3	Soil Boring/ Monitoring Well	42.14589	-77.06038
SB4	Soil Boring/ Monitoring Well	42.14630	-77.06000
SB5/MW5	Soil Boring/ Monitoring Well	42.14523	-77.05978
SB6	Soil Boring	42.14508	-77.05932

Notes:

[a] SB2 boring was installed inside the building in September 2022 to a refusal depth of 16.5 ft below ground surface. An alternative location outside the building was selected to allow for a larger drill rig to advance the boring to the water table.

[b] SB2/MW2 location completed in January 2023 and installed outside of the building.

Table 4-2. Groundwater Elevation Data

MW ID	Elevation (in ft)[a]	Description	1/31/2023 (ft from TOC)	Elevation (in ft)	4/12/2023 (ft from TOC)	Elevation (in ft)	7/25/2023 (ft from TOC)	Elevation (in ft)	10/24/2023 (ft from TOC)	Elevation (in ft)
MW1	930.37	Top of 1" PVC	16.19	914.18	16.06	914.31	20.03	910.34	19.87	910.50
	927.30	Ground surface / dirt bottom of dry well								
	930.90	Concrete Floor								
MW2	934.71	Cover & Ground	19.89	914.40	19.93	914.36	23.72	910.57	23.48	910.81
	934.29	T/2" PVC								
MW3	933.08	Cover & Ground	17.50	915.09	18.93	913.66	23.44	909.15	22.76	909.83
	932.59	T/2" PVC								
MW5	934.67	Cover & Ground	20.12	914.09	20.17	914.04	24.85	909.36	24.29	909.92
	934.21	T/2" PVC								

Notes:

No MW4 well installed due to equipment limitations inside the building

PVC = poly vinyl chloride

TOC = top of casing

[a]Vertical Datum = North American Vertical Datum of 1988

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB1	SB1	SB1	SB1
					Sample Identification	SB1 (0-0.5)	SB1 (0.5-1)	SB1 (1-2)	SB1 (15-16)
					Laboratory ID	480-200156-2	480-200156-3	480-200156-4	480-200156-5
					Sample Date	2022-07-26 04:07:00	2022-07-26 04:07:00	2022-07-26 04:07:00	2022-07-26 04:07:00
Metals (µg/kg)									
Arsenic	7440382	16,000	16,000	13,000		7,400	7,900	6,800	8,900
Lead	7439921	3,900,000	450,000	63,000		**186,000**	17,800	33,700	8,500
Cadmium	7440439	60,000	7,500	2,500		**11,600**	470	1,300	130 *J*
Aluminum	7429905					8,980,000	9,170,000	8,530,000	7,070,000
Antimony	7440360					3,900 *J*	1,400 *J*	1,100 *J*	800 *J*
Barium	7440393	10,000,000	820,000	350,000		137,000	125,000	117,000	82,300
Beryllium	7440417	2,700,000	47,000	7,200		420	470	440	260
Calcium	7440702					6,080,000	1,960,000	1,810,000	1,340,000
Chromium	7440473					15,200	11,300	13,300	11,500
Cobalt	7440484					9,600	8,300	8,000	7,400
Copper	7440508	10,000,000	1,720,000	50,000		21,400	10,600	9,900	19,800
Iron	7439896					20,000,000	18,600,000	17,000,000	20,500,000
Magnesium	7439954					4,080,000	3,110,000	2,840,000	2,370,000
Manganese	7439965	10,000,000	2,000,000	1,600,000		559,000	585,000	535,000	682,000
Mercury	7439976	5,700	730	180		**220**	42	25	5 *U*
Nickel	7440020	10,000,000	130,000	30,000		23,100	18,700	17,400	17,500
Potassium	7440097					870,000	1,030,000	967,000	341,000
Selenium	7782492	6,800,000	4,000	3,900		1,100 *U*	640 *U*	720 *U*	450 *U*
Silver	7440224	6,800,000	8,300	2,000		520 *J*	230 *U*	240 *U*	220 *U*
Sodium	7440235					172,000 *J*	123,000 *J*	135,000 *J*	112,000 *J*
Thallium	7440280					400 *U*	350 *U*	360 *U*	340 *U*
Vanadium	7440622					14,000	13,100	11,900	11,600
Zinc	7440666	10,000,000	2,480,000	109,000		**297,000**	66,400	95,600	56,600
Polycyclic Aromatic Hydrocarbons (µg/kg)									
2-Methylnaphthalene	91576					37 *U*	41 *U*	38 *U*	37 *U*
Acenaphthene	83329	1,000,000	98,000	20,000		28 *U*	30 *U*	28 *U*	27 *U*
Acenaphthylene	208968	1,000,000	107,000	100,000		24 *U*	27 *U*	24 *U*	24 *U*
Anthracene	120127	1,000,000	1,000,000	100,000		46 *U*	51 *U*	47 *U*	45 *U*
Benz[a]anthracene	56553	11,000	1,000	1,000		19 *U*	20 *U*	19 *U*	18 *U*
Benzo[a]pyrene	50328	1,100	22,000	1,000		28 *U*	30 *U*	28 *U*	27 *U*
Benzo[b]fluoranthene	205992	11,000	1,700	1,000		30 *U*	33 *U*	30 *U*	29 *U*
Benzo[g,h,i]perylene	191242	1,000,000	1,000,000	100,000		20 *U*	22 *U*	20 *U*	19 *U*
Benzo[k]fluoranthene	207089	110,000	1,700	800		24 *U*	27 *U*	24 *U*	24 *U*
Chrysene	218019	110,000	1,000	1,000		42 *U*	46 *U*	42 *U*	41 *U*
Dibenz[a,h]anthracene	53703	1,100	1,000,000	330		33 *U*	36 *U*	33 *U*	32 *U*
Dibenzofuran	132649	1,000,000	210,000	7,000		22 *U*	24 *U*	22 *U*	22 *U*
Fluoranthene	206440	1,000,000	1,000,000	100,000		20 *U*	22 *U*	20 *U*	19 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB1	SB1	SB1	SB1
					Sample Identification	SB1 (0-0.5)	SB1 (0.5-1)	SB1 (1-2)	SB1 (15-16)
					Laboratory ID	480-200156-2	480-200156-3	480-200156-4	480-200156-5
					Sample Date	2022-07-26 04:07:00	2022-07-26 04:07:00	2022-07-26 04:07:00	2022-07-26 04:07:00
Fluorene	86737	1,000,000	386,000	30,000		22 *U*	24 *U*	22 *U*	22 *U*
Indeno[1,2,3-cd]pyrene	193395	11,000	8,200	500		23 *U*	25 *U*	23 *U*	23 *U*
Naphthalene	91203	1,000,000	12,000	12,000		24 *U*	27 *U*	24 *U*	24 *U*
Phenanthrene	85018	1,000,000	1,000,000	100,000		28 *U*	30 *U*	28 *U*	27 *U*
Pyrene	129000	1,000,000	1,000,000	100,000		22 *U*	24 *U*	22 *U*	22 *U*
Per- and Polyfluoroalkyl Substances (µg/kg)									
6:2 fluorotelomer sulfonate	27619972								
8:2 fluorotelomer sulfonate	39108344								
2-(N-ethyl-perfluorooctane sulfonamido) acetate									
Perfluorobutyric acid	375224								
2-(N-methyl-perfluorooctane sulfonamido) acetic acid									
Perfluorooctanoic acid	335671	600	0.8	0.66					
Perfluorooctane sulfonic acid	1763231	440	1	0.88					
Perfluorobutane Sulfonic Acid	375735								
Perfluorodecanoic Acid	335762								
Perfluorododecanoic Acid	307551								
Perfluorodecanesulfonic acid	335773								
Perfluoroheptanoic Acid	375859								
Perfluoroheptanesulfonic acid	375928								
Perfluorohexanoic Acid	307244								
Perfluorohexane Sulfonic Acid	355464								
Perfluorononanoic Acid	375951								
Perfluorooctane sulfonamide	754916								
Perfluoropentanoic Acid	2706903								
Perfluorotetradecanoic Acid	376067								
Perfluorotridecanoic Acid	72629948								
Perfluoroundecanoic Acid	2058948								
Semivolatile Organic Compounds (µg/kg)									
Atrazine	1912249					65 *U*	71 *U*	66 *U*	64 *U*
Carbazole	86748					22 *U*	24 *U*	22 *U*	22 *U*
2,4,5-Trichlorophenol	95954					51 *U*	55 *U*	51 *U*	50 *U*
2,4,6-Trichlorophenol	88062					37 *U*	41 *U*	38 *U*	37 *U*
2,4-Dichlorophenol	120832					20 *U*	22 *U*	20 *U*	19 *U*
2-Chlorophenol	95578					34 *U*	37 *U*	34 *U*	34 *U*
Pentachlorophenol	87865	55,000	800	800		190 *U*	200 *U*	190 *U*	180 *U*
1,1'-Biphenyl	92524					28 *U*	30 *U*	28 *U*	27 *U*
2,2'-oxybis(1-Chloropropane)	108601					37 *U*	41 *U*	38 *U*	37 *U*
2,4-Dimethylphenol	105679					45 *U*	49 *U*	46 *U*	44 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB1	SB1	SB1	SB1
					Sample Identification	SB1 (0-0.5)	SB1 (0.5-1)	SB1 (1-2)	SB1 (15-16)
					Laboratory ID	480-200156-2	480-200156-3	480-200156-4	480-200156-5
					Sample Date	2022-07-26 04:07:00	2022-07-26 04:07:00	2022-07-26 04:07:00	2022-07-26 04:07:00
2,4-Dinitrophenol	51285					860 *U*	950 *U*	870 *U*	850 *U*
2,4-Dinitrotoluene	121142					39 *U*	42 *U*	39 *U*	38 *U*
2,6-Dinitrotoluene	606202					22 *U*	24 *U*	22 *U*	22 *U*
2-Chloronaphthalene	91587					31 *U*	34 *U*	31 *U*	30 *U*
2-Methylphenol	95487	1,000,000	330	330		22 *U*	24 *U*	22 *U*	22 *U*
2-Nitroaniline	88744					28 *U*	30 *U*	28 *U*	27 *U*
2-Nitrophenol	88755					53 *U*	58 *U*	53 *U*	52 *U*
3,3'-Dichlorobenzidine	91941					220 *U*	240 *U*	220 *U*	220 *U*
3-Nitroaniline	99092					52 *U*	57 *U*	52 *U*	51 *U*
4,6-Dinitro-2-methylphenol	534521					190 *U*	200 *U*	190 *U*	180 *U*
4-Bromophenyl-phenylether	101553					26 *U*	29 *U*	27 *U*	26 *U*
4-Chloro-3-methylphenol	59507					46 *U*	51 *U*	47 *U*	45 *U*
4-Chloroaniline	106478					46 *U*	51 *U*	47 *U*	45 *U*
4-Chlorophenyl-phenyl ether	7005723					23 *U*	25 *U*	23 *U*	23 *U*
4-Methylphenol	106445	1,000,000	330	330		22 *U*	24 *U*	22 *U*	22 *U*
4-Nitroaniline	100016					98 *U*	110 *U*	99 *U*	96 *U*
4-Nitrophenol	100027					130 *U*	140 *U*	130 *U*	130 *U*
Acetophenone	98862					25 *U*	28 *U*	26 *U*	25 *U*
Benzaldehyde	100527					150 *U*	160 *U*	150 *U*	150 *U*
Bis(2-chloroethyl)ether	111444					24 *U*	27 *U*	24 *U*	24 *U*
bis(2-Chloroethoxy)methane	111911					40 *U*	43 *U*	40 *U*	39 *U*
bis(2-Ethylhexyl)phthalate	117817					84 *J*	70 *U*	64 *U*	63 *U*
Benzyl n-butyl phthalate	85687					31 *U*	34 *U*	31 *U*	30 *U*
Caprolactam	105602					56 *U*	61 *U*	57 *U*	55 *U*
Diethyl phthalate	84662					24 *U*	27 *U*	24 *U*	24 *U*
Dimethyl phthalate	131113					22 *U*	24 *U*	22 *U*	22 *U*
Di-n-butyl phthalate	84742					32 *U*	35 *U*	32 *U*	31 *U*
Di-n-octylphthalate	117840					22 *U*	24 *U*	22 *U*	22 *U*
Hexachloroethane	67721					24 *U*	27 *U*	24 *U*	24 *U*
Hexachlorobenzene	118741	12,000	3,200	330		25 *U*	28 *U*	26 *U*	25 *U*
Hexachlorobutadiene	87683					28 *U*	30 *U*	28 *U*	27 *U*
Hexachlorocyclopentadiene	77474					25 *U*	28 *U*	26 *U*	25 *U*
Isophorone	78591					40 *U*	43 *U*	40 *U*	39 *U*
Nitrobenzene	98953					21 *U*	23 *U*	21 *U*	21 *U*
N-Nitrosodi-n-propylamine	621647					32 *U*	35 *U*	32 *U*	31 *U*
N-Nitrosodiphenylamine	86306					150 *U*	170 *U*	150 *U*	150 *U*
Phenol	108952	1,000,000	330	330		29 *U*	31 *U*	29 *U*	28 *U*
1,4-Dioxane	123911	250,000	100	100					

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB1	SB1	SB1	SB1
					Sample Identification	SB1 (0-0.5)	SB1 (0.5-1)	SB1 (1-2)	SB1 (15-16)
					Laboratory ID	480-200156-2	480-200156-3	480-200156-4	480-200156-5
					Sample Date	2022-07-26 04:07:00	2022-07-26 04:07:00	2022-07-26 04:07:00	2022-07-26 04:07:00
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	630206					0.57 *U*	0.44 *U*	0.39 *U*	0.54 *U*
1,1,1-Trichloroethane	71556	1,000,000	680	680		0.41 *U*	0.32 *U*	0.29 *U*	0.39 *U*
1,1,2,2-Tetrachloroethane	79345					0.92 *U*	0.71 *U*	0.64 *U*	0.87 *U*
1,1,2-Trichloroethane	79005					0.74 *U*	0.57 *U*	0.51 *U*	0.70 *U*
1,1-Dichloroethane	75343	480,000	270	270		0.69 *U*	0.53 *U*	0.48 *U*	0.66 *U*
1,1-Dichloroethene	75354	1,000,000	330	330		0.70 *U*	0.53 *U*	0.48 *U*	0.66 *U*
1,2,3-Trimethylbenzene	526738					1.20 *U*	0.89 *U*	0.80 *U*	1.10 *U*
1,2,4-Trimethylbenzene	95636	380,000	3,600	3,600		1.10 *U*	0.84 *U*	0.75 *U*	1.00 *U*
1,2,4-Trichlorobenzene	120821					0.35 *U*	0.27 *U*	0.24 *U*	0.33 *U*
1,2-Dichlorobenzene	95501	1,000,000	1,100	1,100		0.44 *U*	0.34 *U*	0.31 *U*	0.42 *U*
1,3-Dichlorobenzene	541731	560,000	2,400	2,400		0.29 *U*	0.22 *U*	0.20 *U*	0.28 *U*
1,4-Dichlorobenzene	106467	250,000	1,800	1,800		0.80 *U*	0.61 *U*	0.55 *U*	0.75 *U*
1,2-Dibromo-3-chloropropane	96128					2.80 *U*	2.20 *U*	2.00 *U*	2.70 *U*
1,2-Dibromoethane	106934					0.73 *U*	0.56 *U*	0.50 *U*	0.69 *U*
1,2-Dichloroethane	107062	60,000	20	20		0.29 *U*	0.22 *U*	0.20 *U*	0.27 *U*
1,2-Dichloropropane	78875					2.80 *U*	2.20 *U*	2.00 *U*	2.70 *U*
1,3,5-Trimethylbenzene	108678	380,000	8,400	8,400		0.37 *U*	0.28 *U*	0.25 *U*	0.35 *U*
2-Hexanone	591786					2.8 *U*	2.2 *U*	2.0 *U*	2.7 *U*
4-Methyl-2-pentanone	108101					1.9 *U*	1.4 *U*	1.3 *U*	1.8 *U*
Acetone	67641	1,000,000	50	50		4.8 *U*	3.7 *U*	3.3 *U*	11 *J*
Benzene	71432	89,000	60	60		0.28 *U*	0.21 *U*	0.19 *U*	0.52 *J*
Bromodichloromethane	75274					0.76 *U*	0.58 *U*	0.53 *U*	0.72 *U*
Bromomethane	74839					0.51 *U*	0.39 *U*	0.35 *U*	0.48 *U*
Bromoform	75252					2.80 *U*	2.20 *U*	2.00 *U*	2.70 *U*
Carbon disulfide	75150					2.80 *U*	2.20 *U*	2.00 *U*	2.70 *U*
Carbon Tetrachloride	56235	44,000	760	760		0.55 *U*	0.42 *U*	0.38 *U*	0.52 *U*
Chloroform	67663	700,000	370	370		0.35 *U*	0.27 *U*	0.24 *U*	0.33 *U*
cis-1,2-Dichloroethene	156592	1,000,000	250	250		0.73 *U*	0.56 *U*	0.50 *U*	0.69 *U*
cis-1,3-Dichloropropene	10061015					0.82 *U*	0.63 *U*	0.57 *U*	0.78 *U*
Chlorobenzene	108907	1,000,000	1,100	1,100		0.75 *U*	0.58 *U*	0.52 *U*	0.71 *U*
Chloroethane	75003					1.30 *U*	0.99 *U*	0.89 *U*	1.20 *U*
Chloromethane	74873					0.34 *U*	0.26 *U*	0.24 *U*	0.33 *U*
Cyclohexane	110827					0.80 *U*	0.61 *U*	0.55 *U*	0.75 *U*
Dibromochloromethane	124481					0.73 *U*	0.56 *U*	0.50 *U*	0.69 *U*
Dichlorodifluoromethane	75718					0.47 *U*	0.36 *U*	0.32 *U*	0.45 *U*
Ethylbenzene	100414	780,000	1,000	1,000		0.39 *U*	0.30 *U*	0.27 *U*	0.37 *U*
Isopropylbenzene	98828					0.86 *U*	0.66 *U*	0.59 *U*	0.81 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB1	SB1	SB1	SB1
					Sample Identification	SB1 (0-0.5)	SB1 (0.5-1)	SB1 (1-2)	SB1 (15-16)
					Laboratory ID	480-200156-2	480-200156-3	480-200156-4	480-200156-5
					Sample Date	2022-07-26 04:07:00	2022-07-26 04:07:00	2022-07-26 04:07:00	2022-07-26 04:07:00
2-Butanone	78933	1,000,000	120	120		2.10 *U*	1.60 *U*	1.40 *U*	4.20 *J*
m,p-Xylene	179601231					0.95 *U*	0.73 *U*	0.66 *U*	0.91 *U*
Methyl Acetate	79209					3.4 *U*	2.6 *U*	2.4 *U*	3.3 *U*
Methylcyclohexane	108872					0.86 *U*	0.66 *U*	0.60 *U*	0.82 *U*
Methylene Chloride	75092	1,000,000	50	50		2.60 *U*	2.00 *U*	1.80 *U*	2.50 *U*
Methyl tert-butyl ether	1634044	1,000,000	930	930		0.56 *U*	0.43 *U*	0.39 *U*	0.53 *U*
n-Butylbenzene	104518	1,000,000	12,000	12,000		0.49 *U*	0.38 *U*	0.34 *U*	0.47 *U*
n-Propylbenzene	103651	1,000,000	3,900	3,900		0.45 *U*	0.35 *U*	0.31 *U*	0.43 *U*
o-Xylene	95476					0.74 *U*	0.57 *U*	0.51 *U*	0.70 *U*
sec-Butylbenzene	135988	1,000,000	11,000	11,000		0.49 *U*	0.38 *U*	0.34 *U*	0.47 *U*
Styrene	100425					0.28 *U*	0.22 *U*	0.20 *U*	0.27 *U*
tert-Butylbenzene	98066	1,000,000	5,900	5,900		0.59 *U*	0.45 *U*	0.41 *U*	0.56 *U*
Toluene	108883	1,000,000	700	700		0.43 *U*	0.35 *J*	0.30 *U*	0.79 *J*
Tetrachloroethane	127184	300,000	1,300	1,300		0.76 *U*	0.59 *U*	0.53 *U*	0.72 *U*
trans-1,2-Dichloroethene	156605	1,000,000	190	190		0.59 *U*	0.45 *U*	0.41 *U*	0.56 *U*
trans-1,3-Dichloropropene	10061026					2.50 *U*	1.90 *U*	1.70 *U*	2.40 *U*
Trichloroethene	79016	400,000	470	470		1.30 *U*	0.96 *U*	0.86 *U*	1.2 *U*
Trichlorotrifluoroethane	76131					1.30 *U*	0.99 *U*	0.90 *U*	1.2 *U*
Trichlorofluoromethane	75694					0.54 *U*	0.41 *U*	0.37 *U*	0.51 *U*
Vinyl Chloride	75014	27,000	20	20		0.69 *U*	0.53 *U*	0.48 *U*	0.66 *U*
Xylenes	1330207	1,000,000	1,600	260		0.95 *U*	0.73 *U*	0.66 *U*	0.91 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB1	SB2	SB2	SB2
					Sample Identification	SB1 (15-16)	SB2 (0-0.5)	SB2 (0-0.5)	SB2 (0.5-1)
					Laboratory ID	480-200156-6	480-201707-1	480-204989-3	480-201707-2
					Sample Date	2022-07-26 04:07:00	2022-09-14 12:09:00	2022-12-21 12:12:00	2022-09-14 12:09:00
Metals (µg/kg)									
Arsenic	7440382	16,000	16,000	13,000		8,900	**14,500**	7,200	8,300
Lead	7439921	3,900,000	450,000	63,000		8,500	**146,000**	26,500	49,200
Cadmium	7440439	60,000	7,500	2,500		130 *J*	550	200 *J*	94 *J*
Aluminum	7429905					7,070,000	5,090,000	10,700,000	5,000,000
Antimony	7440360					800 *J*	1,200 *J*	500 *U*	530 *J*
Barium	7440393	10,000,000	820,000	350,000		82,300	76,700	87,500	54,700
Beryllium	7440417	2,700,000	47,000	7,200		260	890	540	1,100
Calcium	7440702					1,340,000	7,690,000	3,270,000	1,290,000
Chromium	7440473					11,500	16,500	17,300 *J-*	14,800
Cobalt	7440484					7,400	5,900	8,500	5,500
Copper	7440508	10,000,000	1,720,000	50,000		19,800	**50,900**	19,500	47,000
Iron	7439896					20,500,000	31,000,000	19,700,000 *J+*	17,000,000
Magnesium	7439954					2,370,000	1,050,000	3,450,000	571,000
Manganese	7439965	10,000,000	2,000,000	1,600,000		682,000	182,000	508,000	161,000
Mercury	7439976	5,700	730	180		5 *U*	66 *J-*	30	37
Nickel	7440020	10,000,000	130,000	30,000		17,500	14,200	21,300	20,400
Potassium	7440097					341,000	1,220,000	1,920,000	839,000
Selenium	7782492	6,800,000	4,000	3,900		450 *U*	1,800 *J*	1,300 *J*	1,100 *J*
Silver	7440224	6,800,000	8,300	2,000		220 *U*	250 *U*	640 *J*	260 *U*
Sodium	7440235					112,000 *J*	472,000	60,700 *J*	169,000 *J*
Thallium	7440280					340 *U*	1,300 *J*	370 *U*	1,400 *J*
Vanadium	7440622					11,600	24,900	16,100	29,000
Zinc	7440666	10,000,000	2,480,000	109,000		56,600	34,000	77,700	20,300
Polycyclic Aromatic Hydrocarbons (µg/kg)									
2-Methylnaphthalene	91576					37 *U*	45 *UJ*	210 *U*	42 *U*
Acenaphthene	83329	1,000,000	98,000	20,000		27 *U*	33 *UJ*	150 *U*	31 *U*
Acenaphthylene	208968	1,000,000	107,000	100,000		24 *U*	44 *J-*	130 *U*	27 *U*
Anthracene	120127	1,000,000	1,000,000	100,000		45 *U*	55 *UJ*	260 *U*	52 *U*
Benz[a]anthracene	56553	11,000	1,000	1,000		18 *U*	200 *J-*	140 *J*	69 *J*
Benzo[a]pyrene	50328	1,100	22,000	1,000		27 *U*	230 *J-*	150 *J*	82 *J*
Benzo[b]fluoranthene	205992	11,000	1,700	1,000		29 *U*	340 *J-*	170 *U*	120 *J*
Benzo[g,h,i]perylene	191242	1,000,000	1,000,000	100,000		19 *U*	160 *J-*	120 *J*	72 *J*
Benzo[k]fluoranthene	207089	110,000	1,700	800		24 *U*	110 *J-*	130 *U*	37 *J*
Chrysene	218019	110,000	1,000	1,000		41 *U*	390 *J-*	230 *U*	170 *J*
Dibenz[a,h]anthracene	53703	1,100	1,000,000	330		32 *U*	46 *J-*	180 *U*	37 *U*
Dibenzofuran	132649	1,000,000	210,000	7,000		22 *U*	26 *UJ*	120 *U*	25 *U*
Fluoranthene	206440	1,000,000	1,000,000	100,000		19 *U*	400 *J-*	240 *J*	120 *J*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB1	SB2	SB2	SB2
					Sample Identification	SB1 (15-16)	SB2 (0-0.5)	SB2 (0-0.5)	SB2 (0.5-1)
					Laboratory ID	480-200156-6	480-201707-1	480-204989-3	480-201707-2
					Sample Date	2022-07-26 04:07:00	2022-09-14 12:09:00	2022-12-21 12:12:00	2022-09-14 12:09:00
Fluorene	86737	1,000,000	386,000	30,000		22 *U*	26 *UJ*	120 *U*	25 *U*
Indeno[1,2,3-cd]pyrene	193395	11,000	8,200	500		23 *U*	180 *J-*	130 *U*	65 *J*
Naphthalene	91203	1,000,000	12,000	12,000		24 *U*	29 *UJ*	130 *U*	27 *U*
Phenanthrene	85018	1,000,000	1,000,000	100,000		27 *U*	380 *J-*	150 *U*	120 *J*
Pyrene	129000	1,000,000	1,000,000	100,000		22 *U*	360 *J-*	200 *J*	110 *J*
Per- and Polyfluoroalkyl Substances (µg/kg)									
6:2 fluorotelomer sulfonate	27619972								
8:2 fluorotelomer sulfonate	39108344								
2-(N-ethyl-perfluorooctane sulfonamido) acetate									
Perfluorobutyric acid	375224								
2-(N-methyl-perfluorooctane sulfonamido) acetic acid									
Perfluorooctanoic acid	335671	600	0.8	0.66					
Perfluorooctane sulfonic acid	1763231	440	1	0.88					
Perfluorobutane Sulfonic Acid	375735								
Perfluorodecanoic Acid	335762								
Perfluorododecanoic Acid	307551								
Perfluorodecanesulfonic acid	335773								
Perfluoroheptanoic Acid	375859								
Perfluoroheptanesulfonic acid	375928								
Perfluorohexanoic Acid	307244								
Perfluorohexane Sulfonic Acid	355464								
Perfluorononanoic Acid	375951								
Perfluorooctane sulfonamide	754916								
Perfluoropentanoic Acid	2706903								
Perfluorotetradecanoic Acid	376067								
Perfluorotridecanoic Acid	72629948								
Perfluoroundecanoic Acid	2058948								
Semivolatile Organic Compounds (µg/kg)									
Atrazine	1912249					64 *U*	78 *UJ*	360 *U*	73 *U*
Carbazole	86748					22 *U*	31 *J-*	120 *U*	25 *U*
2,4,5-Trichlorophenol	95954					50 *U*	60 *U*	280 *U*	57 *U*
2,4,6-Trichlorophenol	88062					37 *U*	45 *U*	210 *U*	42 *U*
2,4-Dichlorophenol	120832					19 *U*	24 *U*	110 *U*	22 *U*
2-Chlorophenol	95578					34 *U*	41 *U*	190 *U*	38 *U*
Pentachlorophenol	87865	55,000	800	800		180 *U*	220 *U*	1,000 *U*	210 *U*
1,1'-Biphenyl	92524					27 *U*	33 *UJ*	150 *U*	31 *U*
2,2'-oxybis(1-Chloropropane)	108601					37 *U*	45 *UJ*	210 *U*	42 *U*
2,4-Dimethylphenol	105679					44 *U*	54 *U*	250 *U*	51 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB1	SB2	SB2	SB2
					Sample Identification	SB1 (15-16)	SB2 (0-0.5)	SB2 (0-0.5)	SB2 (0.5-1)
					Laboratory ID	480-200156-6	480-201707-1	480-204989-3	480-201707-2
					Sample Date	2022-07-26 04:07:00	2022-09-14 12:09:00	2022-12-21 12:12:00	2022-09-14 12:09:00
2,4-Dinitrophenol	51285					850 *U*	1,000 *U*	4,800 *U*	970 *U*
2,4-Dinitrotoluene	121142					38 *U*	46 *UJ*	210 *U*	43 *U*
2,6-Dinitrotoluene	606202					22 *U*	26 *UJ*	120 *U*	25 *U*
2-Chloronaphthalene	91587					30 *U*	37 *UJ*	170 *U*	35 *U*
2-Methylphenol	95487	1,000,000	330	330		22 *U*	26 *U*	120 *U*	25 *U*
2-Nitroaniline	88744					27 *U*	33 *UJ*	150 *U*	31 *U*
2-Nitrophenol	88755					52 *U*	63 *U*	290 *U*	59 *U*
3,3'-Dichlorobenzidine	91941					220 *U*	260 *UJ*	1,200 *U*	250 *U*
3-Nitroaniline	99092					51 *U*	62 *UJ*	290 *U*	58 *U*
4,6-Dinitro-2-methylphenol	534521					180 *U*	220 *U*	1,000 *U*	210 *U*
4-Bromophenyl-phenylether	101553					26 *U*	32 *UJ*	150 *U*	30 *U*
4-Chloro-3-methylphenol	59507					45 *U*	55 *U*	260 *U*	52 *U*
4-Chloroaniline	106478					45 *U*	55 *UJ*	260 *U*	52 *U*
4-Chlorophenyl-phenyl ether	7005723					23 *U*	28 *UJ*	130 *U*	26 *U*
4-Methylphenol	106445	1,000,000	330	330		22 *U*	26 *U*	120 *U*	25 *U*
4-Nitroaniline	100016					96 *U*	120 *UJ*	550 *U*	110 *U*
4-Nitrophenol	100027					130 *U*	160 *U*	730 *U*	150 *U*
Acetophenone	98862					25 *U*	30 *UJ*	140 *U*	28 *U*
Benzaldehyde	100527					150 *U*	180 *UJ*	830 *U*	170 *U*
Bis(2-chloroethyl)ether	111444					24 *U*	29 *UJ*	130 *U*	27 *U*
bis(2-Chloroethoxy)methane	111911					39 *U*	47 *UJ*	220 *U*	45 *U*
bis(2-Ethylhexyl)phthalate	117817					63 *U*	120 *J-*	360 *U*	72 *U*
Benzyl n-butyl phthalate	85687					30 *U*	65 *J-*	250 *J*	35 *U*
Caprolactam	105602					55 *U*	140 *J-*	310 *U*	63 *U*
Diethyl phthalate	84662					24 *U*	94 *UJ*	130 *U*	27 *U*
Dimethyl phthalate	131113					22 *U*	26 *UJ*	120 *U*	25 *U*
Di-n-butyl phthalate	84742					31 *U*	38 *UJ*	180 *U*	36 *U*
Di-n-octylphthalate	117840					22 *U*	26 *UJ*	120 *U*	25 *U*
Hexachloroethane	67721					24 *U*	29 *UJ*	130 *U*	27 *U*
Hexachlorobenzene	118741	12,000	3,200	330		25 *U*	30 *UJ*	140 *U*	28 *U*
Hexachlorobutadiene	87683					27 *U*	33 *UJ*	150 *U*	31 *U*
Hexachlorocyclopentadiene	77474					25 *U*	30 *UJ*	140 *U*	28 *U*
Isophorone	78591					39 *U*	47 *UJ*	220 *U*	45 *U*
Nitrobenzene	98953					21 *U*	25 *UJ*	120 *U*	24 *U*
N-Nitrosodi-n-propylamine	621647					31 *U*	38 *UJ*	180 *U*	36 *U*
N-Nitrosodiphenylamine	86306					150 *U*	180 *UJ*	850 *U*	170 *U*
Phenol	108952	1,000,000	330	330		28 *U*	34 *U*	160 *U*	32 *U*
1,4-Dioxane	123911	250,000	100	100					

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB1	SB2	SB2	SB2
					Sample Identification	SB1 (15-16)	SB2 (0-0.5)	SB2 (0-0.5)	SB2 (0.5-1)
					Laboratory ID	480-200156-6	480-201707-1	480-204989-3	480-201707-2
					Sample Date	2022-07-26 04:07:00	2022-09-14 12:09:00	2022-12-21 12:12:00	2022-09-14 12:09:00
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	630206					0.54 *U*	0.78 *UJ*	0.65 *U*	1.40 *U*
1,1,1-Trichloroethane	71556	1,000,000	680	680		0.39 *U*	0.56 *UJ*	0.48 *U*	0.98 *U*
1,1,2,2-Tetrachloroethane	79345					0.87 *U*	1.30 *UJ*	1.10 *U*	2.20 *U*
1,1,2-Trichloroethane	79005					0.70 *U*	1.00 *UJ*	0.85 *U*	1.80 *U*
1,1-Dichloroethane	75343	480,000	270	270		0.66 *U*	0.95 *UJ*	0.80 *U*	1.70 *U*
1,1-Dichloroethene	75354	1,000,000	330	330		0.66 *U*	0.95 *UJ*	0.80 *U*	1.70 *UJ*
1,2,3-Trimethylbenzene	526738					1.10 *U*	1.60 *UJ*	1.30 *U*	2.80 *U*
1,2,4-Trimethylbenzene	95636	380,000	3,600	3,600		1.00 *U*	1.50 *UJ*	1.30 *U*	2.60 *U*
1,2,4-Trichlorobenzene	120821					0.33 *U*	0.47 *UJ*	0.40 *U*	0.82 *U*
1,2-Dichlorobenzene	95501	1,000,000	1,100	1,100		0.42 *U*	0.61 *UJ*	0.51 *U*	1.10 *U*
1,3-Dichlorobenzene	541731	560,000	2,400	2,400		0.28 *U*	0.40 *UJ*	0.34 *U*	0.70 *U*
1,4-Dichlorobenzene	106467	250,000	1,800	1,800		0.75 *U*	1.10 *UJ*	0.92 *U*	1.90 *U*
1,2-Dibromo-3-chloropropane	96128					2.70 *U*	3.90 *UJ*	3.30 *U*	6.80 *U*
1,2-Dibromoethane	106934					0.69 *U*	1.00 *UJ*	0.84 *U*	1.70 *U*
1,2-Dichloroethane	107062	60,000	20	20		0.27 *U*	0.39 *UJ*	0.33 *U*	0.68 *U*
1,2-Dichloropropane	78875					2.70 *U*	3.90 *UJ*	3.30 *U*	6.80 *U*
1,3,5-Trimethylbenzene	108678	380,000	8,400	8,400		0.35 *U*	0.50 *UJ*	0.42 *U*	0.87 *U*
2-Hexanone	591786					2.70 *U*	3.90 *UJ*	3.30 *U*	6.80 *U*
4-Methyl-2-pentanone	108101					1.80 *U*	2.50 *UJ*	2.10 *U*	4.40 *U*
Acetone	67641	1,000,000	50	50		11.00 *J*	15.00 *J*	5.50 *U*	11 *U*
Benzene	71432	89,000	60	60		0.52 *J*	0.38 *UJ*	0.32 *U*	0.66 *U*
Bromodichloromethane	75274					0.72 *U*	1.00 *UJ*	0.88 *U*	1.80 *U*
Bromomethane	74839					0.48 *U*	0.70 *UJ*	0.59 *U*	1.20 *U*
Bromoform	75252					2.70 *U*	3.90 *UJ*	3.30 *U*	6.80 *U*
Carbon disulfide	75150					2.70 *U*	3.90 *UJ*	3.30 *U*	6.80 *U*
Carbon Tetrachloride	56235	44,000	760	760		0.52 *U*	0.75 *UJ*	0.63 *U*	1.30 *UJ*
Chloroform	67663	700,000	370	370		0.33 *U*	0.48 *UJ*	0.55 *U*	0.84 *U*
cis-1,2-Dichloroethene	156592	1,000,000	250	250		0.69 *U*	0.99 *UJ*	0.84 *U*	1.70 *U*
cis-1,3-Dichloropropene	10061015					0.78 *U*	1.10 *UJ*	0.94 *U*	1.90 *U*
Chlorobenzene	108907	1,000,000	1,100	1,100		0.71 *U*	1.00 *UJ*	0.86 *U*	1.80 *U*
Chloroethane	75003					1.20 *U*	1.80 *UJ*	1.50 *U*	3.10 *U*
Chloromethane	74873					0.33 *U*	0.47 *UJ*	0.40 *U*	0.82 *U*
Cyclohexane	110827					0.75 *U*	1.10 *UJ*	0.92 *U*	1.90 *UJ*
Dibromochloromethane	124481					0.69 *U*	0.99 *UJ*	0.84 *U*	1.70 *U*
Dichlorodifluoromethane	75718					0.45 *U*	0.64 *UJ*	0.54 *U*	1.10 *U*
Ethylbenzene	100414	780,000	1,000	1,000		0.37 *U*	0.54 *UJ*	0.73 *J*	0.93 *U*
Isopropylbenzene	98828					0.81 *U*	1.20 *UJ*	0.99 *U*	2.00 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB1	SB2	SB2	SB2
					Sample Identification	SB1 (15-16)	SB2 (0-0.5)	SB2 (0-0.5)	SB2 (0.5-1)
					Laboratory ID	480-200156-6	480-201707-1	480-204989-3	480-201707-2
					Sample Date	2022-07-26 04:07:00	2022-09-14 12:09:00	2022-12-21 12:12:00	2022-09-14 12:09:00
2-Butanone	78933	1,000,000	120	120		4.20 *J*	2.80 *UJ*	2.40 *U*	5.00 *U*
m,p-Xylene	179601231					0.91 *U*	1.30 *UJ*	1.80 *J*	2.30 *U*
Methyl Acetate	79209					3.3 *U*	4.7 *UJ*	4.0 *U*	8.2 *U*
Methylcyclohexane	108872					0.82 *U*	1.20 *UJ*	1.00 *U*	2.10 *UJ*
Methylene Chloride	75092	1,000,000	50	50		2.50 *U*	3.60 *UJ*	3.00 *U*	6.20 *U*
Methyl tert-butyl ether	1634044	1,000,000	930	930		0.53 *U*	0.76 *UJ*	0.64 *U*	1.30 *U*
n-Butylbenzene	104518	1,000,000	12,000	12,000		0.47 *U*	0.68 *UJ*	0.57 *U*	1.20 *U*
n-Propylbenzene	103651	1,000,000	3,900	3,900		0.43 *U*	0.62 *UJ*	0.52 *U*	1.10 *U*
o-Xylene	95476					0.70 *U*	1.00 *UJ*	0.86 *U*	1.80 *U*
sec-Butylbenzene	135988	1,000,000	11,000	11,000		0.47 *U*	0.68 *UJ*	0.57 *U*	1.20 *U*
Styrene	100425					0.27 *U*	0.39 *UJ*	0.33 *U*	0.68 *U*
tert-Butylbenzene	98066	1,000,000	5,900	5,900		0.56 *U*	0.81 *UJ*	0.68 *U*	1.40 *U*
Toluene	108883	1,000,000	700	700		0.79 *J*	0.59 *UJ*	0.49 *U*	1.00 *U*
Tetrachloroethane	127184	300,000	1,300	1,300		0.72 *U*	1.00 *UJ*	2.90 *U*	1.80 *U*
trans-1,2-Dichloroethene	156605	1,000,000	190	190		0.56 *U*	0.80 *UJ*	0.68 *U*	1.40 *U*
trans-1,3-Dichloropropene	10061026					2.40 *U*	3.40 *UJ*	2.90 *U*	6.00 *U*
Trichloroethene	79016	400,000	470	470		1.20 *U*	1.70 *UJ*	1.40 *U*	3.00 *U*
Trichlorotrifluoroethane	76131					1.20 *U*	1.80 *UJ*	1.50 *U*	3.10 *U*
Trichlorofluoromethane	75694					0.51 *U*	0.74 *UJ*	0.62 *U*	1.30 *U*
Vinyl Chloride	75014	27,000	20	20		0.66 *U*	0.95 *UJ*	0.80 *U*	1.70 *U*
Xylenes	1330207	1,000,000	1,600	260		0.91 *U*	1.30 *UJ*	1.80 *J*	2.30 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location Sample Identification Laboratory ID Sample Date	SB2 SB2 (0.5-1) 480-204989-4 2022-12-21 12:12:00	SB2 SB2 (1-2) 480-201707-3 2022-09-14 12:09:00	SB2 FDUP_091422 480-201707-5 2022-09-14 12:09:00	SB2 SB2 (1-2) 480-204989-5 2022-12-21 12:12:00
Metals (µg/kg)									
Arsenic	7440382	16,000	16,000	13,000		9,200	9,600	9,100	**14,200** *J*
Lead	7439921	3,900,000	450,000	63,000		**78,700**	**70,300**	**78,000**	**105,000** *J*
Cadmium	7440439	60,000	7,500	2,500		210 *J*	280	250	790 *J*
Aluminum	7429905					13,000,000	9,150,000	8,530,000	8,640,000 *J*
Antimony	7440360					450 *U*	960 *J*	790 *J*	4,100 *J*
Barium	7440393	10,000,000	820,000	350,000		63,800	94,900	115,000	79,800 *J*
Beryllium	7440417	2,700,000	47,000	7,200		570	950	760	500
Calcium	7440702					8,990,000	1,970,000	3,900,000	2,730,000 *J*
Chromium	7440473					17,300 *J-*	17,500	17,000	16,200 *J-*
Cobalt	7440484					10,000	8,200	7,900	7,800
Copper	7440508	10,000,000	1,720,000	50,000		34,500	46,600	43,400	**60,600** *J*
Iron	7439896					27,600,000 *J+*	32,000,000	29,100,000	84,900,000 *J*
Magnesium	7439954					7,540,000	1,470,000	1,530,000	2,570,000 *J+*
Manganese	7439965	10,000,000	2,000,000	1,600,000		441,000	377,000	344,000	610,000 *J+*
Mercury	7439976	5,700	730	180		22	50	65	53
Nickel	7440020	10,000,000	130,000	30,000		28,000	**50,400**	**42,100**	23,200 *J*
Potassium	7440097					1,830,000	1,650,000	1,580,000	1,380,000 *J*
Selenium	7782492	6,800,000	4,000	3,900		730 *J*	620 *J*	560 *J*	1,900 *J*
Silver	7440224	6,800,000	8,300	2,000		1,000	250 *J*	230 *U*	420 *U*
Sodium	7440235					85,500 *J*	181,000	156,000 *J*	92,800 *J*
Thallium	7440280					340 *U*	910 *J*	940 *J*	320 *U*
Vanadium	7440622					19,700	27,700	26,500	28,700 *J*
Zinc	7440666	10,000,000	2,480,000	109,000		103,000	68,600	61,900	89,400 *J*
Polycyclic Aromatic Hydrocarbons (µg/kg)									
2-Methylnaphthalene	91576					190 *U*	40 *U*	39 *U*	3,700 *U*
Acenaphthene	83329	1,000,000	98,000	20,000		140 *U*	30 *U*	29 *U*	2,700 *U*
Acenaphthylene	208968	1,000,000	107,000	100,000		120 *U*	26 *U*	25 *U*	2,400 *U*
Anthracene	120127	1,000,000	1,000,000	100,000		230 *U*	50 *U*	49 *U*	4,600 *U*
Benz[a]anthracene	56553	11,000	1,000	1,000		93 *U*	100 *J*	190 *J+*	1,800 *U*
Benzo[a]pyrene	50328	1,100	22,000	1,000		140 *U*	120 *J*	240 *J+*	2,700 *U*
Benzo[b]fluoranthene	205992	11,000	1,700	1,000		150 *U*	180 *J*	300 *J+*	2,900 *U*
Benzo[g,h,i]perylene	191242	1,000,000	1,000,000	100,000		99 *U*	86 *J*	150 *J+*	2,000 *U*
Benzo[k]fluoranthene	207089	110,000	1,700	800		120 *U*	56 *J*	120 *J+*	2,400 *U*
Chrysene	218019	110,000	1,000	1,000		210 *U*	180 *J*	280 *J+*	4,100 *U*
Dibenz[a,h]anthracene	53703	1,100	1,000,000	330		160 *U*	35 *U*	40 *J+*	3,300 *U*
Dibenzofuran	132649	1,000,000	210,000	7,000		110 *U*	24 *U*	23 *U*	2,200 *U*
Fluoranthene	206440	1,000,000	1,000,000	100,000		120 *J*	180 *J*	410 *J+*	3,300 *J*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location Sample Identification Laboratory ID Sample Date	SB2 SB2 (0.5-1) 480-204989-4 2022-12-21 12:12:00	SB2 SB2 (1-2) 480-201707-3 2022-09-14 12:09:00	SB2 FDUP_091422 480-201707-5 2022-09-14 12:09:00	SB2 SB2 (1-2) 480-204989-5 2022-12-21 12:12:00
Fluorene	86737	1,000,000	386,000	30,000		110 *U*	24 *U*	23 *U*	2,200 *U*
Indeno[1,2,3-cd]pyrene	193395	11,000	8,200	500		120 *U*	91 *J*	180 *J+*	2,300 *U*
Naphthalene	91203	1,000,000	12,000	12,000		120 *U*	26 *U*	25 *U*	2,400 *U*
Phenanthrene	85018	1,000,000	1,000,000	100,000		140 *U*	150 *J*	280 *J+*	2,700 *U*
Pyrene	129000	1,000,000	1,000,000	100,000		110 *U*	160 *J*	350 *J+*	2,800 *J*
Per- and Polyfluoroalkyl Substances (µg/kg)									
6:2 fluorotelomer sulfonate	27619972						0.066 *U*	0.066 *U*	0.062 *U*
8:2 fluorotelomer sulfonate	39108344						0.043 *U*	0.043 *U*	0.040 *U*
2-(N-ethyl-perfluorooctane sulfonamido) acetate							0.097 *U*	0.096 *U*	0.090 *U*
Perfluorobutyric acid	375224						0.380 *U*	0.380 *U*	0.360 *U*
2-(N-methyl-perfluorooctane sulfonamido) acetic acid							0.130 *U*	0.130 *U*	0.120 *U*
Perfluorooctanoic acid	335671	600	0.8	0.66			0.160 *NJ*	0.098 *NJ*	0.070 *J*
Perfluorooctane sulfonic acid	1763231	440	1	0.88			0.130 *U*	0.130 *U*	0.200 *J*
Perfluorobutane Sulfonic Acid	375735						0.038 *U*	0.038 *U*	0.036 *U*
Perfluorodecanoic Acid	335762						0.033 *U*	0.033 *U*	0.030 *U*
Perfluorododecanoic Acid	307551						0.029 *U*	0.029 *U*	0.027 *U*
Perfluorodecanesulfonic acid	335773						0.022 *U*	0.022 *U*	0.021 *U*
Perfluoroheptanoic Acid	375859						0.045 *U*	0.045 *U*	0.042 *U*
Perfluoroheptanesulfonic acid	375928						0.027 *U*	0.027 *U*	0.025 *U*
Perfluorohexanoic Acid	307244						0.054 *U*	0.053 *U*	0.050 *U*
Perfluorohexane Sulfonic Acid	355464						0.048 *U*	0.048 *U*	0.044 *U*
Perfluorononanoic Acid	375951						0.040 *U*	0.040 *U*	0.051 *J*
Perfluorooctane sulfonamide	754916						0.040 *U*	0.040 *U*	0.037 *U*
Perfluoropentanoic Acid	2706903						0.064 *U*	0.064 *U*	0.060 *U*
Perfluorotetradecanoic Acid	376067						0.030 *U*	0.030 *U*	0.028 *U*
Perfluorotridecanoic Acid	72629948						0.029 *U*	0.029 *U*	0.027 *U*
Perfluoroundecanoic Acid	2058948						0.031 *U*	0.031 *U*	0.029 *U*
Semivolatile Organic Compounds (µg/kg)									
Atrazine	1912249					320 *U*	70 *U*	68 *U*	6,400 *U*
Carbazole	86748					110 *U*	24 *U*	30 *J+*	2,200 *U*
2,4,5-Trichlorophenol	95954					250 *U*	54 *U*	53 *U*	5,000 *U*
2,4,6-Trichlorophenol	88062					190 *U*	40 *U*	39 *U*	3,700 *U*
2,4-Dichlorophenol	120832					99 *U*	21 *U*	21 *U*	2,000 *U*
2-Chlorophenol	95578					170 *U*	37 *U*	36 *U*	3,400 *U*
Pentachlorophenol	87865	55,000	800	800		930 *U*	200 *U*	200 *U*	18,000 *U*
1,1'-Biphenyl	92524					140 *U*	30 *U*	29 *U*	2,700 *U*
2,2'-oxybis(1-Chloropropane)	108601					190 *U*	40 *U*	39 *U*	3,700 *U*
2,4-Dimethylphenol	105679					220 *U*	48 *U*	47 *U*	4,500 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB2	SB2	SB2	SB2
					Sample Identification	SB2 (0.5-1)	SB2 (1-2)	FDUP_091422	SB2 (1-2)
					Laboratory ID	480-204989-4	480-201707-3	480-201707-5	480-204989-5
					Sample Date	2022-12-21 12:12:00	2022-09-14 12:09:00	2022-09-14 12:09:00	2022-12-21 12:12:00
2,4-Dinitrophenol	51285					4,300 *U*	930 *U*	910 *U*	85,000 *U*
2,4-Dinitrotoluene	121142					190 *U*	41 *U*	41 *U*	3,800 *U*
2,6-Dinitrotoluene	606202					110 *U*	24 *U*	23 *U*	2,200 *U*
2-Chloronaphthalene	91587					150 *U*	33 *U*	32 *U*	3,000 *U*
2-Methylphenol	95487	1,000,000	330	330		110 *U*	24 *U*	23 *U*	2,200 *U*
2-Nitroaniline	88744					140 *U*	30 *U*	29 *U*	2,700 *U*
2-Nitrophenol	88755					260 *U*	57 *U*	56 *U*	5,200 *U*
3,3'-Dichlorobenzidine	91941					1,100 *U*	240 *U*	230 *U*	22,000 *U*
3-Nitroaniline	99092					260 *U*	56 *U*	54 *U*	5,100 *U*
4,6-Dinitro-2-methylphenol	534521					930 *U*	200 *U*	200 *U*	18,000 *U*
4-Bromophenyl-phenylether	101553					130 *U*	28 *U*	28 *U*	2,600 *U*
4-Chloro-3-methylphenol	59507					230 *U*	50 *U*	49 *U*	4,600 *U*
4-Chloroaniline	106478					230 *U*	50 *U*	49 *U*	4,600 *U*
4-Chlorophenyl-phenyl ether	7005723					120 *U*	25 *U*	24 *U*	2,300 *U*
4-Methylphenol	106445	1,000,000	330	330		110 *U*	24 *U*	23 *U*	2,200 *U*
4-Nitroaniline	100016					490 *U*	110 *U*	100 *U*	9,700 *U*
4-Nitrophenol	100027					650 *U*	140 *U*	140 *U*	13,000 *U*
Acetophenone	98862					130 *U*	27 *U*	27 *U*	2,500 *U*
Benzaldehyde	100527					740 *U*	160 *U*	160 *U*	15,000 *U*
Bis(2-chloroethyl)ether	111444					120 *U*	26 *U*	25 *U*	2,400 *U*
bis(2-Chloroethoxy)methane	111911					200 *U*	43 *U*	42 *U*	3,900 *U*
bis(2-Ethylhexyl)phthalate	117817					320 *U*	69 *U*	67 *U*	6,300 *U*
Benzyl n-butyl phthalate	85687					150 *U*	33 *U*	32 *J+*	3,000 *U*
Caprolactam	105602					280 *U*	60 *U*	59 *U*	5,500 *U*
Diethyl phthalate	84662					120 *U*	26 *U*	190 *UJ*	2,400 *U*
Dimethyl phthalate	131113					110 *U*	24 *U*	23 *U*	2,200 *U*
Di-n-butyl phthalate	84742					160 *U*	34 *U*	34 *U*	3,200 *U*
Di-n-octylphthalate	117840					110 *U*	24 *U*	23 *U*	2,200 *U*
Hexachloroethane	67721					120 *U*	26 *U*	25 *U*	2,400 *U*
Hexachlorobenzene	118741	12,000	3,200	330		130 *U*	27 *U*	27 *U*	2,500 *U*
Hexachlorobutadiene	87683					140 *U*	30 *U*	29 *U*	2,700 *U*
Hexachlorocyclopentadiene	77474					130 *U*	27 *U*	27 *U*	2,500 *U*
Isophorone	78591					200 *U*	43 *U*	42 *U*	3,900 *U*
Nitrobenzene	98953					100 *U*	22 *U*	22 *U*	2,100 *U*
N-Nitrosodi-n-propylamine	621647					160 *U*	34 *U*	34 *U*	3,200 *U*
N-Nitrosodiphenylamine	86306					760 *U*	160 *U*	160 *U*	15,000 *U*
Phenol	108952	1,000,000	330	330		140 *U*	31 *U*	30 *U*	2,800 *U*
1,4-Dioxane	123911	250,000	100	100			65 *U*	64 *U*	6,000 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location Sample Identification Laboratory ID Sample Date	SB2 SB2 (0.5-1) 480-204989-4 2022-12-21 12:12:00	SB2 SB2 (1-2) 480-201707-3 2022-09-14 12:09:00	SB2 FDUP_091422 480-201707-5 2022-09-14 12:09:00	SB2 SB2 (1-2) 480-204989-5 2022-12-21 12:12:00
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	630206					0.66 *U*	0.67 *U*	0.61 *U*	0.45 *U*
1,1,1-Trichloroethane	71556	1,000,000	680	680		0.48 *U*	0.48 *U*	0.44 *U*	0.33 *U*
1,1,2,2-Tetrachloroethane	79345					1.10 *U*	1.10 *U*	0.99 *U*	0.73 *U*
1,1,2-Trichloroethane	79005					0.85 *U*	0.87 *U*	0.80 *U*	0.58 *U*
1,1-Dichloroethane	75343	480,000	270	270		0.80 *U*	0.81 *U*	0.75 *U*	0.55 *U*
1,1-Dichloroethene	75354	1,000,000	330	330		0.80 *U*	0.82 *UJ*	0.75 *UJ*	0.55 *U*
1,2,3-Trimethylbenzene	526738					1.30 *U*	1.40 *U*	1.20 *U*	0.92 *U*
1,2,4-Trimethylbenzene	95636	380,000	3,600	3,600		1.30 *U*	1.30 *U*	1.20 *U*	0.86 *U*
1,2,4-Trichlorobenzene	120821					0.40 *U*	0.41 *U*	0.37 *U*	0.27 *UJ*
1,2-Dichlorobenzene	95501	1,000,000	1,100	1,100		0.51 *U*	0.52 *U*	0.48 *U*	0.35 *U*
1,3-Dichlorobenzene	541731	560,000	2,400	2,400		0.34 *U*	0.34 *U*	0.31 *U*	0.23 *U*
1,4-Dichlorobenzene	106467	250,000	1,800	1,800		0.92 *U*	0.93 *U*	0.86 *U*	0.63 *U*
1,2-Dibromo-3-chloropropane	96128					3.30 *U*	3.30 *U*	3.10 *U*	2.20 *U*
1,2-Dibromoethane	106934					0.84 *U*	0.86 *U*	0.79 *U*	0.58 *U*
1,2-Dichloroethane	107062	60,000	20	20		0.33 *U*	0.33 *U*	0.31 *U*	0.23 *U*
1,2-Dichloropropane	78875					3.30 *U*	3.30 *U*	3.10 *U*	2.20 *U*
1,3,5-Trimethylbenzene	108678	380,000	8,400	8,400		0.42 *U*	0.43 *U*	0.39 *U*	0.29 *U*
2-Hexanone	591786					3.30 *U*	3.30 *U*	3.10 *U*	2.20 *U*
4-Methyl-2-pentanone	108101					2.20 *U*	2.20 *U*	2.00 *U*	1.50 *U*
Acetone	67641	1,000,000	50	50		5.50 *U*	**540**	28 *J*	3.80 *U*
Benzene	71432	89,000	60	60		0.32 *U*	0.33 *U*	0.30 *U*	0.22 *U*
Bromodichloromethane	75274					0.88 *U*	0.89 *U*	0.82 *U*	0.60 *U*
Bromomethane	74839					0.59 *U*	0.60 *U*	0.55 *U*	0.40 *U*
Bromoform	75252					3.30 *U*	3.30 *U*	3.10 *U*	2.20 *UJ*
Carbon disulfide	75150					3.30 *U*	3.30 *U*	3.40 *J*	2.20 *U*
Carbon Tetrachloride	56235	44,000	760	760		0.63 *U*	0.65 *UJ*	0.59 *UJ*	0.43 *U*
Chloroform	67663	700,000	370	370		0.56 *U*	0.41 *U*	0.38 *U*	0.37 *U*
cis-1,2-Dichloroethene	156592	1,000,000	250	250		0.84 *U*	0.85 *U*	0.78 *U*	0.57 *U*
cis-1,3-Dichloropropene	10061015					0.94 *U*	0.96 *U*	0.88 *U*	0.65 *U*
Chlorobenzene	108907	1,000,000	1,100	1,100		0.87 *U*	0.88 *U*	0.81 *U*	0.59 *U*
Chloroethane	75003					1.50 *U*	1.50 *U*	1.40 *U*	1.00 *U*
Chloromethane	74873					0.40 *U*	0.40 *U*	0.37 *U*	0.27 *U*
Cyclohexane	110827					0.92 *U*	0.93 *UJ*	0.86 *UJ*	0.63 *U*
Dibromochloromethane	124481					0.84 *U*	0.85 *U*	0.78 *U*	0.57 *U*
Dichlorodifluoromethane	75718					0.54 *U*	0.55 *U*	0.51 *U*	0.37 *U*
Ethylbenzene	100414	780,000	1,000	1,000		0.45 *U*	0.75 *J*	1.00 *J*	0.31 *U*
Isopropylbenzene	98828					0.99 *U*	1.00 *U*	0.92 *U*	0.68 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB2	SB2	SB2	SB2
					Sample Identification	SB2 (0.5-1)	SB2 (1-2)	FDUP_091422	SB2 (1-2)
					Laboratory ID	480-204989-4	480-201707-3	480-201707-5	480-204989-5
					Sample Date	2022-12-21 12:12:00	2022-09-14 12:09:00	2022-09-14 12:09:00	2022-12-21 12:12:00
2-Butanone	78933	1,000,000	120	120		2.40 *U*	92	17 *J*	1.60 *U*
m,p-Xylene	179601231					1.10 *U*	1.10 *U*	1.00 *U*	0.75 *U*
Methyl Acetate	79209					4.0 *U*	4.0 *U*	3.7 *U*	2.7 *U*
Methylcyclohexane	108872					1.00 *U*	1.00 *UJ*	1.60 *J*	0.68 *U*
Methylene Chloride	75092	1,000,000	50	50		3.00 *U*	3.10 *U*	2.80 *U*	2.10 *U*
Methyl tert-butyl ether	1634044	1,000,000	930	930		0.64 *U*	0.66 *U*	0.60 *U*	0.44 *U*
n-Butylbenzene	104518	1,000,000	12,000	12,000		0.57 *U*	0.68 *J*	0.53 *U*	0.39 *U*
n-Propylbenzene	103651	1,000,000	3,900	3,900		0.52 *U*	1.10 *J*	0.87 *J*	0.36 *U*
o-Xylene	95476					0.86 *U*	0.87 *U*	0.80 *U*	0.59 *U*
sec-Butylbenzene	135988	1,000,000	11,000	11,000		0.57 *U*	0.58 *U*	0.53 *U*	0.39 *U*
Styrene	100425					0.33 *U*	0.33 *U*	0.31 *U*	0.22 *U*
tert-Butylbenzene	98066	1,000,000	5,900	5,900		0.68 *U*	0.69 *U*	0.64 *U*	0.47 *U*
Toluene	108883	1,000,000	700	700		0.50 *U*	0.87 *J*	1.20 *J*	0.34 *U*
Tetrachloroethane	127184	300,000	1,300	1,300		2.10 *U*	0.90 *U*	0.82 *U*	1.70 *U*
trans-1,2-Dichloroethene	156605	1,000,000	190	190		0.68 *U*	0.69 *U*	0.63 *U*	0.46 *U*
trans-1,3-Dichloropropene	10061026					2.90 *U*	2.90 *U*	2.70 *U*	2.00 *U*
Trichloroethene	79016	400,000	470	470		1.40 *U*	1.50 *U*	1.30 *U*	0.99 *U*
Trichlorotrifluoroethane	76131					1.50 *U*	1.50 *U*	1.40 *U*	1.00 *U*
Trichlorofluoromethane	75694					0.62 *U*	0.63 *U*	0.58 *U*	0.42 *U*
Vinyl Chloride	75014	27,000	20	20		0.80 *U*	0.81 *U*	0.75 *U*	0.55 *U*
Xylenes	1330207	1,000,000	1,600	260		1.10 *U*	1.10 *U*	1.00 *U*	0.75 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB2	SB2	SB2	SB3
					Sample Identification	FDUP_122122	SB2 (13.5-15.5)	SB2 (20.4-22.4)	SB3 (23-25)
					Laboratory ID	480-204989-7	480-201707-6	480-204989-6	480-205124-1
					Sample Date	2022-12-21 12:12:00	2022-09-14 12:09:00	2022-12-21 12:12:00	2023-01-03 02:01:00
Metals (µg/kg)									
Arsenic	7440382	16,000	16,000	13,000		10,000 *J*	5,300	12,300	7,800
Lead	7439921	3,900,000	450,000	63,000		**1,010,000** *J*	18,400	9,200	7,600
Cadmium	7440439	60,000	7,500	2,500		270 *J*	140 *J*	59 *J*	32 *U*
Aluminum	7429905					8,800,000 *J*	8,030,000	7,590,000	8,310,000
Antimony	7440360					410 *UJ*	520 *J*	460 *U*	430 *U*
Barium	7440393	10,000,000	820,000	350,000		94,500 *J*	66,400	135,000	77,600
Beryllium	7440417	2,700,000	47,000	7,200		440	420	400	320
Calcium	7440702					1,920,000 *J*	929,000	1,210,000	898,000
Chromium	7440473					18,500 *J-*	11,300	9,500 *J-*	11,400
Cobalt	7440484					7,300	6,400	7,500	6,100
Copper	7440508	10,000,000	1,720,000	50,000		23,900 *J*	14,800	16,700	23,200
Iron	7439896					26,400,000 *J*	20,900,000	22,200,000 *J+*	21,900,000
Magnesium	7439954					2,770,000 *J+*	1,800,000	2,160,000	2,420,000
Manganese	7439965	10,000,000	2,000,000	1,600,000		367,000 *J+*	359,000	1,190,000	332,000
Mercury	7439976	5,700	730	180		61	26	6.0 *J*	5.2 *J*
Nickel	7440020	10,000,000	130,000	30,000		20,600 *J*	**39,600**	17,100	17,300
Potassium	7440097					1,260,000 *J*	1,480,000	1,240,000	1,130,000
Selenium	7782492	6,800,000	4,000	3,900		880 *J*	480 *U*	740 *J*	830 *J*
Silver	7440224	6,800,000	8,300	2,000		1,100	240 *U*	840	520 *J*
Sodium	7440235					68,900 *J*	53,100 *J*	102,000 *J*	46,800 *J*
Thallium	7440280					310 *U*	360 *U*	340 *U*	320 *U*
Vanadium	7440622					19,100 *J*	17,300	13,800	11,400
Zinc	7440666	10,000,000	2,480,000	109,000		98,400 *J*	37,600	60,000	41,600
Polycyclic Aromatic Hydrocarbons (µg/kg)									
2-Methylnaphthalene	91576					3,500 *U*	37 *U*	37 *U*	37 *U*
Acenaphthene	83329	1,000,000	98,000	20,000		2,600 *U*	27 *U*	27 *U*	27 *U*
Acenaphthylene	208968	1,000,000	107,000	100,000		2,300 *U*	24 *U*	24 *U*	24 *U*
Anthracene	120127	1,000,000	1,000,000	100,000		4,300 *U*	46 *U*	46 *U*	46 *U*
Benz[a]anthracene	56553	11,000	1,000	1,000		**3,800** *J*	19 *U*	19 *U*	18 *U*
Benzo[a]pyrene	50328	1,100	22,000	1,000		**4,400** *J*	27 *U*	27 *U*	27 *U*
Benzo[b]fluoranthene	205992	11,000	1,700	1,000		**5,400** *J*	30 *U*	30 *U*	29 *U*
Benzo[g,h,i]perylene	191242	1,000,000	1,000,000	100,000		3,600 *J*	20 *U*	20 *U*	20 *U*
Benzo[k]fluoranthene	207089	110,000	1,700	800		**2,500** *J*	24 *U*	24 *U*	24 *U*
Chrysene	218019	110,000	1,000	1,000		**4,900** *J*	42 *U*	42 *U*	41 *U*
Dibenz[a,h]anthracene	53703	1,100	1,000,000	330		3,100 *U*	33 *U*	33 *U*	33 *U*
Dibenzofuran	132649	1,000,000	210,000	7,000		2,100 *U*	22 *U*	22 *U*	22 *U*
Fluoranthene	206440	1,000,000	1,000,000	100,000		8,100 *J*	20 *U*	20 *U*	20 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB2	SB2	SB2	SB3
					Sample Identification	FDUP_122122	SB2 (13.5-15.5)	SB2 (20.4-22.4)	SB3 (23-25)
					Laboratory ID	480-204989-7	480-201707-6	480-204989-6	480-205124-1
					Sample Date	2022-12-21 12:12:00	2022-09-14 12:09:00	2022-12-21 12:12:00	2023-01-03 02:01:00
Fluorene	86737	1,000,000	386,000	30,000		2,100 *U*	22 *U*	22 *U*	22 *U*
Indeno[1,2,3-cd]pyrene	193395	11,000	8,200	500		**3,100** *J*	23 *U*	23 *U*	23 *U*
Naphthalene	91203	1,000,000	12,000	12,000		2,300 *U*	24 *U*	24 *U*	24 *U*
Phenanthrene	85018	1,000,000	1,000,000	100,000		3,100 *J*	27 *U*	27 *U*	27 *U*
Pyrene	129000	1,000,000	1,000,000	100,000		5,900 *J*	22 *U*	22 *U*	22 *U*
Per- and Polyfluoroalkyl Substances (µg/kg)									
6:2 fluorotelomer sulfonate	27619972					0.058 *U*			
8:2 fluorotelomer sulfonate	39108344					0.037 *U*			
2-(N-ethyl-perfluorooctane sulfonamido) acetate						0.084 *U*			
Perfluorobutyric acid	375224					0.330 *U*			
2-(N-methyl-perfluorooctane sulfonamido) acetic acid						0.110 *U*			
Perfluorooctanoic acid	335671	600	0.8	0.66		0.076 *NJ*			
Perfluorooctane sulfonic acid	1763231	440	1	0.88		0.240			
Perfluorobutane Sulfonic Acid	375735					0.033 *U*			
Perfluorodecanoic Acid	335762					0.028 *U*			
Perfluorododecanoic Acid	307551					0.025 *U*			
Perfluorodecanesulfonic acid	335773					0.019 *U*			
Perfluoroheptanoic Acid	375859					0.039 *U*			
Perfluoroheptanesulfonic acid	375928					0.023 *U*			
Perfluorohexanoic Acid	307244					0.046 *U*			
Perfluorohexane Sulfonic Acid	355464					0.041 *U*			
Perfluorononanoic Acid	375951					0.048 *J*			
Perfluorooctane sulfonamide	754916					0.034 *U*			
Perfluoropentanoic Acid	2706903					0.060 *J*			
Perfluorotetradecanoic Acid	376067					0.026 *U*			
Perfluorotridecanoic Acid	72629948					0.025 *U*			
Perfluoroundecanoic Acid	2058948					0.027 *U*			
Semivolatile Organic Compounds (µg/kg)									
Atrazine	1912249					6,100 *U*	65 *U*	65 *U*	64 *U*
Carbazole	86748					2,100 *U*	22 *U*	22 *U*	22 *U*
2,4,5-Trichlorophenol	95954					4,800 *U*	50 *U*	50 *U*	50 *U*
2,4,6-Trichlorophenol	88062					3,500 *U*	37 *U*	37 *U*	37 *U*
2,4-Dichlorophenol	120832					1,900 *U*	20 *U*	20 *U*	20 *U*
2-Chlorophenol	95578					3,200 *U*	34 *U*	34 *U*	34 *U*
Pentachlorophenol	87865	55,000	800	800		18,000 *U*	190 *U*	190 *U*	180 *U*
1,1'-Biphenyl	92524					2,600 *U*	27 *U*	27 *U*	27 *U*
2,2'-oxybis(1-Chloropropane)	108601					3,500 *U*	37 *U*	37 *U*	37 *U*
2,4-Dimethylphenol	105679					4,200 *U*	45 *U*	45 *U*	44 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB2	SB2	SB2	SB3
					Sample Identification	FDUP_122122	SB2 (13.5-15.5)	SB2 (20.4-22.4)	SB3 (23-25)
					Laboratory ID	480-204989-7	480-201707-6	480-204989-6	480-205124-1
					Sample Date	2022-12-21 12:12:00	2022-09-14 12:09:00	2022-12-21 12:12:00	2023-01-03 02:01:00
2,4-Dinitrophenol	51285					81,000 *U*	860 *U*	860 *U*	850 *U*
2,4-Dinitrotoluene	121142					3,600 *U*	38 *U*	38 *U*	38 *U*
2,6-Dinitrotoluene	606202					2,100 *U*	22 *U*	22 *U*	22 *U*
2-Chloronaphthalene	91587					2,900 *U*	31 *U*	31 *U*	30 *U*
2-Methylphenol	95487	1,000,000	330	330		2,100 *U*	22 *U*	22 *U*	22 *U*
2-Nitroaniline	88744					2,600 *U*	27 *U*	27 *U*	27 *U*
2-Nitrophenol	88755					5,000 *U*	53 *U*	53 *U*	52 *U*
3,3'-Dichlorobenzidine	91941					21,000 *U*	220 *U*	220 *U*	220 *U*
3-Nitroaniline	99092					4,900 *U*	51 *U*	51 *U*	51 *U*
4,6-Dinitro-2-methylphenol	534521					18,000 *U*	190 *U*	190 *U*	180 *U*
4-Bromophenyl-phenylether	101553					2,500 *U*	26 *U*	26 *U*	26 *U*
4-Chloro-3-methylphenol	59507					4,300 *U*	46 *U*	46 *U*	46 *U*
4-Chloroaniline	106478					4,300 *U*	46 *U*	46 *U*	46 *U*
4-Chlorophenyl-phenyl ether	7005723					2,200 *U*	23 *U*	23 *U*	23 *U*
4-Methylphenol	106445	1,000,000	330	330		2,100 *U*	22 *U*	22 *U*	22 *U*
4-Nitroaniline	100016					9,200 *U*	97 *U*	98 *U*	96 *U*
4-Nitrophenol	100027					12,000 *U*	130 *U*	130 *U*	130 *U*
Acetophenone	98862					2,400 *U*	25 *U*	25 *U*	25 *U*
Benzaldehyde	100527					14,000 *U*	150 *U*	150 *U*	150 *U*
Bis(2-chloroethyl)ether	111444					2,300 *U*	24 *U*	24 *U*	24 *U*
bis(2-Chloroethoxy)methane	111911					3,700 *U*	39 *U*	39 *U*	39 *U*
bis(2-Ethylhexyl)phthalate	117817					6,000 *U*	63 *U*	110 *J*	63 *U*
Benzyl n-butyl phthalate	85687					2,900 *U*	31 *U*	31 *U*	30 *U*
Caprolactam	105602					5,300 *U*	56 *U*	56 *U*	55 *U*
Diethyl phthalate	84662					2,300 *U*	51 *U*	24 *U*	24 *U*
Dimethyl phthalate	131113					2,100 *U*	22 *U*	22 *U*	22 *U*
Di-n-butyl phthalate	84742					3,000 *U*	32 *U*	32 *U*	31 *U*
Di-n-octylphthalate	117840					2,100 *U*	22 *U*	22 *U*	22 *U*
Hexachloroethane	67721					2,300 *U*	24 *U*	24 *U*	24 *U*
Hexachlorobenzene	118741	12,000	3,200	330		2,400 *U*	25 *U*	25 *U*	25 *U*
Hexachlorobutadiene	87683					2,600 *U*	27 *U*	27 *U*	27 *U*
Hexachlorocyclopentadiene	77474					2,400 *U*	25 *U*	25 *U*	25 *U*
Isophorone	78591					3,700 *U*	39 *U*	39 *U*	39 *U*
Nitrobenzene	98953					2,000 *U*	21 *U*	21 *U*	21 *U*
N-Nitrosodi-n-propylamine	621647					3,000 *U*	32 *U*	32 *U*	31 *U*
N-Nitrosodiphenylamine	86306					14,000 *U*	150 *U*	150 *U*	150 *U*
Phenol	108952	1,000,000	330	330		2,700 *U*	28 *U*	28 *U*	28 *U*
1,4-Dioxane	123911	250,000	100	100		5,700 *U*			

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB2	SB2	SB2	SB3
					Sample Identification	FDUP_122122	SB2 (13.5-15.5)	SB2 (20.4-22.4)	SB3 (23-25)
					Laboratory ID	480-204989-7	480-201707-6	480-204989-6	480-205124-1
					Sample Date	2022-12-21 12:12:00	2022-09-14 12:09:00	2022-12-21 12:12:00	2023-01-03 02:01:00
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	630206					0.58 *U*	0.54 *U*	0.53 *U*	0.42 *UJ*
1,1,1-Trichloroethane	71556	1,000,000	680	680		0.42 *U*	0.39 *U*	0.39 *U*	0.30 *U*
1,1,2,2-Tetrachloroethane	79345					0.94 *UJ*	0.88 *U*	0.87 *U*	0.68 *U*
1,1,2-Trichloroethane	79005					0.75 *U*	0.70 *U*	0.69 *U*	0.54 *U*
1,1-Dichloroethane	75343	480,000	270	270		0.70 *U*	0.66 *U*	0.65 *U*	0.51 *U*
1,1-Dichloroethene	75354	1,000,000	330	330		0.71 *U*	0.66 *UJ*	0.65 *U*	0.51 *U*
1,2,3-Trimethylbenzene	526738					1.20 *U*	1.10 *U*	1.10 *U*	0.85 *U*
1,2,4-Trimethylbenzene	95636	380,000	3,600	3,600		1.10 *UJ*	1.00 *U*	1.00 *U*	0.80 *U*
1,2,4-Trichlorobenzene	120821					0.35 *UJ*	0.33 *U*	0.32 *U*	0.25 *U*
1,2-Dichlorobenzene	95501	1,000,000	1,100	1,100		0.45 *UJ*	0.42 *U*	0.42 *U*	0.33 *U*
1,3-Dichlorobenzene	541731	560,000	2,400	2,400		0.30 *UJ*	0.28 *U*	0.27 *U*	0.21 *U*
1,4-Dichlorobenzene	106467	250,000	1,800	1,800		0.81 *UJ*	0.76 *U*	0.75 *U*	0.58 *U*
1,2-Dibromo-3-chloropropane	96128					2.90 *UJ*	2.70 *U*	2.70 *U*	2.10 *U*
1,2-Dibromoethane	106934					0.74 *U*	0.69 *U*	0.69 *U*	0.54 *U*
1,2-Dichloroethane	107062	60,000	20	20		0.29 *U*	0.27 *U*	0.27 *U*	0.21 *U*
1,2-Dichloropropane	78875					2.90 *U*	2.70 *U*	2.70 *U*	2.10 *U*
1,3,5-Trimethylbenzene	108678	380,000	8,400	8,400		0.37 *UJ*	0.35 *U*	0.34 *U*	0.27 *U*
2-Hexanone	591786					2.90 *U*	2.70 *U*	2.70 *U*	2.10 *U*
4-Methyl-2-pentanone	108101					1.90 *U*	1.80 *U*	1.80 *U*	1.40 *U*
Acetone	67641	1,000,000	50	50		5.90 *J*	10 *J*	20 *J*	3.60 *J*
Benzene	71432	89,000	60	60		0.28 *U*	0.26 *U*	0.26 *U*	0.20 *U*
Bromodichloromethane	75274					0.77 *U*	0.72 *U*	0.72 *U*	0.56 *U*
Bromomethane	74839					0.52 *U*	0.49 *U*	0.48 *U*	0.38 *U*
Bromoform	75252					2.90 *UJ*	2.70 *U*	2.70 *U*	2.10 *UJ*
Carbon disulfide	75150					2.90 *U*	2.70 *U*	2.70 *U*	2.10 *U*
Carbon Tetrachloride	56235	44,000	760	760		0.56 *U*	0.52 *UJ*	0.52 *U*	0.40 *U*
Chloroform	67663	700,000	370	370		0.57 *U*	0.33 *U*	0.43 *U*	0.31 *U*
cis-1,2-Dichloroethene	156592	1,000,000	250	250		0.74 *U*	0.69 *U*	0.68 *U*	0.53 *U*
cis-1,3-Dichloropropene	10061015					0.83 *U*	0.78 *U*	0.77 *U*	0.60 *U*
Chlorobenzene	108907	1,000,000	1,100	1,100		0.76 *U*	0.71 *U*	0.71 *U*	0.55 *U*
Chloroethane	75003					1.30 *U*	1.20 *U*	1.20 *U*	0.94 *U*
Chloromethane	74873					0.35 *U*	0.33 *U*	0.32 *U*	0.25 *U*
Cyclohexane	110827					0.81 *U*	0.76 *UJ*	0.75 *U*	0.58 *U*
Dibromochloromethane	124481					0.74 *U*	0.69 *U*	0.68 *U*	0.53 *UJ*
Dichlorodifluoromethane	75718					0.48 *U*	0.45 *U*	0.44 *U*	0.34 *U*
Ethylbenzene	100414	780,000	1,000	1,000		0.40 *U*	0.37 *U*	0.37 *U*	0.29 *U*
Isopropylbenzene	98828					0.87 *UJ*	0.82 *U*	0.81 *U*	0.63 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB2	SB2	SB2	SB3
					Sample Identification	FDUP_122122	SB2 (13.5-15.5)	SB2 (20.4-22.4)	SB3 (23-25)
					Laboratory ID	480-204989-7	480-201707-6	480-204989-6	480-205124-1
					Sample Date	2022-12-21 12:12:00	2022-09-14 12:09:00	2022-12-21 12:12:00	2023-01-03 02:01:00
2-Butanone	78933	1,000,000	120	120		2.10 *U*	4.30 *J*	6.90 *J*	1.50 *U*
m,p-Xylene	179601231					0.97 *U*	0.91 *U*	0.90 *U*	0.70 *U*
Methyl Acetate	79209					3.5 *U*	3.3 *U*	3.2 *U*	2.5 *U*
Methylcyclohexane	108872					0.88 *U*	0.82 *UJ*	0.81 *U*	0.63 *U*
Methylene Chloride	75092	1,000,000	50	50		2.70 *U*	2.50 *U*	2.50 *U*	1.90 *U*
Methyl tert-butyl ether	1634044	1,000,000	930	930		0.57 *U*	0.53 *U*	0.52 *U*	0.41 *U*
n-Butylbenzene	104518	1,000,000	12,000	12,000		0.50 *UJ*	0.47 *U*	0.46 *U*	0.36 *U*
n-Propylbenzene	103651	1,000,000	3,900	3,900		0.46 *UJ*	0.43 *U*	0.43 *U*	0.33 *U*
o-Xylene	95476					0.75 *U*	0.71 *U*	0.70 *U*	0.55 *U*
sec-Butylbenzene	135988	1,000,000	11,000	11,000		0.50 *UJ*	0.47 *U*	0.46 *U*	0.36 *U*
Styrene	100425					0.29 *U*	0.27 *U*	0.27 *U*	0.21 *U*
tert-Butylbenzene	98066	1,000,000	5,900	5,900		0.60 *UJ*	0.56 *U*	0.56 *U*	0.43 *U*
Toluene	108883	1,000,000	700	700		0.44 *U*	0.41 *U*	0.40 *U*	0.32 *U*
Tetrachloroethane	127184	300,000	1,300	1,300		3.00 *U*	0.73 *U*	1.80 *U*	0.56 *U*
trans-1,2-Dichloroethene	156605	1,000,000	190	190		0.60 *U*	0.56 *U*	0.55 *U*	0.43 *U*
trans-1,3-Dichloropropene	10061026					2.50 *U*	2.40 *U*	2.40 *U*	1.80 *U*
Trichloroethene	79016	400,000	470	470		1.30 *U*	1.20 *U*	1.20 *U*	0.92 *U*
Trichlorotrifluoroethane	76131					1.30 *U*	1.20 *U*	1.20 *U*	0.95 *U*
Trichlorofluoromethane	75694					0.55 *U*	0.51 *U*	0.51 *U*	0.39 *U*
Vinyl Chloride	75014	27,000	20	20		0.70 *U*	0.66 *U*	0.65 *U*	0.51 *U*
Xylenes	1330207	1,000,000	1,600	260		0.97 *U*	0.91 *U*	0.90 *U*	0.70 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB4	SB4	SB4	SB5
					Sample Identification	SB4 (0-0.5)	SB4 (0.5-1)	SB4 (1-2)	SB5 (0-0.5)
					Laboratory ID	480-201707-10	480-201707-11	480-201712-1	480-200130-1
					Sample Date	2022-09-15 09:09:00	2022-09-15 09:09:00	2022-09-15 09:09:00	2022-07-25 03:07:00
Metals (µg/kg)									
Arsenic	7440382	16,000	16,000	13,000		**22,100**	12,900	**21,700**	13,000
Lead	7439921	3,900,000	450,000	63,000		**697,000**	**318,000**	**9,670,000**	**80,900**
Cadmium	7440439	60,000	7,500	2,500		2,500	590	**4,300**	290
Aluminum	7429905					6,350,000	8,880,000	8,180,000	5,360,000
Antimony	7440360					3,500 *J*	1,300 *J*	4,200 *J*	2,200 *J-*
Barium	7440393	10,000,000	820,000	350,000		62,400	65,600	172,000	62,300
Beryllium	7440417	2,700,000	47,000	7,200		380	410	420	420
Calcium	7440702					5,960,000	2,190,000	10,400,000	2,640,000
Chromium	7440473					13,800	12,700	18,600	12,200
Cobalt	7440484					8,200	7,000	4,600	7,300
Copper	7440508	10,000,000	1,720,000	50,000		43,000	22,300	**70,600**	**56,000**
Iron	7439896					34,100,000	27,300,000	21,700,000	23,900,000
Magnesium	7439954					1,550,000	1,830,000	1,900,000	1,400,000
Manganese	7439965	10,000,000	2,000,000	1,600,000		349,000	468,000	301,000	530,000
Mercury	7439976	5,700	730	180		120	**190**	**790**	120
Nickel	7440020	10,000,000	130,000	30,000		17,700	15,000	13,600	15,000
Potassium	7440097					1,470,000	1,760,000	1,420,000	407,000
Selenium	7782492	6,800,000	4,000	3,900		840 *J*	430 *U*	450 *U*	1,000 *U*
Silver	7440224	6,800,000	8,300	2,000		210 *U*	210 *U*	280 *J*	220 *J*
Sodium	7440235					345,000	245,000	491,000	48,600 *J*
Thallium	7440280					680 *J*	720 *J*	1,100 *J*	330 *U*
Vanadium	7440622					18,400	18,400	17,100	16,600
Zinc	7440666	10,000,000	2,480,000	109,000		**135,000**	66,400	**223,000**	61,000
Polycyclic Aromatic Hydrocarbons (µg/kg)									
2-Methylnaphthalene	91576					180 *U*	190 *U*	180 *U*	61 *J*
Acenaphthene	83329	1,000,000	98,000	20,000		130 *U*	140 *U*	140 *U*	28 *U*
Acenaphthylene	208968	1,000,000	107,000	100,000		380 *J*	230 *J*	250 *J+*	130 *J*
Anthracene	120127	1,000,000	1,000,000	100,000		270 *J*	230 *U*	230 *U*	71 *J*
Benz[a]anthracene	56553	11,000	1,000	1,000		**2,800**	**1,800**	**2,200** *J+*	370
Benzo[a]pyrene	50328	1,100	22,000	1,000		**3,700**	**2,400**	**3,600** *J+*	350
Benzo[b]fluoranthene	205992	11,000	1,700	1,000		**5,200**	**3,500**	**4,700** *J+*	600
Benzo[g,h,i]perylene	191242	1,000,000	1,000,000	100,000		2,200	1,400	1,800 *J+*	260
Benzo[k]fluoranthene	207089	110,000	1,700	800		**2,400**	**1,400**	**2,000** *J+*	240
Chrysene	218019	110,000	1,000	1,000		**2,500**	**1,700**	**2,000** *J+*	550
Dibenz[a,h]anthracene	53703	1,100	1,000,000	330		**670** *J*	**350** *J*	**470** *J+*	120 *J*
Dibenzofuran	132649	1,000,000	210,000	7,000		130 *J*	110 *U*	110 *U*	43 *J*
Fluoranthene	206440	1,000,000	1,000,000	100,000		3,000	2,700	2,200 *J+*	550

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB4	SB4	SB4	SB5
					Sample Identification	SB4 (0-0.5)	SB4 (0.5-1)	SB4 (1-2)	SB5 (0-0.5)
					Laboratory ID	480-201707-10	480-201707-11	480-201712-1	480-200130-1
					Sample Date	2022-09-15 09:09:00	2022-09-15 09:09:00	2022-09-15 09:09:00	2022-07-25 03:07:00
Fluorene	86737	1,000,000	386,000	30,000		110 *U*	110 *U*	110 *U*	23 *U*
Indeno[1,2,3-cd]pyrene	193395	11,000	8,200	500		**3,400**	**2,100**	**2,900** *J+*	300
Naphthalene	91203	1,000,000	12,000	12,000		120 *U*	120 *U*	120 *U*	59 *J*
Phenanthrene	85018	1,000,000	1,000,000	100,000		1,200	700 *J*	470 *J+*	230
Pyrene	129000	1,000,000	1,000,000	100,000		2,100	1,800	2,800 *J+*	470
Per- and Polyfluoroalkyl Substances (µg/kg)									
6:2 fluorotelomer sulfonate	27619972								
8:2 fluorotelomer sulfonate	39108344								
2-(N-ethyl-perfluorooctane sulfonamido) acetate									
Perfluorobutyric acid	375224								
2-(N-methyl-perfluorooctane sulfonamido) acetic acid									
Perfluorooctanoic acid	335671	600	0.8	0.66					
Perfluorooctane sulfonic acid	1763231	440	1	0.88					
Perfluorobutane Sulfonic Acid	375735								
Perfluorodecanoic Acid	335762								
Perfluorododecanoic Acid	307551								
Perfluorodecanesulfonic acid	335773								
Perfluoroheptanoic Acid	375859								
Perfluoroheptanesulfonic acid	375928								
Perfluorohexanoic Acid	307244								
Perfluorohexane Sulfonic Acid	355464								
Perfluorononanoic Acid	375951								
Perfluorooctane sulfonamide	754916								
Perfluoropentanoic Acid	2706903								
Perfluorotetradecanoic Acid	376067								
Perfluorotridecanoic Acid	72629948								
Perfluoroundecanoic Acid	2058948								
Semivolatile Organic Compounds (µg/kg)									
Atrazine	1912249					310 *U*	320 *U*	320 *U*	67 *U*
Carbazole	86748					130 *J*	110 *U*	110 *U*	31 *J*
2,4,5-Trichlorophenol	95954					240 *U*	250 *U*	250 *U*	52 *U*
2,4,6-Trichlorophenol	88062					180 *U*	190 *U*	180 *U*	39 *U*
2,4-Dichlorophenol	120832					95 *U*	99 *U*	98 *U*	20 *U*
2-Chlorophenol	95578					160 *U*	170 *U*	170 *U*	35 *U*
Pentachlorophenol	87865	55,000	800	800		900 *U*	940 *U*	920 *U*	190 *U*
1,1'-Biphenyl	92524					130 *U*	140 *U*	140 *U*	28 *U*
2,2'-oxybis(1-Chloropropane)	108601					180 *U*	190 *U*	180 *U*	39 *U*
2,4-Dimethylphenol	105679					220 *U*	230 *U*	220 *U*	46 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB4	SB4	SB4	SB5
					Sample Identification	SB4 (0-0.5)	SB4 (0.5-1)	SB4 (1-2)	SB5 (0-0.5)
					Laboratory ID	480-201707-10	480-201707-11	480-201712-1	480-200130-1
					Sample Date	2022-09-15 09:09:00	2022-09-15 09:09:00	2022-09-15 09:09:00	2022-07-25 03:07:00
2,4-Dinitrophenol	51285					4,100 *U*	4,300 *U*	4,300 *U*	890 *U*
2,4-Dinitrotoluene	121142					180 *U*	190 *U*	190 *U*	40 *U*
2,6-Dinitrotoluene	606202					110 *U*	110 *U*	110 *U*	23 *U*
2-Chloronaphthalene	91587					150 *U*	150 *U*	150 *U*	32 *U*
2-Methylphenol	95487	1,000,000	330	330		110 *U*	110 *U*	110 *U*	23 *U*
2-Nitroaniline	88744					130 *U*	140 *U*	140 *U*	28 *U*
2-Nitrophenol	88755					250 *U*	260 *U*	260 *U*	54 *U*
3,3'-Dichlorobenzidine	91941					1,100 *U*	1,100 *U*	1,100 *U*	230 *U*
3-Nitroaniline	99092					250 *U*	260 *U*	260 *U*	53 *U*
4,6-Dinitro-2-methylphenol	534521					900 *U*	940 *U*	920 *U*	190 *U*
4-Bromophenyl-phenylether	101553					130 *U*	130 *U*	130 *U*	27 *U*
4-Chloro-3-methylphenol	59507					220 *U*	230 *U*	230 *U*	48 *U*
4-Chloroaniline	106478					220 *U*	230 *U*	230 *U*	48 *U*
4-Chlorophenyl-phenyl ether	7005723					110 *U*	120 *U*	110 *U*	24 *U*
4-Methylphenol	106445	1,000,000	330	330		110 *U*	110 *U*	110 *U*	23 *U*
4-Nitroaniline	100016					470 *U*	490 *U*	480 *U*	100 *U*
4-Nitrophenol	100027					630 *U*	660 *U*	650 *U*	130 *U*
Acetophenone	98862					120 *U*	130 *U*	120 *U*	26 *U*
Benzaldehyde	100527					710 *U*	740 *U*	730 *U*	150 *U*
Bis(2-chloroethyl)ether	111444					120 *U*	120 *U*	120 *U*	25 *U*
bis(2-Chloroethoxy)methane	111911					190 *U*	200 *U*	200 *U*	41 *U*
bis(2-Ethylhexyl)phthalate	117817					310 *U*	320 *U*	310 *U*	66 *U*
Benzyl n-butyl phthalate	85687					150 *U*	150 *U*	150 *U*	32 *U*
Caprolactam	105602					270 *U*	280 *U*	280 *U*	58 *U*
Diethyl phthalate	84662					120 *U*	120 *U*	130 *UJ*	25 *U*
Dimethyl phthalate	131113					110 *U*	110 *U*	110 *U*	23 *U*
Di-n-butyl phthalate	84742					150 *U*	160 *U*	160 *U*	33 *U*
Di-n-octylphthalate	117840					110 *U*	110 *U*	110 *U*	23 *U*
Hexachloroethane	67721					120 *U*	120 *U*	120 *U*	25 *U*
Hexachlorobenzene	118741	12,000	3,200	330		120 *U*	130 *U*	120 *U*	26 *U*
Hexachlorobutadiene	87683					130 *U*	140 *U*	140 *U*	28 *U*
Hexachlorocyclopentadiene	77474					120 *U*	130 *U*	120 *U*	26 *U*
Isophorone	78591					190 *U*	200 *U*	200 *U*	41 *U*
Nitrobenzene	98953					100 *U*	100 *U*	100 *U*	22 *U*
N-Nitrosodi-n-propylamine	621647					150 *U*	160 *U*	160 *U*	33 *U*
N-Nitrosodiphenylamine	86306					730 *U*	760 *U*	750 *U*	160 *U*
Phenol	108952	1,000,000	330	330		140 *U*	140 *U*	140 *U*	29 *U*
1,4-Dioxane	123911	250,000	100	100					

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB4	SB4	SB4	SB5
					Sample Identification	SB4 (0-0.5)	SB4 (0.5-1)	SB4 (1-2)	SB5 (0-0.5)
					Laboratory ID	480-201707-10	480-201707-11	480-201712-1	480-200130-1
					Sample Date	2022-09-15 09:09:00	2022-09-15 09:09:00	2022-09-15 09:09:00	2022-07-25 03:07:00
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	630206					0.89 *U*	0.53 *U*	0.53 *U*	0.60 *UJ*
1,1,1-Trichloroethane	71556	1,000,000	680	680		0.64 *U*	0.39 *U*	0.38 *U*	0.44 *U*
1,1,2,2-Tetrachloroethane	79345					1.40 *U*	0.86 *U*	0.85 *U*	*R*
1,1,2-Trichloroethane	79005					1.20 *U*	0.69 *U*	0.68 *U*	0.78 *UJ*
1,1-Dichloroethane	75343	480,000	270	270		1.10 *U*	0.65 *U*	0.64 *U*	0.73 *U*
1,1-Dichloroethene	75354	1,000,000	330	330		1.10 *UJ*	0.65 *UJ*	0.64 *UJ*	0.74 *U*
1,2,3-Trimethylbenzene	526738					1.80 *U*	1.10 *U*	1.10 *U*	1.20 *U*
1,2,4-Trimethylbenzene	95636	380,000	3,600	3,600		1.70 *U*	1.00 *U*	1.00 *U*	*R*
1,2,4-Trichlorobenzene	120821					0.54 *U*	0.32 *U*	0.32 *U*	*R*
1,2-Dichlorobenzene	95501	1,000,000	1,100	1,100		0.69 *U*	0.41 *U*	0.41 *U*	*R*
1,3-Dichlorobenzene	541731	560,000	2,400	2,400		0.46 *U*	0.27 *U*	0.27 *U*	*R*
1,4-Dichlorobenzene	106467	250,000	1,800	1,800		1.20 *U*	0.74 *U*	0.74 *U*	*R*
1,2-Dibromo-3-chloropropane	96128					4.40 *U*	2.70 *U*	2.60 *U*	*R*
1,2-Dibromoethane	106934					1.10 *U*	0.68 *U*	0.67 *U*	0.77 *UJ*
1,2-Dichloroethane	107062	60,000	20	20		0.45 *U*	0.27 *U*	0.26 *U*	0.30 *U*
1,2-Dichloropropane	78875					4.40 *U*	2.70 *U*	2.60 *U*	3.00 *U*
1,3,5-Trimethylbenzene	108678	380,000	8,400	8,400		0.57 *U*	0.34 *U*	0.34 *U*	*R*
2-Hexanone	591786					4.40 *U*	2.70 *U*	2.60 *U*	3.00 *UJ*
4-Methyl-2-pentanone	108101					2.90 *U*	1.70 *U*	1.70 *U*	2.00 *UJ*
Acetone	67641	1,000,000	50	50		7.50 *U*	4.50 *U*	4.40 *U*	5.10 *U*
Benzene	71432	89,000	60	60		0.43 *U*	0.26 *U*	0.26 *U*	0.30 *U*
Bromodichloromethane	75274					1.20 *U*	0.71 *U*	0.70 *U*	0.81 *U*
Bromomethane	74839					0.80 *U*	0.48 *U*	0.47 *U*	0.54 *U*
Bromoform	75252					4.40 *U*	2.70 *U*	2.60 *U*	3.00 *UJ*
Carbon disulfide	75150					4.40 *U*	2.70 *U*	2.60 *U*	3.00 *U*
Carbon Tetrachloride	56235	44,000	760	760		0.86 *UJ*	0.51 *UJ*	0.51 *UJ*	0.58 *U*
Chloroform	67663	700,000	370	370		0.55 *U*	0.33 *U*	0.32 *U*	0.37 *U*
cis-1,2-Dichloroethene	156592	1,000,000	250	250		1.10 *U*	0.68 *U*	0.67 *U*	0.77 *U*
cis-1,3-Dichloropropene	10061015					1.30 *U*	0.76 *U*	0.76 *U*	0.87 *U*
Chlorobenzene	108907	1,000,000	1,100	1,100		1.20 *U*	0.70 *U*	0.69 *U*	0.79 *UJ*
Chloroethane	75003					2.00 *U*	1.20 *U*	1.20 *U*	1.40 *U*
Chloromethane	74873					0.54 *U*	0.32 *U*	0.32 *U*	0.36 *U*
Cyclohexane	110827					1.20 *UJ*	0.74 *UJ*	0.74 *UJ*	0.84 *U*
Dibromochloromethane	124481					1.10 *U*	0.68 *U*	0.67 *U*	0.77 *UJ*
Dichlorodifluoromethane	75718					0.73 *U*	0.44 *U*	0.43 *U*	0.50 *U*
Ethylbenzene	100414	780,000	1,000	1,000		0.61 *U*	0.37 *U*	0.36 *U*	0.42 *UJ*
Isopropylbenzene	98828					1.30 *U*	0.80 *U*	0.79 *U*	*R*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB4	SB4	SB4	SB5
					Sample Identification	SB4 (0-0.5)	SB4 (0.5-1)	SB4 (1-2)	SB5 (0-0.5)
					Laboratory ID	480-201707-10	480-201707-11	480-201712-1	480-200130-1
					Sample Date	2022-09-15 09:09:00	2022-09-15 09:09:00	2022-09-15 09:09:00	2022-07-25 03:07:00
2-Butanone	78933	1,000,000	120	120		3.20 *U*	1.90 *U*	1.90 *U*	2.20 *U*
m,p-Xylene	179601231					1.50 *U*	0.89 *U*	0.88 *U*	1.00 *UJ*
Methyl Acetate	79209					5.4 *U*	3.2 *U*	3.2 *U*	3.6 *U*
Methylcyclohexane	108872					1.30 *UJ*	0.81 *UJ*	0.80 *UJ*	0.92 *U*
Methylene Chloride	75092	1,000,000	50	50		4.10 *U*	2.40 *U*	2.40 *U*	2.80 *U*
Methyl tert-butyl ether	1634044	1,000,000	930	930		0.87 *U*	0.52 *U*	0.52 *U*	0.59 *U*
n-Butylbenzene	104518	1,000,000	12,000	12,000		0.77 *U*	0.46 *U*	0.46 *U*	*R*
n-Propylbenzene	103651	1,000,000	3,900	3,900		0.71 *U*	0.42 *U*	0.42 *U*	*R*
o-Xylene	95476					1.20 *U*	0.69 *U*	0.69 *U*	0.79 *UJ*
sec-Butylbenzene	135988	1,000,000	11,000	11,000		0.77 *U*	0.46 *U*	0.46 *U*	*R*
Styrene	100425					0.44 *U*	0.27 *U*	0.26 *U*	0.30 *UJ*
tert-Butylbenzene	98066	1,000,000	5,900	5,900		0.92 *U*	0.55 *U*	0.55 *U*	*R*
Toluene	108883	1,000,000	700	700		0.67 *U*	0.40 *U*	0.40 *U*	0.46 *UJ*
Tetrachloroethane	127184	300,000	1,300	1,300		1.20 *U*	0.71 *U*	0.70 *U*	0.81 *UJ*
trans-1,2-Dichloroethene	156605	1,000,000	190	190		0.92 *U*	0.55 *U*	0.54 *U*	0.62 *U*
trans-1,3-Dichloropropene	10061026					3.90 *U*	2.30 *U*	2.30 *U*	2.60 *UJ*
Trichloroethene	79016	400,000	470	470		2.00 *U*	1.20 *U*	1.20 *U*	1.30 *U*
Trichlorotrifluoroethane	76131					2.00 *U*	1.20 *U*	1.20 *U*	1.40 *U*
Trichlorofluoromethane	75694					0.84 *U*	0.50 *U*	0.50 *U*	0.57 *U*
Vinyl Chloride	75014	27,000	20	20		1.10 *U*	0.65 *U*	0.64 *U*	0.73 *U*
Xylenes	1330207	1,000,000	1,600	260		1.50 *U*	0.89 *U*	0.88 *U*	1.00 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB5	SB5	SB5	SB6
					Sample Identification	SB5 (0.5-1)	SB5 (1-2)	SB5 (13-15)	SB6 (0-0.5)
					Laboratory ID	480-200130-2	480-200130-3	480-200130-4	480-200248-1
					Sample Date	2022-07-25 03:07:00	2022-07-25 03:07:00	2022-07-25 03:07:00	2022-07-29 08:07:00
Metals (µg/kg)									
Arsenic	7440382	16,000	16,000	13,000		**26,900**	1,400 *J*	9,000	10,600
Lead	7439921	3,900,000	450,000	63,000		**169,000**	8,900	23,500	**121,000**
Cadmium	7440439	60,000	7,500	2,500		1,000	34 *J*	160 *J+*	400
Aluminum	7429905					7,340,000	1,440,000	11,800,000	9,040,000
Antimony	7440360					1,300 *J-*	450 *UJ*	870 *J-*	3,300 *J*
Barium	7440393	10,000,000	820,000	350,000		61,400	15,900	110,000	210,000
Beryllium	7440417	2,700,000	47,000	7,200		430	290	640	590
Calcium	7440702					5,320,000	839,000	1,890,000	2,590,000
Chromium	7440473					12,400	4,600	14,800	13,600
Cobalt	7440484					8,100	2,900	11,300	8,800
Copper	7440508	10,000,000	1,720,000	50,000		34,600	48,900	16,300	44,000
Iron	7439896					23,700,000	4,330,000	26,000,000	20,000,000
Magnesium	7439954					2,680,000	140,000	3,420,000	2,370,000
Manganese	7439965	10,000,000	2,000,000	1,600,000		296,000	42,700	661,000	416,000
Mercury	7439976	5,700	730	180		**220**	51	100	**190**
Nickel	7440020	10,000,000	130,000	30,000		17,500	8,100	24,100	19,200
Potassium	7440097					466,000	164,000	832,000	1,310,000
Selenium	7782492	6,800,000	4,000	3,900		650 *U*	920 *U*	520 *U*	650 *J*
Silver	7440224	6,800,000	8,300	2,000		210 *U*	230 *U*	260 *U*	240 *U*
Sodium	7440235					56,500 *J*	25,500 *J*	40,200 *J*	49,800 *J*
Thallium	7440280					310 *U*	340 *U*	390 *U*	360 *U*
Vanadium	7440622					14,500	7,600	16,800	17,300
Zinc	7440666	10,000,000	2,480,000	109,000		88,700	4,300	66,500	**138,000**
Polycyclic Aromatic Hydrocarbons (µg/kg)									
2-Methylnaphthalene	91576					690 *U*	37 *U*	43 *U*	190 *U*
Acenaphthene	83329	1,000,000	98,000	20,000		510 *U*	27 *U*	32 *U*	150 *J*
Acenaphthylene	208968	1,000,000	107,000	100,000		450 *U*	24 *U*	28 *U*	870 *J*
Anthracene	120127	1,000,000	1,000,000	100,000		860 *U*	45 *U*	54 *U*	890 *J*
Benz[a]anthracene	56553	11,000	1,000	1,000		350 *U*	18 *U*	22 *U*	**2,700**
Benzo[a]pyrene	50328	1,100	22,000	1,000		660 *J*	27 *U*	32 *U*	**2,500**
Benzo[b]fluoranthene	205992	11,000	1,700	1,000		990 *J*	29 *U*	35 *U*	**3,100**
Benzo[g,h,i]perylene	191242	1,000,000	1,000,000	100,000		590 *J*	19 *U*	23 *U*	1,700
Benzo[k]fluoranthene	207089	110,000	1,700	800		570 *J*	24 *U*	28 *U*	**1,200**
Chrysene	218019	110,000	1,000	1,000		770 *U*	41 *U*	49 *U*	**2,500**
Dibenz[a,h]anthracene	53703	1,100	1,000,000	330		610 *U*	32 *U*	38 *U*	**640** *J*
Dibenzofuran	132649	1,000,000	210,000	7,000		410 *U*	22 *U*	26 *U*	270 *J*
Fluoranthene	206440	1,000,000	1,000,000	100,000		850 *J*	19 *U*	23 *U*	4,900

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB5	SB5	SB5	SB6
					Sample Identification	SB5 (0.5-1)	SB5 (1-2)	SB5 (13-15)	SB6 (0-0.5)
					Laboratory ID	480-200130-2	480-200130-3	480-200130-4	480-200248-1
					Sample Date	2022-07-25 03:07:00	2022-07-25 03:07:00	2022-07-25 03:07:00	2022-07-29 08:07:00
Fluorene	86737	1,000,000	386,000	30,000		410 *U*	22 *U*	26 *U*	630 *J*
Indeno[1,2,3-cd]pyrene	193395	11,000	8,200	500		**600** *J*	23 *U*	27 *U*	**1,700**
Naphthalene	91203	1,000,000	12,000	12,000		450 *U*	24 *U*	28 *U*	120 *U*
Phenanthrene	85018	1,000,000	1,000,000	100,000		510 *U*	27 *U*	32 *U*	3,600
Pyrene	129000	1,000,000	1,000,000	100,000		740 *J*	22 *U*	26 *U*	4,400
Per- and Polyfluoroalkyl Substances (µg/kg)									
6:2 fluorotelomer sulfonate	27619972								0.064 *U*
8:2 fluorotelomer sulfonate	39108344								0.041 *U*
2-(N-ethyl-perfluorooctane sulfonamido) acetate									0.093 *U*
Perfluorobutyric acid	375224								0.370 *U*
2-(N-methyl-perfluorooctane sulfonamido) acetic acid									0.120 *U*
Perfluorooctanoic acid	335671	600	0.8	0.66					0.097 *J*
Perfluorooctane sulfonic acid	1763231	440	1	0.88					0.210 *NJ*
Perfluorobutane Sulfonic Acid	375735								0.037 *U*
Perfluorodecanoic Acid	335762								0.043 *J*
Perfluorododecanoic Acid	307551								0.028 *U*
Perfluorodecanesulfonic acid	335773								0.021 *U*
Perfluoroheptanoic Acid	375859								0.046 *J*
Perfluoroheptanesulfonic acid	375928								0.026 *U*
Perfluorohexanoic Acid	307244								0.130 *NJ*
Perfluorohexane Sulfonic Acid	355464								0.046 *U*
Perfluorononanoic Acid	375951								0.072 *J*
Perfluorooctane sulfonamide	754916								0.038 *U*
Perfluoropentanoic Acid	2706903								0.061 *U*
Perfluorotetradecanoic Acid	376067								0.029 *U*
Perfluorotridecanoic Acid	72629948								0.028 *U*
Perfluoroundecanoic Acid	2058948								0.039 *J*
Semivolatile Organic Compounds (µg/kg)									
Atrazine	1912249					1,200 *U*	64 *U*	75 *U*	330 *U*
Carbazole	86748					410 *U*	22 *U*	26 *U*	140 *J*
2,4,5-Trichlorophenol	95954					940 *U*	50 *U*	59 *U*	260 *U*
2,4,6-Trichlorophenol	88062					690 *U*	37 *U*	43 *U*	190 *U*
2,4-Dichlorophenol	120832					370 *U*	19 *U*	23 *U*	100 *U*
2-Chlorophenol	95578					630 *U*	33 *U*	40 *U*	170 *U*
Pentachlorophenol	87865	55,000	800	800		3,500 *U*	180 *U*	220 *U*	940 *U*
1,1'-Biphenyl	92524					510 *U*	27 *U*	32 *U*	140 *U*
2,2'-oxybis(1-Chloropropane)	108601					690 *U*	37 *U*	43 *U*	190 *U*
2,4-Dimethylphenol	105679					840 *U*	44 *U*	52 *U*	230 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB5	SB5	SB5	SB6
					Sample Identification	SB5 (0.5-1)	SB5 (1-2)	SB5 (13-15)	SB6 (0-0.5)
					Laboratory ID	480-200130-2	480-200130-3	480-200130-4	480-200248-1
					Sample Date	2022-07-25 03:07:00	2022-07-25 03:07:00	2022-07-25 03:07:00	2022-07-29 08:07:00
2,4-Dinitrophenol	51285					16,000 *U*	850 *U*	1,000 *U*	4,400 *U*
2,4-Dinitrotoluene	121142					710 *U*	38 *U*	45 *U*	190 *U*
2,6-Dinitrotoluene	606202					410 *U*	22 *U*	26 *U*	110 *U*
2-Chloronaphthalene	91587					570 *U*	30 *U*	36 *U*	160 *U*
2-Methylphenol	95487	1,000,000	330	330		410 *U*	22 *U*	26 *U*	110 *U*
2-Nitroaniline	88744					510 *U*	27 *U*	32 *U*	140 *U*
2-Nitrophenol	88755					980 *U*	52 *U*	61 *U*	270 *U*
3,3'-Dichlorobenzidine	91941					4,100 *U*	220 *U*	260 *U*	1,100 *U*
3-Nitroaniline	99092					960 *U*	51 *U*	60 *U*	260 *U*
4,6-Dinitro-2-methylphenol	534521					3,500 *U*	180 *U*	220 *U*	940 *U*
4-Bromophenyl-phenylether	101553					490 *U*	26 *U*	31 *U*	130 *U*
4-Chloro-3-methylphenol	59507					860 *U*	45 *U*	54 *U*	230 *U*
4-Chloroaniline	106478					860 *U*	45 *U*	54 *U*	230 *U*
4-Chlorophenyl-phenyl ether	7005723					430 *U*	23 *U*	27 *U*	120 *U*
4-Methylphenol	106445	1,000,000	330	330		410 *U*	22 *U*	26 *U*	110 *U*
4-Nitroaniline	100016					1,800 *U*	96 *U*	110 *U*	490 *U*
4-Nitrophenol	100027					2,400 *U*	130 *U*	150 *U*	660 *U*
Acetophenone	98862					470 *U*	25 *U*	29 *U*	130 *U*
Benzaldehyde	100527					2,800 *U*	150 *U*	170 *U*	750 *U*
Bis(2-chloroethyl)ether	111444					450 *U*	24 *U*	28 *U*	120 *U*
bis(2-Chloroethoxy)methane	111911					730 *U*	39 *U*	46 *U*	200 *U*
bis(2-Ethylhexyl)phthalate	117817					1,200 *U*	63 *U*	74 *U*	320 *U*
Benzyl n-butyl phthalate	85687					570 *U*	30 *U*	36 *U*	160 *U*
Caprolactam	105602					1,000 *U*	55 *U*	65 *U*	280 *U*
Diethyl phthalate	84662					450 *U*	24 *U*	28 *U*	120 *U*
Dimethyl phthalate	131113					410 *U*	22 *U*	26 *U*	110 *U*
Di-n-butyl phthalate	84742					590 *U*	31 *U*	37 *U*	160 *U*
Di-n-octylphthalate	117840					410 *U*	22 *U*	26 *U*	110 *U*
Hexachloroethane	67721					450 *U*	24 *U*	28 *U*	120 *U*
Hexachlorobenzene	118741	12,000	3,200	330		470 *U*	25 *U*	29 *U*	130 *U*
Hexachlorobutadiene	87683					510 *U*	27 *U*	32 *U*	140 *U*
Hexachlorocyclopentadiene	77474					470 *U*	25 *U*	29 *U*	130 *U*
Isophorone	78591					730 *U*	39 *U*	46 *U*	200 *U*
Nitrobenzene	98953					390 *U*	21 *U*	24 *U*	110 *U*
N-Nitrosodi-n-propylamine	621647					590 *U*	31 *U*	37 *U*	160 *U*
N-Nitrosodiphenylamine	86306					2,800 *U*	150 *U*	180 *U*	770 *U*
Phenol	108952	1,000,000	330	330		530 *U*	28 *U*	33 *U*	140 *U*
1,4-Dioxane	123911	250,000	100	100					310 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB5	SB5	SB5	SB6
					Sample Identification	SB5 (0.5-1)	SB5 (1-2)	SB5 (13-15)	SB6 (0-0.5)
					Laboratory ID	480-200130-2	480-200130-3	480-200130-4	480-200248-1
					Sample Date	2022-07-25 03:07:00	2022-07-25 03:07:00	2022-07-25 03:07:00	2022-07-29 08:07:00
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	630206					0.50 *UJ*	0.54 *UJ*	0.50 *U*	0.75 *UJ*
1,1,1-Trichloroethane	71556	1,000,000	680	680		0.44 *J+*	1.90 *J+*	0.65 *J+*	0.54 *UJ*
1,1,2,2-Tetrachloroethane	79345					*R*	*R*	0.81 *U*	1.20 *UJ*
1,1,2-Trichloroethane	79005					0.65 *UJ*	0.71 *UJ*	0.65 *U*	0.97 *UJ*
1,1-Dichloroethane	75343	480,000	270	270		0.61 *U*	0.66 *U*	0.61 *U*	0.91 *UJ*
1,1-Dichloroethene	75354	1,000,000	330	330		0.61 *U*	0.67 *U*	0.61 *U*	0.91 *UJ*
1,2,3-Trimethylbenzene	526738					1.00 *U*	1.10 *U*	1.00 *U*	1.50 *UJ*
1,2,4-Trimethylbenzene	95636	380,000	3,600	3,600		*R*	*R*	0.96 *U*	1.40 *UJ*
1,2,4-Trichlorobenzene	120821					*R*	*R*	0.30 *U*	0.45 *UJ*
1,2-Dichlorobenzene	95501	1,000,000	1,100	1,100		*R*	*R*	0.39 *U*	0.58 *UJ*
1,3-Dichlorobenzene	541731	560,000	2,400	2,400		*R*	*R*	0.26 *U*	0.38 *UJ*
1,4-Dichlorobenzene	106467	250,000	1,800	1,800		*R*	*R*	0.70 *U*	1.00 *UJ*
1,2-Dibromo-3-chloropropane	96128					*R*	*R*	2.50 *U*	3.70 *UJ*
1,2-Dibromoethane	106934					0.64 *UJ*	0.70 *UJ*	0.64 *U*	0.96 *UJ*
1,2-Dichloroethane	107062	60,000	20	20		0.25 *U*	0.27 *U*	0.25 *U*	0.37 *UJ*
1,2-Dichloropropane	78875					2.50 *U*	2.70 *U*	2.50 *U*	3.70 *UJ*
1,3,5-Trimethylbenzene	108678	380,000	8,400	8,400		*R*	*R*	0.32 *U*	0.48 *UJ*
2-Hexanone	591786					2.50 *UJ*	2.70 *UJ*	2.50 *U*	3.70 *UJ*
4-Methyl-2-pentanone	108101					1.60 *UJ*	1.80 *UJ*	1.60 *U*	2.40 *UJ*
Acetone	67641	1,000,000	50	50		4.20 *U*	4.60 *U*	4.20 *U*	6.30 *UJ*
Benzene	71432	89,000	60	60		0.24 *U*	0.44 *J+*	0.24 *U*	0.37 *UJ*
Bromodichloromethane	75274					0.67 *U*	0.73 *U*	0.67 *U*	1.00 *UJ*
Bromomethane	74839					0.45 *U*	0.49 *U*	0.45 *U*	0.67 *UJ*
Bromoform	75252					2.50 *UJ*	2.70 *UJ*	2.50 *U*	3.70 *UJ*
Carbon disulfide	75150					2.50 *U*	2.70 *U*	2.50 *U*	3.70 *UJ*
Carbon Tetrachloride	56235	44,000	760	760		0.48 *U*	0.53 *U*	0.48 *U*	0.72 *UJ*
Chloroform	67663	700,000	370	370		0.31 *U*	0.34 *U*	0.31 *U*	0.46 *UJ*
cis-1,2-Dichloroethene	156592	1,000,000	250	250		0.64 *U*	0.70 *U*	0.64 *U*	0.96 *UJ*
cis-1,3-Dichloropropene	10061015					0.72 *U*	0.78 *U*	0.72 *U*	1.10 *UJ*
Chlorobenzene	108907	1,000,000	1,100	1,100		0.66 *UJ*	0.72 *UJ*	0.66 *U*	0.99 *UJ*
Chloroethane	75003					1.10 *U*	1.20 *U*	1.10 *U*	1.70 *UJ*
Chloromethane	74873					0.30 *U*	0.33 *U*	0.30 *U*	0.45 *UJ*
Cyclohexane	110827					0.70 *U*	0.76 *U*	0.70 *U*	1.00 *UJ*
Dibromochloromethane	124481					0.64 *UJ*	0.70 *UJ*	0.64 *U*	0.96 *UJ*
Dichlorodifluoromethane	75718					0.41 *U*	0.45 *U*	0.41 *U*	0.62 *UJ*
Ethylbenzene	100414	780,000	1,000	1,000		0.34 *UJ*	0.38 *UJ*	0.34 *U*	0.51 *UJ*
Isopropylbenzene	98828					*R*	*R*	0.75 *U*	1.10 *UJ*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB5	SB5	SB5	SB6
					Sample Identification	SB5 (0.5-1)	SB5 (1-2)	SB5 (13-15)	SB6 (0-0.5)
					Laboratory ID	480-200130-2	480-200130-3	480-200130-4	480-200248-1
					Sample Date	2022-07-25 03:07:00	2022-07-25 03:07:00	2022-07-25 03:07:00	2022-07-29 08:07:00
2-Butanone	78933	1,000,000	120	120		1.80 *U*	2.00 *U*	1.80 *U*	2.70 *UJ*
m,p-Xylene	179601231					0.84 *UJ*	0.92 *UJ*	0.84 *U*	1.30 *UJ*
Methyl Acetate	79209					3.0 *U*	3.3 *U*	3.0 *U*	4.5 *UJ*
Methylcyclohexane	108872					0.76 *U*	0.83 *U*	0.76 *U*	1.10 *UJ*
Methylene Chloride	75092	1,000,000	50	50		2.30 *U*	2.50 *U*	2.30 *U*	3.40 *UJ*
Methyl tert-butyl ether	1634044	1,000,000	930	930		0.49 *U*	0.54 *U*	0.49 *U*	0.73 *UJ*
n-Butylbenzene	104518	1,000,000	12,000	12,000		*R*	*R*	0.43 *U*	0.65 *UJ*
n-Propylbenzene	103651	1,000,000	3,900	3,900		*R*	*R*	0.40 *U*	0.60 *UJ*
o-Xylene	95476					0.65 *UJ*	0.71 *UJ*	0.65 *U*	0.97 *UJ*
sec-Butylbenzene	135988	1,000,000	11,000	11,000		*R*	*R*	0.43 *U*	0.65 *UJ*
Styrene	100425					0.25 *UJ*	0.27 *UJ*	0.25 *U*	0.37 *UJ*
tert-Butylbenzene	98066	1,000,000	5,900	5,900		*R*	*R*	0.52 *U*	0.78 *UJ*
Toluene	108883	1,000,000	700	700		0.38 *UJ*	0.63 *J*	0.38 *U*	0.61 *J*
Tetrachloroethane	127184	300,000	1,300	1,300		0.67 *UJ*	0.73 *UJ*	0.67 *U*	1.00 *UJ*
trans-1,2-Dichloroethene	156605	1,000,000	190	190		0.51 *U*	0.56 *U*	0.51 *U*	0.77 *UJ*
trans-1,3-Dichloropropene	10061026					2.20 *UJ*	2.40 *UJ*	2.20 *U*	3.30 *UJ*
Trichloroethene	79016	400,000	470	470		1.10 *U*	1.20 *U*	1.10 *U*	1.60 *UJ*
Trichlorotrifluoroethane	76131					1.10 *U*	1.20 *U*	1.10 *U*	1.70 *UJ*
Trichlorofluoromethane	75694					0.47 *U*	0.52 *U*	0.47 *U*	0.71 *UJ*
Vinyl Chloride	75014	27,000	20	20		0.61 *U*	0.66 *U*	0.61 *U*	0.91 *UJ*
Xylenes	1330207	1,000,000	1,600	260		0.84 *U*	0.92 *U*	0.84 *U*	1.30 *UJ*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB6	SB6	SB6	SB6
					Sample Identification	FDUP_072922	SB6 (0.5-1)	SB6 (1-2)	SB6 (13-15)
					Laboratory ID	480-200248-17	480-200248-2	480-200248-18	480-200248-3
					Sample Date	2022-07-29 08:07:00	2022-07-29 08:07:00	2022-07-29 08:07:00	2022-07-29 08:07:00
Metals (µg/kg)									
Arsenic	7440382	16,000	16,000	13,000		10,300	**18,300**	**17,600**	7,700
Lead	7439921	3,900,000	450,000	63,000		**100,000**	**273,000**	**2,370,000**	18,200
Cadmium	7440439	60,000	7,500	2,500		250	740	740	190 *J+*
Aluminum	7429905					8,240,000	7,650,000	6,570,000 *J*	15,500,000
Antimony	7440360					2,500 *J*	5,400 *J*	4,900 *J-*	1,100 *J*
Barium	7440393	10,000,000	820,000	350,000		198,000	**426,000**	**445,000** *J-*	147,000
Beryllium	7440417	2,700,000	47,000	7,200		520	740	700	780
Calcium	7440702					2,470,000	4,930,000	4,560,000 *J+*	1,490,000
Chromium	7440473					13,400	15,500	13,200	18,400
Cobalt	7440484					8,500	9,000	8,300 *J+*	13,700
Copper	7440508	10,000,000	1,720,000	50,000		43,000	**93,800**	**79,700** *J+*	17,200
Iron	7439896					19,000,000	21,100,000	19,400,000 *J-*	24,300,000
Magnesium	7439954					2,230,000	2,300,000	1,910,000	3,850,000
Manganese	7439965	10,000,000	2,000,000	1,600,000		404,000	344,000	291,000 *J-*	566,000
Mercury	7439976	5,700	730	180		180	**320**	**440** *J-*	35
Nickel	7440020	10,000,000	130,000	30,000		18,800	21,100	18,400 *J+*	30,000
Potassium	7440097					1,360,000	1,080,000	1,030,000 *J+*	2,120,000
Selenium	7782492	6,800,000	4,000	3,900		1,600 *J*	2,100 *J*	2,800 *J*	520 *U*
Silver	7440224	6,800,000	8,300	2,000		230 *U*	230 *U*	220 *U*	260 *U*
Sodium	7440235					30,000 *J*	92,500 *J*	71,200 *J*	82,800 *J*
Thallium	7440280					340 *U*	340 *U*	330 *U*	390 *U*
Vanadium	7440622					16,300	22,300	22,600	22,000
Zinc	7440666	10,000,000	2,480,000	109,000		**134,000**	**281,000**	**333,000** *J-*	76,500
Polycyclic Aromatic Hydrocarbons (µg/kg)									
2-Methylnaphthalene	91576					180 *U*	480 *J-*	370 *U*	45 *U*
Acenaphthene	83329	1,000,000	98,000	20,000		140 *U*	270 *UJ*	280 *U*	65 *J*
Acenaphthylene	208968	1,000,000	107,000	100,000		750 *J*	1,400 *J-*	3,000 *J-*	29 *U*
Anthracene	120127	1,000,000	1,000,000	100,000		570 *J*	17,000 *J-*	1,700 *J*	55 *U*
Benz[a]anthracene	56553	11,000	1,000	1,000		**2,100**	**6,500** *J-*	**8,200**	89 *J*
Benzo[a]pyrene	50328	1,100	22,000	1,000		**2,200**	**5,000** *J-*	**8,900** *J*	98 *J*
Benzo[b]fluoranthene	205992	11,000	1,700	1,000		**2,400**	**6,100** *J-*	**10,000** *J*	60 *J*
Benzo[g,h,i]perylene	191242	1,000,000	1,000,000	100,000		1,000	3,500 *J-*	6,300 *J-*	50 *J*
Benzo[k]fluoranthene	207089	110,000	1,700	800		**1,300**	**2,400** *J-*	**4,100**	29 *U*
Chrysene	218019	110,000	1,000	1,000		**2,300**	**6,500** *J-*	**7,500** *J-*	92 *J*
Dibenz[a,h]anthracene	53703	1,100	1,000,000	330		**380** *J*	**900** *J-*	**2,100** *J*	39 *U*
Dibenzofuran	132649	1,000,000	210,000	7,000		110 *U*	220 *UJ*	280 *J*	26 *U*
Fluoranthene	206440	1,000,000	1,000,000	100,000		4,000	11,000 *J-*	13,000	130 *J*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB6	SB6	SB6	SB6
					Sample Identification	FDUP_072922	SB6 (0.5-1)	SB6 (1-2)	SB6 (13-15)
					Laboratory ID	480-200248-17	480-200248-2	480-200248-18	480-200248-3
					Sample Date	2022-07-29 08:07:00	2022-07-29 08:07:00	2022-07-29 08:07:00	2022-07-29 08:07:00
Fluorene	86737	1,000,000	386,000	30,000		130 *J*	1,200 *J-*	570 *J*	49 *J*
Indeno[1,2,3-cd]pyrene	193395	11,000	8,200	500		**1,100**	**3,200** *J-*	**5,800** *J*	45 *J*
Naphthalene	91203	1,000,000	12,000	12,000		120 *U*	290 *UJ*	240 *U*	29 *U*
Phenanthrene	85018	1,000,000	1,000,000	100,000		1,300	8,200 *J-*	5,000 *J*	160 *J*
Pyrene	129000	1,000,000	1,000,000	100,000		3,300	14,000 *J-*	12,000	210 *J*
Per- and Polyfluoroalkyl Substances (µg/kg)									
6:2 fluorotelomer sulfonate	27619972					0.063 *U*	0.062 *U*	0.062 *U*	0.077 *U*
8:2 fluorotelomer sulfonate	39108344					0.041 *U*	0.040 *U*	0.040 *U*	0.050 *U*
2-(N-ethyl-perfluorooctane sulfonamido) acetate						0.092 *U*	0.090 *U*	0.091 *U*	0.110 *U*
Perfluorobutyric acid	375224					0.370 *U*	0.360 *U*	0.360 *U*	0.440 *U*
2-(N-methyl-perfluorooctane sulfonamido) acetic acid						0.120 *U*	0.120 *U*	0.120 *U*	0.150 *U*
Perfluorooctanoic acid	335671	600	0.8	0.66		0.100 *J*	0.130 *J*	0.140 *J*	0.078 *U*
Perfluorooctane sulfonic acid	1763231	440	1	0.88		0.250 *UJ*	0.410	0.500	0.150 *U*
Perfluorobutane Sulfonic Acid	375735					0.037 *U*	0.036 *U*	0.037 *U*	0.044 *U*
Perfluorodecanoic Acid	335762					0.042 *J*	0.030 *U*	0.031 *U*	0.038 *U*
Perfluorododecanoic Acid	307551					0.028 *U*	0.027 *U*	0.027 *U*	0.034 *U*
Perfluorodecanesulfonic acid	335773					0.021 *U*	0.021 *U*	0.021 *U*	0.026 *U*
Perfluoroheptanoic Acid	375859					0.052 *J*	0.045 *U*	0.043 *U*	0.052 *U*
Perfluoroheptanesulfonic acid	375928					0.025 *U*	0.025 *U*	0.025 *U*	0.031 *U*
Perfluorohexanoic Acid	307244					0.100 *UJ*	0.066 *U*	0.053 *U*	0.062 *U*
Perfluorohexane Sulfonic Acid	355464					0.045 *U*	0.100 *UJ*	0.045 *U*	0.055 *U*
Perfluorononanoic Acid	375951					0.080 *J*	0.050 *J*	0.037 *U*	0.046 *U*
Perfluorooctane sulfonamide	754916					0.038 *U*	0.037 *U*	0.037 *U*	0.046 *U*
Perfluoropentanoic Acid	2706903					0.061 *U*	0.060 *U*	0.060 *U*	0.074 *U*
Perfluorotetradecanoic Acid	376067					0.029 *U*	0.028 *U*	0.028 *U*	0.035 *U*
Perfluorotridecanoic Acid	72629948					0.028 *U*	0.027 *U*	0.027 *U*	0.034 *U*
Perfluoroundecanoic Acid	2058948					0.045 *J*	0.029 *U*	0.029 *U*	0.036 *U*
Semivolatile Organic Compounds (µg/kg)									
Atrazine	1912249					320 *U*	640 *UJ*	650 *U*	77 *U*
Carbazole	86748					110 *U*	250 *J-*	310 *J*	26 *U*
2,4,5-Trichlorophenol	95954					250 *U*	500 *U*	510 *U*	60 *U*
2,4,6-Trichlorophenol	88062					180 *U*	370 *U*	370 *U*	45 *U*
2,4-Dichlorophenol	120832					98 *U*	190 *U*	200 *U*	24 *U*
2-Chlorophenol	95578					170 *U*	340 *U*	340 *U*	41 *U*
Pentachlorophenol	87865	55,000	800	800		920 *U*	1,800 *U*	1,900 *U*	220 *U*
1,1'-Biphenyl	92524					140 *U*	270 *UJ*	280 *U*	33 *U*
2,2'-oxybis(1-Chloropropane)	108601					180 *U*	370 *UJ*	370 *U*	45 *U*
2,4-Dimethylphenol	105679					220 *U*	440 *U*	450 *U*	54 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB6	SB6	SB6	SB6
					Sample Identification	FDUP_072922	SB6 (0.5-1)	SB6 (1-2)	SB6 (13-15)
					Laboratory ID	480-200248-17	480-200248-2	480-200248-18	480-200248-3
					Sample Date	2022-07-29 08:07:00	2022-07-29 08:07:00	2022-07-29 08:07:00	2022-07-29 08:07:00
2,4-Dinitrophenol	51285					4,300 *U*	8,500 *U*	*R*	1,000 *U*
2,4-Dinitrotoluene	121142					190 *U*	380 *UJ*	390 *U*	46 *U*
2,6-Dinitrotoluene	606202					110 *U*	220 *UJ*	220 *U*	26 *U*
2-Chloronaphthalene	91587					150 *U*	300 *UJ*	310 *U*	37 *U*
2-Methylphenol	95487	1,000,000	330	330		110 *U*	220 *U*	220 *U*	26 *U*
2-Nitroaniline	88744					140 *U*	270 *UJ*	280 *U*	33 *U*
2-Nitrophenol	88755					260 *U*	520 *U*	530 *U*	63 *U*
3,3'-Dichlorobenzidine	91941					1,100 *U*	2,200 *UJ*	2,200 *U*	260 *U*
3-Nitroaniline	99092					260 *U*	510 *UJ*	520 *U*	62 *U*
4,6-Dinitro-2-methylphenol	534521					920 *U*	1,800 *U*	1,900 *U*	220 *U*
4-Bromophenyl-phenylether	101553					130 *U*	260 *UJ*	260 *U*	31 *U*
4-Chloro-3-methylphenol	59507					230 *U*	450 *U*	460 *U*	55 *U*
4-Chloroaniline	106478					230 *U*	450 *UJ*	460 *U*	55 *U*
4-Chlorophenyl-phenyl ether	7005723					110 *U*	230 *UJ*	230 *U*	28 *U*
4-Methylphenol	106445	1,000,000	330	330		110 *U*	220 *U*	220 *U*	26 *U*
4-Nitroaniline	100016					480 *U*	960 *UJ*	980 *U*	120 *U*
4-Nitrophenol	100027					650 *U*	1,300 *U*	1,300 *U*	160 *U*
Acetophenone	98862					130 *U*	250 *UJ*	250 *U*	30 *U*
Benzaldehyde	100527					730 *U*	1,500 *UJ*	1,500 *U*	180 *U*
Bis(2-chloroethyl)ether	111444					120 *U*	240 *UJ*	240 *U*	29 *U*
bis(2-Chloroethoxy)methane	111911					200 *U*	390 *UJ*	400 *U*	47 *U*
bis(2-Ethylhexyl)phthalate	117817					320 *U*	630 *UJ*	640 *U*	76 *U*
Benzyl n-butyl phthalate	85687					150 *U*	300 *UJ*	310 *U*	37 *U*
Caprolactam	105602					280 *U*	550 *UJ*	560 *U*	67 *U*
Diethyl phthalate	84662					120 *U*	240 *UJ*	240 *U*	29 *U*
Dimethyl phthalate	131113					110 *U*	220 *UJ*	220 *U*	26 *U*
Di-n-butyl phthalate	84742					170 *J*	310 *UJ*	320 *U*	38 *U*
Di-n-octylphthalate	117840					110 *U*	220 *UJ*	220 *U*	26 *U*
Hexachloroethane	67721					120 *U*	240 *UJ*	240 *U*	29 *U*
Hexachlorobenzene	118741	12,000	3,200	330		130 *U*	250 *UJ*	250 *U*	30 *U*
Hexachlorobutadiene	87683					140 *U*	270 *UJ*	280 *U*	33 *U*
Hexachlorocyclopentadiene	77474					130 *U*	250 *UJ*	*R*	30 *U*
Isophorone	78591					200 *U*	390 *UJ*	400 *U*	47 *U*
Nitrobenzene	98953					100 *U*	210 *UJ*	210 *U*	25 *U*
N-Nitrosodi-n-propylamine	621647					160 *U*	310 *UJ*	320 *U*	38 *U*
N-Nitrosodiphenylamine	86306					750 *U*	1,500 *UJ*	1,500 *U*	180 *U*
Phenol	108952	1,000,000	330	330		140 *U*	280 *U*	290 *U*	34 *U*
1,4-Dioxane	123911	250,000	100	100		300 *U*	600 *UJ*	*R*	72 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB6	SB6	SB6	SB6
					Sample Identification	FDUP_072922	SB6 (0.5-1)	SB6 (1-2)	SB6 (13-15)
					Laboratory ID	480-200248-17	480-200248-2	480-200248-18	480-200248-3
					Sample Date	2022-07-29 08:07:00	2022-07-29 08:07:00	2022-07-29 08:07:00	2022-07-29 08:07:00
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	630206					0.60 *UJ*	0.70 *UJ*	0.78 *UJ*	0.51 *U*
1,1,1-Trichloroethane	71556	1,000,000	680	680		0.44 *UJ*	0.51 *UJ*	0.56 *UJ*	0.37 *U*
1,1,2,2-Tetrachloroethane	79345					0.97 *UJ*	*R*	*R*	0.83 *U*
1,1,2-Trichloroethane	79005					0.78 *UJ*	0.91 *UJ*	1.00 *UJ*	0.66 *U*
1,1-Dichloroethane	75343	480,000	270	270		0.73 *UJ*	0.85 *UJ*	0.95 *UJ*	0.62 *U*
1,1-Dichloroethene	75354	1,000,000	330	330		0.74 *UJ*	0.85 *UJ*	0.95 *UJ*	0.63 *U*
1,2,3-Trimethylbenzene	526738					1.20 *UJ*	1.40 *UJ*	1.60 *UJ*	1.00 *U*
1,2,4-Trimethylbenzene	95636	380,000	3,600	3,600		1.20 *UJ*	*R*	*R*	0.98 *U*
1,2,4-Trichlorobenzene	120821					0.37 *UJ*	*R*	*R*	0.31 *U*
1,2-Dichlorobenzene	95501	1,000,000	1,100	1,100		0.47 *UJ*	*R*	*R*	0.40 *U*
1,3-Dichlorobenzene	541731	560,000	2,400	2,400		0.31 *UJ*	*R*	*R*	0.26 *U*
1,4-Dichlorobenzene	106467	250,000	1,800	1,800		0.84 *UJ*	*R*	*R*	0.72 *U*
1,2-Dibromo-3-chloropropane	96128					3.00 *UJ*	*R*	*R*	2.60 *U*
1,2-Dibromoethane	106934					0.77 *UJ*	0.89 *UJ*	1.00 *UJ*	0.66 *U*
1,2-Dichloroethane	107062	60,000	20	20		0.30 *UJ*	0.35 *UJ*	0.39 *UJ*	0.26 *U*
1,2-Dichloropropane	78875					3.00 *UJ*	3.50 *UJ*	3.90 *UJ*	2.60 *U*
1,3,5-Trimethylbenzene	108678	380,000	8,400	8,400		0.39 *UJ*	*R*	*R*	0.33 *U*
2-Hexanone	591786					3.00 *UJ*	3.50 *UJ*	3.90 *UJ*	2.60 *U*
4-Methyl-2-pentanone	108101					2.00 *UJ*	2.30 *UJ*	2.60 *UJ*	1.70 *U*
Acetone	67641	1,000,000	50	50		5.10 *UJ*	5.90 *UJ*	6.50 *UJ*	**94**
Benzene	71432	89,000	60	60		0.29 *UJ*	0.34 *UJ*	0.38 *UJ*	0.25 *U*
Bromodichloromethane	75274					0.80 *UJ*	0.93 *UJ*	1.00 *UJ*	0.68 *U*
Bromomethane	74839					0.54 *UJ*	0.63 *UJ*	0.70 *UJ*	0.46 *U*
Bromoform	75252					3.00 *UJ*	3.50 *UJ*	3.90 *UJ*	2.60 *U*
Carbon disulfide	75150					3.00 *UJ*	3.50 *UJ*	3.90 *UJ*	2.60 *U*
Carbon Tetrachloride	56235	44,000	760	760		0.58 *UJ*	0.67 *UJ*	0.75 *UJ*	0.49 *U*
Chloroform	67663	700,000	370	370		0.37 *UJ*	0.43 *UJ*	0.48 *UJ*	0.32 *U*
cis-1,2-Dichloroethene	156592	1,000,000	250	250		0.77 *UJ*	0.89 *UJ*	1.00 *UJ*	0.65 *U*
cis-1,3-Dichloropropene	10061015					0.87 *UJ*	1.00 *UJ*	1.10 *UJ*	0.74 *U*
Chlorobenzene	108907	1,000,000	1,100	1,100		0.79 *UJ*	0.92 *UJ*	1.00 *UJ*	0.67 *U*
Chloroethane	75003					1.40 *UJ*	1.60 *UJ*	1.80 *UJ*	1.20 *U*
Chloromethane	74873					0.36 *UJ*	0.42 *UJ*	0.47 *UJ*	0.31 *U*
Cyclohexane	110827					0.84 *UJ*	0.98 *UJ*	1.10 *UJ*	0.72 *U*
Dibromochloromethane	124481					0.77 *UJ*	0.89 *UJ*	1.00 *UJ*	0.65 *U*
Dichlorodifluoromethane	75718					0.50 *UJ*	0.58 *UJ*	0.64 *UJ*	0.42 *U*
Ethylbenzene	100414	780,000	1,000	1,000		0.41 *UJ*	0.48 *UJ*	0.54 *UJ*	0.35 *U*
Isopropylbenzene	98828					0.91 *UJ*	*R*	*R*	0.77 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SB6	SB6	SB6	SB6
					Sample Identification	FDUP_072922	SB6 (0.5-1)	SB6 (1-2)	SB6 (13-15)
					Laboratory ID	480-200248-17	480-200248-2	480-200248-18	480-200248-3
					Sample Date	2022-07-29 08:07:00	2022-07-29 08:07:00	2022-07-29 08:07:00	2022-07-29 08:07:00
2-Butanone	78933	1,000,000	120	120		2.20 *UJ*	2.60 *UJ*	2.80 *UJ*	20 *J*
m,p-Xylene	179601231					1.00 *UJ*	1.20 *UJ*	1.30 *UJ*	0.86 *U*
Methyl Acetate	79209					3.6 *UJ*	4.2 *UJ*	4.7 *UJ*	3.5 *J*
Methylcyclohexane	108872					0.91 *UJ*	1.10 *UJ*	1.20 *UJ*	0.78 *U*
Methylene Chloride	75092	1,000,000	50	50		2.80 *UJ*	3.20 *UJ*	3.60 *UJ*	2.40 *U*
Methyl tert-butyl ether	1634044	1,000,000	930	930		0.59 *UJ*	0.68 *UJ*	0.76 *UJ*	0.50 *U*
n-Butylbenzene	104518	1,000,000	12,000	12,000		0.52 *UJ*	*R*	*R*	0.44 *U*
n-Propylbenzene	103651	1,000,000	3,900	3,900		0.48 *UJ*	*R*	*R*	0.41 *U*
o-Xylene	95476					0.78 *UJ*	0.91 *UJ*	1.00 *UJ*	0.67 *U*
sec-Butylbenzene	135988	1,000,000	11,000	11,000		0.52 *UJ*	*R*	*R*	0.44 *U*
Styrene	100425					0.30 *UJ*	0.35 *UJ*	0.39 *UJ*	0.26 *U*
tert-Butylbenzene	98066	1,000,000	5,900	5,900		0.62 *UJ*	*R*	*R*	0.53 *U*
Toluene	108883	1,000,000	700	700		0.45 *UJ*	0.53 *UJ*	0.59 *UJ*	0.39 *U*
Tetrachloroethane	127184	300,000	1,300	1,300		0.81 *UJ*	0.94 *UJ*	1.00 *UJ*	0.69 *U*
trans-1,2-Dichloroethene	156605	1,000,000	190	190		0.62 *UJ*	0.72 *UJ*	0.80 *UJ*	0.53 *U*
trans-1,3-Dichloropropene	10061026					2.60 *UJ*	3.10 *UJ*	3.40 *UJ*	2.20 *U*
Trichloroethene	79016	400,000	470	470		1.30 *UJ*	1.50 *UJ*	1.70 *UJ*	1.10 *U*
Trichlorotrifluoroethane	76131					1.40 *UJ*	1.60 *UJ*	1.80 *UJ*	1.20 *U*
Trichlorofluoromethane	75694					0.57 *UJ*	0.66 *UJ*	0.74 *UJ*	0.48 *U*
Vinyl Chloride	75014	27,000	20	20		0.73 *UJ*	0.85 *UJ*	0.95 *UJ*	0.62 *U*
Xylenes	1330207	1,000,000	1,600	260		1.00 *UJ*	1.20 *UJ*	1.30 *UJ*	0.86 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS1	SS1	SS1	SS1
					Sample Identification	SS1 (0-2)	SS1 (0-6)	SS1 (12-24)	FDUP_091222
					Laboratory ID	480-201563-1	480-201563-2	480-201563-4	480-201563-5
					Sample Date	2022-09-12 04:09:00	2022-09-12 12:09:00	2022-09-12 12:09:00	2022-09-12 12:09:00
Metals (µg/kg)									
Arsenic	7440382	16,000	16,000	13,000		9,900	12,500	12,200	12,900
Lead	7439921	3,900,000	450,000	63,000		**88,400**	**118,000**	**77,400**	**82,200**
Cadmium	7440439	60,000	7,500	2,500		750	1,000 *J+*	660 *J+*	720 *J+*
Aluminum	7429905					9,000,000 *J*	9,160,000	4,890,000	6,850,000
Antimony	7440360					2,300 *J-*	2,200 *J*	7,300 *J*	10,000 *J*
Barium	7440393	10,000,000	820,000	350,000		86,900 *J+*	91,700	50,800	70,300
Beryllium	7440417	2,700,000	47,000	7,200		460	480	360	440
Calcium	7440702					2,810,000	3,380,000	2,160,000	2,130,000
Chromium	7440473					14,200	15,600	19,000	20,200
Cobalt	7440484					7,000	7,800	12,000	14,100
Copper	7440508	10,000,000	1,720,000	50,000		20,500	27,200	**59,300**	**70,500**
Iron	7439896					23,100,000	30,000,000	113,000,000	145,000,000
Magnesium	7439954					2,220,000 *J+*	2,470,000	851,000	1,050,000
Manganese	7439965	10,000,000	2,000,000	1,600,000		427,000	553,000	790,000	885,000
Mercury	7439976	5,700	730	180		85	99	57	49
Nickel	7440020	10,000,000	130,000	30,000		16,200	26,900	20,700 *J*	29,500 *J*
Potassium	7440097					1,740,000 *J+*	1,640,000	797,000	1,230,000
Selenium	7782492	6,800,000	4,000	3,900		1,000 *J*	920 *J+*	680 *J+*	990 *J+*
Silver	7440224	6,800,000	8,300	2,000		250 *U*	250 *U*	230 *U*	220 *U*
Sodium	7440235					58,600 *J*	67,200 *J*	101,000 *J*	93,200 *J*
Thallium	7440280					370 *U*	380 *U*	340 *U*	330 *U*
Vanadium	7440622					15,800	19,300	33,400	41,400
Zinc	7440666	10,000,000	2,480,000	109,000		**119,000**	**135,000**	45,900	49,600
Polycyclic Aromatic Hydrocarbons (µg/kg)									
2-Methylnaphthalene	91576					200 *U*	410 *U*	37 *U*	37 *U*
Acenaphthene	83329	1,000,000	98,000	20,000		150 *U*	310 *U*	27 *U*	28 *U*
Acenaphthylene	208968	1,000,000	107,000	100,000		130 *U*	270 *U*	24 *U*	24 *U*
Anthracene	120127	1,000,000	1,000,000	100,000		250 *U*	510 *U*	46 *U*	46 *U*
Benz[a]anthracene	56553	11,000	1,000	1,000		340 *J*	260 *J*	62 *J*	73 *J*
Benzo[a]pyrene	50328	1,100	22,000	1,000		540 *J*	440 *J*	72 *J*	91 *J*
Benzo[b]fluoranthene	205992	11,000	1,700	1,000		870 *J*	710 *J*	130 *J*	150 *J*
Benzo[g,h,i]perylene	191242	1,000,000	1,000,000	100,000		380 *J*	320 *J*	51 *J*	59 *J*
Benzo[k]fluoranthene	207089	110,000	1,700	800		350 *J*	280 *J*	43 *J*	57 *J*
Chrysene	218019	110,000	1,000	1,000		730 *J*	590 *J*	96 *J*	130 *J*
Dibenz[a,h]anthracene	53703	1,100	1,000,000	330		180 *U*	370 *U*	33 *U*	33 *U*
Dibenzofuran	132649	1,000,000	210,000	7,000		120 *U*	240 *U*	22 *U*	22 *U*
Fluoranthene	206440	1,000,000	1,000,000	100,000		1,500	1,200 *J*	180	220

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS1	SS1	SS1	SS1
					Sample Identification	SS1 (0-2)	SS1 (0-6)	SS1 (12-24)	FDUP_091222
					Laboratory ID	480-201563-1	480-201563-2	480-201563-4	480-201563-5
					Sample Date	2022-09-12 04:09:00	2022-09-12 12:09:00	2022-09-12 12:09:00	2022-09-12 12:09:00
Fluorene	86737	1,000,000	386,000	30,000		120 *U*	240 *U*	22 *U*	22 *U*
Indeno[1,2,3-cd]pyrene	193395	11,000	8,200	500		470 *J*	320 *J*	60 *J*	72 *J*
Naphthalene	91203	1,000,000	12,000	12,000		130 *U*	270 *U*	24 *U*	24 *U*
Phenanthrene	85018	1,000,000	1,000,000	100,000		960 *J*	700 *J*	130 *J*	170 *J*
Pyrene	129000	1,000,000	1,000,000	100,000		1,100	860 *J*	140 *J*	180 *J*
Per- and Polyfluoroalkyl Substances (µg/kg)									
6:2 fluorotelomer sulfonate	27619972					0.068 *U*		0.062 *U*	0.061 *U*
8:2 fluorotelomer sulfonate	39108344					0.044 *U*		0.040 *U*	0.040 *U*
2-(N-ethyl-perfluorooctane sulfonamido) acetate						0.110 *J*		0.090 *U*	0.089 *U*
Perfluorobutyric acid	375224					0.390 *U*		0.360 *U*	0.360 *U*
2-(N-methyl-perfluorooctane sulfonamido) acetic acid						0.130 *U*		0.120 *U*	0.120 *U*
Perfluorooctanoic acid	335671	600	0.8	0.66		0.280		0.180 *J*	0.330
Perfluorooctane sulfonic acid	1763231	440	1	0.88		**1.000**		0.280	0.490
Perfluorobutane Sulfonic Acid	375735					0.039 *U*		0.036 *U*	0.036 *U*
Perfluorodecanoic Acid	335762					0.120 *J*		0.030 *U*	0.030 *U*
Perfluorododecanoic Acid	307551					0.052 *U*		0.027 *U*	0.027 *U*
Perfluorodecanesulfonic acid	335773					0.048 *U*		0.021 *U*	0.020 *U*
Perfluoroheptanoic Acid	375859					0.074 *U*		0.042 *J*	0.071 *J*
Perfluoroheptanesulfonic acid	375928					0.027 *U*		0.025 *U*	0.025 *U*
Perfluorohexanoic Acid	307244					0.140 *UJ*		0.050 *U*	0.050 *U*
Perfluorohexane Sulfonic Acid	355464					0.049 *U*		0.044 *U*	0.055 *J*
Perfluorononanoic Acid	375951					0.150 *J*		0.037 *U*	0.037 *U*
Perfluorooctane sulfonamide	754916					0.040 *U*		0.037 *U*	0.037 *U*
Perfluoropentanoic Acid	2706903					0.068 *U*		0.059 *U*	0.059 *U*
Perfluorotetradecanoic Acid	376067					0.031 *U*		0.028 *U*	0.028 *U*
Perfluorotridecanoic Acid	72629948					0.031 *U*		0.027 *U*	0.027 *U*
Perfluoroundecanoic Acid	2058948					0.079 *J*		0.029 *U*	0.029 *U*
Semivolatile Organic Compounds (µg/kg)									
Atrazine	1912249					350 *U*	720 *U*	64 *U*	65 *U*
Carbazole	86748					120 *U*	240 *U*	22 *U*	22 *U*
2,4,5-Trichlorophenol	95954					270 *U*	560 *U*	50 *U*	51 *U*
2,4,6-Trichlorophenol	88062					200 *U*	410 *U*	37 *U*	37 *U*
2,4-Dichlorophenol	120832					110 *U*	220 *U*	20 *U*	20 *U*
2-Chlorophenol	95578					180 *U*	380 *U*	34 *U*	34 *U*
Pentachlorophenol	87865	55,000	800	800		1,000 *U*	2,100 *U*	180 *U*	190 *U*
1,1'-Biphenyl	92524					150 *U*	310 *U*	27 *U*	28 *U*
2,2'-oxybis(1-Chloropropane)	108601					200 *U*	410 *U*	37 *U*	37 *U*
2,4-Dimethylphenol	105679					240 *U*	500 *U*	44 *U*	45 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS1	SS1	SS1	SS1
					Sample Identification	SS1 (0-2)	SS1 (0-6)	SS1 (12-24)	FDUP_091222
					Laboratory ID	480-201563-1	480-201563-2	480-201563-4	480-201563-5
					Sample Date	2022-09-12 04:09:00	2022-09-12 12:09:00	2022-09-12 12:09:00	2022-09-12 12:09:00
2,4-Dinitrophenol	51285					4,700 *U*	9,600 *U*	850 *U*	860 *U*
2,4-Dinitrotoluene	121142					210 *U*	430 *U*	38 *U*	39 *U*
2,6-Dinitrotoluene	606202					120 *U*	240 *U*	22 *U*	22 *U*
2-Chloronaphthalene	91587					170 *U*	340 *U*	30 *U*	31 *U*
2-Methylphenol	95487	1,000,000	330	330		120 *U*	240 *U*	22 *U*	22 *U*
2-Nitroaniline	88744					150 *U*	310 *U*	27 *U*	28 *U*
2-Nitrophenol	88755					280 *U*	590 *U*	52 *U*	53 *U*
3,3'-Dichlorobenzidine	91941					1,200 *U*	2,400 *U*	220 *U*	220 *U*
3-Nitroaniline	99092					280 *U*	570 *U*	51 *U*	52 *U*
4,6-Dinitro-2-methylphenol	534521					1,000 *U*	2,100 *U*	180 *U*	190 *U*
4-Bromophenyl-phenylether	101553					140 *U*	290 *U*	26 *U*	26 *U*
4-Chloro-3-methylphenol	59507					250 *U*	510 *U*	46 *U*	46 *U*
4-Chloroaniline	106478					250 *U*	510 *U*	46 *U*	46 *U*
4-Chlorophenyl-phenyl ether	7005723					120 *U*	260 *U*	23 *U*	23 *U*
4-Methylphenol	106445	1,000,000	330	330		120 *U*	240 *U*	22 *U*	22 *U*
4-Nitroaniline	100016					530 *U*	1,100 *U*	96 *U*	98 *U*
4-Nitrophenol	100027					710 *U*	1,500 *U*	130 *U*	130 *U*
Acetophenone	98862					140 *U*	280 *U*	25 *U*	25 *U*
Benzaldehyde	100527					800 *U*	1,600 *U*	150 *U*	150 *U*
Bis(2-chloroethyl)ether	111444					130 *U*	270 *U*	24 *U*	24 *U*
bis(2-Chloroethoxy)methane	111911					210 *U*	440 *U*	39 *U*	40 *U*
bis(2-Ethylhexyl)phthalate	117817					340 *U*	710 *U*	63 *U*	64 *U*
Benzyl n-butyl phthalate	85687					170 *U*	340 *U*	32 *J*	32 *J*
Caprolactam	105602					300 *U*	620 *U*	55 *U*	56 *U*
Diethyl phthalate	84662					180 *U*	270 *U*	110 *U*	89 *U*
Dimethyl phthalate	131113					120 *U*	240 *U*	22 *U*	22 *U*
Di-n-butyl phthalate	84742					170 *U*	350 *U*	31 *U*	32 *U*
Di-n-octylphthalate	117840					120 *U*	240 *U*	22 *U*	22 *U*
Hexachloroethane	67721					130 *U*	270 *U*	24 *U*	24 *U*
Hexachlorobenzene	118741	12,000	3,200	330		140 *U*	280 *U*	25 *U*	25 *U*
Hexachlorobutadiene	87683					150 *U*	310 *U*	27 *U*	28 *U*
Hexachlorocyclopentadiene	77474					140 *U*	280 *U*	25 *U*	25 *U*
Isophorone	78591					210 *U*	440 *U*	39 *U*	40 *U*
Nitrobenzene	98953					110 *U*	230 *U*	21 *U*	21 *U*
N-Nitrosodi-n-propylamine	621647					170 *U*	350 *U*	31 *U*	32 *U*
N-Nitrosodiphenylamine	86306					820 *U*	1,700 *U*	150 *U*	150 *U*
Phenol	108952	1,000,000	330	330		150 *U*	320 *U*	28 *U*	29 *U*
1,4-Dioxane	123911	250,000	100	100		330 *U*		60 *U*	61 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS1	SS1	SS1	SS1
					Sample Identification	SS1 (0-2)	SS1 (0-6)	SS1 (12-24)	FDUP_091222
					Laboratory ID	480-201563-1	480-201563-2	480-201563-4	480-201563-5
					Sample Date	2022-09-12 04:09:00	2022-09-12 12:09:00	2022-09-12 12:09:00	2022-09-12 12:09:00
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	630206					0.45 *U*	0.55 *U*	0.52 *U*	0.51 *U*
1,1,1-Trichloroethane	71556	1,000,000	680	680		0.33 *U*	0.40 *U*	0.38 *U*	0.37 *U*
1,1,2,2-Tetrachloroethane	79345					0.73 *UJ*	0.89 *UJ*	0.85 *U*	0.82 *UJ*
1,1,2-Trichloroethane	79005					0.58 *U*	0.71 *U*	0.68 *U*	0.66 *U*
1,1-Dichloroethane	75343	480,000	270	270		0.55 *U*	0.67 *U*	0.64 *U*	0.62 *U*
1,1-Dichloroethene	75354	1,000,000	330	330		0.55 *UJ*	0.67 *UJ*	0.64 *UJ*	0.62 *UJ*
1,2,3-Trimethylbenzene	526738					0.91 *U*	1.10 *U*	1.10 *U*	1.00 *U*
1,2,4-Trimethylbenzene	95636	380,000	3,600	3,600		0.86 *UJ*	1.10 *UJ*	1.00 *U*	0.97 *UJ*
1,2,4-Trichlorobenzene	120821					0.27 *UJ*	0.33 *UJ*	0.32 *U*	0.31 *UJ*
1,2-Dichlorobenzene	95501	1,000,000	1,100	1,100		0.35 *UJ*	0.43 *UJ*	0.41 *U*	0.40 *UJ*
1,3-Dichlorobenzene	541731	560,000	2,400	2,400		0.23 *UJ*	0.28 *UJ*	0.27 *U*	0.26 *UJ*
1,4-Dichlorobenzene	106467	250,000	1,800	1,800		0.63 *UJ*	0.77 *UJ*	0.73 *U*	0.71 *UJ*
1,2-Dibromo-3-chloropropane	96128					2.20 *UJ*	2.70 *UJ*	2.60 *U*	2.50 *UJ*
1,2-Dibromoethane	106934					0.57 *U*	0.70 *U*	0.67 *U*	0.65 *U*
1,2-Dichloroethane	107062	60,000	20	20		0.22 *U*	0.27 *U*	0.26 *U*	0.25 *U*
1,2-Dichloropropane	78875					2.20 *U*	2.70 *U*	2.60 *U*	2.50 *U*
1,3,5-Trimethylbenzene	108678	380,000	8,400	8,400		0.29 *UJ*	0.35 *UJ*	0.34 *U*	0.33 *UJ*
2-Hexanone	591786					2.20 *U*	2.70 *U*	2.60 *U*	2.50 *U*
4-Methyl-2-pentanone	108101					1.50 *U*	1.80 *U*	1.70 *U*	1.70 *U*
Acetone	67641	1,000,000	50	50		3.80 *U*	4.60 *U*	4.40 *U*	4.30 *U*
Benzene	71432	89,000	60	60		0.22 *U*	0.27 *U*	0.26 *U*	0.25 *U*
Bromodichloromethane	75274					0.60 *U*	0.73 *U*	0.70 *U*	0.68 *U*
Bromomethane	74839					0.40 *U*	0.49 *U*	0.47 *U*	0.46 *U*
Bromoform	75252					2.20 *U*	2.70 *U*	2.60 *U*	2.50 *U*
Carbon disulfide	75150					2.20 *U*	2.70 *U*	2.60 *U*	2.50 *U*
Carbon Tetrachloride	56235	44,000	760	760		0.43 *UJ*	0.53 *UJ*	0.51 *UJ*	0.49 *UJ*
Chloroform	67663	700,000	370	370		0.28 *UJ*	0.34 *U*	0.33 *U*	0.33 *UJ*
cis-1,2-Dichloroethene	156592	1,000,000	250	250		0.57 *U*	0.70 *U*	0.67 *U*	0.65 *U*
cis-1,3-Dichloropropene	10061015					0.64 *U*	0.79 *U*	0.76 *U*	0.73 *U*
Chlorobenzene	108907	1,000,000	1,100	1,100		0.59 *U*	0.72 *U*	0.69 *U*	0.67 *U*
Chloroethane	75003					1.00 *U*	1.20 *U*	1.20 *U*	1.10 *U*
Chloromethane	74873					0.27 *U*	0.33 *U*	0.32 *U*	0.31 *U*
Cyclohexane	110827					0.63 *UJ*	0.77 *UJ*	0.73 *UJ*	0.71 *UJ*
Dibromochloromethane	124481					0.57 *U*	0.70 *U*	0.67 *U*	0.65 *U*
Dichlorodifluoromethane	75718					0.37 *U*	0.45 *U*	0.43 *U*	0.42 *U*
Ethylbenzene	100414	780,000	1,000	1,000		0.31 *U*	0.38 *U*	0.36 *U*	0.35 *U*
Isopropylbenzene	98828					0.68 *UJ*	0.83 *UJ*	0.79 *U*	0.77 *UJ*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS1	SS1	SS1	SS1
					Sample Identification	SS1 (0-2)	SS1 (0-6)	SS1 (12-24)	FDUP_091222
					Laboratory ID	480-201563-1	480-201563-2	480-201563-4	480-201563-5
					Sample Date	2022-09-12 04:09:00	2022-09-12 12:09:00	2022-09-12 12:09:00	2022-09-12 12:09:00
2-Butanone	78933	1,000,000	120	120		1.60 *U*	2.00 *U*	1.90 *U*	1.90 *U*
m,p-Xylene	179601231					0.75 *U*	0.92 *U*	0.88 *U*	0.85 *U*
Methyl Acetate	79209					2.7 *U*	3.3 *U*	3.2 *U*	3.1 *U*
Methylcyclohexane	108872					0.68 *UJ*	0.83 *UJ*	0.80 *UJ*	0.77 *UJ*
Methylene Chloride	75092	1,000,000	50	50		2.10 *U*	2.50 *U*	2.40 *U*	2.30 *U*
Methyl tert-butyl ether	1634044	1,000,000	930	930		0.44 *U*	0.54 *U*	0.51 *U*	0.50 *U*
n-Butylbenzene	104518	1,000,000	12,000	12,000		0.39 *UJ*	0.48 *UJ*	0.46 *U*	0.44 *UJ*
n-Propylbenzene	103651	1,000,000	3,900	3,900		0.36 *UJ*	0.44 *UJ*	0.42 *U*	0.41 *UJ*
o-Xylene	95476					0.58 *U*	0.72 *U*	0.68 *U*	0.66 *U*
sec-Butylbenzene	135988	1,000,000	11,000	11,000		0.39 *UJ*	0.48 *UJ*	0.46 *U*	0.44 *UJ*
Styrene	100425					0.22 *U*	0.27 *U*	0.26 *U*	0.25 *U*
tert-Butylbenzene	98066	1,000,000	5,900	5,900		0.47 *UJ*	0.57 *UJ*	0.55 *U*	0.53 *UJ*
Toluene	108883	1,000,000	700	700		0.34 *U*	0.41 *U*	0.40 *U*	0.38 *U*
Tetrachloroethane	127184	300,000	1,300	1,300		0.60 *U*	0.74 *U*	0.70 *U*	0.68 *U*
trans-1,2-Dichloroethene	156605	1,000,000	190	190		0.46 *U*	0.57 *U*	0.54 *U*	0.52 *U*
trans-1,3-Dichloropropene	10061026					2.00 *U*	2.40 *U*	2.30 *U*	2.20 *U*
Trichloroethene	79016	400,000	470	470		0.99 *U*	1.20 *U*	1.20 *U*	1.10 *U*
Trichlorotrifluoroethane	76131					1.00 *U*	1.20 *U*	1.20 *U*	1.20 *U*
Trichlorofluoromethane	75694					0.42 *U*	0.52 *U*	0.50 *U*	0.48 *U*
Vinyl Chloride	75014	27,000	20	20		0.55 *U*	0.67 *U*	0.64 *U*	0.62 *U*
Xylenes	1330207	1,000,000	1,600	260		0.75 *U*	0.92 *U*	0.88 *U*	0.85 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS1	SS2	SS2	SS2
					Sample Identification	SS1 (6-12)	SS2 (0-2)	SS2 (0-6)	SS2 (12-24)
					Laboratory ID	480-201563-3	480-201615-1	480-201615-2	480-201615-4
					Sample Date	2022-09-12 12:09:00	2022-09-13 11:09:00	2022-09-13 10:09:00	2022-09-13 10:09:00
Metals (µg/kg)									
Arsenic	7440382	16,000	16,000	13,000		**18,500**	9,300	7,400	**14,100**
Lead	7439921	3,900,000	450,000	63,000		**134,000**	**116,000**	54,300	**492,000**
Cadmium	7440439	60,000	7,500	2,500		1,200	330	260	400
Aluminum	7429905					9,580,000	11,500,000	11,400,000	11,100,000
Antimony	7440360					2,200 *J*	2,000 *J-*	1,100 *J*	1,700 *J*
Barium	7440393	10,000,000	820,000	350,000		149,000	103,000 *J+*	107,000	113,000
Beryllium	7440417	2,700,000	47,000	7,200		570	540	540	540
Calcium	7440702					13,200,000	3,870,000 *J+*	2,620,000	15,700,000
Chromium	7440473					15,300	15,200 *J+*	13,700 *J+*	13,000 *J+*
Cobalt	7440484					7,400	8,300	8,500	9,000
Copper	7440508	10,000,000	1,720,000	50,000		26,800	21,300	18,700	28,700
Iron	7439896					27,900,000	21,900,000 *J+*	20,000,000	21,400,000
Magnesium	7439954					6,650,000	2,800,000 *J*	2,780,000 *J*	3,090,000 *J*
Manganese	7439965	10,000,000	2,000,000	1,600,000		536,000	513,000 *J+*	467,000	343,000
Mercury	7439976	5,700	730	180		140	55	66	110
Nickel	7440020	10,000,000	130,000	30,000		16,900	19,200	19,400	20,500
Potassium	7440097					1,440,000	2,200,000 *J+*	2,040,000	1,620,000
Selenium	7782492	6,800,000	4,000	3,900		1,100 *J+*	1,100 *J*	630 *J*	460 *U*
Silver	7440224	6,800,000	8,300	2,000		230 *U*	280 *U*	240 *U*	230 *U*
Sodium	7440235					81,800 *J*	73,000 *J*	54,200 *J*	109,000 *J*
Thallium	7440280					340 *U*	420 *U*	360 *U*	350 *U*
Vanadium	7440622					18,700	19,000	17,800	18,600
Zinc	7440666	10,000,000	2,480,000	109,000		103,000	98,900 *J*	72,500	74,100
Polycyclic Aromatic Hydrocarbons (µg/kg)									
2-Methylnaphthalene	91576					190 *U*	930 *U*	210 *U*	37 *U*
Acenaphthene	83329	1,000,000	98,000	20,000		140 *U*	680 *U*	150 *U*	27 *U*
Acenaphthylene	208968	1,000,000	107,000	100,000		120 *U*	920 *J*	150 *J+*	24 *U*
Anthracene	120127	1,000,000	1,000,000	100,000		230 *U*	1,100 *U*	260 *U*	46 *U*
Benz[a]anthracene	56553	11,000	1,000	1,000		220 *J*	**1,200** *J*	1,000	120 *J*
Benzo[a]pyrene	50328	1,100	22,000	1,000		340 *J*	**1,900** *J*	**1,200**	150 *J*
Benzo[b]fluoranthene	205992	11,000	1,700	1,000		540 *J*	**1,700** *J*	**1,300**	180
Benzo[g,h,i]perylene	191242	1,000,000	1,000,000	100,000		240 *J*	1,300 *J*	750 *J+*	100 *J*
Benzo[k]fluoranthene	207089	110,000	1,700	800		210 *J*	620 *J*	520 *J+*	78 *J*
Chrysene	218019	110,000	1,000	1,000		440 *J*	**1,200** *J*	**1,100**	140 *J*
Dibenz[a,h]anthracene	53703	1,100	1,000,000	330		160 *U*	820 *U*	180 *J+*	33 *U*
Dibenzofuran	132649	1,000,000	210,000	7,000		110 *U*	550 *U*	120 *U*	22 *U*
Fluoranthene	206440	1,000,000	1,000,000	100,000		890 *J*	1,300 *J*	1,900	240

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS1	SS2	SS2	SS2
					Sample Identification	SS1 (6-12)	SS2 (0-2)	SS2 (0-6)	SS2 (12-24)
					Laboratory ID	480-201563-3	480-201615-1	480-201615-2	480-201615-4
					Sample Date	2022-09-12 12:09:00	2022-09-13 11:09:00	2022-09-13 10:09:00	2022-09-13 10:09:00
Fluorene	86737	1,000,000	386,000	30,000		110 *U*	550 *U*	120 *U*	22 *U*
Indeno[1,2,3-cd]pyrene	193395	11,000	8,200	500		290 *J*	**1,100** *J*	**850** *J+*	120 *J*
Naphthalene	91203	1,000,000	12,000	12,000		120 *U*	600 *U*	140 *U*	24 *U*
Phenanthrene	85018	1,000,000	1,000,000	100,000		670 *J*	680 *U*	920 *J+*	83 *J*
Pyrene	129000	1,000,000	1,000,000	100,000		680 *J*	1,900 *J*	1,700	200
Per- and Polyfluoroalkyl Substances (µg/kg)									
6:2 fluorotelomer sulfonate	27619972					0.063 *U*			
8:2 fluorotelomer sulfonate	39108344					0.041 *U*			
2-(N-ethyl-perfluorooctane sulfonamido) acetate						0.110 *J*			
Perfluorobutyric acid	375224					0.360 *U*			
2-(N-methyl-perfluorooctane sulfonamido) acetic acid						0.120 *U*			
Perfluorooctanoic acid	335671	600	0.8	0.66		0.260			
Perfluorooctane sulfonic acid	1763231	440	1	0.88		0.820			
Perfluorobutane Sulfonic Acid	375735					0.036 *U*			
Perfluorodecanoic Acid	335762					0.080 *J*			
Perfluorododecanoic Acid	307551					0.039 *U*			
Perfluorodecanesulfonic acid	335773					0.037 *U*			
Perfluoroheptanoic Acid	375859					0.066 *U*			
Perfluoroheptanesulfonic acid	375928					0.025 *U*			
Perfluorohexanoic Acid	307244					0.077 *U*			
Perfluorohexane Sulfonic Acid	355464					0.045 *U*			
Perfluorononanoic Acid	375951					0.110 *J*			
Perfluorooctane sulfonamide	754916					0.037 *U*			
Perfluoropentanoic Acid	2706903					0.085 *U*			
Perfluorotetradecanoic Acid	376067					0.029 *U*			
Perfluorotridecanoic Acid	72629948					0.027 *U*			
Perfluoroundecanoic Acid	2058948					0.052 *J*			
Semivolatile Organic Compounds (µg/kg)									
Atrazine	1912249					320 *U*	1,600 *U*	360 *U*	64 *U*
Carbazole	86748					110 *U*	550 *U*	120 *J+*	22 *U*
2,4,5-Trichlorophenol	95954					250 *U*	1,300 *U*	280 *U*	50 *U*
2,4,6-Trichlorophenol	88062					190 *U*	930 *U*	210 *U*	37 *U*
2,4-Dichlorophenol	120832					99 *U*	490 *U*	110 *U*	20 *U*
2-Chlorophenol	95578					170 *U*	850 *U*	190 *U*	34 *U*
Pentachlorophenol	87865	55,000	800	800		930 *U*	4,700 *U*	1,000 *U*	180 *U*
1,1'-Biphenyl	92524					140 *U*	680 *U*	150 *U*	27 *U*
2,2'-oxybis(1-Chloropropane)	108601					190 *U*	930 *U*	210 *U*	37 *U*
2,4-Dimethylphenol	105679					230 *U*	1,100 *U*	250 *U*	45 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS1	SS2	SS2	SS2
					Sample Identification	SS1 (6-12)	SS2 (0-2)	SS2 (0-6)	SS2 (12-24)
					Laboratory ID	480-201563-3	480-201615-1	480-201615-2	480-201615-4
					Sample Date	2022-09-12 12:09:00	2022-09-13 11:09:00	2022-09-13 10:09:00	2022-09-13 10:09:00
2,4-Dinitrophenol	51285					4,300 *U*	*R*	4,800 *U*	850 *U*
2,4-Dinitrotoluene	121142					190 *U*	960 *U*	220 *U*	38 *U*
2,6-Dinitrotoluene	606202					110 *U*	550 *U*	120 *U*	22 *U*
2-Chloronaphthalene	91587					150 *U*	770 *U*	170 *U*	30 *U*
2-Methylphenol	95487	1,000,000	330	330		110 *U*	550 *U*	120 *U*	22 *U*
2-Nitroaniline	88744					140 *U*	680 *U*	150 *U*	27 *U*
2-Nitrophenol	88755					260 *U*	1,300 *U*	300 *U*	52 *U*
3,3'-Dichlorobenzidine	91941					1,100 *U*	*R*	1,200 *U*	220 *U*
3-Nitroaniline	99092					260 *U*	1,300 *U*	290 *U*	51 *U*
4,6-Dinitro-2-methylphenol	534521					930 *U*	4,700 *U*	1,000 *U*	180 *U*
4-Bromophenyl-phenylether	101553					130 *U*	660 *U*	150 *U*	26 *U*
4-Chloro-3-methylphenol	59507					230 *U*	1,100 *U*	260 *U*	46 *U*
4-Chloroaniline	106478					230 *U*	1,100 *U*	260 *U*	46 *U*
4-Chlorophenyl-phenyl ether	7005723					120 *U*	570 *U*	130 *U*	23 *U*
4-Methylphenol	106445	1,000,000	330	330		110 *U*	550 *U*	120 *U*	22 *U*
4-Nitroaniline	100016					490 *U*	2,400 *U*	550 *U*	97 *U*
4-Nitrophenol	100027					650 *U*	3,300 *U*	730 *U*	130 *U*
Acetophenone	98862					130 *U*	630 *U*	140 *U*	25 *U*
Benzaldehyde	100527					740 *U*	*R*	830 *U*	150 *U*
Bis(2-chloroethyl)ether	111444					120 *U*	600 *UJ*	140 *U*	24 *U*
bis(2-Chloroethoxy)methane	111911					200 *U*	990 *U*	220 *U*	39 *U*
bis(2-Ethylhexyl)phthalate	117817					320 *U*	1,600 *U*	360 *U*	63 *U*
Benzyl n-butyl phthalate	85687					150 *U*	770 *U*	170 *U*	30 *U*
Caprolactam	105602					280 *U*	1,400 *U*	310 *U*	55 *U*
Diethyl phthalate	84662					130 *U*	740 *UJ*	760 *UJ*	240 *U*
Dimethyl phthalate	131113					110 *U*	550 *U*	120 *U*	22 *U*
Di-n-butyl phthalate	84742					160 *U*	790 *U*	180 *U*	31 *U*
Di-n-octylphthalate	117840					110 *U*	550 *U*	120 *U*	22 *U*
Hexachloroethane	67721					120 *U*	600 *U*	140 *U*	24 *U*
Hexachlorobenzene	118741	12,000	3,200	330		130 *U*	630 *U*	140 *U*	25 *U*
Hexachlorobutadiene	87683					140 *U*	680 *U*	150 *U*	27 *U*
Hexachlorocyclopentadiene	77474					130 *U*	630 *U*	140 *U*	25 *UJ*
Isophorone	78591					200 *U*	990 *U*	220 *U*	39 *U*
Nitrobenzene	98953					100 *U*	520 *U*	120 *U*	21 *U*
N-Nitrosodi-n-propylamine	621647					160 *U*	790 *U*	180 *U*	31 *U*
N-Nitrosodiphenylamine	86306					760 *U*	*R*	850 *U*	150 *U*
Phenol	108952	1,000,000	330	330		140 *U*	710 *U*	160 *U*	28 *U*
1,4-Dioxane	123911	250,000	100	100		300 *U*			

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS1	SS2	SS2	SS2
					Sample Identification	SS1 (6-12)	SS2 (0-2)	SS2 (0-6)	SS2 (12-24)
					Laboratory ID	480-201563-3	480-201615-1	480-201615-2	480-201615-4
					Sample Date	2022-09-12 12:09:00	2022-09-13 11:09:00	2022-09-13 10:09:00	2022-09-13 10:09:00
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	630206					0.47 *U*	0.63 *U*	0.46 *U*	0.24 *U*
1,1,1-Trichloroethane	71556	1,000,000	680	680		0.34 *U*	0.46 *U*	0.34 *U*	0.18 *U*
1,1,2,2-Tetrachloroethane	79345					0.77 *UJ*	1.00 *UJ*	0.75 *U*	0.39 *U*
1,1,2-Trichloroethane	79005					0.62 *U*	0.82 *U*	0.60 *U*	0.32 *U*
1,1-Dichloroethane	75343	480,000	270	270		0.58 *U*	0.77 *U*	0.57 *U*	0.30 *U*
1,1-Dichloroethene	75354	1,000,000	330	330		0.58 *UJ*	0.78 *UJ*	0.57 *UJ*	0.30 *UJ*
1,2,3-Trimethylbenzene	526738					0.97 *U*	1.30 *U*	0.95 *U*	0.50 *U*
1,2,4-Trimethylbenzene	95636	380,000	3,600	3,600		0.91 *UJ*	1.20 *UJ*	0.89 *U*	0.47 *U*
1,2,4-Trichlorobenzene	120821					0.29 *UJ*	0.39 *UJ*	0.28 *U*	0.15 *U*
1,2-Dichlorobenzene	95501	1,000,000	1,100	1,100		0.37 *UJ*	0.50 *UJ*	0.36 *U*	0.19 *U*
1,3-Dichlorobenzene	541731	560,000	2,400	2,400		0.24 *UJ*	0.33 *UJ*	0.24 *U*	0.13 *U*
1,4-Dichlorobenzene	106467	250,000	1,800	1,800		0.66 *UJ*	0.89 *UJ*	0.65 *U*	0.34 *U*
1,2-Dibromo-3-chloropropane	96128					2.40 *UJ*	3.20 *UJ*	2.30 *U*	1.20 *U*
1,2-Dibromoethane	106934					0.61 *U*	0.81 *UJ*	0.59 *U*	0.31 *U*
1,2-Dichloroethane	107062	60,000	20	20		0.24 *U*	0.32 *U*	0.23 *U*	0.12 *U*
1,2-Dichloropropane	78875					2.40 *U*	3.20 *U*	2.30 *U*	1.20 *U*
1,3,5-Trimethylbenzene	108678	380,000	8,400	8,400		0.31 *UJ*	0.41 *UJ*	0.30 *U*	0.16 *U*
2-Hexanone	591786					2.40 *U*	3.20 *UJ*	2.30 *U*	1.20 *U*
4-Methyl-2-pentanone	108101					1.60 *U*	2.10 *U*	1.50 *U*	0.80 *U*
Acetone	67641	1,000,000	50	50		4.00 *U*	5.30 *UJ*	9.40 *J*	2.00 *U*
Benzene	71432	89,000	60	60		0.23 *U*	0.31 *U*	0.23 *U*	0.12 *U*
Bromodichloromethane	75274					0.64 *U*	0.85 *UJ*	0.62 *U*	0.33 *U*
Bromomethane	74839					0.43 *U*	0.57 *U*	0.42 *U*	0.22 *U*
Bromoform	75252					2.40 *U*	3.20 *UJ*	2.30 *U*	1.20 *U*
Carbon disulfide	75150					2.40 *U*	3.20 *U*	2.30 *U*	1.20 *U*
Carbon Tetrachloride	56235	44,000	760	760		0.46 *UJ*	0.61 *UJ*	0.45 *UJ*	0.24 *UJ*
Chloroform	67663	700,000	370	370		0.30 *UJ*	0.45 *UJ*	0.29 *U*	0.15 *U*
cis-1,2-Dichloroethene	156592	1,000,000	250	250		0.61 *U*	0.81 *U*	0.59 *U*	0.31 *U*
cis-1,3-Dichloropropene	10061015					0.68 *U*	0.91 *UJ*	0.67 *U*	0.35 *U*
Chlorobenzene	108907	1,000,000	1,100	1,100		0.63 *U*	0.84 *U*	0.61 *U*	0.32 *U*
Chloroethane	75003					1.10 *U*	1.40 *U*	1.00 *U*	0.55 *U*
Chloromethane	74873					0.29 *U*	0.38 *U*	0.28 *U*	0.15 *U*
Cyclohexane	110827					0.66 *UJ*	0.89 *UJ*	0.65 *UJ*	0.34 *UJ*
Dibromochloromethane	124481					0.61 *U*	0.81 *U*	0.59 *U*	0.31 *U*
Dichlorodifluoromethane	75718					0.39 *U*	0.52 *U*	0.38 *U*	0.20 *U*
Ethylbenzene	100414	780,000	1,000	1,000		0.33 *U*	0.44 *U*	0.32 *U*	0.17 *U*
Isopropylbenzene	98828					0.71 *UJ*	0.96 *UJ*	0.70 *U*	0.37 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS1	SS2	SS2	SS2
					Sample Identification	SS1 (6-12)	SS2 (0-2)	SS2 (0-6)	SS2 (12-24)
					Laboratory ID	480-201563-3	480-201615-1	480-201615-2	480-201615-4
					Sample Date	2022-09-12 12:09:00	2022-09-13 11:09:00	2022-09-13 10:09:00	2022-09-13 10:09:00
2-Butanone	78933	1,000,000	120	120		1.70 *U*	2.30 *UJ*	2.40 *J*	0.89 *U*
m,p-Xylene	179601231					0.80 *U*	1.10 *U*	0.78 *U*	0.41 *U*
Methyl Acetate	79209					2.9 *U*	3.8 *U*	2.8 *U*	1.5 *U*
Methylcyclohexane	108872					0.72 *UJ*	0.96 *UJ*	0.70 *UJ*	0.37 *UJ*
Methylene Chloride	75092	1,000,000	50	50		2.20 *U*	2.90 *U*	2.10 *U*	1.10 *U*
Methyl tert-butyl ether	1634044	1,000,000	930	930		0.47 *U*	0.62 *U*	0.46 *U*	0.24 *U*
n-Butylbenzene	104518	1,000,000	12,000	12,000		0.41 *UJ*	0.55 *UJ*	0.40 *U*	0.21 *U*
n-Propylbenzene	103651	1,000,000	3,900	3,900		0.38 *UJ*	0.51 *UJ*	0.37 *U*	0.19 *U*
o-Xylene	95476					0.62 *U*	0.83 *U*	0.61 *U*	0.32 *U*
sec-Butylbenzene	135988	1,000,000	11,000	11,000		0.41 *UJ*	0.55 *UJ*	0.40 *U*	0.21 *U*
Styrene	100425					0.24 *U*	0.32 *UJ*	0.23 *U*	0.12 *U*
tert-Butylbenzene	98066	1,000,000	5,900	5,900		0.49 *UJ*	0.66 *UJ*	0.48 *U*	0.25 *U*
Toluene	108883	1,000,000	700	700		0.36 *U*	0.48 *U*	0.35 *U*	0.18 *U*
Tetrachloroethane	127184	300,000	1,300	1,300		0.64 *U*	0.85 *U*	0.62 *U*	0.33 *U*
trans-1,2-Dichloroethene	156605	1,000,000	190	190		0.49 *U*	0.65 *U*	0.48 *U*	0.25 *U*
trans-1,3-Dichloropropene	10061026					2.10 *U*	2.80 *UJ*	2.00 *U*	1.10 *U*
Trichloroethene	79016	400,000	470	470		1.00 *U*	1.40 *U*	1.00 *U*	0.54 *U*
Trichlorotrifluoroethane	76131					1.10 *U*	1.40 *U*	1.10 *U*	0.55 *U*
Trichlorofluoromethane	75694					0.45 *U*	0.60 *U*	0.44 *U*	0.23 *U*
Vinyl Chloride	75014	27,000	20	20		0.58 *U*	0.77 *U*	0.57 *U*	0.30 *U*
Xylenes	1330207	1,000,000	1,600	260		0.80 *U*	1.10 *U*	0.78 *U*	0.41 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS2	SS3	SS3	SS3
					Sample Identification	SS2 (6-12)	SS3 (0-2)	SS3 (0-6)	SS3 (12-24)
					Laboratory ID	480-201615-3	480-201615-5	480-201615-6	480-201615-8
					Sample Date	2022-09-13 10:09:00	2022-09-13 11:09:00	2022-09-13 12:09:00	2022-09-13 12:09:00
Metals (µg/kg)									
Arsenic	7440382	16,000	16,000	13,000		9,300	7,000	9,700	**13,800**
Lead	7439921	3,900,000	450,000	63,000		47,900	42,700	**65,300**	**251,000**
Cadmium	7440439	60,000	7,500	2,500		190 *U*	170 *U*	240 *U*	1,400
Aluminum	7429905					12,600,000	8,960,000	8,720,000	6,450,000
Antimony	7440360					1,500 *J-*	1,000 *J*	1,400 *J*	2,300 *J*
Barium	7440393	10,000,000	820,000	350,000		129,000 *J+*	70,300	84,200	70,000
Beryllium	7440417	2,700,000	47,000	7,200		550	460	500	400
Calcium	7440702					4,060,000 *J+*	1,970,000	3,080,000	18,000,000
Chromium	7440473					15,000 *J+*	11,100 *J+*	13,400 *J+*	12,300 *J+*
Cobalt	7440484					11,000	6,900	7,600	5,200
Copper	7440508	10,000,000	1,720,000	50,000		31,800	20,700	34,500	25,300
Iron	7439896					26,500,000	17,200,000	20,300,000	26,700,000
Magnesium	7439954					3,920,000 *J*	2,060,000 *J*	2,200,000 *J*	2,800,000 *J*
Manganese	7439965	10,000,000	2,000,000	1,600,000		406,000	357,000	407,000	504,000
Mercury	7439976	5,700	730	180		26	48	73	180
Nickel	7440020	10,000,000	130,000	30,000		26,200	15,400	16,200	13,000
Potassium	7440097					1,700,000 *J+*	1,630,000	1,520,000	1,010,000
Selenium	7782492	6,800,000	4,000	3,900		700 *J*	530 *U*	1,200 *J*	840 *J*
Silver	7440224	6,800,000	8,300	2,000		210 *U*	270 *U*	250 *U*	220 *U*
Sodium	7440235					63,300 *J*	40,000 *J*	55,900 *J*	140,000 *J*
Thallium	7440280					320 *U*	400 *U*	380 *U*	330 *U*
Vanadium	7440622					18,900	13,800	16,800	17,300
Zinc	7440666	10,000,000	2,480,000	109,000		76,700 *J*	59,400	62,800	**126,000**
Polycyclic Aromatic Hydrocarbons (µg/kg)									
2-Methylnaphthalene	91576					180 *U*	220 *U*	210 *U*	380 *U*
Acenaphthene	83329	1,000,000	98,000	20,000		130 *U*	160 *U*	160 *U*	280 *U*
Acenaphthylene	208968	1,000,000	107,000	100,000		230 *J*	140 *U*	140 *U*	240 *U*
Anthracene	120127	1,000,000	1,000,000	100,000		230 *U*	270 *U*	260 *U*	710 *J*
Benz[a]anthracene	56553	11,000	1,000	1,000		610 *J*	180 *J*	250 *J*	**3,900**
Benzo[a]pyrene	50328	1,100	22,000	1,000		770 *J*	220 *J*	270 *J*	**3,400**
Benzo[b]fluoranthene	205992	11,000	1,700	1,000		800 *J*	310 *J*	380 *J*	**4,800**
Benzo[g,h,i]perylene	191242	1,000,000	1,000,000	100,000		550 *J*	150 *J*	180 *J*	1,600 *J*
Benzo[k]fluoranthene	207089	110,000	1,700	800		290 *J*	140 *U*	150 *J*	**1,900**
Chrysene	218019	110,000	1,000	1,000		650 *J*	250 *U*	270 *J*	**3,400**
Dibenz[a,h]anthracene	53703	1,100	1,000,000	330		160 *U*	200 *U*	190 *U*	**490** *J*
Dibenzofuran	132649	1,000,000	210,000	7,000		110 *U*	130 *U*	130 *U*	220 *U*
Fluoranthene	206440	1,000,000	1,000,000	100,000		920	350 *J*	430 *J*	5,100

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS2	SS3	SS3	SS3
					Sample Identification	SS2 (6-12)	SS3 (0-2)	SS3 (0-6)	SS3 (12-24)
					Laboratory ID	480-201615-3	480-201615-5	480-201615-6	480-201615-8
					Sample Date	2022-09-13 10:09:00	2022-09-13 11:09:00	2022-09-13 12:09:00	2022-09-13 12:09:00
Fluorene	86737	1,000,000	386,000	30,000		110 *U*	130 *U*	130 *U*	220 *U*
Indeno[1,2,3-cd]pyrene	193395	11,000	8,200	500		**550** *J*	160 *J*	200 *J*	**2,300**
Naphthalene	91203	1,000,000	12,000	12,000		120 *U*	140 *U*	140 *U*	240 *U*
Phenanthrene	85018	1,000,000	1,000,000	100,000		290 *J*	160 *U*	170 *J*	2,200
Pyrene	129000	1,000,000	1,000,000	100,000		1,000	280 *J*	400 *J*	4,100
Per- and Polyfluoroalkyl Substances (µg/kg)									
6:2 fluorotelomer sulfonate	27619972								
8:2 fluorotelomer sulfonate	39108344								
2-(N-ethyl-perfluorooctane sulfonamido) acetate									
Perfluorobutyric acid	375224								
2-(N-methyl-perfluorooctane sulfonamido) acetic acid									
Perfluorooctanoic acid	335671	600	0.8	0.66					
Perfluorooctane sulfonic acid	1763231	440	1	0.88					
Perfluorobutane Sulfonic Acid	375735								
Perfluorodecanoic Acid	335762								
Perfluorododecanoic Acid	307551								
Perfluorodecanesulfonic acid	335773								
Perfluoroheptanoic Acid	375859								
Perfluoroheptanesulfonic acid	375928								
Perfluorohexanoic Acid	307244								
Perfluorohexane Sulfonic Acid	355464								
Perfluorononanoic Acid	375951								
Perfluorooctane sulfonamide	754916								
Perfluoropentanoic Acid	2706903								
Perfluorotetradecanoic Acid	376067								
Perfluorotridecanoic Acid	72629948								
Perfluoroundecanoic Acid	2058948								
Semivolatile Organic Compounds (µg/kg)									
Atrazine	1912249					320 *U*	380 *U*	370 *U*	650 *U*
Carbazole	86748					110 *U*	130 *U*	130 *U*	450 *J*
2,4,5-Trichlorophenol	95954					250 *U*	300 *U*	290 *U*	510 *U*
2,4,6-Trichlorophenol	88062					180 *U*	220 *U*	210 *U*	380 *U*
2,4-Dichlorophenol	120832					97 *U*	120 *U*	110 *U*	200 *U*
2-Chlorophenol	95578					170 *U*	200 *U*	200 *U*	340 *U*
Pentachlorophenol	87865	55,000	800	800		920 *U*	1,100 *U*	1,100 *U*	1,900 *U*
1,1'-Biphenyl	92524					130 *U*	160 *U*	160 *U*	280 *U*
2,2'-oxybis(1-Chloropropane)	108601					180 *U*	220 *U*	210 *U*	380 *U*
2,4-Dimethylphenol	105679					220 *U*	270 *U*	260 *U*	450 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS2	SS3	SS3	SS3
					Sample Identification	SS2 (6-12)	SS3 (0-2)	SS3 (0-6)	SS3 (12-24)
					Laboratory ID	480-201615-3	480-201615-5	480-201615-6	480-201615-8
					Sample Date	2022-09-13 10:09:00	2022-09-13 11:09:00	2022-09-13 12:09:00	2022-09-13 12:09:00
2,4-Dinitrophenol	51285					*R*	5,100 *U*	4,900 *U*	8,700 *U*
2,4-Dinitrotoluene	121142					190 *U*	230 *U*	220 *U*	390 *U*
2,6-Dinitrotoluene	606202					110 *U*	130 *U*	130 *U*	220 *U*
2-Chloronaphthalene	91587					150 *U*	180 *U*	180 *U*	310 *U*
2-Methylphenol	95487	1,000,000	330	330		110 *U*	130 *U*	130 *U*	220 *U*
2-Nitroaniline	88744					130 *U*	160 *U*	160 *U*	280 *U*
2-Nitrophenol	88755					260 *U*	310 *U*	300 *U*	530 *U*
3,3'-Dichlorobenzidine	91941					1,100 *U*	1,300 *U*	1,300 *U*	2,200 *U*
3-Nitroaniline	99092					250 *U*	310 *U*	300 *U*	520 *U*
4,6-Dinitro-2-methylphenol	534521					920 *U*	1,100 *U*	1,100 *U*	1,900 *U*
4-Bromophenyl-phenylether	101553					130 *U*	160 *U*	150 *U*	270 *U*
4-Chloro-3-methylphenol	59507					230 *U*	270 *U*	260 *U*	460 *U*
4-Chloroaniline	106478					230 *U*	270 *U*	260 *U*	460 *U*
4-Chlorophenyl-phenyl ether	7005723					110 *U*	140 *U*	130 *U*	230 *U*
4-Methylphenol	106445	1,000,000	330	330		110 *U*	130 *U*	130 *U*	240 *J*
4-Nitroaniline	100016					480 *U*	580 *U*	560 *U*	980 *U*
4-Nitrophenol	100027					640 *U*	780 *U*	750 *U*	1,300 *U*
Acetophenone	98862					120 *U*	150 *U*	140 *U*	250 *U*
Benzaldehyde	100527					730 *U*	880 *U*	850 *U*	1,500 *U*
Bis(2-chloroethyl)ether	111444					120 *U*	140 *U*	140 *U*	240 *U*
bis(2-Chloroethoxy)methane	111911					190 *U*	230 *U*	230 *U*	400 *U*
bis(2-Ethylhexyl)phthalate	117817					310 *U*	380 *U*	360 *U*	640 *U*
Benzyl n-butyl phthalate	85687					150 *U*	180 *U*	180 *U*	310 *U*
Caprolactam	105602					270 *U*	330 *U*	320 *U*	560 *U*
Diethyl phthalate	84662					760 *UJ*	710 *U*	820 *U*	540 *U*
Dimethyl phthalate	131113					110 *U*	130 *U*	130 *U*	220 *U*
Di-n-butyl phthalate	84742					160 *U*	190 *U*	180 *U*	320 *U*
Di-n-octylphthalate	117840					110 *U*	130 *U*	130 *U*	220 *U*
Hexachloroethane	67721					120 *U*	140 *U*	140 *U*	240 *U*
Hexachlorobenzene	118741	12,000	3,200	330		120 *U*	150 *U*	140 *U*	250 *U*
Hexachlorobutadiene	87683					130 *U*	160 *U*	160 *U*	280 *U*
Hexachlorocyclopentadiene	77474					120 *U*	150 *U*	140 *U*	250 *U*
Isophorone	78591					190 *U*	230 *U*	230 *U*	400 *U*
Nitrobenzene	98953					100 *U*	120 *U*	120 *U*	210 *U*
N-Nitrosodi-n-propylamine	621647					160 *U*	190 *U*	180 *U*	320 *U*
N-Nitrosodiphenylamine	86306					740 *U*	900 *U*	870 *U*	1,500 *U*
Phenol	108952	1,000,000	330	330		140 *U*	170 *U*	160 *U*	290 *U*
1,4-Dioxane	123911	250,000	100	100					

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS2	SS3	SS3	SS3
					Sample Identification	SS2 (6-12)	SS3 (0-2)	SS3 (0-6)	SS3 (12-24)
					Laboratory ID	480-201615-3	480-201615-5	480-201615-6	480-201615-8
					Sample Date	2022-09-13 10:09:00	2022-09-13 11:09:00	2022-09-13 12:09:00	2022-09-13 12:09:00
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	630206					0.54 *U*	0.66 *U*	0.52 *UJ*	0.64 *UJ*
1,1,1-Trichloroethane	71556	1,000,000	680	680		0.39 *U*	0.48 *U*	0.38 *UJ*	0.47 *UJ*
1,1,2,2-Tetrachloroethane	79345					0.88 *U*	1.10 *UJ*	0.85 *UJ*	*R*
1,1,2-Trichloroethane	79005					0.71 *U*	0.86 *U*	0.68 *UJ*	0.83 *UJ*
1,1-Dichloroethane	75343	480,000	270	270		0.66 *U*	0.81 *U*	0.64 *UJ*	0.78 *UJ*
1,1-Dichloroethene	75354	1,000,000	330	330		0.66 *UJ*	0.81 *UJ*	0.64 *UJ*	0.79 *UJ*
1,2,3-Trimethylbenzene	526738					1.10 *U*	1.40 *U*	1.10 *UJ*	1.30 *UJ*
1,2,4-Trimethylbenzene	95636	380,000	3,600	3,600		1.00 *U*	1.30 *UJ*	1.00 *UJ*	*R*
1,2,4-Trichlorobenzene	120821					0.33 *UJ*	0.40 *UJ*	0.32 *UJ*	*R*
1,2-Dichlorobenzene	95501	1,000,000	1,100	1,100		0.42 *U*	0.52 *UJ*	0.41 *UJ*	*R*
1,3-Dichlorobenzene	541731	560,000	2,400	2,400		0.28 *U*	0.34 *UJ*	0.27 *UJ*	*R*
1,4-Dichlorobenzene	106467	250,000	1,800	1,800		0.76 *U*	0.93 *UJ*	0.73 *UJ*	*R*
1,2-Dibromo-3-chloropropane	96128					2.70 *U*	3.30 *UJ*	2.60 *UJ*	*R*
1,2-Dibromoethane	106934					0.70 *U*	0.85 *U*	0.67 *UJ*	0.82 *UJ*
1,2-Dichloroethane	107062	60,000	20	20		0.27 *U*	0.33 *U*	0.26 *UJ*	0.32 *UJ*
1,2-Dichloropropane	78875					2.70 *U*	3.30 *U*	2.60 *UJ*	3.20 *UJ*
1,3,5-Trimethylbenzene	108678	380,000	8,400	8,400		0.35 *U*	0.43 *UJ*	0.34 *UJ*	*R*
2-Hexanone	591786					2.70 *U*	3.30 *U*	2.60 *UJ*	3.20 *UJ*
4-Methyl-2-pentanone	108101					1.80 *U*	2.20 *U*	1.70 *UJ*	2.10 *UJ*
Acetone	67641	1,000,000	50	50		4.60 *U*	5.60 *U*	5.10 *J*	19 *J*
Benzene	71432	89,000	60	60		0.27 *U*	0.33 *U*	0.26 *UJ*	0.95 *J*
Bromodichloromethane	75274					0.73 *U*	0.89 *U*	0.70 *UJ*	0.86 *UJ*
Bromomethane	74839					0.49 *U*	0.60 *U*	0.47 *UJ*	0.58 *UJ*
Bromoform	75252					2.70 *U*	3.30 *U*	2.60 *UJ*	3.20 *UJ*
Carbon disulfide	75150					2.70 *U*	3.30 *U*	2.60 *UJ*	3.20 *UJ*
Carbon Tetrachloride	56235	44,000	760	760		0.53 *UJ*	0.64 *UJ*	0.51 *UJ*	0.62 *UJ*
Chloroform	67663	700,000	370	370		0.34 *U*	0.48 *UJ*	0.44 *UJ*	0.40 *UJ*
cis-1,2-Dichloroethene	156592	1,000,000	250	250		0.70 *U*	0.85 *U*	0.67 *UJ*	0.82 *UJ*
cis-1,3-Dichloropropene	10061015					0.78 *UJ*	0.96 *U*	0.75 *UJ*	0.92 *UJ*
Chlorobenzene	108907	1,000,000	1,100	1,100		0.72 *U*	0.88 *U*	0.69 *UJ*	0.85 *UJ*
Chloroethane	75003					1.20 *U*	1.50 *U*	1.20 *UJ*	1.50 *UJ*
Chloromethane	74873					0.33 *U*	0.40 *U*	0.32 *UJ*	0.39 *UJ*
Cyclohexane	110827					0.76 *UJ*	0.93 *UJ*	0.73 *UJ*	1.10 *J*
Dibromochloromethane	124481					0.70 *U*	0.85 *U*	0.67 *UJ*	0.82 *UJ*
Dichlorodifluoromethane	75718					0.45 *U*	0.55 *U*	0.43 *UJ*	0.53 *UJ*
Ethylbenzene	100414	780,000	1,000	1,000		0.37 *U*	0.46 *U*	0.36 *UJ*	0.44 *UJ*
Isopropylbenzene	98828					0.82 *U*	1.00 *UJ*	0.79 *UJ*	*R*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS2	SS3	SS3	SS3
					Sample Identification	SS2 (6-12)	SS3 (0-2)	SS3 (0-6)	SS3 (12-24)
					Laboratory ID	480-201615-3	480-201615-5	480-201615-6	480-201615-8
					Sample Date	2022-09-13 10:09:00	2022-09-13 11:09:00	2022-09-13 12:09:00	2022-09-13 12:09:00
2-Butanone	78933	1,000,000	120	120		2.00 *UJ*	2.40 *U*	1.90 *UJ*	4.60 *J*
m,p-Xylene	179601231					0.91 *U*	1.10 *U*	0.88 *UJ*	1.10 *UJ*
Methyl Acetate	79209					3.3 *U*	4.0 *U*	3.2 *UJ*	3.9 *UJ*
Methylcyclohexane	108872					0.83 *UJ*	1.00 *UJ*	0.80 *UJ*	0.98 *UJ*
Methylene Chloride	75092	1,000,000	50	50		2.50 *U*	3.10 *U*	2.40 *UJ*	3.00 *UJ*
Methyl tert-butyl ether	1634044	1,000,000	930	930		0.53 *U*	0.65 *U*	0.51 *UJ*	0.63 *UJ*
n-Butylbenzene	104518	1,000,000	12,000	12,000		0.47 *U*	0.58 *UJ*	0.46 *UJ*	*R*
n-Propylbenzene	103651	1,000,000	3,900	3,900		0.43 *U*	0.53 *UJ*	0.42 *UJ*	*R*
o-Xylene	95476					0.71 *U*	0.87 *U*	0.68 *UJ*	0.84 *UJ*
sec-Butylbenzene	135988	1,000,000	11,000	11,000		0.47 *U*	0.58 *UJ*	0.46 *UJ*	*R*
Styrene	100425					0.27 *U*	0.33 *U*	0.26 *UJ*	0.32 *UJ*
tert-Butylbenzene	98066	1,000,000	5,900	5,900		0.56 *U*	0.69 *UJ*	0.54 *UJ*	*R*
Toluene	108883	1,000,000	700	700		0.44 *J*	0.50 *U*	0.40 *UJ*	1.80 *J*
Tetrachloroethane	127184	300,000	1,300	1,300		0.73 *U*	0.89 *U*	0.70 *UJ*	0.86 *UJ*
trans-1,2-Dichloroethene	156605	1,000,000	190	190		0.56 *U*	0.68 *U*	0.54 *UJ*	0.66 *UJ*
trans-1,3-Dichloropropene	10061026					2.40 *U*	2.90 *U*	2.30 *UJ*	2.80 *UJ*
Trichloroethene	79016	400,000	470	470		1.20 *U*	1.50 *U*	1.20 *UJ*	1.40 *UJ*
Trichlorotrifluoroethane	76131					1.20 *U*	1.50 *U*	1.20 *UJ*	1.50 *UJ*
Trichlorofluoromethane	75694					0.51 *U*	0.63 *U*	0.50 *UJ*	0.61 *UJ*
Vinyl Chloride	75014	27,000	20	20		0.66 *U*	0.81 *U*	0.64 *UJ*	0.78 *UJ*
Xylenes	1330207	1,000,000	1,600	260		0.91 *U*	1.10 *U*	0.88 *UJ*	1.10 *UJ*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS3	SS3	SS4	SS4
					Sample Identification	FDUP2_091322	SS3 (6-12)	SS4 (0-2)	SS4 (0-6)
					Laboratory ID	480-201615-9	480-201615-7	480-201615-10	480-201615-11
					Sample Date	2022-09-13 12:09:00	2022-09-13 12:09:00	2022-09-13 11:09:00	2022-09-13 09:09:00
Metals (µg/kg)									
Arsenic	7440382	16,000	16,000	13,000		**16,200**	8,800	10,700	10,400
Lead	7439921	3,900,000	450,000	63,000		**301,000**	**93,400**	52,600	50,300
Cadmium	7440439	60,000	7,500	2,500		1,200	390	160 *U*	160 *U*
Aluminum	7429905					7,370,000	7,160,000	10,400,000	9,760,000
Antimony	7440360					3,100 *J*	1,200 *J*	940 *J*	1,300 *J*
Barium	7440393	10,000,000	820,000	350,000		74,500	57,100	90,800	80,800
Beryllium	7440417	2,700,000	47,000	7,200		450	360	560	520
Calcium	7440702					18,600,000	10,100,000	2,030,000	1,990,000
Chromium	7440473					13,700 *J+*	14,600 *J+*	12,900 *J+*	12,000 *J+*
Cobalt	7440484					6,400	13,700	8,100	8,000
Copper	7440508	10,000,000	1,720,000	50,000		29,300	**91,400**	30,900	31,000
Iron	7439896					32,300,000	16,700,000	20,300,000	20,000,000
Magnesium	7439954					3,240,000 *J*	3,450,000 *J*	2,250,000 *J*	2,200,000 *J*
Manganese	7439965	10,000,000	2,000,000	1,600,000		565,000	499,000	446,000	402,000
Mercury	7439976	5,700	730	180		**220**	61	71	76
Nickel	7440020	10,000,000	130,000	30,000		15,300	13,900	17,700	17,500
Potassium	7440097					1,240,000	1,150,000	1,870,000	1,600,000
Selenium	7782492	6,800,000	4,000	3,900		940 *J*	760 *J*	930 *J*	890 *J*
Silver	7440224	6,800,000	8,300	2,000		240 *U*	**7,200**	260 *U*	240 *U*
Sodium	7440235					173,000	95,600 *J*	49,400 *J*	43,700 *J*
Thallium	7440280					360 *U*	340 *U*	400 *U*	350 *U*
Vanadium	7440622					20,300	14,900	17,100	15,800
Zinc	7440666	10,000,000	2,480,000	109,000		**131,000**	73,100	67,000	62,400
Polycyclic Aromatic Hydrocarbons (µg/kg)									
2-Methylnaphthalene	91576					380 *U*	180 *U*	210 *U*	200 *U*
Acenaphthene	83329	1,000,000	98,000	20,000		280 *U*	140 *U*	160 *U*	150 *U*
Acenaphthylene	208968	1,000,000	107,000	100,000		250 *J*	120 *U*	140 *U*	130 *U*
Anthracene	120127	1,000,000	1,000,000	100,000		680 *J*	230 *U*	260 *U*	250 *U*
Benz[a]anthracene	56553	11,000	1,000	1,000		**4,000**	270 *J*	160 *J*	190 *J*
Benzo[a]pyrene	50328	1,100	22,000	1,000		**3,800**	350 *J*	200 *J*	200 *J*
Benzo[b]fluoranthene	205992	11,000	1,700	1,000		**5,200**	470 *J*	320 *J*	290 *J*
Benzo[g,h,i]perylene	191242	1,000,000	1,000,000	100,000		1,800 *J*	230 *J*	130 *J*	120 *J*
Benzo[k]fluoranthene	207089	110,000	1,700	800		**2,000**	170 *J*	140 *U*	130 *U*
Chrysene	218019	110,000	1,000	1,000		**3,200**	330 *J*	240 *U*	220 *U*
Dibenz[a,h]anthracene	53703	1,100	1,000,000	330		**530** *J*	160 *U*	190 *U*	180 *U*
Dibenzofuran	132649	1,000,000	210,000	7,000		230 *U*	110 *U*	130 *U*	120 *U*
Fluoranthene	206440	1,000,000	1,000,000	100,000		6,000	560 *J*	320 *J*	380 *J*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS3	SS3	SS4	SS4
					Sample Identification	FDUP2_091322	SS3 (6-12)	SS4 (0-2)	SS4 (0-6)
					Laboratory ID	480-201615-9	480-201615-7	480-201615-10	480-201615-11
					Sample Date	2022-09-13 12:09:00	2022-09-13 12:09:00	2022-09-13 11:09:00	2022-09-13 09:09:00
Fluorene	86737	1,000,000	386,000	30,000		230 *U*	110 *U*	130 *U*	120 *U*
Indeno[1,2,3-cd]pyrene	193395	11,000	8,200	500		**2,600**	250 *J*	140 *J*	130 *J*
Naphthalene	91203	1,000,000	12,000	12,000		250 *U*	120 *U*	140 *U*	130 *U*
Phenanthrene	85018	1,000,000	1,000,000	100,000		2,100	230 *J*	160 *U*	180 *J*
Pyrene	129000	1,000,000	1,000,000	100,000		4,700	480 *J*	260 *J*	310 *J*
Per- and Polyfluoroalkyl Substances (µg/kg)									
6:2 fluorotelomer sulfonate	27619972								
8:2 fluorotelomer sulfonate	39108344								
2-(N-ethyl-perfluorooctane sulfonamido) acetate									
Perfluorobutyric acid	375224								
2-(N-methyl-perfluorooctane sulfonamido) acetic acid									
Perfluorooctanoic acid	335671	600	0.8	0.66					
Perfluorooctane sulfonic acid	1763231	440	1	0.88					
Perfluorobutane Sulfonic Acid	375735								
Perfluorodecanoic Acid	335762								
Perfluorododecanoic Acid	307551								
Perfluorodecanesulfonic acid	335773								
Perfluoroheptanoic Acid	375859								
Perfluoroheptanesulfonic acid	375928								
Perfluorohexanoic Acid	307244								
Perfluorohexane Sulfonic Acid	355464								
Perfluorononanoic Acid	375951								
Perfluorooctane sulfonamide	754916								
Perfluoropentanoic Acid	2706903								
Perfluorotetradecanoic Acid	376067								
Perfluorotridecanoic Acid	72629948								
Perfluoroundecanoic Acid	2058948								
Semivolatile Organic Compounds (µg/kg)									
Atrazine	1912249					670 *U*	320 *U*	370 *U*	350 *U*
Carbazole	86748					420 *J*	110 *U*	130 *U*	120 *U*
2,4,5-Trichlorophenol	95954					520 *U*	250 *U*	290 *U*	270 *U*
2,4,6-Trichlorophenol	88062					380 *U*	180 *U*	210 *U*	200 *U*
2,4-Dichlorophenol	120832					200 *U*	97 *U*	110 *U*	110 *U*
2-Chlorophenol	95578					350 *U*	170 *U*	190 *U*	180 *U*
Pentachlorophenol	87865	55,000	800	800		1,900 *U*	920 *U*	1,100 *U*	1,000 *U*
1,1'-Biphenyl	92524					280 *U*	140 *U*	160 *U*	150 *U*
2,2'-oxybis(1-Chloropropane)	108601					380 *U*	180 *U*	210 *U*	200 *U*
2,4-Dimethylphenol	105679					460 *U*	220 *U*	260 *U*	240 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS3	SS3	SS4	SS4
					Sample Identification	FDUP2_091322	SS3 (6-12)	SS4 (0-2)	SS4 (0-6)
					Laboratory ID	480-201615-9	480-201615-7	480-201615-10	480-201615-11
					Sample Date	2022-09-13 12:09:00	2022-09-13 12:09:00	2022-09-13 11:09:00	2022-09-13 09:09:00
2,4-Dinitrophenol	51285					8,900 *U*	4,200 *U*	4,900 *U*	4,600 *U*
2,4-Dinitrotoluene	121142					400 *U*	190 *U*	220 *U*	210 *U*
2,6-Dinitrotoluene	606202					230 *U*	110 *U*	130 *U*	120 *U*
2-Chloronaphthalene	91587					320 *U*	150 *U*	180 *U*	170 *U*
2-Methylphenol	95487	1,000,000	330	330		230 *U*	110 *U*	130 *U*	120 *U*
2-Nitroaniline	88744					280 *U*	140 *U*	160 *U*	150 *U*
2-Nitrophenol	88755					540 *U*	260 *U*	300 *U*	280 *U*
3,3'-Dichlorobenzidine	91941					2,300 *U*	1,100 *U*	1,300 *U*	1,200 *U*
3-Nitroaniline	99092					530 *U*	250 *U*	290 *U*	280 *U*
4,6-Dinitro-2-methylphenol	534521					1,900 *U*	920 *U*	1,100 *U*	1,000 *U*
4-Bromophenyl-phenylether	101553					270 *U*	130 *U*	150 *U*	140 *U*
4-Chloro-3-methylphenol	59507					480 *U*	230 *U*	260 *U*	250 *U*
4-Chloroaniline	106478					480 *U*	230 *U*	260 *U*	250 *U*
4-Chlorophenyl-phenyl ether	7005723					240 *U*	110 *U*	130 *U*	120 *U*
4-Methylphenol	106445	1,000,000	330	330		230 *U*	110 *U*	130 *U*	120 *U*
4-Nitroaniline	100016					1,000 *U*	480 *U*	560 *U*	530 *U*
4-Nitrophenol	100027					1,300 *U*	640 *U*	750 *U*	700 *U*
Acetophenone	98862					260 *U*	120 *U*	140 *U*	140 *U*
Benzaldehyde	100527					1,500 *U*	730 *U*	850 *U*	800 *U*
Bis(2-chloroethyl)ether	111444					250 *U*	120 *U*	140 *U*	130 *U*
bis(2-Chloroethoxy)methane	111911					410 *U*	190 *U*	230 *U*	210 *U*
bis(2-Ethylhexyl)phthalate	117817					660 *U*	1,500	360 *U*	340 *U*
Benzyl n-butyl phthalate	85687					320 *U*	150 *J*	180 *U*	170 *U*
Caprolactam	105602					580 *U*	280 *U*	320 *U*	300 *U*
Diethyl phthalate	84662					700 *U*	450 *U*	720 *U*	740 *U*
Dimethyl phthalate	131113					230 *U*	110 *U*	130 *U*	120 *U*
Di-n-butyl phthalate	84742					330 *U*	160 *U*	180 *U*	170 *U*
Di-n-octylphthalate	117840					230 *U*	110 *U*	130 *U*	120 *U*
Hexachloroethane	67721					250 *U*	120 *U*	140 *U*	130 *U*
Hexachlorobenzene	118741	12,000	3,200	330		260 *U*	120 *U*	140 *U*	140 *U*
Hexachlorobutadiene	87683					280 *U*	140 *U*	160 *U*	150 *U*
Hexachlorocyclopentadiene	77474					260 *U*	120 *U*	140 *U*	140 *U*
Isophorone	78591					410 *U*	190 *U*	230 *U*	210 *U*
Nitrobenzene	98953					210 *U*	100 *U*	120 *U*	110 *U*
N-Nitrosodi-n-propylamine	621647					330 *U*	160 *U*	180 *U*	170 *U*
N-Nitrosodiphenylamine	86306					1,600 *U*	750 *U*	860 *U*	810 *U*
Phenol	108952	1,000,000	330	330		290 *U*	140 *U*	160 *U*	150 *U*
1,4-Dioxane	123911	250,000	100	100					

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS3	SS3	SS4	SS4
					Sample Identification	FDUP2_091322	SS3 (6-12)	SS4 (0-2)	SS4 (0-6)
					Laboratory ID	480-201615-9	480-201615-7	480-201615-10	480-201615-11
					Sample Date	2022-09-13 12:09:00	2022-09-13 12:09:00	2022-09-13 11:09:00	2022-09-13 09:09:00
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	630206					0.56 *UJ*	0.50 *UJ*	0.83 *U*	0.54 *UJ*
1,1,1-Trichloroethane	71556	1,000,000	680	680		0.41 *UJ*	0.36 *UJ*	0.60 *U*	0.39 *UJ*
1,1,2,2-Tetrachloroethane	79345					*R*	0.81 *UJ*	*R*	0.87 *UJ*
1,1,2-Trichloroethane	79005					0.73 *UJ*	0.65 *UJ*	1.10 *U*	0.70 *UJ*
1,1-Dichloroethane	75343	480,000	270	270		0.68 *UJ*	0.61 *UJ*	1.00 *U*	0.66 *UJ*
1,1-Dichloroethene	75354	1,000,000	330	330		0.69 *UJ*	0.61 *UJ*	1.00 *UJ*	0.66 *UJ*
1,2,3-Trimethylbenzene	526738					1.10 *UJ*	1.00 *UJ*	1.70 *U*	1.10 *UJ*
1,2,4-Trimethylbenzene	95636	380,000	3,600	3,600		*R*	0.95 *UJ*	*R*	1.00 *UJ*
1,2,4-Trichlorobenzene	120821					*R*	0.30 *UJ*	*R*	0.33 *UJ*
1,2-Dichlorobenzene	95501	1,000,000	1,100	1,100		*R*	0.39 *UJ*	*R*	0.42 *UJ*
1,3-Dichlorobenzene	541731	560,000	2,400	2,400		*R*	0.26 *UJ*	*R*	0.28 *UJ*
1,4-Dichlorobenzene	106467	250,000	1,800	1,800		*R*	0.70 *UJ*	*R*	0.75 *UJ*
1,2-Dibromo-3-chloropropane	96128					*R*	2.50 *UJ*	*R*	2.70 *UJ*
1,2-Dibromoethane	106934					0.72 *UJ*	0.64 *UJ*	1.10 *U*	0.69 *UJ*
1,2-Dichloroethane	107062	60,000	20	20		0.28 *UJ*	0.25 *UJ*	0.42 *U*	0.27 *UJ*
1,2-Dichloropropane	78875					2.80 *UJ*	2.50 *UJ*	4.20 *U*	2.70 *UJ*
1,3,5-Trimethylbenzene	108678	380,000	8,400	8,400		*R*	0.32 *UJ*	*R*	0.35 *UJ*
2-Hexanone	591786					2.80 *UJ*	2.50 *UJ*	4.20 *U*	2.70 *UJ*
4-Methyl-2-pentanone	108101					1.80 *UJ*	1.60 *UJ*	2.70 *U*	1.80 *UJ*
Acetone	67641	1,000,000	50	50		13 *J*	23 *J*	7.00 *U*	4.50 *UJ*
Benzene	71432	89,000	60	60		0.27 *UJ*	0.24 *UJ*	0.41 *U*	0.26 *UJ*
Bromodichloromethane	75274					0.75 *UJ*	0.67 *UJ*	1.10 *U*	0.72 *UJ*
Bromomethane	74839					0.50 *UJ*	0.45 *UJ*	0.75 *U*	0.48 *UJ*
Bromoform	75252					2.80 *UJ*	2.50 *UJ*	4.20 *U*	2.70 *UJ*
Carbon disulfide	75150					2.80 *UJ*	2.50 *UJ*	4.20 *U*	2.70 *UJ*
Carbon Tetrachloride	56235	44,000	760	760		0.54 *UJ*	0.48 *UJ*	0.80 *UJ*	0.52 *UJ*
Chloroform	67663	700,000	370	370		0.47 *UJ*	0.37 *UJ*	0.56 *UJ*	0.37 *UJ*
cis-1,2-Dichloroethene	156592	1,000,000	250	250		0.72 *UJ*	0.64 *UJ*	1.10 *U*	0.69 *UJ*
cis-1,3-Dichloropropene	10061015					0.81 *UJ*	0.72 *UJ*	1.20 *U*	0.78 *UJ*
Chlorobenzene	108907	1,000,000	1,100	1,100		0.74 *UJ*	0.66 *UJ*	1.10 *U*	0.71 *UJ*
Chloroethane	75003					1.30 *UJ*	1.10 *UJ*	1.90 *U*	1.20 *UJ*
Chloromethane	74873					0.34 *UJ*	0.30 *UJ*	0.50 *U*	0.33 *UJ*
Cyclohexane	110827					0.78 *UJ*	0.70 *UJ*	1.20 *UJ*	0.75 *UJ*
Dibromochloromethane	124481					0.72 *UJ*	0.64 *UJ*	1.10 *U*	0.69 *UJ*
Dichlorodifluoromethane	75718					0.46 *UJ*	0.41 *UJ*	0.69 *U*	0.45 *UJ*
Ethylbenzene	100414	780,000	1,000	1,000		0.39 *UJ*	0.34 *UJ*	0.57 *U*	0.37 *UJ*
Isopropylbenzene	98828					*R*	0.75 *UJ*	*R*	0.81 *UJ*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS3	SS3	SS4	SS4
					Sample Identification	FDUP2_091322	SS3 (6-12)	SS4 (0-2)	SS4 (0-6)
					Laboratory ID	480-201615-9	480-201615-7	480-201615-10	480-201615-11
					Sample Date	2022-09-13 12:09:00	2022-09-13 12:09:00	2022-09-13 11:09:00	2022-09-13 09:09:00
2-Butanone	78933	1,000,000	120	120		2.10 *UJ*	4.20 *J*	3.00 *U*	2.00 *UJ*
m,p-Xylene	179601231					0.94 *UJ*	0.84 *UJ*	1.40 *U*	0.91 *UJ*
Methyl Acetate	79209					3.4 *UJ*	3.0 *UJ*	5.0 *U*	3.3 *UJ*
Methylcyclohexane	108872					1.00 *J*	0.76 *UJ*	1.30 *UJ*	0.82 *UJ*
Methylene Chloride	75092	1,000,000	50	50		2.60 *UJ*	2.30 *UJ*	3.80 *U*	2.50 *UJ*
Methyl tert-butyl ether	1634044	1,000,000	930	930		0.55 *UJ*	0.49 *UJ*	0.82 *U*	0.53 *UJ*
n-Butylbenzene	104518	1,000,000	12,000	12,000		*R*	0.43 *UJ*	*R*	0.47 *UJ*
n-Propylbenzene	103651	1,000,000	3,900	3,900		*R*	0.40 *UJ*	*R*	0.43 *UJ*
o-Xylene	95476					0.73 *UJ*	0.65 *UJ*	1.10 *U*	0.70 *UJ*
sec-Butylbenzene	135988	1,000,000	11,000	11,000		*R*	0.43 *UJ*	*R*	0.47 *UJ*
Styrene	100425					0.28 *UJ*	0.25 *UJ*	0.42 *U*	0.27 *UJ*
tert-Butylbenzene	98066	1,000,000	5,900	5,900		*R*	0.52 *UJ*	*R*	0.56 *UJ*
Toluene	108883	1,000,000	700	700		0.42 *UJ*	0.38 *UJ*	0.63 *U*	0.41 *UJ*
Tetrachloroethane	127184	300,000	1,300	1,300		0.75 *UJ*	0.67 *UJ*	1.10 *U*	0.72 *UJ*
trans-1,2-Dichloroethene	156605	1,000,000	190	190		0.58 *UJ*	0.51 *UJ*	0.86 *U*	0.56 *UJ*
trans-1,3-Dichloropropene	10061026					2.50 *UJ*	2.20 *UJ*	3.70 *U*	2.40 *UJ*
Trichloroethene	79016	400,000	470	470		1.20 *UJ*	1.10 *UJ*	1.80 *U*	1.20 *UJ*
Trichlorotrifluoroethane	76131					1.30 *UJ*	1.10 *UJ*	1.90 *U*	1.20 *UJ*
Trichlorofluoromethane	75694					0.53 *UJ*	0.47 *UJ*	0.79 *U*	0.51 *UJ*
Vinyl Chloride	75014	27,000	20	20		0.68 *UJ*	0.61 *UJ*	1.00 *U*	0.66 *UJ*
Xylenes	1330207	1,000,000	1,600	260		0.94 *UJ*	0.84 *UJ*	1.40 *U*	0.91 *UJ*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS4	SS4	SS5	SS5
					Sample Identification	SS4 (12-24)	SS4 (6-12)	SS5 (0-2)	SS5 (0-6)
					Laboratory ID	480-201615-13	480-201615-12	480-200248-7	480-200248-8
					Sample Date	2022-09-13 09:09:00	2022-09-13 09:09:00	2022-07-29 01:07:00	2022-07-29 01:07:00
Metals (µg/kg)									
Arsenic	7440382	16,000	16,000	13,000		**27,700**	**20,000**	3,300	7,500
Lead	7439921	3,900,000	450,000	63,000		**99,300**	**94,900**	26,900	37,500
Cadmium	7440439	60,000	7,500	2,500		320	230 *U*	260	120 *J*
Aluminum	7429905					9,310,000	9,800,000	9,330,000	12,100,000
Antimony	7440360					2,300 *J*	2,300 *J*	820 *J*	660 *J*
Barium	7440393	10,000,000	820,000	350,000		84,000	84,800	102,000	154,000
Beryllium	7440417	2,700,000	47,000	7,200		620	630	360	480
Calcium	7440702					9,230,000	5,060,000	2,200,000	1,970,000
Chromium	7440473					15,200 *J+*	15,500 *J+*	10,600	14,300
Cobalt	7440484					8,900	9,500	23,300	21,300
Copper	7440508	10,000,000	1,720,000	50,000		**67,900**	**68,200**	**334,000**	**153,000**
Iron	7439896					23,000,000	27,400,000	11,700,000	17,400,000
Magnesium	7439954					4,430,000 *J*	2,740,000 *J*	1,780,000	2,510,000
Manganese	7439965	10,000,000	2,000,000	1,600,000		472,000	323,000	314,000	437,000
Mercury	7439976	5,700	730	180		67	130	59	90
Nickel	7440020	10,000,000	130,000	30,000		21,100	22,000	14,000	18,900
Potassium	7440097					1,600,000	1,220,000	1,070,000	1,490,000
Selenium	7782492	6,800,000	4,000	3,900		1,300 *J*	2,100 *J*	470 *U*	460 *U*
Silver	7440224	6,800,000	8,300	2,000		240 *U*	240 *U*	**10,200**	**2,700**
Sodium	7440235					81,500 *J*	69,600 *J*	113,000 *J*	52,900 *J*
Thallium	7440280					360 *U*	360 *U*	350 *U*	340 *U*
Vanadium	7440622					19,400	24,200	12,500	18,800
Zinc	7440666	10,000,000	2,480,000	109,000		83,400	73,800	69,200	98,200
Polycyclic Aromatic Hydrocarbons (µg/kg)									
2-Methylnaphthalene	91576					190 *U*	190 *U*	180 *U*	56 *J*
Acenaphthene	83329	1,000,000	98,000	20,000		140 *U*	140 *U*	140 *U*	27 *U*
Acenaphthylene	208968	1,000,000	107,000	100,000		190 *J*	160 *J*	250 *J*	450
Anthracene	120127	1,000,000	1,000,000	100,000		240 *U*	240 *U*	230 *U*	180
Benz[a]anthracene	56553	11,000	1,000	1,000		490 *J*	660 *J*	550 *J*	920
Benzo[a]pyrene	50328	1,100	22,000	1,000		480 *J*	630 *J*	390 *J*	650
Benzo[b]fluoranthene	205992	11,000	1,700	1,000		810 *J*	920 *J*	890 *J*	**1,200**
Benzo[g,h,i]perylene	191242	1,000,000	1,000,000	100,000		310 *J*	360 *J*	480 *J*	600
Benzo[k]fluoranthene	207089	110,000	1,700	800		320 *J*	370 *J*	120 *U*	520
Chrysene	218019	110,000	1,000	1,000		590 *J*	690 *J*	680 *J*	**1,100**
Dibenz[a,h]anthracene	53703	1,100	1,000,000	330		170 *U*	170 *U*	170 *J*	200
Dibenzofuran	132649	1,000,000	210,000	7,000		110 *U*	110 *U*	110 *U*	22 *U*
Fluoranthene	206440	1,000,000	1,000,000	100,000		830 *J*	1,200	770 *J*	1,200

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS4	SS4	SS5	SS5
					Sample Identification	SS4 (12-24)	SS4 (6-12)	SS5 (0-2)	SS5 (0-6)
					Laboratory ID	480-201615-13	480-201615-12	480-200248-7	480-200248-8
					Sample Date	2022-09-13 09:09:00	2022-09-13 09:09:00	2022-07-29 01:07:00	2022-07-29 01:07:00
Fluorene	86737	1,000,000	386,000	30,000		110 *U*	110 *U*	110 *U*	48 *J*
Indeno[1,2,3-cd]pyrene	193395	11,000	8,200	500		390 *J*	450 *J*	470 *J*	**590**
Naphthalene	91203	1,000,000	12,000	12,000		130 *U*	130 *U*	120 *U*	70 *U*
Phenanthrene	85018	1,000,000	1,000,000	100,000		370 *J*	360 *J*	140 *U*	380
Pyrene	129000	1,000,000	1,000,000	100,000		690 *J*	960 *J*	1,300	1,900
Per- and Polyfluoroalkyl Substances (µg/kg)									
6:2 fluorotelomer sulfonate	27619972								
8:2 fluorotelomer sulfonate	39108344								
2-(N-ethyl-perfluorooctane sulfonamido) acetate									
Perfluorobutyric acid	375224								
2-(N-methyl-perfluorooctane sulfonamido) acetic acid									
Perfluorooctanoic acid	335671	600	0.8	0.66					
Perfluorooctane sulfonic acid	1763231	440	1	0.88					
Perfluorobutane Sulfonic Acid	375735								
Perfluorodecanoic Acid	335762								
Perfluorododecanoic Acid	307551								
Perfluorodecanesulfonic acid	335773								
Perfluoroheptanoic Acid	375859								
Perfluoroheptanesulfonic acid	375928								
Perfluorohexanoic Acid	307244								
Perfluorohexane Sulfonic Acid	355464								
Perfluorononanoic Acid	375951								
Perfluorooctane sulfonamide	754916								
Perfluoropentanoic Acid	2706903								
Perfluorotetradecanoic Acid	376067								
Perfluorotridecanoic Acid	72629948								
Perfluoroundecanoic Acid	2058948								
Semivolatile Organic Compounds (µg/kg)									
Atrazine	1912249					340 *U*	340 *U*	320 *U*	64 *U*
Carbazole	86748					110 *U*	110 *U*	110 *U*	22 *U*
2,4,5-Trichlorophenol	95954					260 *U*	260 *U*	250 *U*	50 *U*
2,4,6-Trichlorophenol	88062					190 *U*	190 *U*	180 *U*	37 *U*
2,4-Dichlorophenol	120832					100 *U*	100 *U*	97 *U*	19 *U*
2-Chlorophenol	95578					180 *U*	180 *U*	170 *U*	34 *U*
Pentachlorophenol	87865	55,000	800	800		970 *U*	970 *U*	920 *U*	180 *U*
1,1'-Biphenyl	92524					140 *U*	140 *U*	140 *U*	27 *U*
2,2'-oxybis(1-Chloropropane)	108601					190 *U*	190 *U*	180 *U*	37 *U*
2,4-Dimethylphenol	105679					230 *U*	230 *U*	220 *U*	44 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS4	SS4	SS5	SS5
					Sample Identification	SS4 (12-24)	SS4 (6-12)	SS5 (0-2)	SS5 (0-6)
					Laboratory ID	480-201615-13	480-201615-12	480-200248-7	480-200248-8
					Sample Date	2022-09-13 09:09:00	2022-09-13 09:09:00	2022-07-29 01:07:00	2022-07-29 01:07:00
2,4-Dinitrophenol	51285					4,500 *U*	4,500 *U*	4,200 *U*	850 *U*
2,4-Dinitrotoluene	121142					200 *U*	200 *U*	190 *U*	38 *U*
2,6-Dinitrotoluene	606202					110 *U*	110 *U*	110 *U*	22 *U*
2-Chloronaphthalene	91587					160 *U*	160 *U*	150 *U*	30 *U*
2-Methylphenol	95487	1,000,000	330	330		110 *U*	110 *U*	110 *U*	22 *U*
2-Nitroaniline	88744					140 *U*	140 *U*	140 *U*	27 *U*
2-Nitrophenol	88755					270 *U*	270 *U*	260 *U*	52 *U*
3,3'-Dichlorobenzidine	91941					1,100 *U*	1,100 *U*	1,100 *U*	220 *U*
3-Nitroaniline	99092					270 *U*	270 *U*	250 *U*	51 *U*
4,6-Dinitro-2-methylphenol	534521					970 *U*	970 *U*	920 *U*	180 *U*
4-Bromophenyl-phenylether	101553					140 *U*	140 *U*	130 *U*	26 *U*
4-Chloro-3-methylphenol	59507					240 *U*	240 *U*	230 *U*	45 *U*
4-Chloroaniline	106478					240 *U*	240 *U*	230 *U*	45 *U*
4-Chlorophenyl-phenyl ether	7005723					120 *U*	120 *U*	110 *U*	23 *U*
4-Methylphenol	106445	1,000,000	330	330		110 *U*	110 *U*	110 *U*	22 *U*
4-Nitroaniline	100016					510 *U*	510 *U*	480 *U*	96 *U*
4-Nitrophenol	100027					680 *U*	680 *U*	640 *U*	130 *U*
Acetophenone	98862					130 *U*	130 *U*	120 *U*	25 *U*
Benzaldehyde	100527					770 *U*	770 *U*	730 *U*	150 *U*
Bis(2-chloroethyl)ether	111444					130 *U*	130 *U*	120 *U*	24 *U*
bis(2-Chloroethoxy)methane	111911					210 *U*	210 *U*	190 *U*	39 *U*
bis(2-Ethylhexyl)phthalate	117817					330 *U*	330 *U*	310 *U*	63 *U*
Benzyl n-butyl phthalate	85687					160 *U*	160 *U*	150 *U*	410
Caprolactam	105602					290 *U*	290 *U*	280 *U*	55 *U*
Diethyl phthalate	84662					240 *U*	730 *U*	120 *U*	24 *U*
Dimethyl phthalate	131113					110 *U*	110 *U*	110 *U*	22 *U*
Di-n-butyl phthalate	84742					170 *U*	170 *U*	160 *U*	31 *U*
Di-n-octylphthalate	117840					110 *U*	110 *U*	110 *U*	22 *U*
Hexachloroethane	67721					130 *U*	130 *U*	120 *U*	24 *U*
Hexachlorobenzene	118741	12,000	3,200	330		130 *U*	130 *U*	120 *U*	25 *U*
Hexachlorobutadiene	87683					140 *U*	140 *U*	140 *U*	27 *U*
Hexachlorocyclopentadiene	77474					130 *U*	130 *U*	120 *U*	25 *U*
Isophorone	78591					210 *U*	210 *U*	190 *U*	39 *U*
Nitrobenzene	98953					110 *U*	110 *U*	100 *U*	21 *U*
N-Nitrosodi-n-propylamine	621647					170 *U*	170 *U*	160 *U*	31 *U*
N-Nitrosodiphenylamine	86306					790 *U*	790 *U*	750 *U*	150 *U*
Phenol	108952	1,000,000	330	330		150 *U*	150 *U*	140 *U*	28 *U*
1,4-Dioxane	123911	250,000	100	100					

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS4	SS4	SS5	SS5
					Sample Identification	SS4 (12-24)	SS4 (6-12)	SS5 (0-2)	SS5 (0-6)
					Laboratory ID	480-201615-13	480-201615-12	480-200248-7	480-200248-8
					Sample Date	2022-09-13 09:09:00	2022-09-13 09:09:00	2022-07-29 01:07:00	2022-07-29 01:07:00
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	630206					0.64 *UJ*	0.61 *UJ*	0.85 *U*	0.64 *U*
1,1,1-Trichloroethane	71556	1,000,000	680	680		0.47 *UJ*	0.44 *UJ*	0.62 *U*	0.47 *U*
1,1,2,2-Tetrachloroethane	79345					*R*	*R*	1.40 *UJ*	1.00 *U*
1,1,2-Trichloroethane	79005					0.84 *UJ*	0.80 *UJ*	1.10 *U*	0.83 *U*
1,1-Dichloroethane	75343	480,000	270	270		0.78 *UJ*	0.75 *UJ*	1.00 *U*	0.78 *U*
1,1-Dichloroethene	75354	1,000,000	330	330		0.79 *UJ*	0.75 *UJ*	1.00 *U*	0.78 *U*
1,2,3-Trimethylbenzene	526738					1.30 *UJ*	1.20 *UJ*	1.70 *U*	1.30 *U*
1,2,4-Trimethylbenzene	95636	380,000	3,600	3,600		*R*	*R*	1.60 *UJ*	1.20 *U*
1,2,4-Trichlorobenzene	120821					*R*	*R*	0.52 *UJ*	0.39 *U*
1,2-Dichlorobenzene	95501	1,000,000	1,100	1,100		*R*	*R*	0.66 *UJ*	0.50 *U*
1,3-Dichlorobenzene	541731	560,000	2,400	2,400		*R*	*R*	0.44 *UJ*	0.33 *U*
1,4-Dichlorobenzene	106467	250,000	1,800	1,800		*R*	*R*	1.2 *UJ*	0.90 *U*
1,2-Dibromo-3-chloropropane	96128					*R*	*R*	4.20 *UJ*	3.20 *U*
1,2-Dibromoethane	106934					0.83 *UJ*	0.79 *UJ*	1.10 *U*	0.82 *U*
1,2-Dichloroethane	107062	60,000	20	20		0.32 *UJ*	0.31 *UJ*	0.43 *U*	0.32 *U*
1,2-Dichloropropane	78875					3.20 *UJ*	3.10 *UJ*	4.20 *U*	3.20 *U*
1,3,5-Trimethylbenzene	108678	380,000	8,400	8,400		*R*	*R*	0.55 *UJ*	0.41 *U*
2-Hexanone	591786					3.20 *UJ*	3.10 *UJ*	4.20 *U*	3.20 *U*
4-Methyl-2-pentanone	108101					2.10 *UJ*	2.00 *UJ*	2.80 *U*	2.10 *U*
Acetone	67641	1,000,000	50	50		5.40 *UJ*	5.20 *UJ*	16 *J*	5.40 *U*
Benzene	71432	89,000	60	60		0.31 *UJ*	0.30 *UJ*	0.42 *U*	0.31 *U*
Bromodichloromethane	75274					0.86 *UJ*	0.82 *UJ*	1.10 *U*	0.86 *U*
Bromomethane	74839					0.58 *UJ*	0.55 *UJ*	0.76 *U*	0.58 *U*
Bromoform	75252					3.20 *UJ*	3.10 *UJ*	4.20 *U*	3.20 *U*
Carbon disulfide	75150					3.20 *UJ*	3.10 *UJ*	4.20 *U*	3.20 *U*
Carbon Tetrachloride	56235	44,000	760	760		0.62 *UJ*	0.59 *UJ*	0.82 *U*	0.62 *U*
Chloroform	67663	700,000	370	370		0.59 *UJ*	0.50 *UJ*	0.52 *U*	0.40 *U*
cis-1,2-Dichloroethene	156592	1,000,000	250	250		0.82 *UJ*	0.78 *UJ*	1.10 *U*	0.82 *U*
cis-1,3-Dichloropropene	10061015					0.93 *UJ*	0.88 *UJ*	1.20 *U*	0.92 *U*
Chlorobenzene	108907	1,000,000	1,100	1,100		0.85 *UJ*	0.81 *UJ*	1.10 *U*	0.85 *U*
Chloroethane	75003					1.50 *UJ*	1.40 *UJ*	1.90 *U*	1.40 *U*
Chloromethane	74873					0.39 *UJ*	0.37 *UJ*	0.51 *U*	0.39 *U*
Cyclohexane	110827					0.90 *UJ*	0.86 *UJ*	1.20 *U*	0.90 *U*
Dibromochloromethane	124481					0.82 *UJ*	0.78 *UJ*	1.10 *U*	0.82 *U*
Dichlorodifluoromethane	75718					0.53 *UJ*	0.51 *UJ*	0.70 *U*	0.53 *U*
Ethylbenzene	100414	780,000	1,000	1,000		0.44 *UJ*	0.42 *UJ*	0.59 *U*	0.44 *U*
Isopropylbenzene	98828					*R*	*R*	1.30 *UJ*	0.97 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS4	SS4	SS5	SS5
					Sample Identification	SS4 (12-24)	SS4 (6-12)	SS5 (0-2)	SS5 (0-6)
					Laboratory ID	480-201615-13	480-201615-12	480-200248-7	480-200248-8
					Sample Date	2022-09-13 09:09:00	2022-09-13 09:09:00	2022-07-29 01:07:00	2022-07-29 01:07:00
2-Butanone	78933	1,000,000	120	120		2.40 *UJ*	2.20 *UJ*	3.10 *U*	2.30 *U*
m,p-Xylene	179601231					1.10 *UJ*	1.00 *UJ*	1.40 *U*	1.10 *U*
Methyl Acetate	79209					3.9 *UJ*	3.7 *UJ*	5.1 *U*	3.9 *U*
Methylcyclohexane	108872					0.98 *UJ*	0.93 *UJ*	1.30 *U*	0.97 *U*
Methylene Chloride	75092	1,000,000	50	50		3.00 *UJ*	2.80 *UJ*	3.90 *U*	2.90 *U*
Methyl tert-butyl ether	1634044	1,000,000	930	930		0.63 *UJ*	0.60 *UJ*	0.83 *U*	0.63 *U*
n-Butylbenzene	104518	1,000,000	12,000	12,000		*R*	*R*	0.74 *UJ*	0.56 *U*
n-Propylbenzene	103651	1,000,000	3,900	3,900		*R*	*R*	0.68 *UJ*	0.51 *U*
o-Xylene	95476					0.84 *UJ*	0.80 *UJ*	1.10 *U*	0.84 *U*
sec-Butylbenzene	135988	1,000,000	11,000	11,000		*R*	*R*	0.74 *UJ*	0.56 *U*
Styrene	100425					0.32 *UJ*	0.31 *UJ*	0.42 *U*	0.32 *U*
tert-Butylbenzene	98066	1,000,000	5,900	5,900		*R*	*R*	0.88 *UJ*	0.67 *U*
Toluene	108883	1,000,000	700	700		0.49 *UJ*	0.46 *UJ*	0.64 *U*	0.48 *U*
Tetrachloroethane	127184	300,000	1,300	1,300		0.86 *UJ*	0.82 *UJ*	1.10 *U*	0.86 *U*
trans-1,2-Dichloroethene	156605	1,000,000	190	190		0.66 *UJ*	0.63 *UJ*	0.88 *U*	0.66 *U*
trans-1,3-Dichloropropene	10061026					2.80 *UJ*	2.70 *UJ*	3.70 *U*	2.80 *U*
Trichloroethene	79016	400,000	470	470		1.40 *UJ*	1.30 *UJ*	1.90 *U*	1.40 *U*
Trichlorotrifluoroethane	76131					1.50 *UJ*	1.40 *UJ*	1.90 *U*	1.50 *U*
Trichlorofluoromethane	75694					0.61 *UJ*	0.58 *UJ*	0.80 *U*	0.61 *U*
Vinyl Chloride	75014	27,000	20	20		0.78 *UJ*	0.75 *UJ*	1.00 *U*	0.78 *U*
Xylenes	1330207	1,000,000	1,600	260		1.10 *UJ*	1.00 *UJ*	1.40 *U*	1.10 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS5	SS5	SS5	SS6
					Sample Identification	SS5 (12-24)	SS5 (12-24)	SS5 (6-12)	SS6 (0-2)
					Laboratory ID	480-200248-10	480-200248-6	480-200248-9	480-200248-13
					Sample Date	2022-07-29 01:07:00	2022-07-29 01:07:00	2022-07-29 01:07:00	2022-07-29 02:07:00
Metals (µg/kg)									
Arsenic	7440382	16,000	16,000	13,000		6,200	5,900	7,200	**24,100**
Lead	7439921	3,900,000	450,000	63,000		17,000	22,800	38,100	**90,900**
Cadmium	7440439	60,000	7,500	2,500		31 *U*	140 *J*	33 *UJ*	97 *J-*
Aluminum	7429905					9,840,000	9,360,000	10,500,000	8,210,000
Antimony	7440360					610 *J*	1,000 *J*	1,200 *J*	1,300 *J*
Barium	7440393	10,000,000	820,000	350,000		56,100	49,700	106,000	92,800
Beryllium	7440417	2,700,000	47,000	7,200		420	410	480	490
Calcium	7440702					19,800,000	17,300,000	7,570,000	1,830,000
Chromium	7440473					13,800	13,900	18,000	13,100
Cobalt	7440484					9,200	8,200	9,600	8,400
Copper	7440508	10,000,000	1,720,000	50,000		26,600	28,300	**62,500**	47,800
Iron	7439896					22,000,000	25,100,000	28,100,000	24,500,000
Magnesium	7439954					5,780,000	5,390,000	3,400,000	2,090,000
Manganese	7439965	10,000,000	2,000,000	1,600,000		490,000	528,000	805,000	478,000
Mercury	7439976	5,700	730	180		14 *J*	52	61	67
Nickel	7440020	10,000,000	130,000	30,000		23,500	20,600	21,100	18,900
Potassium	7440097					1,280,000	1,070,000	1,310,000	1,420,000
Selenium	7782492	6,800,000	4,000	3,900		410 *U*	390 *U*	950 *J*	1,200 *J*
Silver	7440224	6,800,000	8,300	2,000		210 *U*	200 *U*	220 *U*	210 *U*
Sodium	7440235					48,800 *J*	66,400 *J*	60,200 *J*	26,200 *J*
Thallium	7440280					310 *U*	300 *U*	330 *U*	310 *U*
Vanadium	7440622					16,900	18,500	25,200	15,400
Zinc	7440666	10,000,000	2,480,000	109,000		67,100	65,400	67,800	65,600
Polycyclic Aromatic Hydrocarbons (µg/kg)									
2-Methylnaphthalene	91576					35 *U*	35 *U*	180 *U*	36 *U*
Acenaphthene	83329	1,000,000	98,000	20,000		26 *U*	26 *U*	130 *U*	26 *U*
Acenaphthylene	208968	1,000,000	107,000	100,000		23 *U*	23 *U*	340 *J*	130 *J*
Anthracene	120127	1,000,000	1,000,000	100,000		43 *U*	43 *U*	220 *U*	110 *J*
Benz[a]anthracene	56553	11,000	1,000	1,000		18 *U*	17 *U*	980	410
Benzo[a]pyrene	50328	1,100	22,000	1,000		26 *U*	26 *U*	590 *J*	440
Benzo[b]fluoranthene	205992	11,000	1,700	1,000		28 *U*	28 *U*	**1,200**	710
Benzo[g,h,i]perylene	191242	1,000,000	1,000,000	100,000		19 *U*	18 *U*	670 *J*	380
Benzo[k]fluoranthene	207089	110,000	1,700	800		23 *U*	23 *U*	490 *J*	220
Chrysene	218019	110,000	1,000	1,000		39 *U*	39 *U*	**1,100**	570
Dibenz[a,h]anthracene	53703	1,100	1,000,000	330		31 *U*	31 *U*	170 *J*	96 *J*
Dibenzofuran	132649	1,000,000	210,000	7,000		21 *U*	21 *U*	100 *U*	34 *J*
Fluoranthene	206440	1,000,000	1,000,000	100,000		19 *U*	18 *U*	1,300	720

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS5	SS5	SS5	SS6
					Sample Identification	SS5 (12-24)	SS5 (12-24)	SS5 (6-12)	SS6 (0-2)
					Laboratory ID	480-200248-10	480-200248-6	480-200248-9	480-200248-13
					Sample Date	2022-07-29 01:07:00	2022-07-29 01:07:00	2022-07-29 01:07:00	2022-07-29 02:07:00
Fluorene	86737	1,000,000	386,000	30,000		21 *U*	21 *U*	100 *U*	21 *U*
Indeno[1,2,3-cd]pyrene	193395	11,000	8,200	500		22 *U*	22 *U*	**580** *J*	340
Naphthalene	91203	1,000,000	12,000	12,000		23 *U*	23 *U*	110 *U*	45 *U*
Phenanthrene	85018	1,000,000	1,000,000	100,000		26 *U*	26 *U*	520 *J*	320
Pyrene	129000	1,000,000	1,000,000	100,000		21 *U*	21 *U*	2,200	780
Per- and Polyfluoroalkyl Substances (µg/kg)									
6:2 fluorotelomer sulfonate	27619972								
8:2 fluorotelomer sulfonate	39108344								
2-(N-ethyl-perfluorooctane sulfonamido) acetate									
Perfluorobutyric acid	375224								
2-(N-methyl-perfluorooctane sulfonamido) acetic acid									
Perfluorooctanoic acid	335671	600	0.8	0.66					
Perfluorooctane sulfonic acid	1763231	440	1	0.88					
Perfluorobutane Sulfonic Acid	375735								
Perfluorodecanoic Acid	335762								
Perfluorododecanoic Acid	307551								
Perfluorodecanesulfonic acid	335773								
Perfluoroheptanoic Acid	375859								
Perfluoroheptanesulfonic acid	375928								
Perfluorohexanoic Acid	307244								
Perfluorohexane Sulfonic Acid	355464								
Perfluorononanoic Acid	375951								
Perfluorooctane sulfonamide	754916								
Perfluoropentanoic Acid	2706903								
Perfluorotetradecanoic Acid	376067								
Perfluorotridecanoic Acid	72629948								
Perfluoroundecanoic Acid	2058948								
Semivolatile Organic Compounds (µg/kg)									
Atrazine	1912249					61 *U*	60 *U*	310 *U*	62 *U*
Carbazole	86748					21 *U*	21 *U*	100 *U*	35 *J*
2,4,5-Trichlorophenol	95954					47 *U*	47 *U*	240 *U*	48 *U*
2,4,6-Trichlorophenol	88062					35 *U*	35 *U*	180 *U*	36 *U*
2,4-Dichlorophenol	120832					19 *U*	18 *U*	94 *U*	19 *U*
2-Chlorophenol	95578					32 *U*	32 *U*	160 *U*	32 *U*
Pentachlorophenol	87865	55,000	800	800		180 *U*	170 *U*	890 *U*	180 *U*
1,1'-Biphenyl	92524					26 *U*	26 *U*	130 *U*	26 *U*
2,2'-oxybis(1-Chloropropane)	108601					35 *U*	35 *U*	180 *U*	36 *U*
2,4-Dimethylphenol	105679					42 *U*	42 *U*	210 *U*	43 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS5	SS5	SS5	SS6
					Sample Identification	SS5 (12-24)	SS5 (12-24)	SS5 (6-12)	SS6 (0-2)
					Laboratory ID	480-200248-10	480-200248-6	480-200248-9	480-200248-13
					Sample Date	2022-07-29 01:07:00	2022-07-29 01:07:00	2022-07-29 01:07:00	2022-07-29 02:07:00
2,4-Dinitrophenol	51285					810 *U*	800 *U*	4,100 *U*	820 *U*
2,4-Dinitrotoluene	121142					36 *U*	36 *U*	180 *U*	37 *U*
2,6-Dinitrotoluene	606202					21 *U*	21 *U*	100 *U*	21 *U*
2-Chloronaphthalene	91587					29 *U*	29 *U*	150 *U*	29 *U*
2-Methylphenol	95487	1,000,000	330	330		21 *U*	21 *U*	100 *U*	21 *U*
2-Nitroaniline	88744					26 *U*	26 *U*	130 *U*	26 *U*
2-Nitrophenol	88755					49 *U*	49 *U*	250 *U*	50 *U*
3,3'-Dichlorobenzidine	91941					210 *U*	210 *U*	1,000 *U*	210 *U*
3-Nitroaniline	99092					48 *U*	48 *U*	240 *U*	49 *U*
4,6-Dinitro-2-methylphenol	534521					180 *U*	170 *U*	890 *U*	180 *U*
4-Bromophenyl-phenylether	101553					25 *U*	25 *U*	130 *U*	25 *U*
4-Chloro-3-methylphenol	59507					43 *U*	43 *U*	220 *U*	44 *U*
4-Chloroaniline	106478					43 *U*	43 *U*	220 *U*	44 *U*
4-Chlorophenyl-phenyl ether	7005723					22 *U*	22 *U*	110 *U*	22 *U*
4-Methylphenol	106445	1,000,000	330	330		21 *U*	21 *U*	100 *U*	21 *U*
4-Nitroaniline	100016					92 *U*	91 *U*	460 *U*	93 *U*
4-Nitrophenol	100027					120 *U*	120 *U*	620 *U*	120 *U*
Acetophenone	98862					24 *U*	24 *U*	120 *U*	24 *U*
Benzaldehyde	100527					140 *U*	140 *U*	700 *U*	140 *U*
Bis(2-chloroethyl)ether	111444					23 *U*	23 *U*	110 *U*	23 *U*
bis(2-Chloroethoxy)methane	111911					37 *U*	37 *U*	190 *U*	38 *U*
bis(2-Ethylhexyl)phthalate	117817					60 *U*	59 *U*	300 *U*	61 *U*
Benzyl n-butyl phthalate	85687					29 *U*	29 *U*	150 *U*	29 *U*
Caprolactam	105602					53 *U*	52 *U*	270 *U*	53 *U*
Diethyl phthalate	84662					23 *U*	23 *U*	110 *U*	23 *U*
Dimethyl phthalate	131113					21 *U*	21 *U*	100 *U*	21 *U*
Di-n-butyl phthalate	84742					30 *U*	30 *U*	150 *U*	30 *U*
Di-n-octylphthalate	117840					21 *U*	21 *U*	100 *U*	21 *U*
Hexachloroethane	67721					23 *U*	23 *U*	110 *U*	23 *U*
Hexachlorobenzene	118741	12,000	3,200	330		24 *U*	24 *U*	120 *U*	24 *U*
Hexachlorobutadiene	87683					26 *U*	26 *U*	130 *U*	26 *U*
Hexachlorocyclopentadiene	77474					24 *U*	24 *U*	120 *U*	24 *U*
Isophorone	78591					37 *U*	37 *U*	190 *U*	38 *U*
Nitrobenzene	98953					20 *U*	19 *U*	99 *U*	20 *U*
N-Nitrosodi-n-propylamine	621647					30 *U*	30 *U*	150 *U*	30 *U*
N-Nitrosodiphenylamine	86306					140 *U*	140 *U*	720 *U*	140 *U*
Phenol	108952	1,000,000	330	330		27 *U*	27 *U*	140 *U*	27 *U*
1,4-Dioxane	123911	250,000	100	100					

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS5	SS5	SS5	SS6
					Sample Identification	SS5 (12-24)	SS5 (12-24)	SS5 (6-12)	SS6 (0-2)
					Laboratory ID	480-200248-10	480-200248-6	480-200248-9	480-200248-13
					Sample Date	2022-07-29 01:07:00	2022-07-29 01:07:00	2022-07-29 01:07:00	2022-07-29 02:07:00
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	630206					0.43 *UJ*	0.45 *U*	0.52 *U*	0.58 *UJ*
1,1,1-Trichloroethane	71556	1,000,000	680	680		0.31 *UJ*	0.33 *U*	0.38 *U*	0.42 *UJ*
1,1,2,2-Tetrachloroethane	79345					0.69 *UJ*	0.73 *U*	0.85 *U*	0.94 *UJ*
1,1,2-Trichloroethane	79005					0.56 *UJ*	0.58 *U*	0.68 *U*	0.76 *UJ*
1,1-Dichloroethane	75343	480,000	270	270		0.52 *UJ*	0.55 *U*	0.64 *U*	0.71 *UJ*
1,1-Dichloroethene	75354	1,000,000	330	330		0.52 *UJ*	0.55 *U*	0.64 *U*	0.71 *UJ*
1,2,3-Trimethylbenzene	526738					0.87 *UJ*	0.92 *U*	1.10 *U*	1.20 *UJ*
1,2,4-Trimethylbenzene	95636	380,000	3,600	3,600		0.82 *UJ*	0.86 *U*	1.00 *U*	1.10 *UJ*
1,2,4-Trichlorobenzene	120821					0.26 *UJ*	0.27 *U*	0.32 *U*	0.35 *UJ*
1,2-Dichlorobenzene	95501	1,000,000	1,100	1,100		0.33 *UJ*	0.35 *U*	0.41 *U*	0.46 *UJ*
1,3-Dichlorobenzene	541731	560,000	2,400	2,400		0.22 *UJ*	0.23 *U*	0.27 *U*	0.30 *UJ*
1,4-Dichlorobenzene	106467	250,000	1,800	1,800		0.60 *UJ*	0.63 *U*	0.73 *U*	0.82 *UJ*
1,2-Dibromo-3-chloropropane	96128					2.10 *UJ*	2.20 *U*	2.60 *U*	2.90 *UJ*
1,2-Dibromoethane	106934					0.55 *UJ*	0.58 *U*	0.67 *U*	0.75 *UJ*
1,2-Dichloroethane	107062	60,000	20	20		0.21 *UJ*	0.23 *U*	0.26 *U*	0.29 *UJ*
1,2-Dichloropropane	78875					2.10 *UJ*	2.20 *U*	2.60 *U*	2.90 *UJ*
1,3,5-Trimethylbenzene	108678	380,000	8,400	8,400		0.28 *UJ*	0.29 *U*	0.34 *U*	0.38 *UJ*
2-Hexanone	591786					2.10 *UJ*	2.20 *U*	2.60 *U*	2.90 *UJ*
4-Methyl-2-pentanone	108101					1.40 *UJ*	1.50 *U*	1.70 *U*	1.90 *UJ*
Acetone	67641	1,000,000	50	50		20 *J*	9.00 *J*	4.40 *U*	6.80 *J*
Benzene	71432	89,000	60	60		0.21 *UJ*	0.22 *U*	0.26 *U*	0.29 *UJ*
Bromodichloromethane	75274					0.57 *UJ*	0.60 *U*	0.70 *U*	0.78 *UJ*
Bromomethane	74839					0.38 *UJ*	0.40 *U*	0.47 *U*	0.52 *UJ*
Bromoform	75252					2.10 *UJ*	2.20 *U*	2.60 *U*	2.90 *UJ*
Carbon disulfide	75150					2.10 *UJ*	2.20 *U*	2.60 *U*	2.90 *UJ*
Carbon Tetrachloride	56235	44,000	760	760		0.41 *UJ*	0.43 *U*	0.51 *U*	0.56 *UJ*
Chloroform	67663	700,000	370	370		0.26 *UJ*	0.28 *U*	0.32 *U*	0.36 *UJ*
cis-1,2-Dichloroethene	156592	1,000,000	250	250		0.55 *UJ*	0.57 *U*	0.67 *U*	0.75 *UJ*
cis-1,3-Dichloropropene	10061015					0.62 *UJ*	0.65 *U*	0.75 *U*	0.84 *UJ*
Chlorobenzene	108907	1,000,000	1,100	1,100		0.56 *UJ*	0.59 *U*	0.69 *U*	0.77 *UJ*
Chloroethane	75003					0.97 *UJ*	1.00 *U*	1.20 *U*	1.30 *UJ*
Chloromethane	74873					0.26 *UJ*	0.27 *U*	0.32 *U*	0.35 *UJ*
Cyclohexane	110827					0.60 *UJ*	0.63 *U*	0.73 *U*	0.82 *UJ*
Dibromochloromethane	124481					0.55 *UJ*	0.57 *U*	0.67 *U*	0.75 *UJ*
Dichlorodifluoromethane	75718					0.35 *UJ*	0.37 *U*	0.43 *U*	0.48 *UJ*
Ethylbenzene	100414	780,000	1,000	1,000		0.29 *UJ*	0.31 *U*	0.36 *U*	0.40 *UJ*
Isopropylbenzene	98828					0.64 *UJ*	0.68 *U*	0.79 *U*	0.88 *UJ*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS5	SS5	SS5	SS6
					Sample Identification	SS5 (12-24)	SS5 (12-24)	SS5 (6-12)	SS6 (0-2)
					Laboratory ID	480-200248-10	480-200248-6	480-200248-9	480-200248-13
					Sample Date	2022-07-29 01:07:00	2022-07-29 01:07:00	2022-07-29 01:07:00	2022-07-29 02:07:00
2-Butanone	78933	1,000,000	120	120		1.60 *UJ*	1.60 *U*	1.90 *U*	2.10 *UJ*
m,p-Xylene	179601231					0.72 *UJ*	0.75 *U*	0.88 *U*	0.98 *UJ*
Methyl Acetate	79209					2.6 *UJ*	2.7 *U*	3.2 *U*	3.5 *UJ*
Methylcyclohexane	108872					0.65 *UJ*	0.68 *U*	0.79 *U*	0.89 *UJ*
Methylene Chloride	75092	1,000,000	50	50		2.00 *UJ*	2.10 *J*	2.40 *U*	2.70 *UJ*
Methyl tert-butyl ether	1634044	1,000,000	930	930		0.42 *UJ*	0.44 *U*	0.51 *U*	0.57 *UJ*
n-Butylbenzene	104518	1,000,000	12,000	12,000		0.37 *UJ*	0.39 *U*	0.45 *U*	0.51 *UJ*
n-Propylbenzene	103651	1,000,000	3,900	3,900		0.34 *UJ*	0.36 *U*	0.42 *U*	0.47 *UJ*
o-Xylene	95476					0.56 *UJ*	0.59 *U*	0.68 *U*	0.76 *UJ*
sec-Butylbenzene	135988	1,000,000	11,000	11,000		0.37 *UJ*	0.39 *U*	0.45 *U*	0.51 *UJ*
Styrene	100425					0.21 *UJ*	0.22 *U*	0.26 *U*	0.29 *UJ*
tert-Butylbenzene	98066	1,000,000	5,900	5,900		0.44 *UJ*	0.47 *U*	0.54 *U*	0.61 *UJ*
Toluene	108883	1,000,000	700	700		0.32 *UJ*	0.34 *U*	0.39 *U*	0.44 *UJ*
Tetrachloroethane	127184	300,000	1,300	1,300		0.57 *UJ*	0.60 *U*	0.70 *U*	0.78 *UJ*
trans-1,2-Dichloroethene	156605	1,000,000	190	190		0.44 *UJ*	0.46 *U*	0.54 *U*	0.60 *UJ*
trans-1,3-Dichloropropene	10061026					1.90 *UJ*	2.00 *U*	2.30 *U*	2.60 *UJ*
Trichloroethene	79016	400,000	470	470		0.94 *UJ*	0.99 *U*	1.10 *U*	1.30 *UJ*
Trichlorotrifluoroethane	76131					0.97 *UJ*	1.00 *U*	1.20 *U*	1.30 *UJ*
Trichlorofluoromethane	75694					0.40 *UJ*	0.42 *U*	0.49 *U*	0.55 *UJ*
Vinyl Chloride	75014	27,000	20	20		0.52 *UJ*	0.55 *U*	0.64 *U*	0.71 *UJ*
Xylenes	1330207	1,000,000	1,600	260		0.72 *UJ*	0.75 *U*	0.88 *U*	0.98 *UJ*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS6	SS6	SS6	SS7
					Sample Identification	SS6 (0-6)	SS6 (12-24)	SS6 (6-12)	SS7 (0-2)
					Laboratory ID	480-200248-14	480-200248-16	480-200248-15	480-200156-11
					Sample Date	2022-07-29 02:07:00	2022-07-29 02:07:00	2022-07-29 02:07:00	2022-07-27 04:07:00
Metals (µg/kg)									
Arsenic	7440382	16,000	16,000	13,000		**15,700**	3,400	6,600	10,000
Lead	7439921	3,900,000	450,000	63,000		**656,000**	**74,400**	**84,000**	42,800
Cadmium	7440439	60,000	7,500	2,500		34 *UJ*	380	330	37 *U*
Aluminum	7429905					6,930,000	5,410,000	6,350,000	8,790,000
Antimony	7440360					1,600 *J*	10,200 *J*	7,400 *J*	910 *J*
Barium	7440393	10,000,000	820,000	350,000		70,500	22,600	38,000	95,700
Beryllium	7440417	2,700,000	47,000	7,200		460	230	330	490
Calcium	7440702					1,480,000	572,000	833,000	2,060,000
Chromium	7440473					14,200	24,500	16,300	11,600
Cobalt	7440484					7,000	7,300	7,200	7,900
Copper	7440508	10,000,000	1,720,000	50,000		**83,800**	36,800	**67,900**	28,300
Iron	7439896					44,500,000	137,000,000	95,800,000	18,100,000
Magnesium	7439954					1,250,000	825,000	981,000	2,380,000
Manganese	7439965	10,000,000	2,000,000	1,600,000		415,000	**1,950,000**	874,000	415,000
Mercury	7439976	5,700	730	180		73	16 *J*	29	64
Nickel	7440020	10,000,000	130,000	30,000		14,600	11,300 *J*	12,300	17,300
Potassium	7440097					1,210,000	554,000	847,000	1,480,000 *J+*
Selenium	7782492	6,800,000	4,000	3,900		2,300 *J*	1,100 *J*	1,100 *J*	760 *J*
Silver	7440224	6,800,000	8,300	2,000		230 *U*	210 *U*	210 *U*	240 *U*
Sodium	7440235					39,700 *J*	56,400 *J*	50,900 *J*	48,500 *U*
Thallium	7440280					340 *U*	310 *U*	320 *U*	370 *U*
Vanadium	7440622					18,800	40,300	27,700	14,700
Zinc	7440666	10,000,000	2,480,000	109,000		50,400	41,400	43,300	61,000
Polycyclic Aromatic Hydrocarbons (µg/kg)									
2-Methylnaphthalene	91576					37 *U*	35 *U*	35 *U*	39 *U*
Acenaphthene	83329	1,000,000	98,000	20,000		27 *U*	26 *U*	26 *U*	29 *U*
Acenaphthylene	208968	1,000,000	107,000	100,000		69 *J*	23 *U*	23 *U*	71 *J*
Anthracene	120127	1,000,000	1,000,000	100,000		63 *J*	43 *U*	44 *U*	49 *U*
Benz[a]anthracene	56553	11,000	1,000	1,000		220	18 *U*	56 *J*	180 *J*
Benzo[a]pyrene	50328	1,100	22,000	1,000		230	26 *U*	45 *J*	190 *J*
Benzo[b]fluoranthene	205992	11,000	1,700	1,000		340	52 *J*	78 *J*	320
Benzo[g,h,i]perylene	191242	1,000,000	1,000,000	100,000		200	19 *U*	34 *J*	150 *J*
Benzo[k]fluoranthene	207089	110,000	1,700	800		120 *J*	23 *U*	38 *J*	130 *J*
Chrysene	218019	110,000	1,000	1,000		330	39 *U*	66 *J*	250
Dibenz[a,h]anthracene	53703	1,100	1,000,000	330		54 *J*	31 *U*	31 *U*	51 *J*
Dibenzofuran	132649	1,000,000	210,000	7,000		22 *U*	21 *U*	21 *U*	23 *U*
Fluoranthene	206440	1,000,000	1,000,000	100,000		360	19 *U*	120 *J*	290

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS6	SS6	SS6	SS7
					Sample Identification	SS6 (0-6)	SS6 (12-24)	SS6 (6-12)	SS7 (0-2)
					Laboratory ID	480-200248-14	480-200248-16	480-200248-15	480-200156-11
					Sample Date	2022-07-29 02:07:00	2022-07-29 02:07:00	2022-07-29 02:07:00	2022-07-27 04:07:00
Fluorene	86737	1,000,000	386,000	30,000		22 *U*	21 *U*	21 *U*	23 *U*
Indeno[1,2,3-cd]pyrene	193395	11,000	8,200	500		180 *J*	22 *U*	27 *J*	140 *J*
Naphthalene	91203	1,000,000	12,000	12,000		30 *U*	23 *U*	23 *U*	26 *U*
Phenanthrene	85018	1,000,000	1,000,000	100,000		210	26 *U*	56 *J*	120 *J*
Pyrene	129000	1,000,000	1,000,000	100,000		410	21 *U*	96 *J*	250
Per- and Polyfluoroalkyl Substances (µg/kg)									
6:2 fluorotelomer sulfonate	27619972								0.064 *UJ*
8:2 fluorotelomer sulfonate	39108344								0.042 *UJ*
2-(N-ethyl-perfluorooctane sulfonamido) acetate									0.094 *UJ*
Perfluorobutyric acid	375224								0.370 *UJ*
2-(N-methyl-perfluorooctane sulfonamido) acetic acid									0.120 *UJ*
Perfluorooctanoic acid	335671	600	0.8	0.66					0.065 *UJ*
Perfluorooctane sulfonic acid	1763231	440	1	0.88					0.120 *UJ*
Perfluorobutane Sulfonic Acid	375735								0.037 *UJ*
Perfluorodecanoic Acid	335762								0.039 *NJ*
Perfluorododecanoic Acid	307551								0.028 *UJ*
Perfluorodecanesulfonic acid	335773								0.036 *J*
Perfluoroheptanoic Acid	375859								0.044 *UJ*
Perfluoroheptanesulfonic acid	375928								0.068 *J*
Perfluorohexanoic Acid	307244								0.130 *NJ*
Perfluorohexane Sulfonic Acid	355464								0.046 *UJ*
Perfluorononanoic Acid	375951								0.063 *J*
Perfluorooctane sulfonamide	754916								0.038 *UJ*
Perfluoropentanoic Acid	2706903								0.062 *UJ*
Perfluorotetradecanoic Acid	376067								0.029 *UJ*
Perfluorotridecanoic Acid	72629948								0.028 *UJ*
Perfluoroundecanoic Acid	2058948								0.042 *J*
Semivolatile Organic Compounds (µg/kg)									
Atrazine	1912249					65 *U*	61 *U*	61 *U*	69 *U*
Carbazole	86748					22 *U*	21 *U*	21 *U*	23 *U*
2,4,5-Trichlorophenol	95954					50 *U*	48 *U*	48 *U*	53 *U*
2,4,6-Trichlorophenol	88062					37 *U*	35 *U*	35 *U*	39 *U*
2,4-Dichlorophenol	120832					20 *U*	19 *U*	19 *U*	21 *U*
2-Chlorophenol	95578					34 *U*	32 *U*	32 *U*	36 *U*
Pentachlorophenol	87865	55,000	800	800		190 *U*	180 *U*	180 *U*	200 *U*
1,1'-Biphenyl	92524					27 *U*	26 *U*	26 *U*	29 *U*
2,2'-oxybis(1-Chloropropane)	108601					37 *U*	35 *U*	35 *U*	39 *U*
2,4-Dimethylphenol	105679					45 *U*	42 *U*	42 *U*	48 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS6	SS6	SS6	SS7
					Sample Identification	SS6 (0-6)	SS6 (12-24)	SS6 (6-12)	SS7 (0-2)
					Laboratory ID	480-200248-14	480-200248-16	480-200248-15	480-200156-11
					Sample Date	2022-07-29 02:07:00	2022-07-29 02:07:00	2022-07-29 02:07:00	2022-07-27 04:07:00
2,4-Dinitrophenol	51285					860 *U*	810 *U*	810 *U*	910 *U*
2,4-Dinitrotoluene	121142					38 *U*	36 *U*	36 *U*	41 *U*
2,6-Dinitrotoluene	606202					22 *U*	21 *U*	21 *U*	23 *U*
2-Chloronaphthalene	91587					31 *U*	29 *U*	29 *U*	33 *U*
2-Methylphenol	95487	1,000,000	330	330		22 *U*	21 *U*	21 *U*	23 *U*
2-Nitroaniline	88744					27 *U*	26 *U*	26 *U*	29 *U*
2-Nitrophenol	88755					53 *U*	50 *U*	50 *U*	56 *U*
3,3'-Dichlorobenzidine	91941					220 *U*	210 *U*	210 *U*	230 *U*
3-Nitroaniline	99092					51 *U*	49 *U*	49 *U*	55 *U*
4,6-Dinitro-2-methylphenol	534521					190 *U*	180 *U*	180 *U*	200 *U*
4-Bromophenyl-phenylether	101553					26 *U*	25 *U*	25 *U*	28 *U*
4-Chloro-3-methylphenol	59507					46 *U*	43 *U*	44 *U*	49 *U*
4-Chloroaniline	106478					46 *U*	43 *U*	44 *U*	49 *U*
4-Chlorophenyl-phenyl ether	7005723					23 *U*	22 *U*	22 *U*	24 *U*
4-Methylphenol	106445	1,000,000	330	330		22 *U*	21 *U*	21 *U*	23 *U*
4-Nitroaniline	100016					97 *U*	92 *U*	92 *U*	100 *U*
4-Nitrophenol	100027					130 *U*	120 *U*	120 *U*	140 *U*
Acetophenone	98862					25 *U*	24 *U*	24 *U*	27 *U*
Benzaldehyde	100527					150 *U*	140 *U*	140 *U*	160 *U*
Bis(2-chloroethyl)ether	111444					24 *U*	23 *U*	23 *U*	26 *U*
bis(2-Chloroethoxy)methane	111911					39 *U*	37 *U*	37 *U*	42 *U*
bis(2-Ethylhexyl)phthalate	117817					64 *U*	60 *U*	60 *U*	67 *U*
Benzyl n-butyl phthalate	85687					31 *U*	29 *U*	29 *U*	33 *U*
Caprolactam	105602					56 *U*	53 *U*	53 *U*	59 *U*
Diethyl phthalate	84662					24 *U*	23 *U*	23 *U*	26 *U*
Dimethyl phthalate	131113					22 *U*	21 *U*	21 *U*	23 *U*
Di-n-butyl phthalate	84742					32 *U*	30 *U*	30 *U*	34 *U*
Di-n-octylphthalate	117840					22 *U*	21 *U*	21 *U*	23 *U*
Hexachloroethane	67721					24 *U*	23 *U*	23 *U*	26 *U*
Hexachlorobenzene	118741	12,000	3,200	330		25 *U*	24 *U*	24 *U*	27 *U*
Hexachlorobutadiene	87683					27 *U*	26 *U*	26 *U*	29 *U*
Hexachlorocyclopentadiene	77474					25 *U*	24 *U*	24 *U*	27 *U*
Isophorone	78591					39 *U*	37 *U*	37 *U*	42 *U*
Nitrobenzene	98953					21 *U*	20 *U*	20 *U*	22 *U*
N-Nitrosodi-n-propylamine	621647					32 *U*	30 *U*	30 *U*	34 *U*
N-Nitrosodiphenylamine	86306					150 *U*	140 *U*	140 *U*	160 *U*
Phenol	108952	1,000,000	330	330		28 *U*	27 *U*	27 *U*	30 *U*
1,4-Dioxane	123911	250,000	100	100					64 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS6	SS6	SS6	SS7
					Sample Identification	SS6 (0-6)	SS6 (12-24)	SS6 (6-12)	SS7 (0-2)
					Laboratory ID	480-200248-14	480-200248-16	480-200248-15	480-200156-11
					Sample Date	2022-07-29 02:07:00	2022-07-29 02:07:00	2022-07-29 02:07:00	2022-07-27 04:07:00
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	630206					0.68 *UJ*	0.49 *UJ*	0.51 *UJ*	0.86 *U*
1,1,1-Trichloroethane	71556	1,000,000	680	680		0.49 *UJ*	0.35 *UJ*	0.37 *UJ*	0.62 *U*
1,1,2,2-Tetrachloroethane	79345					1.10 *UJ*	0.79 *UJ*	0.83 *UJ*	1.40 *UJ*
1,1,2-Trichloroethane	79005					0.88 *UJ*	0.63 *UJ*	0.66 *UJ*	1.10 *U*
1,1-Dichloroethane	75343	480,000	270	270		0.83 *UJ*	0.59 *UJ*	0.62 *UJ*	1.00 *U*
1,1-Dichloroethene	75354	1,000,000	330	330		0.83 *UJ*	0.59 *UJ*	0.62 *UJ*	1.00 *U*
1,2,3-Trimethylbenzene	526738					1.40 *UJ*	0.99 *UJ*	1.00 *UJ*	1.70 *U*
1,2,4-Trimethylbenzene	95636	380,000	3,600	3,600		1.30 *UJ*	0.93 *UJ*	0.98 *UJ*	1.60 *UJ*
1,2,4-Trichlorobenzene	120821					0.41 *UJ*	0.30 *UJ*	0.31 *UJ*	0.52 *UJ*
1,2-Dichlorobenzene	95501	1,000,000	1,100	1,100		0.53 *UJ*	0.38 *UJ*	0.40 *UJ*	0.67 *UJ*
1,3-Dichlorobenzene	541731	560,000	2,400	2,400		0.35 *UJ*	0.25 *UJ*	0.26 *UJ*	0.44 *UJ*
1,4-Dichlorobenzene	106467	250,000	1,800	1,800		0.95 *UJ*	0.68 *UJ*	0.71 *UJ*	1.20 *UJ*
1,2-Dibromo-3-chloropropane	96128					3.40 *UJ*	2.40 *UJ*	2.50 *UJ*	4.30 *UJ*
1,2-Dibromoethane	106934					0.87 *UJ*	0.62 *UJ*	0.65 *UJ*	1.10 *U*
1,2-Dichloroethane	107062	60,000	20	20		0.34 *UJ*	0.24 *UJ*	0.26 *UJ*	0.43 *U*
1,2-Dichloropropane	78875					3.40 *UJ*	2.40 *UJ*	2.50 *UJ*	4.30 *U*
1,3,5-Trimethylbenzene	108678	380,000	8,400	8,400		0.44 *UJ*	0.31 *UJ*	0.33 *UJ*	0.55 *UJ*
2-Hexanone	591786					3.40 *UJ*	2.40 *UJ*	2.50 *UJ*	4.30 *U*
4-Methyl-2-pentanone	108101					2.20 *UJ*	1.60 *UJ*	1.70 *UJ*	2.80 *U*
Acetone	67641	1,000,000	50	50		5.70 *UJ*	23 *J*	7.70 *J*	7.20 *U*
Benzene	71432	89,000	60	60		0.33 *UJ*	0.26 *J*	0.25 *UJ*	0.42 *U*
Bromodichloromethane	75274					0.91 *UJ*	0.65 *UJ*	0.68 *UJ*	1.10 *U*
Bromomethane	74839					0.61 *UJ*	0.44 *UJ*	0.46 *UJ*	0.77 *U*
Bromoform	75252					3.40 *UJ*	2.40 *UJ*	2.50 *UJ*	4.30 *U*
Carbon disulfide	75150					3.40 *UJ*	2.40 *UJ*	2.50 *UJ*	4.30 *U*
Carbon Tetrachloride	56235	44,000	760	760		0.66 *UJ*	0.47 *UJ*	0.49 *UJ*	0.83 *U*
Chloroform	67663	700,000	370	370		0.42 *UJ*	0.30 *UJ*	0.31 *UJ*	0.53 *U*
cis-1,2-Dichloroethene	156592	1,000,000	250	250		0.87 *UJ*	0.62 *UJ*	0.65 *UJ*	1.10 *U*
cis-1,3-Dichloropropene	10061015					0.98 *UJ*	0.70 *UJ*	0.73 *UJ*	1.20 *U*
Chlorobenzene	108907	1,000,000	1,100	1,100		0.90 *UJ*	0.64 *UJ*	0.67 *UJ*	1.10 *U*
Chloroethane	75003					1.50 *UJ*	1.10 *UJ*	1.20 *UJ*	1.90 *U*
Chloromethane	74873					0.41 *UJ*	0.29 *UJ*	0.31 *UJ*	0.52 *U*
Cyclohexane	110827					0.95 *UJ*	0.68 *UJ*	0.71 *UJ*	1.20 *U*
Dibromochloromethane	124481					0.87 *UJ*	0.62 *UJ*	0.65 *UJ*	1.10 *U*
Dichlorodifluoromethane	75718					0.56 *UJ*	0.40 *UJ*	0.42 *UJ*	0.71 *U*
Ethylbenzene	100414	780,000	1,000	1,000		0.47 *UJ*	0.33 *UJ*	0.35 *UJ*	0.59 *U*
Isopropylbenzene	98828					1.00 *UJ*	0.73 *UJ*	0.77 *UJ*	1.30 *UJ*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS6	SS6	SS6	SS7
					Sample Identification	SS6 (0-6)	SS6 (12-24)	SS6 (6-12)	SS7 (0-2)
					Laboratory ID	480-200248-14	480-200248-16	480-200248-15	480-200156-11
					Sample Date	2022-07-29 02:07:00	2022-07-29 02:07:00	2022-07-29 02:07:00	2022-07-27 04:07:00
2-Butanone	78933	1,000,000	120	120		2.50 *UJ*	5.50 *J*	2.90 *J*	3.10 *U*
m,p-Xylene	179601231					1.10 *UJ*	0.82 *UJ*	0.86 *UJ*	1.40 *U*
Methyl Acetate	79209					4.1 *UJ*	2.9 *UJ*	3.1 *UJ*	5.2 *U*
Methylcyclohexane	108872					1.00 *UJ*	0.74 *UJ*	0.77 *UJ*	1.30 *U*
Methylene Chloride	75092	1,000,000	50	50		3.10 *UJ*	2.20 *UJ*	12.00 *J*	3.90 *U*
Methyl tert-butyl ether	1634044	1,000,000	930	930		0.67 *UJ*	0.48 *UJ*	0.50 *UJ*	0.84 *U*
n-Butylbenzene	104518	1,000,000	12,000	12,000		0.59 *UJ*	0.42 *UJ*	0.44 *UJ*	0.75 *UJ*
n-Propylbenzene	103651	1,000,000	3,900	3,900		0.54 *UJ*	0.39 *UJ*	0.41 *UJ*	0.69 *UJ*
o-Xylene	95476					0.89 *UJ*	0.63 *UJ*	0.66 *UJ*	1.10 *U*
sec-Butylbenzene	135988	1,000,000	11,000	11,000		0.59 *UJ*	0.42 *UJ*	0.44 *UJ*	0.75 *UJ*
Styrene	100425					0.34 *UJ*	0.24 *UJ*	0.25 *UJ*	0.43 *U*
tert-Butylbenzene	98066	1,000,000	5,900	5,900		0.71 *UJ*	0.50 *UJ*	0.53 *UJ*	0.89 *UJ*
Toluene	108883	1,000,000	700	700		0.51 *UJ*	0.37 *UJ*	0.38 *UJ*	0.65 *U*
Tetrachloroethane	127184	300,000	1,300	1,300		0.91 *UJ*	0.65 *UJ*	0.68 *UJ*	1.10 *U*
trans-1,2-Dichloroethene	156605	1,000,000	190	190		0.70 *UJ*	0.50 *UJ*	0.53 *UJ*	0.88 *U*
trans-1,3-Dichloropropene	10061026					3.00 *UJ*	2.10 *UJ*	2.20 *UJ*	3.80 *U*
Trichloroethene	79016	400,000	470	470		1.50 *UJ*	1.10 *UJ*	1.10 *UJ*	1.90 *U*
Trichlorotrifluoroethane	76131					1.60 *UJ*	1.10 *UJ*	1.20 *UJ*	2.00 *U*
Trichlorofluoromethane	75694					0.64 *UJ*	0.46 *UJ*	0.48 *UJ*	0.81 *U*
Vinyl Chloride	75014	27,000	20	20		0.83 *UJ*	0.59 *UJ*	0.62 *UJ*	1.00 *U*
Xylenes	1330207	1,000,000	1,600	260		1.10 *UJ*	0.82 *UJ*	0.86 *UJ*	1.40 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS7	SS7	SS7
					Sample Identification	SS7 (0-6)	SS7 (12-24)	SS7 (6-12)
					Laboratory ID	480-200156-8	480-200156-10	480-200156-9
					Sample Date	2022-07-27 05:07:00	2022-07-27 05:07:00	2022-07-27 05:07:00
Metals (µg/kg)								
Arsenic	7440382	16,000	16,000	13,000		10,700	**16,300**	**14,600**
Lead	7439921	3,900,000	450,000	63,000		51,500	**299,000**	**140,000**
Cadmium	7440439	60,000	7,500	2,500		210 *J+*	750	510
Aluminum	7429905					8,700,000	8,610,000	8,520,000
Antimony	7440360					1,400 *J-*	1,000 *J-*	1,200 *J-*
Barium	7440393	10,000,000	820,000	350,000		77,800	88,200	107,000
Beryllium	7440417	2,700,000	47,000	7,200		400	480	440
Calcium	7440702					2,820,000	13,700,000	13,100,000
Chromium	7440473					11,900	13,100	13,700
Cobalt	7440484					8,700	8,700	9,200
Copper	7440508	10,000,000	1,720,000	50,000		38,900	40,800	45,700
Iron	7439896					22,800,000	21,600,000	23,900,000
Magnesium	7439954					2,760,000	3,940,000	6,700,000
Manganese	7439965	10,000,000	2,000,000	1,600,000		407,000	436,000	531,000
Mercury	7439976	5,700	730	180		81	**260**	140
Nickel	7440020	10,000,000	130,000	30,000		20,400	20,200	20,400
Potassium	7440097					508,000	1,040,000	521,000
Selenium	7782492	6,800,000	4,000	3,900		450 *U*	740 *U*	410 *U*
Silver	7440224	6,800,000	8,300	2,000		220 *U*	210 *U*	210 *U*
Sodium	7440235					33,300 *J*	87,500 *J*	50,700 *J*
Thallium	7440280					340 *U*	320 *U*	310 *U*
Vanadium	7440622					14,600	19,700	16,600
Zinc	7440666	10,000,000	2,480,000	109,000		69,500	104,000	86,500
Polycyclic Aromatic Hydrocarbons (µg/kg)								
2-Methylnaphthalene	91576					36 *U*	360 *U*	170 *U*
Acenaphthene	83329	1,000,000	98,000	20,000		27 *U*	260 *U*	130 *U*
Acenaphthylene	208968	1,000,000	107,000	100,000		79 *J*	420 *J*	120 *J*
Anthracene	120127	1,000,000	1,000,000	100,000		48 *J*	800 *J*	220 *U*
Benz[a]anthracene	56553	11,000	1,000	1,000		280	**1,900**	430 *J*
Benzo[a]pyrene	50328	1,100	22,000	1,000		240	**1,900**	490 *J*
Benzo[b]fluoranthene	205992	11,000	1,700	1,000		450	**2,600**	730 *J*
Benzo[g,h,i]perylene	191242	1,000,000	1,000,000	100,000		210	1,400 *J*	410 *J*
Benzo[k]fluoranthene	207089	110,000	1,700	800		170 *J*	**1,100** *J*	250 *J*
Chrysene	218019	110,000	1,000	1,000		350	**2,000**	480 *J*
Dibenz[a,h]anthracene	53703	1,100	1,000,000	330		71 *J*	**430** *J*	160 *J*
Dibenzofuran	132649	1,000,000	210,000	7,000		26 *J*	210 *U*	100 *U*
Fluoranthene	206440	1,000,000	1,000,000	100,000		500	4,400	730 *J*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS7	SS7	SS7
					Sample Identification	SS7 (0-6)	SS7 (12-24)	SS7 (6-12)
					Laboratory ID	480-200156-8	480-200156-10	480-200156-9
					Sample Date	2022-07-27 05:07:00	2022-07-27 05:07:00	2022-07-27 05:07:00
Fluorene	86737	1,000,000	386,000	30,000		21 *U*	290 *J*	100 *U*
Indeno[1,2,3-cd]pyrene	193395	11,000	8,200	500		210	**1,500** *J*	420 *J*
Naphthalene	91203	1,000,000	12,000	12,000		34 *U*	230 *U*	110 *U*
Phenanthrene	85018	1,000,000	1,000,000	100,000		160 *J*	2,900	290 *J*
Pyrene	129000	1,000,000	1,000,000	100,000		410	3,400	630 *J*
Per- and Polyfluoroalkyl Substances (µg/kg)								
6:2 fluorotelomer sulfonate	27619972					0.060 *UJ*	0.061 *UJ*	0.058 *UJ*
8:2 fluorotelomer sulfonate	39108344					0.039 *UJ*	0.039 *UJ*	0.038 *UJ*
2-(N-ethyl-perfluorooctane sulfonamido) acetate						0.087 *UJ*	0.088 *UJ*	0.085 *UJ*
Perfluorobutyric acid	375224					0.350 *UJ*	0.350 *UJ*	0.340 *UJ*
2-(N-methyl-perfluorooctane sulfonamido) acetic acid						0.120 *UJ*	0.120 *UJ*	0.110 *UJ*
Perfluorooctanoic acid	335671	600	0.8	0.66		0.092 *J*	0.062 *UJ*	0.060 *J*
Perfluorooctane sulfonic acid	1763231	440	1	0.88		0.120 *NJ*	0.230 *J*	0.120 *J*
Perfluorobutane Sulfonic Acid	375735					0.035 *UJ*	0.035 *UJ*	0.034 *UJ*
Perfluorodecanoic Acid	335762					0.043 *J*	0.030 *UJ*	0.029 *UJ*
Perfluorododecanoic Acid	307551					0.026 *J*	0.027 *UJ*	0.026 *UJ*
Perfluorodecanesulfonic acid	335773					0.021 *J*	0.072 *J*	0.022 *J*
Perfluoroheptanoic Acid	375859					0.053 *J*	0.042 *UJ*	0.040 *UJ*
Perfluoroheptanesulfonic acid	375928					0.075 *J*	0.024 *UJ*	0.024 *UJ*
Perfluorohexanoic Acid	307244					0.150 *NJ*	0.049 *UJ*	0.047 *UJ*
Perfluorohexane Sulfonic Acid	355464					0.043 *UJ*	0.044 *UJ*	0.042 *UJ*
Perfluorononanoic Acid	375951					0.078 *J*	0.036 *UJ*	0.035 *UJ*
Perfluorooctane sulfonamide	754916					0.036 *UJ*	0.036 *UJ*	0.035 *UJ*
Perfluoropentanoic Acid	2706903					0.058 *UJ*	0.059 *UJ*	0.056 *UJ*
Perfluorotetradecanoic Acid	376067					0.027 *UJ*	0.028 *UJ*	0.027 *UJ*
Perfluorotridecanoic Acid	72629948					0.026 *J*	0.027 *UJ*	0.026 *UJ*
Perfluoroundecanoic Acid	2058948					0.051 *J*	0.029 *UJ*	0.028 *UJ*
Semivolatile Organic Compounds (µg/kg)								
Atrazine	1912249					63 *U*	620 *U*	300 *U*
Carbazole	86748					21 *U*	370 *J*	100 *U*
2,4,5-Trichlorophenol	95954					49 *U*	480 *U*	240 *U*
2,4,6-Trichlorophenol	88062					36 *U*	360 *U*	170 *U*
2,4-Dichlorophenol	120832					19 *U*	190 *U*	92 *U*
2-Chlorophenol	95578					33 *U*	330 *U*	160 *U*
Pentachlorophenol	87865	55,000	800	800		180 *U*	1,800 *U*	870 *U*
1,1'-Biphenyl	92524					27 *U*	260 *U*	130 *U*
2,2'-oxybis(1-Chloropropane)	108601					36 *U*	360 *U*	170 *U*
2,4-Dimethylphenol	105679					44 *U*	430 *U*	210 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS7	SS7	SS7
					Sample Identification	SS7 (0-6)	SS7 (12-24)	SS7 (6-12)
					Laboratory ID	480-200156-8	480-200156-10	480-200156-9
					Sample Date	2022-07-27 05:07:00	2022-07-27 05:07:00	2022-07-27 05:07:00
2,4-Dinitrophenol	51285					840 *U*	8,200 *U*	4,000 *U*
2,4-Dinitrotoluene	121142					38 *U*	370 *U*	180 *U*
2,6-Dinitrotoluene	606202					21 *U*	210 *U*	100 *U*
2-Chloronaphthalene	91587					30 *U*	290 *U*	140 *U*
2-Methylphenol	95487	1,000,000	330	330		21 *U*	210 *U*	100 *U*
2-Nitroaniline	88744					27 *U*	260 *U*	130 *U*
2-Nitrophenol	88755					52 *U*	500 *U*	250 *U*
3,3'-Dichlorobenzidine	91941					210 *U*	2,100 *U*	1,000 *U*
3-Nitroaniline	99092					50 *U*	490 *U*	240 *U*
4,6-Dinitro-2-methylphenol	534521					180 *U*	1,800 *U*	870 *U*
4-Bromophenyl-phenylether	101553					26 *U*	250 *U*	120 *U*
4-Chloro-3-methylphenol	59507					45 *U*	440 *U*	220 *U*
4-Chloroaniline	106478					45 *U*	440 *U*	220 *U*
4-Chlorophenyl-phenyl ether	7005723					23 *U*	220 *U*	110 *U*
4-Methylphenol	106445	1,000,000	330	330		21 *U*	210 *U*	100 *U*
4-Nitroaniline	100016					96 *U*	930 *U*	460 *U*
4-Nitrophenol	100027					130 *U*	1,200 *U*	610 *U*
Acetophenone	98862					25 *U*	240 *U*	120 *U*
Benzaldehyde	100527					140 *U*	1,400 *U*	690 *U*
Bis(2-chloroethyl)ether	111444					24 *U*	230 *U*	110 *U*
bis(2-Chloroethoxy)methane	111911					39 *U*	380 *U*	180 *U*
bis(2-Ethylhexyl)phthalate	117817					62 *U*	610 *U*	300 *U*
Benzyl n-butyl phthalate	85687					30 *U*	290 *U*	140 *U*
Caprolactam	105602					55 *U*	540 *U*	260 *U*
Diethyl phthalate	84662					24 *U*	230 *U*	110 *U*
Dimethyl phthalate	131113					21 *U*	210 *U*	100 *U*
Di-n-butyl phthalate	84742					31 *U*	300 *U*	150 *U*
Di-n-octylphthalate	117840					21 *U*	210 *U*	100 *U*
Hexachloroethane	67721					24 *U*	230 *U*	110 *U*
Hexachlorobenzene	118741	12,000	3,200	330		25 *U*	240 *U*	120 *U*
Hexachlorobutadiene	87683					27 *U*	260 *U*	130 *U*
Hexachlorocyclopentadiene	77474					25 *U*	240 *U*	120 *U*
Isophorone	78591					39 *U*	380 *U*	180 *U*
Nitrobenzene	98953					20 *U*	200 *U*	97 *U*
N-Nitrosodi-n-propylamine	621647					31 *U*	300 *U*	150 *U*
N-Nitrosodiphenylamine	86306					150 *U*	1,400 *U*	710 *U*
Phenol	108952	1,000,000	330	330		28 *U*	270 *U*	130 *U*
1,4-Dioxane	123911	250,000	100	100		59 *U*	580 *U*	280 *U*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS7	SS7	SS7
					Sample Identification	SS7 (0-6)	SS7 (12-24)	SS7 (6-12)
					Laboratory ID	480-200156-8	480-200156-10	480-200156-9
					Sample Date	2022-07-27 05:07:00	2022-07-27 05:07:00	2022-07-27 05:07:00
Volatiles (µg/kg)								
1,1,1,2-Tetrachloroethane	630206					0.59 *UJ*	0.55 *UJ*	0.55 *UJ*
1,1,1-Trichloroethane	71556	1,000,000	680	680		0.43 *UJ*	0.40 *UJ*	0.40 *UJ*
1,1,2,2-Tetrachloroethane	79345					0.95 *UJ*	*R*	0.89 *UJ*
1,1,2-Trichloroethane	79005					0.76 *UJ*	0.72 *UJ*	0.71 *UJ*
1,1-Dichloroethane	75343	480,000	270	270		0.72 *UJ*	0.67 *UJ*	0.67 *UJ*
1,1-Dichloroethene	75354	1,000,000	330	330		0.72 *UJ*	0.67 *UJ*	0.67 *UJ*
1,2,3-Trimethylbenzene	526738					1.20 *UJ*	1.10 *UJ*	1.10 *UJ*
1,2,4-Trimethylbenzene	95636	380,000	3,600	3,600		1.10 *UJ*	*R*	1.10 *UJ*
1,2,4-Trichlorobenzene	120821					0.36 *UJ*	*R*	0.33 *UJ*
1,2-Dichlorobenzene	95501	1,000,000	1,100	1,100		0.46 *UJ*	*R*	0.43 *UJ*
1,3-Dichlorobenzene	541731	560,000	2,400	2,400		0.30 *UJ*	*R*	0.28 *UJ*
1,4-Dichlorobenzene	106467	250,000	1,800	1,800		0.82 *UJ*	*R*	0.77 *UJ*
1,2-Dibromo-3-chloropropane	96128					2.90 *UJ*	*R*	2.70 *UJ*
1,2-Dibromoethane	106934					0.75 *UJ*	0.71 *UJ*	0.70 *UJ*
1,2-Dichloroethane	107062	60,000	20	20		0.29 *UJ*	0.28 *UJ*	0.28 *UJ*
1,2-Dichloropropane	78875					2.90 *UJ*	2.80 *UJ*	2.70 *UJ*
1,3,5-Trimethylbenzene	108678	380,000	8,400	8,400		0.38 *UJ*	*R*	0.35 *UJ*
2-Hexanone	591786					2.90 *UJ*	2.80 *UJ*	2.70 *UJ*
4-Methyl-2-pentanone	108101					1.90 *UJ*	1.80 *UJ*	1.80 *UJ*
Acetone	67641	1,000,000	50	50		4.90 *UJ*	7.90 *J*	4.60 *UJ*
Benzene	71432	89,000	60	60		0.29 *UJ*	0.27 *UJ*	0.27 *UJ*
Bromodichloromethane	75274					0.79 *UJ*	0.74 *UJ*	0.73 *UJ*
Bromomethane	74839					0.53 *UJ*	0.50 *UJ*	0.49 *UJ*
Bromoform	75252					2.90 *UJ*	2.80 *UJ*	2.70 *UJ*
Carbon disulfide	75150					2.90 *UJ*	2.80 *UJ*	2.70 *UJ*
Carbon Tetrachloride	56235	44,000	760	760		0.57 *UJ*	0.53 *UJ*	0.53 *UJ*
Chloroform	67663	700,000	370	370		0.36 *UJ*	0.34 *UJ*	0.34 *UJ*
cis-1,2-Dichloroethene	156592	1,000,000	250	250		0.75 *UJ*	0.70 *UJ*	0.70 *UJ*
cis-1,3-Dichloropropene	10061015					0.84 *UJ*	0.79 *UJ*	0.79 *UJ*
Chlorobenzene	108907	1,000,000	1,100	1,100		0.77 *UJ*	0.73 *UJ*	0.72 *UJ*
Chloroethane	75003					1.30 *UJ*	1.20 *UJ*	1.20 *UJ*
Chloromethane	74873					0.35 *UJ*	0.33 *UJ*	0.33 *UJ*
Cyclohexane	110827					0.82 *UJ*	0.77 *UJ*	0.77 *UJ*
Dibromochloromethane	124481					0.75 *UJ*	0.70 *UJ*	0.70 *UJ*
Dichlorodifluoromethane	75718					0.48 *UJ*	0.45 *UJ*	0.45 *UJ*
Ethylbenzene	100414	780,000	1,000	1,000		0.40 *UJ*	0.38 *UJ*	0.38 *UJ*
Isopropylbenzene	98828					0.88 *UJ*	*R*	0.83 *UJ*

Table 6-1. Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Protection of Groundwater	NYSDEC SCOS 2006 Unrestricted Use Soil	Sample Location	SS7	SS7	SS7
					Sample Identification	SS7 (0-6)	SS7 (12-24)	SS7 (6-12)
					Laboratory ID	480-200156-8	480-200156-10	480-200156-9
					Sample Date	2022-07-27 05:07:00	2022-07-27 05:07:00	2022-07-27 05:07:00
2-Butanone	78933	1,000,000	120	120		2.10 *UJ*	2.00 *UJ*	2.00 *UJ*
m,p-Xylene	179601231					0.99 *UJ*	0.92 *UJ*	0.92 *UJ*
Methyl Acetate	79209					3.5 *UJ*	4.7 *J*	3.3 *UJ*
Methylcyclohexane	108872					0.89 *UJ*	0.84 *UJ*	0.83 *UJ*
Methylene Chloride	75092	1,000,000	50	50		2.70 *UJ*	2.50 *UJ*	2.50 *UJ*
Methyl tert-butyl ether	1634044	1,000,000	930	930		0.58 *UJ*	0.54 *UJ*	0.54 *UJ*
n-Butylbenzene	104518	1,000,000	12,000	12,000		0.51 *UJ*	*R*	0.48 *UJ*
n-Propylbenzene	103651	1,000,000	3,900	3,900		0.47 *UJ*	*R*	0.44 *UJ*
o-Xylene	95476					0.77 *UJ*	0.72 *UJ*	0.72 *UJ*
sec-Butylbenzene	135988	1,000,000	11,000	11,000		0.51 *UJ*	*R*	0.48 *UJ*
Styrene	100425					0.29 *UJ*	0.28 *UJ*	0.27 *UJ*
tert-Butylbenzene	98066	1,000,000	5,900	5,900		0.61 *UJ*	*R*	0.57 *UJ*
Toluene	108883	1,000,000	700	700		0.44 *UJ*	0.42 *UJ*	0.41 *UJ*
Tetrachloroethane	127184	300,000	1,300	1,300		0.79 *UJ*	0.74 *UJ*	0.74 *UJ*
trans-1,2-Dichloroethene	156605	1,000,000	190	190		0.61 *UJ*	0.57 *UJ*	0.57 *UJ*
trans-1,3-Dichloropropene	10061026					2.60 *UJ*	2.40 *UJ*	2.40 *UJ*
Trichloroethene	79016	400,000	470	470		1.30 *UJ*	1.20 *UJ*	1.20 *UJ*
Trichlorotrifluoroethane	76131					1.30 *UJ*	1.30 *UJ*	1.20 *UJ*
Trichlorofluoromethane	75694					0.55 *UJ*	0.52 *UJ*	0.52 *UJ*
Vinyl Chloride	75014	27,000	20	20		0.72 *UJ*	0.67 *UJ*	0.67 *UJ*
Xylenes	1330207	1,000,000	1,600	260		0.99 *UJ*	0.92 *UJ*	0.92 *UJ*

Notes:

Underlined = Exceeds NYSDEC SCOS 2006 Industrial Soil

Dark gray shading = Exceeds NYSDEC SCOS 2006 Protection of Groundwater

Bold = Exceeds NYSDEC SCO 2006 Unrestricted Use Soil

CAS = Chemical Abstract Service

NYSDEC = New York State Department of Environmental Conservation

Qualifiers:

J = The associated numerical value is an estimated quantity.

J- = The result is an estimated quantity, but the result may be biased low.

J+ = The result is an estimated quantity, but the result may be biased high.

NJ = The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value is the estimated concentration in the sample.

R = Rejected. The data are unusable.

U = The material was analyzed for, but was not detected.

UJ = The material was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

Table 6-2. Validated Analytical Results—Groundwater

Analyte	CAS Number	NYSDEC WQS 1998 Class GA	Sample Location	MW1	MW1	MW1	MW2	MW2	MW3	MW5	MW5
			Sample Identification	MW1-100522	FDUP-100522	MW1-013123	MW2-013123	MW2-013123	MW3-013123	MW5-013123	MW5-100522
			Laboratory ID	480-202448-3	480-202448-5	480-205868-5	480-205868-1	480-205868-2	480-205868-3	480-205868-4	480-202448-4
			Sample Date	10/5/2022	10/5/2022	1/31/2023	1/31/2023	1/31/2023	1/31/2023	1/31/2023	10/5/2022
Dissolved Metals (µg/L)											
Aluminum	7429905			60 *U*	60 *U*	60 *U*	60 *U*	60 *U*	60 *U*	60 *U*	60 *U*
Antimony	7440360			6.8 *U*	6.8 *U*	6.8 *U*	6.8 *U*	6.8 *U*	6.8 *U*	6.8 *U*	6.8 *U*
Arsenic	7440382			5.6 *U*	5.6 *U*	5.6 *U*	5.6 *U*	5.6 *U*	5.6 *U*	5.6 *U*	5.6 *U*
Barium	7440393			88	87	150	98	97	140	87	130
Beryllium	7440417			0.3 *U*	0.3 *U*	0.3 *U*	0.3 *U*	0.3 *U*	0.3 *U*	0.3 *U*	0.3 *U*
Cadmium	7440439			0.5 *U*	0.5 *U*	0.5 *U*	0.5 *U*	0.5 *U*	0.5 *U*	0.5 *U*	0.5 *U*
Calcium	7440702			41,000	40,800	61,500	80,300	80,400	57,500	99,100	143,000
Chromium	7440473			1 *U*	1 *U*	1 *U*	1 *U*	1 *U*	1 *U*	1 *U*	1 *U*
Cobalt	7440484			0.63 *U*	0.63 *U*	0.63 *U*	0.63 *U*	0.63 *U*	0.63 *U*	0.63 *U*	1.1 *J*
Copper	7440508			1.7 *U*	2.1 *U*	1.6 *U*	1.6 *U*	1.6 *U*	1.6 *U*	1.9 *J*	3.6 *U*
Iron	7439896			19 *U*	19 *U*	19 *U*	19 *J*	19 *U*	19 *U*	46 *J*	390
Lead	7439921			3 *U*	3 *U*	3 *U*	3 *U*	3 *U*	3 *U*	5.4 *J*	3 *U*
Magnesium	7439954			7,000	7,200	9,500	15,600	15,500	11,200	13,400	14,400
Manganese	7439965			440	450	360	140	130	46	890	4,700
Mercury	7439976			0.043 *U*	0.043 *U*	0.043 *U*	0.043 *U*	0.043 *U*	0.043 *U*	0.043 *U*	0.043 *U*
Nickel	7440020			1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*	1.6 *J*	2.5 *J*
Potassium	7440097			3,000	3,100	4,200	3,500	3,400	3,700	5,400	5,500
Selenium	7782492			8.7 *U*	8.7 *U*	8.7 *U*	8.7 *U*	8.7 *U*	8.7 *U*	9.3 *J*	8.7 *U*
Silver	7440224			1.7 *U*	1.7 *U*	1.7 *U*	1.7 *U*	1.7 *U*	1.7 *U*	1.7 *U*	1.7 *U*
Sodium	7440235			124,000	123,000	139,000	52,000	52,000	84,900	35,500	54,900
Thallium	7440280			10 *U*	10 *U*	10 *U*	10 *U*	10 *U*	10 *U*	10 *U*	10 *U*
Vanadium	7440622			1.5 *U*	1.5 *U*	1.5 *U*	1.5 *U*	1.5 *U*	1.5 *U*	1.5 *U*	1.5 *U*
Zinc	7440666			1.5 *U*	1.6 *J*	2.5 *J*	1.5 *U*	4.9 *J*	1.5 *J*	2.9 *J*	6.5 *J*
Total Metals (µg/L)											
Aluminum	7429905			200	60 *U*	60 *U*	120 *J*	60 *U*	60 *U*	60 *U*	410
Antimony	7440360	3		6.8 *U*	6.8 *U*	6.8 *U*	6.8 *U*	6.8 *U*	6.8 *U*	6.8 *U*	6.8 *U*
Arsenic	7440382	25		5.6 *U*	5.6 *U*	5.6 *U*	5.6 *U*	5.6 *U*	5.6 *U*	5.6 *U*	5.6 *U*
Barium	7440393	1,000		110	97	140	96	96	140	84	150
Beryllium	7440417	3		0.3 *U*	0.3 *U*	0.3 *U*	0.3 *U*	0.3 *U*	0.3 *U*	0.3 *U*	0.3 *U*
Cadmium	7440439	5		0.5 *U*	0.5 *U*	0.5 *U*	0.5 *U*	0.5 *U*	0.5 *U*	0.5 *U*	0.5 *U*
Calcium	7440702			47,900	41,500	58,700	79,000	77,900	56,700	94,200	149,000
Chromium	7440473	50		1 *U*	1 *U*	1 *J*	1 *U*	1 *U*	1 *U*	1 *U*	1 *U*
Cobalt	7440484			0.63 *U*	0.63 *U*	0.63 *U*	0.63 *U*	0.63 *U*	0.63 *U*	0.63 *U*	1.2 *J*
Copper	7440508	200		1.6 *U*	1.6 *U*	1.6 *U*	1.6 *U*	1.6 *U*	1.6 *U*	1.9 *J*	8.7 *J*
Iron	7439896			210	19 *U*	19 *U*	46 *J*	45 *J*	19 *J*	47 *J*	770
Lead	7439921	25		3.1 *J*	3 *U*	3 *U*	3 *U*	4.2 *J*	3 *U*	4.2 *J*	4.6 *J*
Magnesium	7439954	35,000		8,100	7,100	9,500	15,900	15,700	11,400	13,300	14,800
Manganese	7439965			560	450	360	140	150	55	870	4,700
Mercury	7439976	0.7		0.043 *U*	0.043 *U*	0.043 *U*	0.043 *U*	0.043 *U*	0.043 *U*	0.043 *U*	0.043 *U*
Nickel	7440020	100		1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*	1.3 *J*	2.5 *J*
Potassium	7440097			3,500	3,300	4,100	3,600	3,600	3,800	5,400	6,100
Selenium	7782492	10		8.7 *U*	8.7 *U*	8.7 *U*	8.7 *U*	8.7 *U*	8.7 *U*	8.8 *J*	8.7 *U*
Silver	7440224	50		1.7 *U*	1.7 *U*	1.7 *U*	1.7 *U*	1.7 *U*	1.7 *U*	1.7 *U*	1.7 *U*
Sodium	7440235	20,000		136,000	131,000	140,000	53,000	52,700	87,000	36,000	53,100
Thallium	7440280	0.5		10 *U*	10 *U*	10 *U*	10 *U*	10 *U*	10 *U*	10 *U*	10 *U*
Vanadium	7440622			1.5 *U*	1.5 *U*	1.5 *U*	1.5 *U*	1.5 *U*	1.5 *U*	1.5 *U*	1.5 *U*
Zinc	7440666	2,000		1.6 *J*	1.5 *U*	2.3 *J*	1.5 *U*	1.5 *U*	1.5 *J*	2.7 *J*	11
Polycyclic Aromatic Hydrocarbons (µg/L)											
2-Methylnaphthalene	91576			0.63 *U*	0.63 *U*	0.63 *U*	0.63 *U*	0.6 *U*	0.63 *U*	0.63 *U*	0.71 *U*
Acenaphthene	83329			0.43 *U*	0.43 *U*	0.43 *U*	0.43 *U*	0.41 *U*	0.43 *U*	0.44 *J*	0.49 *U*
Acenaphthylene	208968			0.4 *U*	0.4 *U*	0.4 *U*	0.4 *U*	0.38 *U*	0.4 *U*	0.4 *U*	0.45 *U*
Anthracene	120127	50		0.29 *U*	0.29 *U*	0.29 *U*	0.29 *U*	0.28 *U*	0.29 *U*	0.29 *U*	0.33 *U*
Benz[a]anthracene	56553	0.002		0.38 *U*	0.38 *U*	0.38 *U*	0.38 *U*	0.36 *U*	0.38 *U*	0.38 *U*	0.43 *U*
Benzo[a]pyrene	50328			0.49 *U*	0.49 *U*	0.49 *U*	0.49 *U*	0.47 *U*	0.49 *U*	0.49 *U*	0.56 *U*
Benzo[b]fluoranthene	205992	0.002		0.35 *U*	0.35 *U*	0.35 *U*	0.35 *U*	0.34 *U*	0.35 *U*	0.35 *U*	0.4 *U*

Table 6-2. Validated Analytical Results—Groundwater

Analyte	CAS Number	NYSDEC WQS 1998 Class GA	Sample Location	MW1	MW1	MW1	MW2	MW2	MW3	MW5	MW5
			Sample Identification	MW1-100522	FDUP-100522	MW1-013123	MW2-013123	MW2-013123	MW3-013123	MW5-013123	MW5-100522
			Laboratory ID	480-202448-3	480-202448-5	480-205868-5	480-205868-1	480-205868-2	480-205868-3	480-205868-4	480-202448-4
			Sample Date	10/5/2022	10/5/2022	1/31/2023	1/31/2023	1/31/2023	1/31/2023	1/31/2023	10/5/2022
Benzo[g,h,i]perylene	191242			0.36 *U*	0.36 *U*	0.36 *U*	0.36 *U*	0.35 *U*	0.36 *U*	0.36 *U*	0.42 *U*
Benzo[k]fluoranthene	207089	0.002		0.76 *U*	0.76 *U*	0.76 *U*	0.76 *U*	0.73 *U*	0.76 *U*	0.76 *U*	0.87 *U*
Chrysene	218019	0.002		0.34 *U*	0.34 *U*	0.34 *U*	0.34 *U*	0.33 *U*	0.34 *U*	0.34 *U*	0.39 *U*
Dibenzofuran	132649			0.53 *U*	0.53 *U*	0.53 *U*	0.53 *U*	0.51 *U*	0.53 *U*	0.53 *U*	0.61 *U*
Dibenz[a,h]anthracene	53703			0.44 *U*	0.44 *U*	0.44 *U*	0.44 *U*	0.42 *U*	0.44 *U*	0.44 *U*	0.5 *U*
Fluoranthene	206440	50		0.42 *U*	0.42 *U*	0.42 *U*	0.42 *U*	0.4 *U*	0.42 *U*	0.42 *U*	0.48 *U*
Fluorene	86737	50		0.38 *U*	0.38 *U*	0.38 *U*	0.38 *U*	0.36 *U*	0.38 *U*	0.38 *U*	0.43 *U*
Indeno[1,2,3-cd]pyrene	193395	0.002		0.49 *U*	0.49 *U*	0.49 *U*	0.49 *U*	0.47 *U*	0.49 *U*	0.49 *U*	0.56 *U*
Naphthalene	91203	10		0.79 *U*	0.79 *U*	0.79 *U*	0.79 *U*	0.76 *U*	0.79 *U*	0.79 *U*	0.9 *U*
Phenanthrene	85018	50		0.46 *U*	0.46 *U*	0.46 *U*	0.46 *U*	0.44 *U*	0.46 *U*	0.46 *U*	0.52 *U*
Pyrene	129000	50		0.35 *U*	0.35 *U*	0.35 *U*	0.35 *U*	0.34 *U*	0.35 *U*	0.35 *U*	0.4 *U*
Per- and Polyfluoroalkyl Substances (µg/L)											
6:2 fluorotelomer sulfonate	27619972			0.0012 *U*	0.0012 *U*		0.0023 *U*	0.0023 *U*			
8:2 fluorotelomer sulfonate	39108344			0.00069 *U*	0.00074 *U*		0.0023 *U*	0.0024 *U*			
2-(N-ethyl-perfluorooctane sulfonamido) acetate				0.0014 *U*	0.0015 *U*		0.00063 *UJ*	0.00065 *U*			
Perfluorobutyric acid	375224			0.0012 *J*	0.0013 *J*		0.0018 *U*	0.0019 *U*			
2-(N-methyl-perfluorooctane sulfonamido) acetic acid				0.0017 *U*	0.0018 *U*		0.0011 *U*	0.0011 *U*			
Perfluorooctanoic acid	335671			0.00068 *J*	0.00073 *U*		0.0007 *J+*	0.0006 *U*			
Perfluorooctane sulfonic acid	1763231			0.0022	0.002		0.00045 *U*	0.00047 *U*			
Perfluorobutane Sulfonic Acid	375735			0.00056 *U*	0.00059 *U*		0.00046 *J*	0.0003 *J*			
Perfluorodecanoic Acid	335762			0.00041 *U*	0.00044 *U*		0.00045 *U*	0.00047 *U*			
Perfluorododecanoic Acid	307551			0.00044 *U*	0.00047 *U*		0.00045 *U*	0.00047 *U*			
Perfluorodecanesulfonic acid	335773			0.00036 *U*	0.00038 *U*		0.00045 *U*	0.00047 *U*			
Perfluoroheptanoic Acid	375859			0.00048 *U*	0.00052 *U*		0.00047 *U*	0.00049 *U*			
Perfluoroheptanesulfonic acid	375928			0.00037 *U*	0.00039 *U*		0.00036 *U*	0.00037 *U*			
Perfluorohexanoic Acid	307244			0.00058 *U*	0.00062 *U*		0.00045 *U*	0.00047 *U*			
Perfluorohexane Sulfonic Acid	355464			0.00049 *U*	0.00053 *U*		0.00051 *U*	0.00053 *U*			
Perfluorononanoic Acid	375951			0.00044 *U*	0.00047 *U*		0.00045 *U*	0.00047 *U*			
Perfluorooctane sulfonamide	754916			0.00082 *U*	0.00088 *U*		0.00045 *U*	0.00047 *U*			
Perfluoropentanoic Acid	2706903			0.00061 *U*	0.00065 *U*		0.0009 *U*	0.00093 *U*			
Perfluorotetradecanoic Acid	376067			0.00057 *U*	0.00061 *U*		0.00045 *U*	0.00047 *U*			
Perfluorotridecanoic Acid	72629948			0.00043 *U*	0.00046 *U*		0.00045 *U*	0.00047 *U*			
Perfluoroundecanoic Acid	2058948			0.00049 *U*	0.00053 *U*		0.00045 *U*	0.00047 *U*			
11Cl-PF3OUdS (F-53B Minor)							0.0018 *U*	0.0019 *U*			
4:2 fluorotelomer sulfonate	757124724						0.0015 *U*	0.0016 *U*			
3H-perfluoro-3-[(3-methoxy-propoxy)propanoic acid]							0.0014 *U*	0.0014 *U*			
Perfluorononanesulfonic acid	109200628						0.00036 *U*	0.00037 *U*			
Perfluoropentanesulfonic acid	2706914						0.00045 *U*	0.00047 *U*			
3:3 FTCA	356025						0.0014 *U*	0.0014 *U*			
5:3 FTCA	914637493						0.009 *U*	0.0093 *U*			
7:3 FTCA	812704						0.009 *U*	0.0093 *U*			
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	756426581						0.0009 *U*	0.00093 *U*			
2-(N-ethylperfluoro-1-octanesulfonamido) ethanol	1691992						0.0045 *U*	0.0047 *U*			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	13252136						0.0018 *U*	0.0019 *U*			
N-methyl perfluoro-1-octanesulfonamide	31506328						0.00045 *U*	0.00047 *U*			
2-(N-methylperfluoro-1-octanesulfonamido) ethanol	24448097						0.0045 *U*	0.0047 *U*			
Nonafluoro-3,6-dioxaheptanoic acid	151772586						0.0009 *U*	0.00093 *U*			
Perfluorododecanesulfonic acid	79780395						0.00081 *U*	0.00084 *U*			
Perfluoroethylcyclohexane sulfonate	646833						0.00045 *U*	0.00047 *U*			
Perfluoro-4-methoxybutanoic acid	863090895						0.0009 *U*	0.00093 *U*			
Perfluoro-3-methoxypropanoic acid	377731						0.00045 *U*	0.00047 *U*			
N-ethylperfluoro-1-octanesulfonamide	4151502						0.00045 *U*	0.00047 *U*			
Semivolatile Organic Compounds (µg/L)											
Atrazine	1912249	7.5		0.48 *U*	0.48 *U*	0.48 *U*	0.48 *U*	0.46 *U*	0.48 *U*	0.48 *U*	0.55 *U*
Carbazole	86748			0.31 *U*	0.31 *U*	0.31 *U*	0.31 *U*	0.3 *U*	0.31 *U*	0.31 *U*	0.36 *U*
2,4,5-Trichlorophenol	95954			0.5 *U*	0.5 *U*	0.5 *U*	0.5 *U*	0.48 *U*	0.5 *U*	0.5 *U*	0.57 *U*

Table 6-2. Validated Analytical Results—Groundwater

Analyte	CAS Number	NYSDEC WQS 1998 Class GA	Sample Location	MW1	MW1	MW1	MW2	MW2	MW3	MW5	MW5
			Sample Identification	MW1-100522	FDUP-100522	MW1-013123	MW2-013123	MW2-013123	MW3-013123	MW5-013123	MW5-100522
			Laboratory ID	480-202448-3	480-202448-5	480-205868-5	480-205868-1	480-205868-2	480-205868-3	480-205868-4	480-202448-4
			Sample Date	10/5/2022	10/5/2022	1/31/2023	1/31/2023	1/31/2023	1/31/2023	1/31/2023	10/5/2022
2,4,6-Trichlorophenol	88062			0.64 *U*	0.64 *U*	0.64 *U*	0.64 *U*	0.61 *U*	0.64 *U*	0.64 *U*	0.73 *U*
2,4-Dichlorophenol	120832	5		0.53 *U*	0.53 *U*	0.53 *U*	0.53 *U*	0.51 *U*	0.53 *U*	0.53 *U*	0.61 *U*
2-Chlorophenol	95578			0.55 *U*	0.55 *U*	0.55 *U*	0.55 *U*	0.53 *U*	0.55 *U*	0.55 *U*	0.63 *U*
Pentachlorophenol	87865			2.3 *U*	2.3 *U*	2.3 *U*	2.3 *U*	2.2 *U*	2.3 *U*	2.3 *U*	2.6 *U*
1,1'-Biphenyl	92524	5		0.68 *U*	0.68 *U*	0.68 *U*	0.68 *U*	0.65 *U*	0.68 *U*	0.68 *U*	0.78 *U*
1,2,4-Trichlorobenzene	120821	5		0.41 *U*	0.41 *U*	0.41 *U*	0.41 *U*	0.41 *U*	0.41 *U*	0.41 *U*	0.41 *U*
1,2-Dichlorobenzene	95501	3		0.79 *U*	0.79 *U*	0.79 *U*	0.79 *U*	0.79 *U*	0.79 *U*	0.79 *U*	0.79 *U*
1,3-Dichlorobenzene	541731	3		0.78 *U*	0.78 *U*	0.78 *U*	0.78 *U*	0.78 *U*	0.78 *U*	0.78 *U*	0.78 *U*
1,4-Dichlorobenzene	106467	3		0.84 *U*	0.84 *U*	0.84 *U*	0.84 *U*	0.84 *U*	0.84 *U*	0.84 *U*	0.84 *U*
2,2'-oxybis(1-Chloropropane)	108601	5		0.54 *U*	0.54 *U*	0.54 *U*	0.54 *U*	0.52 *U*	0.54 *U*	0.54 *U*	0.62 *U*
2,4-Dimethylphenol	105679	50		0.52 *U*	0.52 *U*	0.52 *U*	0.52 *U*	0.5 *U*	0.52 *U*	0.52 *U*	0.6 *U*
2,4-Dinitrophenol	51285	10		2.3 *U*	2.3 *U*	2.3 *U*	2.3 *U*	2.2 *U*	2.3 *U*	2.3 *U*	2.6 *U*
2,4-Dinitrotoluene	121142	5		0.47 *U*	0.47 *U*	0.47 *U*	0.47 *U*	0.45 *U*	0.47 *U*	0.47 *U*	0.53 *U*
2,6-Dinitrotoluene	606202	5		0.42 *U*	0.42 *U*	0.42 *U*	0.42 *U*	0.4 *U*	0.42 *U*	0.42 *U*	0.48 *U*
2-Chloronaphthalene	91587			0.48 *U*	0.48 *U*	0.48 *U*	0.48 *U*	0.46 *U*	0.48 *U*	0.48 *U*	0.55 *U*
2-Methylphenol	95487			0.42 *U*	0.42 *U*	0.42 *U*	0.42 *U*	0.4 *U*	0.42 *U*	0.42 *U*	0.48 *U*
2-Nitroaniline	88744	5		0.44 *U*	0.44 *U*	0.44 *U*	0.44 *U*	0.42 *U*	0.44 *U*	0.44 *U*	0.5 *U*
2-Nitrophenol	88755			0.5 *U*	0.5 *U*	0.5 *U*	0.5 *U*	0.48 *U*	0.5 *U*	0.5 *U*	0.57 *U*
3,3'-Dichlorobenzidine	91941	5		0.42 *U*	0.42 *U*	0.42 *U*	0.42 *U*	0.4 *U*	0.42 *U*	0.42 *U*	0.48 *U*
3-Nitroaniline	99092	5		0.5 *U*	0.5 *U*	0.5 *U*	0.5 *U*	0.48 *U*	0.5 *U*	0.5 *U*	0.57 *U*
4,6-Dinitro-2-methylphenol	534521			2.3 *U*	2.3 *U*	2.3 *U*	2.3 *U*	2.2 *U*	2.3 *U*	2.3 *U*	2.6 *U*
4-Bromophenyl-phenylether	101553			0.47 *U*	0.47 *U*	0.47 *U*	0.47 *U*	0.45 *U*	0.47 *U*	0.47 *U*	0.54 *U*
4-Chloro-3-methylphenol	59507			0.47 *U*	0.47 *U*	0.47 *U*	0.47 *U*	0.45 *U*	0.47 *U*	0.47 *U*	0.54 *U*
4-Chloroaniline	106478	5		0.61 *U*	0.61 *U*	0.61 *U*	0.61 *U*	0.59 *U*	0.61 *U*	0.61 *U*	0.7 *U*
4-Chlorophenyl-phenyl ether	7005723			0.36 *U*	0.36 *U*	0.36 *U*	0.36 *U*	0.35 *U*	0.36 *U*	0.36 *U*	0.42 *U*
4-Methylphenol	106445			0.38 *U*	0.38 *U*	0.38 *U*	0.38 *U*	0.36 *U*	0.38 *U*	0.38 *U*	0.43 *U*
4-Nitroaniline	100016	5		0.26 *U*	0.26 *U*	0.26 *U*	0.26 *U*	0.25 *U*	0.26 *U*	0.26 *U*	0.3 *U*
4-Nitrophenol	100027			1.6 *U*	1.6 *U*	1.6 *U*	1.6 *U*	1.5 *U*	1.6 *U*	1.6 *U*	1.8 *U*
Acetophenone	98862			0.56 *U*	0.56 *U*	0.56 *U*	0.56 *U*	0.54 *U*	0.56 *U*	0.56 *U*	0.64 *U*
Benzaldehyde	100527			0.28 *U*	0.28 *U*	0.28 *U*	0.28 *U*	0.27 *U*	0.28 *U*	0.28 *U*	0.32 *U*
Bis(2-chloroethyl)ether	111444	1		0.42 *U*	0.42 *U*	0.42 *U*	0.42 *U*	0.4 *U*	0.42 *U*	0.42 *U*	0.48 *U*
Bis(2-chloroethoxy)methane	111911	5		0.36 *U*	0.36 *U*	0.36 *U*	0.36 *U*	0.35 *U*	0.36 *U*	0.36 *U*	0.42 *U*
Bis(2-ethylhexyl)phthalate	117817	5		2.3 *U*	2.3 *U*	2.3 *U*	2.3 *U*	2.2 *U*	2.3 *U*	2.3 *U*	2.6 *U*
Benzyl n-butyl phthalate	85687	50		1.0 *U*	1.0 *U*	1.0 *U*	1.0 *U*	1.0 *U*	1.0 *U*	1.0 *U*	1.2 *U*
Caprolactam	105602			2.3 *U*	2.3 *U*	2.3 *U*	2.3 *U*	2.2 *U*	2.3 *U*	2.3 *U*	2.6 *U*
Diethyl phthalate	84662	50		2.4 *U*	3.1 *U*	0.23 *U*	0.23 *U*	0.22 *U*	0.23 *U*	0.23 *U*	3.1 *U*
Dimethyl phthalate	131113	50		0.38 *U*	0.38 *U*	0.38 *U*	0.38 *U*	0.36 *U*	0.38 *U*	0.38 *U*	0.43 *U*
Di-n-butyl phthalate	84742	50		0.32 *U*	0.32 *U*	0.32 *U*	0.32 *U*	0.31 *U*	0.32 *U*	0.32 *U*	0.37 *U*
Di-n-octylphthalate	117840	50		0.49 *U*	0.49 *U*	0.49 *U*	0.49 *U*	0.47 *U*	0.49 *U*	0.49 *U*	0.56 *U*
Hexachloroethane	67721	5		0.61 *U*	0.61 *U*	0.61 *U*	0.61 *U*	0.59 *U*	0.61 *U*	0.61 *U*	0.7 *U*
Hexachlorobenzene	118741	0.04		0.53 *U*	0.53 *U*	0.53 *U*	0.53 *U*	0.51 *U*	0.53 *U*	0.53 *U*	0.61 *U*
Hexachlorobutadiene	87683	0.5		0.71 *U*	0.71 *U*	0.71 *U*	0.71 *U*	0.68 *U*	0.71 *U*	0.71 *U*	0.81 *U*
Hexachlorocyclopentadiene	77474	5		0.61 *U*	0.61 *UJ*	0.61 *U*	0.61 *U*	0.59 *U*	0.61 *U*	0.61 *U*	0.7 *U*
Isophorone	78591	50		0.45 *U*	0.45 *U*	0.45 *U*	0.45 *U*	0.43 *U*	0.45 *U*	0.45 *U*	0.51 *U*
Methyl Acetate	79209			1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*
Nitrobenzene	98953	0.4		0.3 *U*	0.3 *U*	0.3 *U*	0.3 *U*	0.29 *U*	0.3 *U*	0.3 *U*	0.35 *U*
N-Nitrosodi-n-propylamine	621647			0.56 *U*	0.56 *U*	0.56 *U*	0.56 *U*	0.54 *U*	0.56 *U*	0.56 *U*	0.64 *U*
N-Nitrosodiphenylamine	86306	50		0.53 *U*	0.53 *U*	0.53 *U*	0.53 *U*	0.51 *U*	0.53 *U*	0.53 *U*	0.61 *U*
Phenol	108952			0.41 *U*	0.41 *U*	0.41 *U*	0.41 *U*	0.39 *U*	0.41 *U*	0.41 *U*	0.46 *U*
1,4-Dioxane	123911			0.11 *U*	0.11 *U*		0.11 *U*	0.11 *U*			
Volatiles (µg/L)											
1,1,1,2-Tetrachloroethane	630206	5		0.35 *U*	0.35 *U*	0.35 *U*	0.35 *U*	0.35 *U*	0.35 *U*	0.35 *U*	0.35 *U*
1,1,1-Trichloroethane	71556	5		0.82 *U*	0.82 *U*	0.82 *U*	0.82 *U*	0.82 *U*	0.82 *U*	0.82 *U*	0.82 *U*
1,1,2,2-Tetrachloroethane	79345	5		0.21 *U*	0.21 *U*	0.21 *U*	0.21 *U*	0.21 *U*	0.21 *U*	0.21 *U*	0.21 *U*
1,1,2-Trichloroethane	79005	1		0.23 *U*	0.23 *U*	0.23 *U*	0.23 *U*	0.23 *U*	0.23 *U*	0.23 *U*	0.23 *U*
1,1-Dichloroethane	75343	5		0.38 *U*	0.38 *U*	0.38 *U*	0.38 *U*	0.38 *U*	0.38 *U*	0.55 *J*	0.6 *J*

Table 6-2. Validated Analytical Results—Groundwater

Analyte	CAS Number	NYSDEC WQS 1998 Class GA	Sample Location	MW1	MW1	MW1	MW2	MW2	MW3	MW5	MW5
			Sample Identification	MW1-100522	FDUP-100522	MW1-013123	MW2-013123	MW2-013123	MW3-013123	MW5-013123	MW5-100522
			Laboratory ID	480-202448-3	480-202448-5	480-205868-5	480-205868-1	480-205868-2	480-205868-3	480-205868-4	480-202448-4
			Sample Date	10/5/2022	10/5/2022	1/31/2023	1/31/2023	1/31/2023	1/31/2023	1/31/2023	10/5/2022
1,1-Dichloroethene	75354	5		0.29 *U*	0.29 *U*	0.29 *U*	0.29 *U*	0.29 *U*	0.29 *U*	0.29 *U*	0.29 *U*
1,2,3-Trimethylbenzene	526738	5		0.26 *U*	0.26 *U*	0.26 *U*	0.26 *U*	0.26 *U*	0.26 *U*	0.26 *U*	0.26 *U*
1,2,4-Trimethylbenzene	95636	5		0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*
1,2-Dibromo-3-chloropropane	96128	0.04		0.39 *U*	0.39 *U*	0.39 *U*	0.39 *U*	0.39 *U*	0.39 *U*	0.39 *U*	0.39 *U*
1,2-Dibromoethane	106934	0.0006		0.73 *U*	0.73 *U*	0.73 *U*	0.73 *U*	0.73 *U*	0.73 *U*	0.73 *U*	0.73 *U*
1,2-Dichloroethane	107062	0.6		0.21 *U*	0.21 *U*	0.21 *U*	0.21 *U*	0.21 *U*	0.21 *U*	0.21 *U*	0.21 *U*
1,2-Dichloropropane	78875	1		0.72 *U*	0.72 *U*	0.72 *U*	0.72 *U*	0.72 *U*	0.72 *U*	0.72 *U*	0.72 *U*
1,3,5-Trimethylbenzene	108678	5		0.77 *U*	0.77 *U*	0.77 *U*	0.77 *U*	0.77 *U*	0.77 *U*	0.77 *U*	0.77 *U*
2-Hexanone	591786	50		1.2 *U*	1.2 *U*	1.2 *U*	1.2 *U*	1.2 *U*	1.2 *U*	1.2 *U*	1.2 *U*
4-Methyl-2-pentanone	108101			2.1 *U*	2.1 *U*	2.1 *U*	2.1 *U*	2.1 *U*	2.1 *U*	2.1 *U*	2.1 *U*
Acetone	67641	50		3 *U*	3 *U*	3 *U*	3 *U*	3 *U*	3 *U*	3 *U*	3 *U*
Benzene	71432	1		0.41 *U*	0.41 *U*	0.41 *U*	0.41 *U*	0.41 *U*	0.41 *U*	3.1	0.41 *U*
Bromodichloromethane	75274	50		0.39 *U*	0.39 *U*	0.39 *U*	0.39 *U*	0.39 *U*	0.39 *U*	0.39 *U*	0.39 *U*
Bromomethane	74839	5		0.69 *U*	0.69 *U*	0.69 *U*	0.69 *U*	0.69 *U*	0.69 *U*	0.69 *U*	0.69 *U*
Bromoform	75252	50		0.26 *U*	0.26 *U*	0.26 *U*	0.26 *U*	0.26 *U*	0.26 *U*	0.26 *U*	0.26 *U*
Carbon disulfide	75150	60		0.19 *U*	0.19 *U*	0.19 *U*	0.19 *U*	0.19 *U*	0.19 *U*	0.19 *U*	0.19 *U*
Carbon Tetrachloride	56235	5		0.27 *U*	0.27 *U*	0.27 *U*	0.27 *U*	0.27 *U*	0.27 *U*	0.27 *U*	0.27 *U*
Chloroform	67663	7		0.34 *U*	0.34 *U*	0.34 *U*	0.34 *U*	0.34 *U*	0.34 *U*	0.34 *U*	0.34 *U*
cis-1,2-Dichloroethene	156592	5		0.81 *U*	0.81 *U*	0.81 *U*	0.81 *U*	0.81 *U*	0.81 *U*	0.81 *U*	0.81 *U*
cis-1,3-Dichloropropene	10061015			0.36 *U*	0.36 *U*	0.36 *U*	0.36 *U*	0.36 *U*	0.36 *U*	0.36 *U*	0.36 *U*
Chlorobenzene	108907	5		0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*
Chloroethane	75003	5		0.32 *U*	0.32 *U*	0.32 *U*	0.32 *U*	0.32 *U*	0.32 *U*	0.32 *U*	0.32 *U*
Chloromethane	74873	5		0.35 *U*	0.35 *U*	0.35 *U*	0.35 *U*	0.35 *U*	0.35 *U*	0.35 *U*	0.35 *U*
Cyclohexane	110827			0.18 *U*	0.18 *U*	0.18 *U*	0.18 *U*	0.18 *U*	0.18 *U*	0.18 *U*	0.18 *U*
Dibromochloromethane	124481	50		0.32 *U*	0.32 *U*	0.32 *U*	0.32 *U*	0.32 *U*	0.32 *U*	0.32 *U*	0.32 *U*
Dichlorodifluoromethane	75718	5		0.68 *U*	0.68 *U*	0.68 *U*	0.68 *U*	0.68 *U*	0.68 *U*	0.68 *U*	0.68 *U*
Ethylbenzene	100414	5		0.74 *U*	0.74 *U*	0.74 *U*	0.74 *U*	0.74 *U*	0.74 *U*	0.74 *U*	0.74 *U*
Isopropylbenzene	98828	5		0.79 *U*	0.79 *U*	0.79 *U*	0.79 *U*	0.79 *U*	0.79 *U*	0.79 *U*	0.79 *U*
2-Butanone	78933	50		1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*
m,p-Xylene	179601231			0.66 *U*	0.66 *U*	0.66 *U*	0.66 *U*	0.66 *U*	0.66 *U*	0.66 *U*	0.66 *U*
Methylcyclohexane	108872			0.16 *U*	0.16 *U*	0.16 *U*	0.16 *U*	0.16 *U*	0.16 *U*	0.16 *U*	0.16 *U*
Methylene Chloride	75092	5		0.44 *U*	0.44 *U*	0.44 *U*	0.44 *U*	0.44 *U*	0.44 *U*	0.44 *U*	0.44 *U*
Methyl tert-butyl ether	1634044	10		0.16 *U*	0.16 *U*	0.16 *U*	0.16 *U*	0.16 *U*	0.16 *U*	0.16 *U*	0.16 *U*
n-Butylbenzene	104518	5		0.64 *U*	0.64 *U*	0.64 *U*	0.64 *U*	0.64 *U*	0.64 *U*	0.64 *U*	0.64 *U*
n-Propylbenzene	103651	5		0.69 *U*	0.69 *U*	0.69 *U*	0.69 *U*	0.69 *U*	0.69 *U*	0.69 *U*	0.69 *U*
o-Xylene	95476	5		0.76 *U*	0.76 *U*	0.76 *U*	0.76 *U*	0.76 *U*	0.76 *U*	0.76 *U*	0.76 *U*
sec-Butylbenzene	135988	5		0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*
Styrene	100425	5		0.73 *U*	0.73 *U*	0.73 *U*	0.73 *U*	0.73 *U*	0.73 *U*	0.73 *U*	0.73 *U*
tert-Butylbenzene	98066	5		0.81 *U*	0.81 *U*	0.81 *U*	0.81 *U*	0.81 *U*	0.81 *U*	0.81 *U*	0.81 *U*
Toluene	108883	5		0.51 *U*	0.51 *U*	0.51 *U*	0.51 *U*	0.51 *U*	0.51 *U*	0.51 *U*	0.51 *U*
trans-1,2-Dichloroethene	156605	5		0.9 *U*	0.9 *U*	0.9 *U*	0.9 *U*	0.9 *U*	0.9 *U*	0.9 *U*	0.9 *U*
trans-1,3-Dichloropropene	10061026			0.37 *U*	0.37 *U*	0.37 *U*	0.37 *U*	0.37 *U*	0.37 *U*	0.37 *U*	0.37 *U*
Trichloroethene	79016	5		2.3	2.1	1.8	0.46 *U*	0.46 *U*	0.46 *U*	0.51 *J*	0.46 *U*
Trichlorotrifluoroethane	76131	5		0.31 *U*	0.31 *U*	0.31 *U*	0.31 *U*	0.31 *U*	0.31 *U*	0.31 *U*	0.31 *U*
Trichlorofluoromethane	75694	5		0.88 *U*	0.88 *U*	0.88 *U*	0.88 *U*	0.88 *U*	0.88 *U*	0.88 *U*	0.88 *U*
Vinyl Chloride	75014	2		0.9 *U*	0.9 *U*	0.9 *U*	0.9 *U*	0.9 *U*	0.9 *U*	0.9 *U*	0.9 *U*
Xylenes	1330207			0.66 *U*	0.66 *U*	0.66 *U*	0.66 *U*	0.66 *U*	0.66 *U*	0.66 *U*	0.66 *U*
Tetrachloroethene	127184	5		0.36 *U*	0.36 *U*	0.36 *U*	0.36 *U*	0.36 *U*	0.36 *U*	0.36 *U*	0.36 *U*

Notes:
Gray shading = Exceeds NYSDEC WQS 1998 Class GA
CAS = Chemical Abstract Service
NYSDEC = New York State Department of Environmental Conservation
WQS = water quality standard

Qualifiers:
J = The associated numerical value is an estimated quantity.The associated numerical value is an estimated quantity.
J+ = The result is an estimated quantity, but the result may be biased high.
U = The material was analyzed for, but was not detected.
UJ = The material was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

Appendix A

Property Boundary Survey Map

XREFS: NONE

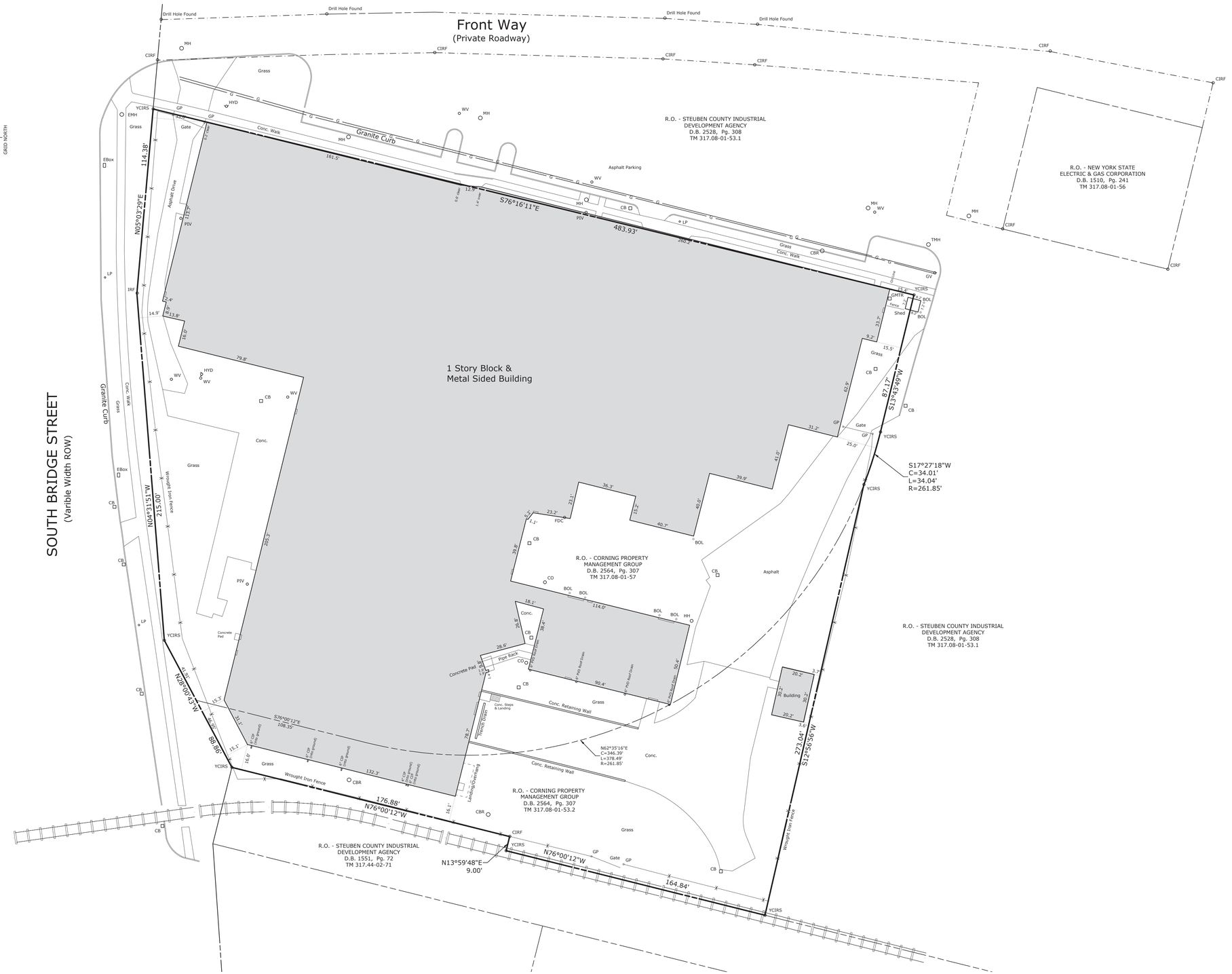
PROJECT NUMBER: 22.2356

CAD DWG. FILE NAME: Corning Refractories Plant.dwg

LEGEND

- BOL ------ BOLLARD
- GP ------ GATE POST
- TMH ------ TELEPHONE MANHOLE
- MH ------ UNKNOWN MANHOLE
- CBR / CB ------ CATCH BASIN
- LP ------ LIGHT POLE
- EMH ------ ELECTRIC MANHOLE
- HYD ------ HYDRANT
- WV ------ WATER VALVE
- PIV ------ POST INDICATOR VALVE
- GMTR ------ GAS METER
- IRF ------ IRON ROD FOUND
- CIRF ------ CAPPED IRON ROD FOUND
- YCIRS ------ YELLOW CAP IRON ROD SET
- EBox ------ ELECTRIC BOX
- X ------ WROUGHT IRON FENCE
- ------ EASEMENT LINE
- G ------ GAS LINE
- ------ PROPERTY LINE

GRID NORTH



MAP NOTES

1.) NORTH ORIENTATION IS BASED ON GRID NORTH FROM RTK GPS OBSERVATIONS.

2.) FIELD WORK PERFORMED ON JUNE 1-2, 2022.

3.) THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF AN ABSTRACT OR UP TO DATE TITLE REPORT AND IS THEREFORE SUBJECT TO ANY EASEMENTS, RESTRICTIONS, COVENANTS OR ANY STATEMENT OF FACTS THAT SUCH DOCUMENTS MAY DISCLOSE.

4.) UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM DATA OBTAINED BY FIELD SURVEY, PREVIOUS MAPS AND RECORDS, (AND PAROLE TESTIMONY). THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHER UNDERGROUND UTILITIES, THE EXISTENCE OF WHICH ARE NOT KNOWN TO THE UNDERSIGNED. SIZE AND LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES MUST BE VERIFIED BY THE APPROPRIATE AUTHORITIES PRIOR TO ANY CONSTRUCTION.

MAP REFERENCES

1.) PROPOSED EASEMENTS AND PROPERTY CONVEYANCES FOR NEW YORK STATE ELECTRIC & GAS CORP., STEUBEN COUNTY INDUSTRIAL DEVELOPMENT AGENCY AND CORNING INCORPORATED PREPARED BY WEILER ASSOCIATES DATED OCT. 27, 1993, LAST REVISED JULY 8, 1996. FILED AS MAP #12137.

2.) BOUNDARY SURVEY OF LANDS OF CORNING PROPERTY MANAGEMENT CORP., STEUBEN COUNTY INDUSTRIAL DEVELOPMENT AGENCY AND CORNING INC. PREPARED BY WEILER ASSOCIATES DATED JULY 15, 2015, REVISED JULY 13, 2015. JOB No. 8745.12

BAR SCALE

30 0 15 30 60

1 inch = 30 ft.

"ONLY COPIES OF THIS MAP SIGNED IN RED INK AND EMBOSSED WITH THE SEAL OF AN OFFICER OF C.T. MALE ASSOCIATES OR A DESIGNATED REPRESENTATIVE SHALL BE CONSIDERED TO BE A VALID TRUE COPY".

I CERTIFY THAT THIS SURVEY WAS PREPARED FROM AN ACTUAL FIELD SURVEY AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND HAS BEEN PREPARED IN ACCORDANCE WITH THE EXISTING CODE OF PRACTICE OF THE N.Y.S. ASSOCIATION OF PROFESSIONAL LAND SURVEYORS.

06/09/2022

DAVID M. SLISKI PLS # 50105 DATE

DAVID M. SLISKI
P.L.S. NO. 050105

STATE OF NEW YORK · DAVID MICHAEL SLISKI · 050105 · LICENSED LAND SURVEYOR

DATE	REVISIONS RECORD/DESCRIPTION	DRAFTER	CHECK	APPR.
	1			
	2			
	3			
	4			
	5			
	6			
	7			
	8			
	9			

UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW.

© 2022
C.T. MALE ASSOCIATES

APPROVED:
DRAFTED : TFS
CHECKED : DMS
PROJ. NO : 22.2356
SCALE : 1" = 30 FT.
DATE : JUNE 9, 2022

BOUNDARY SURVEY MAP

FOR THE LANDS OF

CORNING PROPERTY MANAGEMENT GROUP

1 FRONT WAY

CITY OF CORNING — STEUBEN COUNTY, NEW YORK

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.
50 CENTURY HILL DRIVE, LATHAM, NY 12110 PH 518.786.7400
COBLESKILL, NY · GLENS FALLS, NY · POUGHKEEPSIE, NY
JOHNSTOWN, NY · RED HOOK, NY · SYRACUSE, NY
www.ctmale.com

SHEET 1 OF 1

DWG. NO: 22-0446

Appendix B

Weekly Update Reports

Integral Engineering, P.C.
31 West 34th Street
Suite 7196
New York, NY 10001

telephone: 212.962.4303
www.integral-corp.com

PROGRESS REPORT

To:	Samantha Salotto, P.E.
From:	Jeffrey Marsh, P.E.
Subject:	Corning Refractories Plant Site Characterization
Reporting Period:	December 20, 2022 – January 5, 2023
Integral Project No.:	EF1017
NYSDEC Project No.:	851048

ACTIVITIES PERFORMED

Site characterization field work was performed December 20 through December 23, 2022, and January 3 through January 5, 2023, in accordance with the NYSDEC-approved P-Site Characterization Work Plan. A summary of the work completed is as follows:

- Sampling and logging of SB2 was completed and a 2-inch PVC well was installed (MW2)
- Sampling and logging of SB3 was completed and a 2-inch PVC well was installed (MW3)
- MW2 and MW3 were developed.

WORK PLAN MODIFICATIONS

None.

AIR MONITORING RESULTS

Air monitoring was performed in accordance with the NYSDEC-approved Community Air Monitoring Plan (CAMP). Data was collected with a hand held DustTrak and PID unit collected manually in 30-minute increments. Data collected during this work are attached.

UPCOMING ACTIVITIES AND SCHEDULE

Groundwater sampling of MW1, MW2, MW3 and MW5 is scheduled to occur on January 31. Quarterly groundwater level measurements will also be collected at this time.

Corning Refractories Plant
1 Front Street, Corning, NY 14830
NYSDEC Project # 851048
Air Monitoring Results

Date	Upwind				Downwind			
	Time	Type of Reading (Pre-Sample, During, Post-Sample)	Mass Concentration (mg/m^3) [a]	PID (ppm)	Time	Type of Reading (Pre-Sample, During, Post-Sample)	Mass Concentration (mg/m^3) [a]	PID (ppm)
12/21/2022	07:00 - 07:30				07:00 - 07:30			
	07:30 - 08:00				07:30 - 08:00			
	08:00 - 08:30	During hand augering	0.044	0.0	08:00 - 08:30	During hand augering	0.035	0.0
	08:30 - 09:00	During hand augering	0.035	0.0	08:30 - 09:00	During hand augering	0.035	0.0
	09:00 - 09:30	Mob rig to SB2	0.038	0.0	09:00 - 09:30	Mob rig to SB2	0.040	0.0
	09:30 - 10:00	During boring at SB2	0.036	0.0	09:30 - 10:00	During boring at SB2	0.039	0.0
	10:00 - 10:30	During boring at SB2	0.037	0.0	10:00 - 10:30	During boring at SB2	0.044	0.0
	10:30 - 11:00	During boring at SB2	0.026	0.0	10:30 - 11:00	During boring at SB2	0.038	0.0
	11:00 - 11:30	During boring at SB2	0.031	0.0	11:00 - 11:30	During boring at SB2	0.031	0.0
	11:30 - 12:00	During boring at SB2	0.026	0.0	11:30 - 12:00	During boring at SB2	0.042	0.0
	12:00 - 12:30	No intrusive work	0.026	0.0	12:00 - 12:30	No intrusive work	0.032	0.0
	12:30 - 13:00	No intrusive work (Lunch)	-	-	12:30 - 13:00	No intrusive work (Lunch)	-	-
	13:00 - 13:30	During boring at SB2	0.023	0.0	13:00 - 13:30	During boring at SB2	0.023	0.0
	13:30 - 14:00	During boring at SB2	0.040	0.0	13:30 - 14:00	During boring at SB2	0.028	0.0
	14:00 - 14:30	During boring at SB2	0.026	0.0	14:00 - 14:30	During boring at SB2	0.023	0.0
	14:30 - 15:00	During boring at SB2	0.031	0.0	14:30 - 15:00	During boring at SB2	0.027	0.0
	15:00 - 15:30	During boring at SB2	0.031	0.0	15:00 - 15:30	During boring at SB2	0.026	0.0
	15:30 - 16:00	During boring at SB2	0.030	0.0	15:30 - 16:00	During boring at SB2	0.028	0.0
	16:00 - 16:30	During boring at SB2	0.048	0.0	16:00 - 16:30	During boring at SB2	0.036	0.0
	16:30 - 17:00	No intrusive work, demob	0.027	0.0	16:30 - 17:00	No intrusive work, demob	0.023	0.0

Notes:

CAMP = Community Air Monitoring Plan

NYSDEC = New York State Department of Environmental Conservation

PID = photoionization detector

ppb = parts per billion

ppm = parts per million

VOC = volatile organic compound

[a] Alarms were as set as defined in the CAMP: at 100 ppb and 150 ppb for Particulates; and at 5 ppm (5,000 ppb), > 5 ppm (5,000 ppb) and <25 ppm (25,000 ppb), and >25 ppm (25,000 ppb) for VOCs. All alarm settings were in reference to the upwind air monitoring. Note that 1 ppb equals 1 mg/m^3.

Corning Refractories Plant
1 Front Street, Corning, NY 14830
NYSDEC Project # 851048
Air Monitoring Results

Date	Upwind				Downwind			
	Time	Type of Reading (Pre-Sample, During, Post-Sample)	Mass Concentration (mg/m^3) [a]	PID (ppm)	Time	Type of Reading (Pre-Sample, During, Post-Sample)	Mass Concentration (mg/m^3) [a]	PID (ppm)
12/22/2022	07:00 - 07:30				07:00 - 07:30			
	07:30 - 08:00	No intrusive work, mob to MW2	0.040	0.0	07:30 - 08:00	No intrusive work, mob to MW2	0.037	0.0
	08:00 - 08:30	During augering at MW2	0.039	0.0	08:00 - 08:30	During augering at MW2	0.040	0.0
	08:30 - 09:00	During augering at MW2	0.046	0.0	08:30 - 09:00	During augering at MW2	0.045	0.0
	09:00 - 09:30	During augering at MW2	0.042	0.0	09:00 - 09:30	During augering at MW2	0.044	0.0
	09:30 - 10:00	During augering at MW2	0.038	0.0	09:30 - 10:00	During augering at MW2	0.037	0.0
	10:00 - 10:30	During installation of MW2	0.023	0.0	10:00 - 10:30	During installation of MW2	0.024	0.0
	10:30 - 11:00	During installation of MW3	0.023	0.0	10:30 - 11:00	During installation of MW3	0.022	0.0
	11:00 - 11:30	During installation of MW4	0.021	0.0	11:00 - 11:30	During installation of MW4	0.020	0.0
	11:30 - 12:00	During installation of MW5	0.022	0.0	11:30 - 12:00	During installation of MW5	0.023	0.0
	12:00 - 12:30	During installation of MW6	0.019	0.0	12:00 - 12:30	During installation of MW6	0.017	0.0
	12:30 - 13:00	During installation of MW7	0.015	0.0	12:30 - 13:00	During installation of MW7	0.014	0.0
	13:00 - 13:30	During installation of MW8	0.015	0.0	13:00 - 13:30	During installation of MW8	0.015	0.0
	13:30 - 14:00	During installation of MW9	0.015	0.0	13:30 - 14:00	During installation of MW9	0.013	0.0
	14:00 - 14:30	No intrusive work, move to decon	0.018	0.0	14:00 - 14:30	No intrusive work, move to decon	0.043	0.0
	14:30 - 15:00	No intrusive work, decon	0.016	0.0	14:30 - 15:00	No intrusive work, decon	0.014	0.0
	15:00 - 15:30	No intrusive work, demob	0.022	0.0	15:00 - 15:30	No intrusive work, demob	0.017	0.0
	15:30 - 16:00				15:30 - 16:00			
	16:00 - 16:30				16:00 - 16:30			
	16:30 - 17:00				16:30 - 17:00			

Notes:

CAMP = Community Air Monitoring Plan

NYSDEC = New York State Department of Environmental Conservation

PID = photoionization detector

ppb = parts per billion

ppm = parts per million

VOC = volatile organic compound

[a] Alarms were as set as defined in the CAMP: at 100 ppb and 150 ppb for Particulates; and at 5 ppm (5,000 ppb), > 5 ppm (5,000 ppb) and <25 ppm (25,000 ppb), and >25 ppm (25,000 ppb) for VOCs. All alarm settings were in reference to the upwind air monitoring. Note that 1 ppb equals 1 mg/m^3.

Corning Refractories Plant
1 Front Street, Corning, NY 14830
NYSDEC Project # 851048
Air Monitoring Results

Date	Upwind				Downwind			
	Time	Type of Reading (Pre-Sample, During, Post-Sample)	Mass Concentration (mg/m^3) [a]	PID (ppm)	Time	Type of Reading (Pre-Sample, During, Post-Sample)	Mass Concentration (mg/m^3) [a]	PID (ppm)
1/3/2023	07:00 - 07:30				07:00 - 07:30			
	07:30 - 08:00				07:30 - 08:00			
	08:00 - 08:30				08:00 - 08:30			
	08:30 - 09:00				08:30 - 09:00			
	09:00 - 09:30				09:00 - 09:30			
	09:30 - 10:00				09:30 - 10:00			
	10:00 - 10:30				10:00 - 10:30			
	10:30 - 11:00				10:30 - 11:00			
	11:00 - 11:30				11:00 - 11:30			
	11:30 - 12:00				11:30 - 12:00			
	12:00 - 12:30	No intrusive work, mob to SB3	0.045	0.0	12:00 - 12:30	No intrusive work, mob to SB3	0.044	0.2
	12:30 - 13:00	During boring at SB3	0.043	0.0	12:30 - 13:00	During boring at SB3	0.038	0.2
	13:00 - 13:30	During boring at SB3	0.038	0.1	13:00 - 13:30	During boring at SB3	0.029	0.3
	13:30 - 14:00	During boring at SB3	0.036	0.1	13:30 - 14:00	During boring at SB3	0.031	0.3
	14:00 - 14:30	During boring at SB3	0.041	0.2	14:00 - 14:30	During boring at SB3	0.032	0.3
	14:30 - 15:00	No intrusive work	0.033	0.2	14:30 - 15:00	No intrusive work	0.028	0.3
	15:00 - 15:30	During boring at SB3	0.033	0.2	15:00 - 15:30	During boring at SB3	0.022	0.3
	15:30 - 16:00	During boring at SB3	0.027	0.2	15:30 - 16:00	During boring at SB3	0.030	0.3
	16:00 - 16:30	No intrusive work, demob	0.031	0.2	16:00 - 16:30	No intrusive work, demob	0.025	0.4
	16:30 - 17:00				16:30 - 17:00			

Notes:

CAMP = Community Air Monitoring Plan

NYSDEC = New York State Department of Environmental Conservation

PID = photoionization detector

ppb = parts per billion

ppm = parts per million

VOC = volatile organic compound

[a] Alarms were as set as defined in the CAMP: at 100 ppb and 150 ppb for Particulates; and at 5 ppm (5,000 ppb), > 5 ppm (5,000 ppb) and <25 ppm (25,000 ppb), and >25 ppm (25,000 ppb) for VOCs. All alarm settings were in reference to the upwind air monitoring. Note that 1 ppb equals 1 mg/m^3.

Corning Refractories Plant
1 Front Street, Corning, NY 14830
NYSDEC Project # 851048
Air Monitoring Results

Date	Upwind				Downwind			
	Time	Type of Reading (Pre-Sample, During, Post-Sample)	Mass Concentration (mg/m^3) [a]	PID (ppm)	Time	Type of Reading (Pre-Sample, During, Post-Sample)	Mass Concentration (mg/m^3) [a]	PID (ppm)
1/4/2023	07:00 - 07:30				07:00 - 07:30			
	07:30 - 08:00				07:30 - 08:00			
	08:00 - 08:30	No intrusive work, mob to SB3	0.023	0.1	08:00 - 08:30	No intrusive work, mob to SB3	0.024	0.0
	08:30 - 09:00	During boring at SB3	0.023	0.2	08:30 - 09:00	During boring at SB3	0.028	0.1
	09:00 - 09:30	During boring at SB3	0.024	0.2	09:00 - 09:30	During boring at SB3	0.019	0.1
	09:30 - 10:00	During boring at SB3	0.018	0.3	09:30 - 10:00	During boring at SB3	0.019	0.2
	10:00 - 10:30	During installation of MW3	0.022	0.3	10:00 - 10:30	During installation of MW3	0.023	0.2
	10:30 - 11:00	During installation of MW3	0.023	0.3	10:30 - 11:00	During installation of MW3	0.025	0.2
	11:00 - 11:30	During installation of MW3	0.024	0.3	11:00 - 11:30	During installation of MW3	0.025	0.3
	11:30 - 12:00	During installation of MW3	0.024	0.4	11:30 - 12:00	During installation of MW3	0.024	0.3
	12:00 - 12:30	During installation of MW3	0.019	0.3	12:00 - 12:30	During installation of MW3	0.021	0.3
	12:30 - 13:00	No intrusive work	0.021	0.3	12:30 - 13:00	No intrusive work	0.027	0.3
	13:00 - 13:30	During installation of MW3	0.022	0.3	13:00 - 13:30	During installation of MW3	0.022	0.3
	13:30 - 14:00	During installation of MW3	0.022	0.3	13:30 - 14:00	During installation of MW3	0.023	0.2
	14:00 - 14:30	During installation of MW3	0.023	0.4	14:00 - 14:30	During installation of MW3	0.023	0.3
	14:30 - 15:00	During installation of MW3	0.024	0.4	14:30 - 15:00	During installation of MW3	0.025	0.3
	15:00 - 15:30	During installation of MW3	0.027	0.4	15:00 - 15:30	During installation of MW3	0.028	0.3
	15:30 - 16:00	During installation of MW3	0.032	0.4	15:30 - 16:00	During installation of MW3	0.031	0.3
	16:00 - 16:30	No intrusive work, demob	0.035	0.4	16:00 - 16:30	No intrusive work, demob	0.029	0.3
	16:30 - 17:00				16:30 - 17:00			

Notes:

CAMP = Community Air Monitoring Plan

NYSDEC = New York State Department of Environmental Conservation

PID = photoionization detector

ppb = parts per billion

ppm = parts per million

VOC = volatile organic compound

[a] Alarms were as set as defined in the CAMP: at 100 ppb and 150 ppb for Particulates; and at 5 ppm (5,000 ppb), > 5 ppm (5,000 ppb) and <25 ppm (25,000 ppb), and >25 ppm (25,000 ppb) for VOCs. All alarm settings were in reference to the upwind air monitoring. Note that 1 ppb equals 1 mg/m^3.

Integral Engineering, P.C.
31 West 34th Street
Suite 7196
New York, NY 10001

telephone: 212.962.4303
www.integral-corp.com

PROGRESS REPORT

To:	Samantha Salotto, P.E.
From:	Jeffrey Marsh, P.E.
Subject:	Corning Refractories Plant Site Characterization
Reporting Period:	July 25, 2022 – July 29, 2022
Integral Project No.:	EF1017
NYSDEC Project No.:	851048

ACTIVITIES PERFORMED

Site characterization field work was performed the week of July 25 through July 29, 2022, in accordance with the NYSDEC-approved P-Site Characterization Work Plan. A summary of the work completed is as follows:

- Sampling and logging of SB1 was completed and a 1-inch PVC well was installed (MW1).
- Sampling and logging of SB5 was completed and a 2-inch PVC well was installed (MW5).
- Surface and shallow soil samples were collected and logged from SS5, SS6 and SS7.
- Installation of borings SB2 and SB4 was attempted, however, at both locations the Geoprobe was not able to advance the boring due to concrete-like material.
- SB3 was installed. No samples were collected as there was insufficient material recovered from the specified sample intervals. During installation of MW3, the bore hole collapsed as the augers were pulled back and the bore hole was abandoned with grout.

WORK PLAN MODIFICATIONS

Due to overhead clearance limitations, a small drill rig (54LT) was/will be used to install the soil borings and monitoring wells inside the building. The small drill rig cannot spin augers and as a result the monitoring wells inside the building, MW1, MW2 and MW4, are/will be constructed with 1-inch PVC.

The location of SB4/MW4 was moved approximately 5 feet south to remain within the property boundary.

The location of SS1 will be moved approximately 20 feet south east to avoid buried utilities and remain within the property boundary.

AIR MONITORING RESULTS

Air monitoring was performed in accordance with the NYSDEC-approved Community Air Monitoring Plan (CAMP). Data collected during this work are attached. While the CAMP monitoring equipment was actively sampling site conditions, and alarm settings were active on the individual monitoring units, there were several issues with recording/logging of data at the CAMP stations. A summary of relevant data gaps is provided below:

- On July 25, 2022, a gap in the downwind photoionization detector (PID) data log took place between approximately 14:15 and 17:25. This occurred during the time that SB5/MW5 was being advanced. The work zone was actively monitored with a separate PID unit and ambient VOC concentrations did not exceed the CAMP limit of 5 parts per million (ppm). No audible alarms were triggered on the downwind PID unit.
- On July 27, 2022, a gap in the downwind aerosol meter (DustTrak™) data log occurred between approximately 13:20 and 15:37. Soil boring/monitoring well SB5/MW5 was advanced during this time period. No audible alarms were triggered on the downwind DustTrak unit, and no visible dust was observed in the work zone.
- On July 28, 2022, a gap in the downwind PID data log occurred between approximately 08:00 and 09:45. Monitoring well MW5 was being constructed (grout emplacement) during this time period; however, no drilling took place. The work zone was actively monitored with a separate PID unit and ambient VOC concentrations did not exceed 5 ppm. No audible alarms were observed in the downwind PID unit.

- On July 28, 2022, a gap in the downwind PID data log occurred between approximately 10:36 and 13:15. This was during advancement of soil boring/monitoring well SB3/MW3. The work zone was actively monitored with a separate PID unit and ambient VOC concentrations did not exceed 5 ppm. No audible alarms were observed in the downwind PID unit.
- On July 28, 2022, a gap in the DustTrak data log occurred between 09:58 and 13:15. Soil boring/monitoring well SB3/MW3 was advanced during this time. No audible alarms were triggered on the downwind DustTrak unit, and no visible dust was observed.

Throughout the entirety of the intrusive work performed, work zone air monitoring did not indicate a VOC concentration above 5 ppm and no visible dust was generated. As such, Integral is confident that no CAMP limit exceedances occurred as a result of the site characterization work. In general, the air monitoring stations appeared to be working properly and there was no indication to the field team that data was not being logged. In order to prevent the loss of logged data in the future, air monitoring with a hand held DustTrak and PID will be collected manually in 30-minute increments, in accordance with the NYSDEC-approved Work Plan.

UPCOMING ACTIVITIES

- Corning Incorporated is procuring a construction contractor in order to gain access to the necessary sub-slab areas and remove concrete-like material such that SB2/MW2 and SB4/MW4 can be completed.
- A second attempt to install MW3 will be made utilizing a 10 ft sand pre-pack and 5 ft bentonite pre-pack.
- Sample locations SS1 through SS4 will be completed.
- The five monitoring wells will be developed for future groundwater sampling (to be performed at least 2 weeks after the well development).

SCHEDULE

A revised schedule will be provided to NYSDEC once dates are confirmed with the construction contractor and driller. Notification will be provided to the NYSDEC at least 2-weeks in advance of field activities.

Community Air Monitoring Plan - Downwind Aerosol Data

Date/Time	AEROSOL (mg/m^3)
7/25/2022 14:25	0.011
7/25/2022 14:26	0.014
7/25/2022 14:27	0.014
7/25/2022 14:28	0.015
7/25/2022 14:29	0.015
7/25/2022 14:30	0.016
7/25/2022 14:31	0.014
7/25/2022 14:32	0.015
7/25/2022 14:33	0.014
7/25/2022 14:34	0.015
7/25/2022 14:35	0.014
7/25/2022 14:36	0.014
7/25/2022 14:37	0.014
7/25/2022 14:38	0.014
7/25/2022 14:39	0.014
7/25/2022 14:40	0.014
7/25/2022 14:41	0.015
7/25/2022 14:42	0.014
7/25/2022 14:43	0.014
7/25/2022 14:44	0.015
7/25/2022 14:45	0.014
7/25/2022 14:46	0.013
7/25/2022 14:47	0.014
7/25/2022 14:48	0.013
7/25/2022 14:49	0.013
7/25/2022 14:50	0.013
7/25/2022 14:51	0.013
7/25/2022 14:52	0.013
7/25/2022 14:53	0.013
7/25/2022 14:54	0.013
7/25/2022 14:55	0.013
7/25/2022 14:56	0.013
7/25/2022 14:57	0.013
7/25/2022 14:58	0.013
7/25/2022 14:59	0.013
7/25/2022 15:00	0.013
7/25/2022 15:01	0.014
7/25/2022 15:02	0.014
7/25/2022 15:03	0.014
7/25/2022 15:04	0.014
7/25/2022 15:05	0.015
7/25/2022 15:06	0.014
7/25/2022 15:07	0.015
7/25/2022 15:08	0.015
7/25/2022 15:09	0.014
7/25/2022 15:10	0.014
7/25/2022 15:11	0.014
7/25/2022 15:12	0.014
7/25/2022 15:13	0.014
7/25/2022 15:14	0.014
7/25/2022 15:15	0.014
7/25/2022 15:16	0.014
7/25/2022 15:17	0.014
7/25/2022 15:18	0.014
7/25/2022 15:19	0.014
7/25/2022 15:20	0.013
7/25/2022 15:21	0.013
7/25/2022 15:22	0.014
7/25/2022 15:23	0.014
7/25/2022 15:24	0.014
7/25/2022 15:25	0.014
7/25/2022 15:26	0.016
7/25/2022 15:27	0.018
7/25/2022 15:28	0.014
7/25/2022 15:29	0.014
7/25/2022 15:30	0.013
7/25/2022 15:31	0.013
7/25/2022 15:32	0.015
7/25/2022 15:33	0.016
7/25/2022 15:34	0.014
7/25/2022 15:35	0.015
7/25/2022 15:36	0.015
7/25/2022 15:37	0.015
7/25/2022 15:38	0.014
7/25/2022 15:39	0.014
7/25/2022 15:40	0.014
7/25/2022 15:41	0.014
7/25/2022 15:42	0.014
7/25/2022 15:43	0.014
7/25/2022 15:44	0.014
7/25/2022 15:45	0.014
7/25/2022 15:46	0.014
7/25/2022 15:47	0.013
7/25/2022 15:48	0.014
7/25/2022 15:49	0.013
7/25/2022 15:50	0.013
7/25/2022 15:51	0.013
7/25/2022 15:52	0.013
7/25/2022 15:53	0.013
7/25/2022 15:54	0.013
7/25/2022 15:55	0.013
7/25/2022 15:56	0.013
7/25/2022 15:57	0.013
7/25/2022 15:58	0.013

Community Air Monitoring Plan - Downwind Aerosol Data

Date/Time	AEROSOL (mg/m^3)	
7/25/2022 15:59	0.019	
7/25/2022 16:00	0.012	
7/25/2022 16:01	0.014	
7/25/2022 16:02	0.014	
7/25/2022 16:03	0.012	
7/25/2022 16:04	0.012	
7/25/2022 16:05	0.012	
7/25/2022 16:06	0.012	
7/25/2022 16:07	0.013	
7/25/2022 16:08	0.013	
7/25/2022 16:09	0.014	
7/25/2022 16:10	0.013	
7/25/2022 16:11	0.012	
7/25/2022 16:12	0.014	
7/25/2022 16:13	0.014	
7/25/2022 16:14	0.013	
7/25/2022 16:15	0.012	
7/25/2022 16:16	0.012	
7/25/2022 16:17	0.013	
7/25/2022 16:18	0.013	
7/25/2022 16:19	0.013	
7/25/2022 16:20	0.013	
7/25/2022 16:21	0.013	
7/25/2022 16:22	0.012	
7/25/2022 16:23	0.014	
7/25/2022 16:24	0.012	
7/25/2022 16:25	0.013	
7/25/2022 16:26	0.012	
7/25/2022 16:27	0.013	
7/25/2022 16:28	0.013	
7/25/2022 16:29	0.013	
7/25/2022 16:30	0.015	
7/25/2022 16:31	0.014	
7/25/2022 16:32	0.014	
7/25/2022 16:33	0.013	
7/25/2022 16:34	0.013	
7/25/2022 16:35	0.013	
7/27/22 12:58	0.025	
7/27/22 12:59	0.033	
7/27/22 13:00	0.019	
7/27/22 13:01	0.018	
7/27/22 13:02	0.018	
7/27/22 13:03	0.018	
7/27/22 13:04	0.019	
7/27/22 13:05	0.018	
7/27/22 13:06	0.018	
7/27/22 13:07	0.018	
7/27/22 13:08	0.019	
7/27/22 13:09	0.018	
7/27/22 13:10	0.02	
7/27/22 13:11	0.019	
7/27/22 13:12	0.019	
7/27/22 13:13	0.023	
7/27/22 13:14	0.037	
7/27/22 13:15	0.034	
7/27/22 13:16	0.02	
7/27/22 13:17	0.027	
7/27/22 13:18	0.023	
7/27/22 13:19	0.019	
7/27/22 13:20	0.02	
7/27/22 15:37	0.032	
7/27/22 15:38	0.03	
7/27/22 15:39	0.03	
7/27/22 15:40	0.026	
7/27/22 15:41	0.026	
7/27/22 15:42	0.026	
7/27/22 15:43	0.026	
7/27/22 15:44	0.016	
7/27/22 15:45	0.037	
7/27/22 15:46	0.028	
7/27/22 15:47	0.038	
7/27/22 15:48	0.031	
7/27/22 15:49	0.014	
7/27/22 15:50	0.013	
7/27/22 15:51	0.025	
7/27/22 15:52	0.028	
7/27/22 15:53	0.018	
7/27/22 15:54	0.018	
7/27/22 15:55	0.018	
7/27/22 16:03	0.035	
7/27/22 16:04	0.034	
7/27/22 16:05	0.032	
7/27/22 16:06	0.032	
7/27/22 16:07	0.032	
7/27/22 16:08	0.036	
7/27/22 16:09	0.033	
7/27/2022 16:10	0.019	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:11	0.021	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:12	0.154	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:13	0.044	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:14	0.022	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:15	0.018	Data from Upwind Unit - Repositioned downwind

Community Air Monitoring Plan - Downwind Aerosol Data

Date/Time	AEROSOL (mg/m^3)	
7/27/2022 16:16	0.019	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:17	0.024	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:18	0.02	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:19	0.025	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:20	0.02	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:21	0.023	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:22	0.019	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:23	0.019	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:24	0.018	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:25	0.017	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:26	0.02	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:27	0.021	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:28	0.02	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:29	0.022	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:30	0.018	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:31	0.018	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:32	0.018	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:33	0.018	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:34	0.018	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:35	0.018	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:36	0.018	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:37	0.018	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:38	0.018	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:39	0.018	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:40	0.018	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:41	0.018	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:42	0.019	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:43	0.018	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:44	0.024	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:45	0.019	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:46	0.028	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:47	0.02	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:48	0.078	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:49	0.022	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:50	0.017	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:51	0.023	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:52	0.023	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:53	0.018	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:54	0.022	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:55	0.034	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:56	0.028	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:57	0.019	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:58	0.018	Data from Upwind Unit - Repositioned downwind
7/27/2022 16:59	0.024	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:00	0.022	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:01	0.023	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:02	0.033	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:03	0.037	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:04	0.048	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:05	0.03	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:06	0.024	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:07	0.023	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:08	0.021	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:09	0.018	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:10	0.02	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:11	0.027	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:12	0.023	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:13	0.024	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:14	0.026	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:15	0.018	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:16	0.019	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:17	0.022	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:18	0.026	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:19	0.019	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:20	0.025	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:21	0.021	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:22	0.025	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:23	0.02	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:24	0.022	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:25	0.031	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:26	0.021	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:27	0.025	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:28	0.024	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:29	0.02	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:30	0.02	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:31	0.046	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:32	0.053	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:33	0.029	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:34	0.027	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:35	0.023	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:36	0.026	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:37	0.021	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:38	0.018	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:39	0.021	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:40	0.022	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:41	0.021	Data from Upwind Unit - Repositioned downwind
7/27/2022 17:42	0.02	Data from Upwind Unit - Repositioned downwind
7/28/22 9:46	0.005	
7/28/22 9:47	0.006	
7/28/22 9:48	0.006	
7/28/22 9:49	0.006	
7/28/22 9:50	0.006	
7/28/22 9:51	0.006	

Community Air Monitoring Plan - Downwind Aerosol Data

Date/Time	AEROSOL (mg/m^3)
7/28/22 9:52	0.006
7/28/22 9:53	0.006
7/28/22 9:54	0.006
7/28/22 9:55	0.006
7/28/22 9:56	0.006
7/28/22 9:57	0.006
7/28/22 9:58	0.006
7/28/22 13:56	0.013
7/28/22 13:57	0.015
7/28/22 13:58	0.011
7/28/22 13:59	0.012
7/28/22 14:00	0.016
7/28/22 14:01	0.014
7/28/22 14:02	0.023
7/28/22 14:03	0.024
7/28/22 14:04	0.019
7/28/22 14:05	0.018
7/28/22 14:06	0.022
7/28/22 14:07	0.02
7/28/22 14:08	0.021
7/28/22 14:33	0.017
7/28/22 14:34	0.017
7/28/22 14:35	0.018
7/28/22 14:36	0.016
7/28/22 14:37	0.016
7/28/22 14:38	0.017
7/28/22 14:39	0.016
7/28/22 14:40	0.029
7/28/22 14:41	0.027
7/28/22 14:42	0.022
7/28/22 14:43	0.025
7/28/22 14:44	0.021
7/28/22 14:45	0.022
7/28/22 14:46	0.017
7/28/22 14:47	0.02
7/28/22 14:48	0.033
7/28/22 14:49	0.032
7/28/22 14:50	0.035
7/28/22 14:51	0.047
7/28/22 14:52	0.027
7/29/22 7:45	0.028
7/29/22 7:46	0.027
7/29/22 7:47	0.03
7/29/22 7:48	0.029
7/29/22 7:49	0.027
7/29/22 7:50	0.027
7/29/22 7:51	0.027
7/29/22 7:52	0.027
7/29/22 7:53	0.026
7/29/22 7:54	0.025
7/29/22 7:55	0.025
7/29/22 7:56	0.025
7/29/22 7:57	0.026
7/29/22 7:58	0.024
7/29/22 7:59	0.025
7/29/22 8:00	0.025
7/29/22 8:01	0.025
7/29/22 8:02	0.026
7/29/22 8:03	0.025
7/29/22 8:04	0.026
7/29/22 8:05	0.025
7/29/22 8:06	0.025
7/29/22 8:07	0.025
7/29/22 8:08	0.025
7/29/22 8:09	0.025
7/29/22 8:10	0.025
7/29/22 8:11	0.025
7/29/22 8:12	0.025
7/29/22 8:13	0.025
7/29/22 8:14	0.026
7/29/22 8:15	0.025
7/29/22 8:16	0.025
7/29/22 8:17	0.025
7/29/22 8:18	0.025
7/29/22 8:19	0.025
7/29/22 8:20	0.025
7/29/22 8:21	0.024
7/29/22 8:22	0.025
7/29/22 8:23	0.025
7/29/22 8:24	0.024
7/29/22 8:25	0.024
7/29/22 8:26	0.024
7/29/22 8:27	0.024
7/29/22 8:28	0.024
7/29/22 8:29	0.024
7/29/22 8:30	0.024
7/29/22 8:31	0.024
7/29/22 8:32	0.023
7/29/22 8:33	0.023
7/29/22 8:34	0.023
7/29/22 8:35	0.023
7/29/22 8:36	0.023

Community Air Monitoring Plan - Downwind Aerosol Data

Date/Time	AEROSOL (mg/m^3)	
7/29/22 8:37	0.024	
7/29/22 8:38	0.023	
7/29/22 8:39	0.023	
7/29/22 8:40	0.023	
7/29/22 8:41	0.023	
7/29/22 8:42	0.024	
7/29/22 8:43	0.032	
7/29/22 8:44	0.028	
7/29/22 8:45	0.04	
7/29/22 8:46	0.022	
7/29/22 8:47	0.013	
7/29/22 8:48	0.027	
7/29/22 8:49	0.009	
7/29/22 8:50	0.022	
7/29/22 8:51	0.068	
7/29/22 8:52	0.006	
7/29/22 8:53	0.024	
7/29/22 8:54	0.027	
7/29/22 8:55	0.021	
7/29/22 13:11	0.025	
7/29/22 13:12	0.011	
7/29/22 13:13	0.007	
7/29/22 13:14	0.011	
7/29/2022 13:15	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:16	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:17	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:18	0.061	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:19	0.029	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:20	0.012	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:21	0.033	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:22	0.007	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:23	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:24	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:25	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:26	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:27	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:28	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:29	0.03	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:30	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:31	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:32	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:33	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:34	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:35	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:36	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:37	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:38	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:39	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:40	0.007	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:41	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:42	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:43	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:44	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:45	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:46	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:47	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:48	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:49	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:50	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:51	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:52	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:53	0.007	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:54	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:55	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:56	0.008	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:57	0.007	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:58	0.017	Data from Upwind Unit - Repositioned Downwind
7/29/2022 13:59	0.029	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:00	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:01	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:02	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:03	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:04	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:05	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:06	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:07	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:08	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:09	0.007	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:10	0.007	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:11	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:12	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:13	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:14	0.007	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:15	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:16	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:17	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:18	0.007	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:19	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:20	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:21	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:22	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:23	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:24	0.006	Data from Upwind Unit - Repositioned Downwind

Community Air Monitoring Plan - Downwind Aerosol Data

Date/Time	AEROSOL (mg/m^3)	
7/29/2022 14:25	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:26	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:27	0.007	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:28	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:29	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:30	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:31	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:32	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:33	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:34	0.005	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:35	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:36	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:37	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:38	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:39	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:40	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:41	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:42	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:43	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:44	0.01	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:45	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:46	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:47	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:48	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:49	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:50	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:51	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:52	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:53	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:54	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:55	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:56	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:57	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:58	0.007	Data from Upwind Unit - Repositioned Downwind
7/29/2022 14:59	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 15:00	0.006	Data from Upwind Unit - Repositioned Downwind
7/29/2022 15:01	0.009	Data from Upwind Unit - Repositioned Downwind

Community Air Monitoring Plan - Downwind Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B057949 VOC (Peak) (ppm)	RAE RS232(A) 0B057949 VOC (Low) (ppm)	RAE RS232(A) 0B057949 VOC (STEL) (ppm)	RAE RS232(A) 0B057949 VOC (TWA) (ppm)	RAE RS232(A) 0B057949 VOC (ppm)	VOC ppm AVG 15m (ppm)
7/25/2022 14:24						
7/25/2022 14:25						
7/25/2022 14:26						
7/25/2022 14:27						
7/25/2022 14:28						
7/25/2022 14:29						
7/25/2022 14:30						
7/25/2022 14:31						
7/25/2022 14:32						
7/25/2022 14:33						
7/25/2022 14:34						
7/25/2022 14:35						
7/25/2022 14:36						
7/25/2022 14:37						
7/25/2022 14:38						
7/25/2022 14:39						
7/25/2022 14:40						
7/25/2022 14:41						
7/25/2022 14:42						
7/25/2022 14:43						
7/25/2022 14:44						
7/25/2022 14:45						
7/25/2022 14:46						
7/25/2022 14:47						
7/25/2022 14:48						
7/25/2022 14:49						
7/25/2022 14:50						
7/25/2022 14:51						
7/25/2022 14:52						
7/25/2022 14:53						
7/25/2022 14:54						
7/25/2022 14:55						
7/25/2022 14:56						
7/25/2022 14:57						
7/25/2022 14:58						
7/25/2022 14:59						
7/25/2022 15:00						
7/25/2022 15:01						
7/25/2022 15:02						
7/25/2022 15:03						
7/25/2022 15:04						
7/25/2022 15:05						
7/25/2022 15:06						
7/25/2022 15:07						
7/25/2022 15:08						
7/25/2022 15:09						
7/25/2022 15:10						
7/25/2022 15:11						
7/25/2022 15:12						
7/25/2022 15:13						
7/25/2022 15:14						
7/25/2022 15:15						
7/25/2022 15:16						
7/25/2022 15:17						
7/25/2022 15:18						
7/25/2022 15:19						
7/25/2022 15:20						
7/25/2022 15:21						
7/25/2022 15:22						
7/25/2022 15:23						
7/25/2022 15:24						
7/25/2022 15:25						
7/25/2022 15:26						
7/25/2022 15:27						
7/25/2022 15:28						
7/25/2022 15:29						
7/25/2022 15:30						
7/25/2022 15:31						
7/25/2022 15:32						
7/25/2022 15:33						
7/25/2022 15:34						
7/25/2022 15:35						
7/25/2022 15:36						
7/25/2022 15:37						
7/25/2022 15:38						
7/25/2022 15:39						
7/25/2022 15:40						
7/25/2022 15:41						
7/25/2022 15:42						
7/25/2022 15:43						
7/25/2022 15:44						
7/25/2022 15:45						
7/25/2022 15:46						
7/25/2022 15:47						
7/25/2022 15:48						
7/25/2022 15:49						
7/25/2022 15:50						
7/25/2022 15:51						
7/25/2022 15:52						
7/25/2022 15:53						
7/25/2022 15:54						
7/25/2022 15:55						
7/25/2022 15:56						
7/25/2022 15:57						
7/25/2022 15:58						
7/25/2022 15:59						
7/25/2022 16:00						
7/25/2022 16:01						
7/25/2022 16:02						
7/25/2022 16:03						
7/25/2022 16:04						
7/25/2022 16:05						
7/25/2022 16:06						
7/25/2022 16:07						
7/25/2022 16:08						
7/25/2022 16:09						
7/25/2022 16:10						
7/25/2022 16:11						
7/25/2022 16:12						
7/25/2022 16:13						
7/25/2022 16:14						
7/25/2022 16:15						
7/25/2022 16:16						
7/25/2022 16:17						
7/25/2022 16:18						
7/25/2022 16:19						
7/25/2022 16:20						
7/25/2022 16:21						
7/25/2022 16:22						
7/25/2022 16:23						
7/25/2022 16:24						
7/25/2022 16:25						
7/25/2022 16:26						
7/25/2022 16:27						
7/25/2022 16:28						
7/25/2022 16:29						
7/25/2022 16:30						
7/25/2022 16:31						
7/25/2022 16:32						

Community Air Monitoring Plan - Downwind Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B057949 VOC (Peak) (ppm)	RAE RS232(A) 0B057949 VOC (Low) (ppm)	RAE RS232(A) 0B057949 VOC (STEL) (ppm)	RAE RS232(A) 0B057949 VOC (TWA) (ppm)	RAE RS232(A) 0B057949 VOC (ppm)	VOC ppm AVG 15m (ppm)
7/25/2022 16:33						
7/25/2022 16:34						
7/25/2022 16:35						
7/26/2022 7:44						
7/26/2022 7:45	0.113	0	0	0	0	0
7/26/2022 7:46	0.113	0	0	0	0	0
7/26/2022 7:47	0.113	0	0	0	0	0
7/26/2022 7:48	0.113	0	0	0	0	0
7/26/2022 7:49	0.113	0	0	0	0	0
7/26/2022 7:50	0.113	0	0	0	0	0
7/26/2022 7:51	0.113	0	0	0	0	0
7/26/2022 7:52	0.113	0	0	0	0	0
7/26/2022 7:53	0.113	0	0	0	0	0
7/26/2022 7:54	0.113	0	0	0	0	0
7/26/2022 7:55	0.113	0	0	0	0	0
7/26/2022 7:56						
7/26/2022 7:57						
7/26/2022 7:58						
7/26/2022 7:59						
7/26/2022 8:00						
7/26/2022 8:01						
7/26/2022 8:02						
7/26/2022 8:03						
7/26/2022 8:04						
7/26/2022 8:05						
7/26/2022 8:06						
7/26/2022 8:07						
7/26/2022 8:08						
7/26/2022 8:09						
7/26/2022 8:10						
7/26/2022 8:11						
7/26/2022 8:12						
7/26/2022 8:13						
7/26/2022 8:14						
7/26/2022 8:15						
7/26/2022 8:16						
7/26/2022 8:17						
7/26/2022 8:18						
7/26/2022 8:19						
7/26/2022 8:20						
7/26/2022 8:21						
7/26/2022 8:22						
7/26/2022 8:23						
7/26/2022 8:24						
7/26/2022 8:25						
7/26/2022 8:26						
7/26/2022 8:27						
7/26/2022 8:28						
7/26/2022 8:29						
7/26/2022 8:30						
7/26/2022 8:31						
7/26/2022 8:31						
7/26/2022 8:32						
7/26/2022 8:33						
7/26/2022 8:33						
7/26/2022 8:34						
7/26/2022 8:35						
7/26/2022 8:36						
7/26/2022 8:37						
7/26/2022 8:38						
7/26/2022 8:39						
7/26/2022 8:40						
7/26/2022 8:41						
7/26/2022 8:42						
7/26/2022 8:43						
7/26/2022 8:44						
7/26/2022 8:45						
7/26/2022 8:46						
7/26/2022 8:47						
7/26/2022 8:48						
7/26/2022 8:49						
7/26/2022 8:50						
7/26/2022 8:51						
7/26/2022 8:52						
7/26/2022 8:53						
7/26/2022 8:54						
7/26/2022 8:55						
7/26/2022 8:56						
7/26/2022 8:57						
7/26/2022 8:58						
7/26/2022 8:59						
7/26/2022 9:00						
7/26/2022 9:01						
7/26/2022 9:02						
7/26/2022 9:03						
7/26/2022 9:04						
7/26/2022 9:05						
7/26/2022 9:06						
7/26/2022 9:07						
7/26/2022 9:08						
7/26/2022 9:09						
7/26/2022 9:10						
7/26/2022 9:11						
7/26/2022 9:12						
7/26/2022 9:13						
7/26/2022 9:14						
7/26/2022 9:15						
7/26/2022 9:16						
7/26/2022 9:17						
7/26/2022 9:18						
7/26/2022 9:19						
7/26/2022 9:20						
7/26/2022 9:21						
7/26/2022 9:22						
7/26/2022 9:23						
7/26/2022 9:24						
7/26/2022 9:25						
7/26/2022 9:26						
7/26/2022 9:27						
7/26/2022 9:28						
7/26/2022 9:29						
7/26/2022 9:30						
7/26/2022 9:31						
7/26/2022 9:32						
7/26/2022 9:33						
7/26/2022 9:34						
7/26/2022 9:35						
7/26/2022 9:36						
7/26/2022 9:37						
7/26/2022 9:38						
7/26/2022 9:39						
7/26/2022 9:40						
7/26/2022 9:41						
7/26/2022 9:42						
7/26/2022 9:43						
7/26/2022 9:44						
7/26/2022 9:45						
7/26/2022 9:46						
7/26/2022 9:47						

Community Air Monitoring Plan - Downwind Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B057949 VOC (Peak) (ppm)	RAE RS232(A) 0B057949 VOC (Low) (ppm)	RAE RS232(A) 0B057949 VOC (STEL) (ppm)	RAE RS232(A) 0B057949 VOC (TWA) (ppm)	RAE RS232(A) 0B057949 VOC (ppm)	VOC ppm AVG 15m (ppm)
7/26/2022 9:48						
7/26/2022 9:49						
7/26/2022 9:50						
7/26/2022 9:51						
7/26/2022 9:52						
7/26/2022 9:53						
7/26/2022 9:54						
7/26/2022 9:55						
7/26/2022 9:56						
7/26/2022 9:57						
7/26/2022 9:58						
7/26/2022 9:59						
7/26/2022 10:00						
7/26/2022 10:01						
7/26/2022 10:02						
7/26/2022 10:03						
7/26/2022 10:04						
7/26/2022 10:05						
7/26/2022 10:06						
7/26/2022 10:07						
7/26/2022 10:08						
7/26/2022 10:09						
7/26/2022 10:10						
7/26/2022 10:11						
7/26/2022 10:12						
7/26/2022 10:13						
7/26/2022 10:14						
7/26/2022 10:15						
7/26/2022 10:16						
7/26/2022 10:17						
7/26/2022 10:18						
7/26/2022 10:19						
7/26/2022 10:20						
7/27/2022 13:21						
7/27/2022 13:22	0.215	0	0.162	0.007	0.186	0.186
7/27/2022 13:23	0.215	0	0.166	0.007	0.176	0.181
7/27/2022 13:24	0.215	0	0.17	0.007	0.177	0.1797
7/27/2022 13:25	0.215	0	0.172	0.008	0.161	0.175
7/27/2022 13:26	0.215	0	0.174	0.008	0.17	0.174
7/27/2022 13:27	0.215	0	0.175	0.008	0.17	0.1733
7/27/2022 13:28	0.215	0	0.176	0.009	0.17	0.1729
7/27/2022 13:29	0.215	0	0.177	0.009	0.171	0.1726
7/27/2022 13:30	0.215	0	0.178	0.009	0.183	0.1738
7/27/2022 13:31	0.215	0	0.178	0.01	0.191	0.1755
7/27/2022 13:32	0.215	0	0.179	0.01	0.197	0.1775
7/27/2022 13:33	0.215	0	0.18	0.011	0.208	0.18
7/27/2022 13:34	0.215	0	0.181	0.011	0.21	0.1823
7/27/2022 13:35	0.252	0	0.182	0.012	0.216	0.1847
7/27/2022 13:36	0.252	0	0.185	0.012	0.218	0.1869
7/27/2022 13:37	0.252	0	0.187	0.012	0.21	0.1885
7/27/2022 13:38	0.252	0	0.189	0.013	0.22	0.1915
7/27/2022 13:39	0.252	0	0.192	0.013	0.224	0.1946
7/27/2022 13:40	0.252	0	0.195	0.014	0.23	0.1992
7/27/2022 13:41	0.252	0	0.2	0.014	0.232	0.2033
7/27/2022 13:42	0.252	0	0.204	0.015	0.232	0.2075
7/27/2022 13:43	0.252	0	0.208	0.015	0.237	0.2119
7/27/2022 13:44	0.252	0	0.213	0.016	0.241	0.2166
7/27/2022 13:45	0.252	0	0.217	0.016	0.239	0.2203
7/27/2022 13:46	0.252	0	0.221	0.017	0.236	0.2233
7/27/2022 13:47	0.252	0	0.224	0.017	0.231	0.2256
7/27/2022 13:48	0.252	0	0.225	0.018	0.231	0.2271
7/27/2022 13:49	0.252	0	0.227	0.018	0.239	0.2291
7/27/2022 13:50	0.252	0	0.229	0.019	0.242	0.2308
7/27/2022 13:51	0.252	0	0.23	0.019	0.245	0.2326
7/27/2022 13:52	0.252	0	0.232	0.02	0.242	0.2347
7/27/2022 13:53	0.252	0	0.233	0.02	0.244	0.2363
7/27/2022 13:54	0.252	0	0.235	0.021	0.243	0.2376
7/27/2022 13:55	0.252	0	0.236	0.021	0.243	0.2385
7/27/2022 13:56	0.252	0	0.236	0.022	0.237	0.2388
7/27/2022 13:57	0.252	0	0.237	0.022	0.233	0.2389
7/27/2022 13:58	0.252	0	0.236	0.023	0.232	0.2385
7/27/2022 13:59	0.252	0	0.236	0.023	0.224	0.2374
7/27/2022 14:00	0.252	0	0.235	0.024	0.228	0.2367
7/27/2022 14:01	0.252	0	0.234	0.024	0.222	0.2357
7/27/2022 14:02	0.252	0	0.233	0.025	0.216	0.2347
7/27/2022 14:03	0.252	0	0.233	0.025	0.221	0.2341
7/27/2022 14:04	0.252	0	0.232	0.025	0.213	0.2323
7/27/2022 14:05	0.252	0	0.23	0.026	0.205	0.2299
7/27/2022 14:06	0.252	0	0.228	0.026	0.202	0.227
7/27/2022 14:07	0.252	0	0.225	0.027	0.198	0.2241
7/27/2022 14:08	0.252	0	0.223	0.027	0.201	0.2212
7/27/2022 14:09	0.252	0	0.22	0.028	0.202	0.2185
7/27/2022 14:10	0.252	0	0.218	0.028	0.2	0.2156
7/27/2022 14:11	0.252	0	0.215	0.028	0.203	0.2133
7/27/2022 14:12	0.252	0	0.213	0.029	0.204	0.2114
7/27/2022 14:13	0.252	0	0.211	0.029	0.202	0.2094
7/27/2022 14:14	0.252	0	0.209	0.03	0.222	0.2093
7/27/2022 14:15	0.252	0	0.209	0.03	0.205	0.2077
7/27/2022 14:16	0.252	0	0.207	0.031	0.209	0.2069
7/27/2022 14:17	0.252	0	0.207	0.031	0.208	0.2063
7/27/2022 14:18	0.252	0	0.206	0.031	0.21	0.2056
7/27/2022 14:19	0.252	0	0.206	0.032	0.206	0.2051
7/27/2022 14:20	0.252	0	0.205	0.032	0.206	0.2052
7/27/2022 14:21	0.252	0	0.205	0.033	0.208	0.2056
7/27/2022 14:22	0.909	0	0.21	0.033	0.22	0.2071
7/27/2022 14:23	0.909	0	0.211	0.034	0.208	0.2075
7/27/2022 14:24	0.909	0	0.212	0.034	0.207	0.2079
7/27/2022 14:25	0.909	0	0.212	0.035	0.202	0.208
7/27/2022 14:26	0.909	0	0.212	0.035	0.206	0.2082
7/27/2022 14:27	0.909	0	0.212	0.035	0.2	0.2079
7/27/2022 14:28	0.909	0	0.212	0.036	0.2	0.2078
7/27/2022 14:29	0.909	0	0.211	0.036	0.201	0.2064
7/27/2022 14:30	0.909	0	0.21	0.037	0.201	0.2061
7/27/2022 14:31	0.909	0	0.21	0.037	0.203	0.2057
7/27/2022 14:32	0.909	0	0.209	0.038	0.202	0.2053
7/27/2022 14:33	0.909	0	0.209	0.038	0.203	0.2049
7/27/2022 14:34	0.909	0	0.208	0.038	0.201	0.2045
7/27/2022 14:35	0.909	0	0.208	0.039	0.197	0.2039
7/27/2022 14:36	0.909	0	0.207	0.039	0.196	0.2031
7/27/2022 14:37	0.909	0	0.201	0.04	0.197	0.2016
7/27/2022 14:38	0.909	0	0.2	0.04	0.191	0.2005
7/27/2022 14:39	0.909	0	0.199	0.04	0.195	0.1997
7/27/2022 14:40	0.909	0	0.198	0.041	0.196	0.1993
7/27/2022 14:41	0.909	0	0.197	0.041	0.191	0.1983
7/27/2022 14:42	0.909	0	0.197	0.042	0.193	0.1978
7/27/2022 14:43	0.909	0	0.196	0.042	0.192	0.1973
7/27/2022 14:44	0.909	0	0.196	0.042	0.189	0.1965
7/27/2022 14:45	0.909	0	0.195	0.043	0.181	0.1951
7/27/2022 14:46	0.909	0	0.194	0.043	0.181	0.1937
7/27/2022 14:47	0.909	0	0.192	0.044	0.18	0.1922
7/27/2022 14:48	0.909	0	0.191	0.044	0.177	0.1905
7/27/2022 14:49	0.909	0	0.189	0.044	0.173	0.1886
7/27/2022 14:50	0.909	0	0.188	0.045	0.178	0.1873
7/27/2022 14:51	0.909	0	0.186	0.045	0.177	0.1861
7/27/2022 14:52	0.909	0	0.185	0.045	0.174	0.1845
7/27/2022 14:53	0.909	0	0.183	0.046	0.18	0.1838
7/27/2022 14:54	0.909	0	0.182	0.046	0.178	0.1827
7/27/2022 14:55	0.909	0	0.181	0.047	0.177	0.1814
7/27/2022 14:56	0.909	0	0.18	0.047	0.179	0.1806

Community Air Monitoring Plan - Downwind Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B057949 VOC (Peak) (ppm)	RAE RS232(A) 0B057949 VOC (Low) (ppm)	RAE RS232(A) 0B057949 VOC (STEL) (ppm)	RAE RS232(A) 0B057949 VOC (TWA) (ppm)	RAE RS232(A) 0B057949 VOC (ppm)	VOC ppm AVG 15m (ppm)	
7/27/2022 14:57	0.909	0	0.179	0.047	0.179	0.1797	
7/27/2022 14:58	0.909	0	0.178	0.048	0.177	0.1787	
7/27/2022 14:59	0.909	0	0.177	0.048	0.175	0.1777	
7/27/2022 15:00	0.909	0	0.177	0.048	0.173	0.1772	
7/27/2022 15:01	0.909	0	0.176	0.049	0.172	0.1766	
7/27/2022 15:02							
7/27/2022 15:03							
7/27/2022 15:36							
7/27/2022 15:37	0.064	0	0	0	0.008	0.008	
7/27/2022 15:38	0.064	0	0	0	0.012	0.01	
7/27/2022 15:39	0.064	0	0	0	0.014	0.0113	
7/27/2022 15:40	0.064	0	0	0	0.017	0.0128	
7/27/2022 15:41	0.064	0	0	0	0.026	0.0154	
7/27/2022 15:42	0.064	0	0	0	0.025	0.017	
7/27/2022 15:43	0.064	0	0	0	0.035	0.0196	
7/27/2022 15:44	0.064	0	0	0	0.036	0.0216	
7/27/2022 15:45	0.064	0	0	0	0.035	0.0231	
7/27/2022 15:46	0.064	0	0.021	0	0.044	0.0252	
7/27/2022 15:47							
7/27/2022 15:48							
7/27/2022 15:49							
7/27/2022 15:50							
7/27/2022 15:51							
7/27/2022 15:52							
7/27/2022 15:53							
7/27/2022 15:54							
7/27/2022 15:55							
7/27/2022 15:56							
7/27/2022 15:57							
7/27/2022 15:58							
7/27/2022 15:59							
7/27/2022 16:00							
7/27/2022 16:01							
7/27/2022 16:10	0.22	0	0.18	0.062	0.19	0.1828	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:11	0.22	0	0.182	0.063	0.187	0.1835	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:12	0.22	0	0.183	0.063	0.194	0.1844	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:13	0.222	0	0.184	0.064	0.188	0.1852	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:14	0.222	0	0.185	0.064	0.185	0.1863	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:15	0.222	0	0.186	0.064	0.192	0.1871	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:16	0.222	0	0.187	0.065	0.187	0.188	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:17	0.222	0	0.187	0.065	0.197	0.1889	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:18	0.222	0	0.188	0.066	0.192	0.1895	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:19	0.222	0	0.189	0.066	0.195	0.1899	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:20	0.222	0	0.19	0.066	0.199	0.1909	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:21	0.222	0	0.19	0.067	0.206	0.1919	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:22	0.222	0	0.192	0.067	0.208	0.1933	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:23	0.222	0	0.193	0.068	0.211	0.1949	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:24	0.222	0	0.194	0.068	0.216	0.1965	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:25	0.222	0	0.196	0.069	0.216	0.1982	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:26	0.222	0	0.198	0.069	0.218	0.2003	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:27	0.224	0	0.2	0.069	0.221	0.2021	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:28	0.224	0	0.201	0.07	0.224	0.2045	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:29	0.229	0	0.203	0.07	0.224	0.2071	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:30	0.235	0	0.206	0.071	0.226	0.2093	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:31	0.235	0	0.208	0.071	0.223	0.2117	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:32	0.235	0	0.211	0.072	0.233	0.2141	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:33	0.235	0	0.213	0.072	0.235	0.217	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:34	0.24	0	0.216	0.073	0.238	0.2199	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:35	0.241	0	0.218	0.073	0.232	0.2221	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:36	0.241	0	0.221	0.074	0.231	0.2237	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:37	0.241	0	0.223	0.074	0.238	0.2257	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:38	0.241	0	0.225	0.075	0.239	0.2276	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:39	0.241	0	0.226	0.075	0.235	0.2289	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:40	0.241	0	0.228	0.076	0.23	0.2298	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:41	0.241	0	0.229	0.076	0.229	0.2305	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:42	0.241	0	0.23	0.077	0.225	0.2308	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:43	0.241	0	0.23	0.077	0.222	0.2307	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:44	0.241	0	0.23	0.078	0.223	0.2306	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:45	0.251	0	0.23	0.078	0.222	0.2303	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:46	0.251	0	0.23	0.078	0.215	0.2298	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:47	0.251	0	0.229	0.079	0.211	0.2283	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:48	0.251	0	0.228	0.079	0.211	0.2267	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:49	0.251	0	0.227	0.08	0.204	0.2245	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:50	0.251	0	0.225	0.08	0.198	0.2222	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:51	0.251	0	0.223	0.081	0.2	0.2201	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:52	0.251	0	0.22	0.081	0.193	0.2171	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:53	0.251	0	0.218	0.081	0.191	0.2139	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:54	0.251	0	0.215	0.082	0.195	0.2113	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:55	0.251	0	0.212	0.082	0.19	0.2086	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:56	0.251	0	0.21	0.083	0.192	0.2061	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:57	0.251	0	0.207	0.083	0.192	0.2039	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:58	0.251	0	0.205	0.084	0.192	0.2019	Data from Upwind Unit - Repositioned downwind.
7/27/2022 16:59	0.251	0	0.203	0.084	0.196	0.2001	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:00	0.251	0	0.201	0.084	0.191	0.1981	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:01	0.251	0	0.198	0.085	0.189	0.1963	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:02	0.251	0	0.197	0.085	0.183	0.1945	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:03	0.251	0	0.195	0.085	0.184	0.1927	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:04	0.251	0	0.193	0.086	0.182	0.1912	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:05	0.251	0	0.191	0.086	0.179	0.1899	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:06	0.251	0	0.19	0.087	0.185	0.1889	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:07	0.251	0	0.189	0.087	0.186	0.1885	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:08	0.251	0	0.188	0.087	0.184	0.188	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:09	0.251	0	0.187	0.088	0.188	0.1875	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:10	0.251	0	0.187	0.088	0.186	0.1873	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:11	0.251	0	0.186	0.089	0.186	0.1869	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:12	0.251	0	0.186	0.089	0.187	0.1865	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:13	0.251	0	0.186	0.089	0.19	0.1864	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:14	0.251	0	0.186	0.09	0.188	0.1859	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:15	0.251	0	0.186	0.09	0.191	0.1859	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:16	0.251	0	0.186	0.091	0.196	0.1863	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:17	0.251	0	0.186	0.091	0.198	0.1873	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:18	0.251	0	0.187	0.091	0.196	0.1881	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:19	0.251	0	0.188	0.092	0.194	0.1889	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:20	0.251	0	0.189	0.092	0.194	0.1899	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:21	0.251	0	0.19	0.093	0.199	0.1909	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:22	0.251	0	0.191	0.093	0.2	0.1918	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:23	0.251	0	0.192	0.093	0.207	0.1933	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:24	0.251	0	0.193	0.094	0.197	0.1939	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:25	0.251	0	0.194	0.094	0.203	0.1951	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:26	0.251	0	0.195	0.095	0.198	0.1959	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:27	0.251	0	0.195	0.095	0.198	0.1966	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:28	0.251	0	0.196	0.095	0.195	0.1969	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:29	0.251	0	0.197	0.096	0.202	0.1979	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:30	0.251	0	0.197	0.096	0.196	0.1982	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:31	0.251	0	0.198	0.097	0.2	0.1985	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:32	0.251	0	0.198	0.097	0.198	0.1985	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:33	0.251	0	0.198	0.098	0.19	0.1981	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:34	0.251	0	0.198	0.098	0.193	0.198	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:35	0.251	0	0.197	0.098	0.194	0.198	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:36	0.251	0	0.197	0.099	0.18	0.1967	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:37	0.251	0	0.196	0.099	0.178	0.1953	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:38	0.251	0	0.195	0.099	0.182	0.1936	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:39	0.251	0	0.194	0.1	0.175	0.1921	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:40	0.251	0	0.192	0.1	0.174	0.1902	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:41	0.251	0	0.191	0.101	0.176	0.1887	Data from Upwind Unit - Repositioned downwind.
7/27/2022 17:42	0.251	0	0.189	0.101	0.17	0.1869	Data from Upwind Unit - Repositioned downwind.
7/28/2022 8:30							
7/28/2022 8:31							
7/28/2022 8:32							

Community Air Monitoring Plan - Downwind Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B057949 VOC (Peak) (ppm)	RAE RS232(A) 0B057949 VOC (Low) (ppm)	RAE RS232(A) 0B057949 VOC (STEL) (ppm)	RAE RS232(A) 0B057949 VOC (TWA) (ppm)	RAE RS232(A) 0B057949 VOC (ppm)	VOC ppm AVG 15m (ppm)
7/28/2022 8:33						
7/28/2022 8:34						
7/28/2022 8:35						
7/28/2022 8:36						
7/28/2022 8:37						
7/28/2022 8:38						
7/28/2022 8:39						
7/28/2022 8:40						
7/28/2022 8:41						
7/28/2022 8:42						
7/28/2022 8:43						
7/28/2022 8:44						
7/28/2022 8:45						
7/28/2022 8:46						
7/28/2022 8:47						
7/28/2022 8:48						
7/28/2022 8:49						
7/28/2022 8:50						
7/28/2022 8:51						
7/28/2022 8:52						
7/28/2022 8:53						
7/28/2022 8:54						
7/28/2022 8:55						
7/28/2022 8:56						
7/28/2022 8:57						
7/28/2022 8:58						
7/28/2022 8:59						
7/28/2022 9:00						
7/28/2022 9:01						
7/28/2022 9:02						
7/28/2022 9:03						
7/28/2022 9:04						
7/28/2022 9:05						
7/28/2022 9:06						
7/28/2022 9:07						
7/28/2022 9:08						
7/28/2022 9:09						
7/28/2022 9:10						
7/28/2022 9:11						
7/28/2022 9:12						
7/28/2022 9:13						
7/28/2022 9:14						
7/28/2022 9:15						
7/28/2022 9:16						
7/28/2022 9:17						
7/28/2022 9:18						
7/28/2022 9:19						
7/28/2022 9:20						
7/28/2022 9:21						
7/28/2022 9:22						
7/28/2022 9:23						
7/28/2022 9:24						
7/28/2022 9:25						
7/28/2022 9:26						
7/28/2022 9:27						
7/28/2022 9:28						
7/28/2022 9:29						
7/28/2022 9:30						
7/28/2022 9:31						
7/28/2022 9:32						
7/28/2022 9:33						
7/28/2022 9:34						
7/28/2022 9:35						
7/28/2022 9:36						
7/28/2022 9:37						
7/28/2022 9:38						
7/28/2022 9:39						
7/28/2022 9:40						
7/28/2022 9:41						
7/28/2022 9:42						
7/28/2022 9:43						
7/28/2022 9:44						
7/28/2022 9:45						
7/28/2022 9:46	0.25	0	0	0	0.244	0.244
7/28/2022 9:47	0.26	0	0	0	0.259	0.2515
7/28/2022 9:48	0.264	0	0	0	0.26	0.2543
7/28/2022 9:49	0.264	0	0	0.001	0.258	0.2553
7/28/2022 9:50	0.268	0	0	0.001	0.262	0.2566
7/28/2022 9:51	0.268	0	0	0.002	0.259	0.257
7/28/2022 9:52	0.268	0	0	0.002	0.246	0.2554
7/28/2022 9:53	0.268	0	0	0.003	0.233	0.2526
7/28/2022 9:54	0.268	0	0	0.003	0.235	0.2507
7/28/2022 9:55	0.268	0	0	0.004	0.233	0.2489
7/28/2022 9:56	0.268	0	0	0.004	0.235	0.2476
7/28/2022 9:57	0.268	0	0	0.005	0.234	0.2465
7/28/2022 9:58	0.268	0	0	0.005	0.233	0.2455
7/28/2022 9:59	0.268	0	0	0.006	0.235	0.2447
7/28/2022 10:00	0.268	0	0	0.006	0.238	0.2443
7/28/2022 10:01	0.268	0	0.236	0.007	0.24	0.244
7/28/2022 10:02	0.268	0	0.243	0.007	0.242	0.2429
7/28/2022 10:03	0.268	0	0.242	0.008	0.243	0.2417
7/28/2022 10:04	0.268	0	0.241	0.008	0.247	0.241
7/28/2022 10:05	0.268	0	0.241	0.009	0.249	0.2401
7/28/2022 10:06	0.268	0	0.24	0.009	0.248	0.2394
7/28/2022 10:07	0.268	0	0.239	0.01	0.249	0.2396
7/28/2022 10:08	0.268	0	0.239	0.01	0.255	0.2411
7/28/2022 10:09	0.268	0	0.24	0.011	0.259	0.2427
7/28/2022 10:10	0.268	0	0.241	0.012	0.26	0.2445
7/28/2022 10:11	0.268	0	0.243	0.012	0.256	0.2459
7/28/2022 10:12	0.268	0	0.244	0.013	0.261	0.2477
7/28/2022 10:13	0.268	0	0.246	0.013	0.259	0.2494
7/28/2022 10:14	0.268	0	0.248	0.014	0.26	0.2511
7/28/2022 10:15	0.268	0	0.249	0.014	0.261	0.2526
7/28/2022 10:16	0.268	0	0.251	0.015	0.263	0.2541
7/28/2022 10:17	0.269	0	0.252	0.015	0.261	0.2554
7/28/2022 10:18	0.269	0	0.254	0.016	0.258	0.2564
7/28/2022 10:19	0.269	0	0.255	0.016	0.257	0.2571
7/28/2022 10:20	0.269	0	0.256	0.017	0.256	0.2575
7/28/2022 10:21	0.269	0	0.256	0.017	0.255	0.258
7/28/2022 10:22	0.269	0	0.257	0.018	0.253	0.2583
7/28/2022 10:23	0.269	0	0.257	0.019	0.249	0.2579
7/28/2022 10:24	0.269	0	0.257	0.019	0.247	0.2571
7/28/2022 10:25	0.269	0	0.257	0.02	0.246	0.2561
7/28/2022 10:26	0.269	0	0.256	0.02	0.248	0.2556
7/28/2022 10:27	0.269	0	0.255	0.021	0.248	0.2547
7/28/2022 10:28	0.269	0	0.254	0.021	0.246	0.2539
7/28/2022 10:29	0.269	0	0.253	0.022	0.241	0.2526
7/28/2022 10:30	0.269	0	0.252	0.022	0.244	0.2515
7/28/2022 10:31	0.269	0	0.251	0.023	0.247	0.2504
7/28/2022 10:32	0.269	0	0.25	0.023	0.251	0.2497
7/28/2022 10:33	0.275	0	0.249	0.024	0.254	0.2495
7/28/2022 10:34	0.275	0	0.248	0.024	0.248	0.2489
7/28/2022 10:35	0.275	0	0.248	0.025	0.246	0.2482
7/28/2022 10:36						
7/28/2022 10:37						
7/28/2022 10:38						
7/28/2022 10:39						
7/28/2022 10:40						
7/28/2022 10:41						

Community Air Monitoring Plan - Downwind Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B057949 VOC (Peak) (ppm)	RAE RS232(A) 0B057949 VOC (Low) (ppm)	RAE RS232(A) 0B057949 VOC (STEL) (ppm)	RAE RS232(A) 0B057949 VOC (TWA) (ppm)	RAE RS232(A) 0B057949 VOC (ppm)	VOC ppm AVG 15m (ppm)
7/28/2022 10:42						
7/28/2022 10:43						
7/28/2022 10:44						
7/28/2022 10:45						
7/28/2022 10:46						
7/28/2022 10:47						
7/28/2022 10:48						
7/28/2022 10:49						
7/28/2022 10:50						
7/28/2022 10:51						
7/28/2022 10:52						
7/28/2022 10:53						
7/28/2022 10:54						
7/28/2022 10:55						
7/28/2022 10:56						
7/28/2022 10:57						
7/28/2022 10:58						
7/28/2022 10:59						
7/28/2022 11:00						
7/28/2022 11:01						
7/28/2022 11:02						
7/28/2022 11:03						
7/28/2022 11:04						
7/28/2022 11:05						
7/28/2022 11:06						
7/28/2022 11:07						
7/28/2022 11:08						
7/28/2022 11:09						
7/28/2022 11:10						
7/28/2022 11:11						
7/28/2022 11:12						
7/28/2022 11:13						
7/28/2022 11:14						
7/28/2022 11:15						
7/28/2022 11:16						
7/28/2022 11:17						
7/28/2022 11:18						
7/28/2022 11:19						
7/28/2022 11:20						
7/28/2022 11:21						
7/28/2022 11:22						
7/28/2022 11:23						
7/28/2022 11:24						
7/28/2022 11:25						
7/28/2022 11:26						
7/28/2022 11:27						
7/28/2022 11:28						
7/28/2022 11:29						
7/28/2022 11:30						
7/28/2022 11:31						
7/28/2022 11:32						
7/28/2022 11:33						
7/28/2022 11:34						
7/28/2022 11:35						
7/28/2022 11:36						
7/28/2022 11:37						
7/28/2022 11:38						
7/28/2022 11:40						
7/28/2022 11:45						
7/28/2022 11:50						
7/28/2022 11:55						
7/28/2022 11:56						
7/28/2022 12:00						
7/28/2022 12:05						
7/28/2022 12:10						
7/28/2022 12:15						
7/28/2022 12:20						
7/28/2022 12:25						
7/28/2022 12:30						
7/28/2022 12:35						
7/28/2022 12:40						
7/28/2022 12:45						
7/28/2022 12:50						
7/28/2022 12:55						
7/28/2022 13:00						
7/28/2022 13:05						
7/28/2022 13:10						
7/28/2022 13:15						
7/28/2022 13:20						
7/28/2022 13:25						
7/28/2022 13:30						
7/28/2022 13:35						
7/28/2022 13:40						
7/28/2022 13:42	0.185	0	0	0	0.143	0.143
7/28/2022 13:43	0.185	0	0	0	0.115	0.129
7/28/2022 13:44	0.185	0	0	0	0.132	0.13
7/28/2022 13:45	0.185	0	0	0.001	0.115	0.1263
7/28/2022 13:46	0.185	0	0	0.001	0.152	0.1314
7/28/2022 13:47	0.185	0	0	0.001	0.145	0.1337
7/28/2022 13:48	0.185	0	0	0.002	0.136	0.134
7/28/2022 13:49	0.185	0	0	0.002	0.139	0.1346
7/28/2022 13:50	0.185	0	0	0.002	0.151	0.1364
7/28/2022 13:51	0.185	0	0	0.002	0.158	0.1386
7/28/2022 13:53						
7/28/2022 13:55	0.124	0	0	0	0.108	0.1358
7/28/2022 13:56	0.124	0	0	0	0.084	0.1315
7/28/2022 13:57	0.124	0	0	0	0.087	0.1268
7/28/2022 13:58	0.124	0	0	0	0.076	0.1236
7/28/2022 13:59	0.124	0	0	0	0.071	0.1185
7/28/2022 14:00	0.124	0	0	0.001	0.069	0.1147
7/28/2022 14:01	0.124	0	0	0.001	0.075	0.1083
7/28/2022 14:02	0.124	0	0	0.001	0.079	0.1028
7/28/2022 14:03	0.124	0	0	0.001	0.089	0.0988
7/28/2022 14:04	0.124	0	0	0.001	0.096	0.0952
7/28/2022 14:05	0.124	0	0	0.001	0.099	0.0909
7/28/2022 14:06	0.124	0	0	0.002	0.109	0.0868
7/28/2022 14:07	0.124	0	0	0.002	0.111	0.0887
7/28/2022 14:08	0.129	0	0	0.002	0.114	0.0905
7/28/2022 14:09	0.129	0	0.088	0.002	0.121	0.0925
7/28/2022 14:10	0.133	0	0.091	0.003	0.12	0.0933
7/28/2022 14:11	0.133	0	0.092	0.003	0.123	0.0959
7/28/2022 14:12	0.158	0	0.095	0.003	0.143	0.0997
7/28/2022 14:13	0.158	0	0.098	0.003	0.134	0.1035
7/28/2022 14:14	0.158	0	0.102	0.004	0.135	0.1078
7/28/2022 14:15	0.158	0	0.106	0.004	0.135	0.1122
7/28/2022 14:16	0.158	0	0.11	0.004	0.139	0.1165
7/28/2022 14:17	0.158	0	0.115	0.004	0.138	0.1204
7/28/2022 14:18	0.158	0	0.119	0.005	0.142	0.1239
7/28/2022 14:19	0.158	0	0.122	0.005	0.139	0.1268
7/28/2022 14:20	0.169	0	0.125	0.005	0.15	0.1302
7/28/2022 14:21	0.169	0	0.128	0.006	0.142	0.1324
7/28/2022 14:22	0.169	0	0.131	0.006	0.134	0.1339
7/28/2022 14:23	0.169	0	0.133	0.006	0.125	0.1347
7/28/2022 14:24	0.169	0	0.133	0.006	0.123	0.1348
7/28/2022 14:25	0.169	0	0.134	0.007	0.126	0.1352
7/28/2022 14:26	0.169	0	0.135	0.007	0.125	0.1353
7/29/2022 7:31						
7/29/2022 7:32	0.282	0	0	0	0.24	0.24
7/29/2022 7:33	0.282	0	0	0	0.232	0.236

Community Air Monitoring Plan - Downwind Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B057949 VOC (Peak) (ppm)	RAE RS232(A) 0B057949 VOC (Low) (ppm)	RAE RS232(A) 0B057949 VOC (STEL) (ppm)	RAE RS232(A) 0B057949 VOC (TWA) (ppm)	RAE RS232(A) 0B057949 VOC (ppm)	VOC ppm AVG 15m (ppm)
7/29/2022 7:34	0.282	0	0	0.001	0.221	0.231
7/29/2022 7:35	0.282	0	0	0.001	0.211	0.226
7/29/2022 7:36						
7/29/2022 7:37						
7/29/2022 7:38						
7/29/2022 7:39						
7/29/2022 7:40						
7/29/2022 7:41						
7/29/2022 7:42						
7/29/2022 7:42						
7/29/2022 7:43						
7/29/2022 7:44						
7/29/2022 7:45						
7/29/2022 7:46						
7/29/2022 7:47						
7/29/2022 7:48						
7/29/2022 7:49	122.19	0	0	0.16	0.04	0.1255
7/29/2022 7:50	122.19	0	0	0.16	0.035	0.0375
7/29/2022 7:51	122.19	0	0	0.16	0.025	0.0333
7/29/2022 7:52	122.19	0	0	0.16	0.024	0.031
7/29/2022 7:53	122.19	0	0	0.16	0.029	0.0306
7/29/2022 7:54	122.19	0	0	0.16	0.027	0.03
7/29/2022 7:55	122.19	0	0	0.16	0.026	0.0294
7/29/2022 7:56	122.19	0	0	0.16	0.032	0.0298
7/29/2022 7:57	122.19	0	0	0.16	0.03	0.0298
7/29/2022 7:58	122.19	0	5.153	0.161	0.031	0.0299
7/29/2022 7:59	122.19	0	5.15	0.161	0.036	0.0305
7/29/2022 8:00	122.19	0	5.144	0.161	0.031	0.0305
7/29/2022 8:01	122.19	0	5.14	0.161	0.03	0.0305
7/29/2022 8:02	122.19	0	5.137	0.161	0.033	0.0306
7/29/2022 8:03	122.19	0	0.393	0.161	0.035	0.0309
7/29/2022 8:04	122.19	0	0.03	0.161	0.029	0.0302
7/29/2022 8:05	122.19	0	0.03	0.161	0.033	0.0301
7/29/2022 8:06	122.19	0	0.03	0.161	0.038	0.0309
7/29/2022 8:07	122.19	0	0.03	0.161	0.038	0.0319
7/29/2022 8:08	122.19	0	0.031	0.161	0.037	0.0324
7/29/2022 8:09	122.19	0	0.032	0.161	0.038	0.0331
7/29/2022 8:10	122.19	0	0.033	0.161	0.037	0.0339
7/29/2022 8:11	122.19	0	0.033	0.161	0.039	0.0343
7/29/2022 8:12	122.19	0	0.034	0.162	0.035	0.0347
7/29/2022 8:13	122.19	0	0.034	0.162	0.042	0.0354
7/29/2022 8:14	122.19	0	0.034	0.162	0.038	0.0355
7/29/2022 8:15	122.19	0	0.035	0.162	0.035	0.0358
7/29/2022 8:16	122.19	0	0.035	0.162	0.041	0.0365
7/29/2022 8:17	122.19	0	0.036	0.162	0.046	0.0374
7/29/2022 8:18	122.19	0	0.036	0.162	0.043	0.0379
7/29/2022 8:19	122.19	0	0.037	0.162	0.042	0.0388
7/29/2022 8:20	122.19	0	0.038	0.162	0.046	0.0397
7/29/2022 8:21	122.19	0	0.039	0.162	0.044	0.0401
7/29/2022 8:22	122.19	0	0.039	0.162	0.043	0.0404
7/29/2022 8:23	122.19	0	0.04	0.162	0.047	0.0411
7/29/2022 8:24	122.19	0	0.04	0.163	0.052	0.042
7/29/2022 8:25	122.19	0	0.041	0.163	0.05	0.0429
7/29/2022 8:26	122.19	0	0.042	0.163	0.057	0.0441
7/29/2022 8:27	122.19	0	0.044	0.163	0.052	0.0452
7/29/2022 8:28	122.19	0	0.045	0.163	0.06	0.0464
7/29/2022 8:29	122.19	0	0.046	0.163	0.055	0.0475
7/29/2022 8:30	122.19	0	0.047	0.163	0.058	0.0491
7/29/2022 8:31	122.19	0	0.048	0.163	0.059	0.0503
7/29/2022 8:32	122.19	0	0.049	0.164	0.053	0.0507
7/29/2022 8:33	122.19	0	0.05	0.164	0.055	0.0515
7/29/2022 8:34	122.19	0	0.051	0.164	0.056	0.0525
7/29/2022 8:35	122.19	0	0.052	0.164	0.06	0.0534
7/29/2022 8:36	122.19	0	0.053	0.164	0.064	0.0547
7/29/2022 8:37	122.19	0	0.054	0.164	0.059	0.0558
7/29/2022 8:38	122.19	0	0.055	0.164	0.062	0.0568
7/29/2022 8:39	122.19	0	0.056	0.164	0.063	0.0575
7/29/2022 8:40	122.19	0	0.057	0.164	0.062	0.0583
7/29/2022 8:41	122.19	0	0.058	0.165	0.07	0.0592
7/29/2022 8:42	122.19	0	0.058	0.165	0.061	0.0598
7/29/2022 8:43	122.19	0	0.059	0.165	0.064	0.0601
7/29/2022 8:44	122.19	0	0.059	0.165	0.07	0.0611
7/29/2022 8:45	122.19	0	0.06	0.165	0.068	0.0617
7/29/2022 8:46	122.19	0	0.061	0.165	0.07	0.0625
7/29/2022 8:47	122.19	0	0.062	0.165	0.069	0.0635
7/29/2022 8:48	122.19	0	0.063	0.166	0.071	0.0646
7/29/2022 8:49	122.19	0	0.064	0.166	0.072	0.0657
7/29/2022 8:50	122.19	0	0.065	0.166	0.073	0.0665
7/29/2022 8:51	122.19	0	0.065	0.166	0.075	0.0673
7/29/2022 8:52	122.19	0	0.066	0.166	0.071	0.0681
7/29/2022 8:53	122.19	0	0.067	0.166	0.076	0.069
7/29/2022 8:54	122.19	0	0.068	0.166	0.075	0.0698
7/29/2022 8:55	122.19	0	0.069	0.167	0.082	0.0711
7/29/2022 8:56	122.19	0	0.07	0.167	0.081	0.0719
7/29/2022 8:57	122.19	0	0.071	0.167	0.081	0.0732
7/29/2022 8:58	122.19	0	0.072	0.167	0.085	0.0746
7/29/2022 8:59	122.19	0	0.073	0.167	0.089	0.0759
7/29/2022 9:00	122.19	0	0.074	0.168	0.085	0.077
7/29/2022 9:01	122.19	0	0.076	0.168	0.083	0.0779
7/29/2022 9:02	122.19	0	0.077	0.168	0.09	0.0793
7/29/2022 9:03	122.19	0	0.078	0.168	0.088	0.0804
7/29/2022 9:04	122.19	0	0.079	0.168	0.092	0.0817
7/29/2022 9:05	122.19	0	0.081	0.168	0.091	0.0829
7/29/2022 9:06	122.19	0	0.082	0.169	0.099	0.0845
7/29/2022 9:07	122.19	0	0.083	0.169	0.099	0.0864
7/29/2022 9:08	122.19	0	0.085	0.169	0.107	0.0885
7/29/2022 9:09	122.19	0	0.087	0.169	0.103	0.0903
7/29/2022 9:10	122.19	0	0.089	0.169	0.1	0.0915
7/29/2022 9:11	122.19	0	0.091	0.17	0.104	0.0931
7/29/2022 9:12	122.19	0	0.092	0.17	0.105	0.0947
7/29/2022 9:13	122.19	0	0.094	0.17	0.105	0.096
7/29/2022 9:14	122.19	0	0.095	0.17	0.107	0.0972
7/29/2022 9:15	122.19	0	0.096	0.171	0.107	0.0987
7/29/2022 9:16	122.19	0	0.097	0.171	0.107	0.1003
7/29/2022 9:17	122.19	0	0.099	0.171	0.105	0.1013
7/29/2022 9:18	122.19	0	0.1	0.171	0.106	0.1025
7/29/2022 9:19	122.19	0	0.101	0.171	0.113	0.1039
7/29/2022 9:20	122.19	0	0.103	0.172	0.114	0.1054
7/29/2022 9:21	122.19	0	0.104	0.172	0.111	0.1062
7/29/2022 9:22	122.19	0	0.105	0.172	0.111	0.107
7/29/2022 9:23	122.19	0	0.106	0.172	0.107	0.107
7/29/2022 9:24	122.19	0	0.106	0.173	0.113	0.1077
7/29/2022 9:25	122.19	0	0.107	0.173	0.112	0.1085
7/29/2022 9:26	122.19	0	0.107	0.173	0.111	0.1089
7/29/2022 9:27	122.19	0	0.108	0.173	0.113	0.1095
7/29/2022 9:28	122.19	0	0.108	0.173	0.108	0.1097
7/29/2022 9:29	122.19	0	0.109	0.174	0.114	0.1101
7/29/2022 9:30	122.19	0	0.109	0.174	0.113	0.1105
7/29/2022 9:31	122.19	0	0.11	0.174	0.11	0.1107
7/29/2022 9:32	122.19	0	0.111	0.174	0.116	0.1115
7/29/2022 9:33	122.19	0	0.111	0.175	0.116	0.1121
7/29/2022 9:34	122.19	0	0.112	0.175	0.116	0.1123
7/29/2022 9:35	122.19	0	0.112	0.175	0.125	0.1131
7/29/2022 9:36	122.19	0	0.113	0.175	0.123	0.1139
7/29/2022 9:37	122.19	0	0.114	0.176	0.119	0.1144
7/29/2022 9:38	122.19	0	0.114	0.176	0.126	0.1157
7/29/2022 9:39	122.19	0	0.115	0.176	0.122	0.1163
7/29/2022 9:40	122.19	0	0.116	0.176	0.123	0.117
7/29/2022 9:41	122.19	0	0.117	0.177	0.124	0.1179

Community Air Monitoring Plan - Downwind Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B057949 VOC (Peak) (ppm)	RAE RS232(A) 0B057949 VOC (Low) (ppm)	RAE RS232(A) 0B057949 VOC (STEL) (ppm)	RAE RS232(A) 0B057949 VOC (TWA) (ppm)	RAE RS232(A) 0B057949 VOC (ppm)	VOC ppm AVG 15m (ppm)
7/29/2022 9:42	122.19	0	0.117	0.177	0.124	0.1186
7/29/2022 9:43	122.19	0	0.118	0.177	0.131	0.1201
7/29/2022 9:44	122.19	0	0.119	0.177	0.133	0.1214
7/29/2022 9:45	122.19	0	0.12	0.178	0.131	0.1226
7/29/2022 9:46	122.19	0	0.121	0.178	0.134	0.1242
7/29/2022 9:47	122.19	0	0.123	0.178	0.137	0.1256
7/29/2022 9:48	122.19	0	0.124	0.179	0.133	0.1267
7/29/2022 9:49	122.19	0	0.125	0.179	0.135	0.128
7/29/2022 9:50	122.19	0	0.126	0.179	0.136	0.1287
7/29/2022 9:51	122.19	0	0.127	0.179	0.14	0.1299
7/29/2022 9:52	122.19	0	0.129	0.18	0.137	0.1311
7/29/2022 9:53	122.19	0	0.13	0.18	0.146	0.1324
7/29/2022 9:54	122.19	0	0.131	0.18	0.144	0.1339
7/29/2022 9:55	122.19	0	0.132	0.181	0.143	0.1352
7/29/2022 9:56	122.19	0	0.134	0.181	0.143	0.1365
7/29/2022 9:57	122.19	0	0.135	0.181	0.145	0.1379
7/29/2022 9:58	122.19	0	0.136	0.181	0.142	0.1386
7/29/2022 9:59	122.19	0	0.137	0.182	0.141	0.1391
7/29/2022 10:00	122.19	0	0.138	0.182	0.146	0.1401
7/29/2022 10:01	122.19	0	0.139	0.182	0.144	0.1408
7/29/2022 10:02	122.19	0	0.14	0.183	0.144	0.1413
7/29/2022 10:03	122.19	0	0.14	0.183	0.148	0.1423
7/29/2022 10:04	122.19	0	0.141	0.183	0.148	0.1431
7/29/2022 10:05	122.19	0	0.142	0.184	0.15	0.1441
7/29/2022 10:06	122.19	0	0.143	0.184	0.151	0.1448
7/29/2022 10:07	122.19	0	0.144	0.184	0.148	0.1455
7/29/2022 10:08	122.19	0	0.145	0.185	0.154	0.1461
7/29/2022 10:09	122.19	0	0.147	0.185	0.145	0.1461
7/29/2022 10:10	122.19	0	0.148	0.185	0.147	0.1464
7/29/2022 10:11	122.19	0	0.148	0.186	0.149	0.1468
7/29/2022 10:12	122.19	0	0.148	0.186	0.154	0.1474
7/29/2022 10:13	122.19	0	0.149	0.186	0.147	0.1477
7/29/2022 10:14	122.19	0	0.149	0.186	0.146	0.1481
7/29/2022 10:15	122.19	0	0.15	0.187	0.153	0.1485
7/29/2022 10:16	122.19	0	0.15	0.187	0.152	0.1491
7/29/2022 10:17	122.19	0	0.15	0.187	0.147	0.1493
7/29/2022 10:18	122.19	0	0.15	0.188	0.155	0.1497
7/29/2022 10:19	122.19	0	0.151	0.188	0.149	0.1498
7/29/2022 10:20	122.19	0	0.151	0.188	0.155	0.1501
7/29/2022 10:21	122.19	0	0.151	0.189	0.154	0.1503
7/29/2022 10:22	122.19	0	0.151	0.189	0.153	0.1507
7/29/2022 10:23	122.19	0	0.151	0.189	0.151	0.1505
7/29/2022 10:24	122.19	0	0.149	0.19	0.154	0.1511
7/29/2022 10:25	122.19	0	0.15	0.19	0.155	0.1516
7/29/2022 10:26	122.19	0	0.15	0.19	0.149	0.1516
7/29/2022 10:27	122.19	0	0.15	0.191	0.156	0.1517
7/29/2022 10:28	122.19	0	0.15	0.191	0.152	0.1521
7/29/2022 10:29	122.19	0	0.15	0.191	0.156	0.1527
7/29/2022 10:30	122.19	0	0.151	0.191	0.157	0.153
7/29/2022 10:31	122.19	0	0.151	0.192	0.155	0.1532
7/29/2022 10:32	122.19	0	0.152	0.192	0.16	0.1541
7/29/2022 10:33	122.19	0	0.152	0.192	0.154	0.154
7/29/2022 10:34	122.19	0	0.152	0.193	0.157	0.1545
7/29/2022 10:35	122.19	0	0.153	0.193	0.155	0.1545
7/29/2022 10:36	122.19	0	0.153	0.193	0.152	0.1544
7/29/2022 10:37	122.19	0	0.153	0.194	0.158	0.1547
7/29/2022 10:38	122.19	0	0.154	0.194	0.156	0.1551
7/29/2022 10:39	122.19	0	0.154	0.194	0.16	0.1555
7/29/2022 10:40	122.19	0	0.155	0.195	0.167	0.1563
7/29/2022 10:41	122.19	0	0.155	0.195	0.167	0.1575
7/29/2022 10:42	122.19	0	0.156	0.195	0.164	0.158
7/29/2022 10:43	122.19	0	0.157	0.196	0.161	0.1586
7/29/2022 10:44	122.19	0	0.158	0.196	0.162	0.159
7/29/2022 10:45	122.19	0	0.158	0.196	0.163	0.1594
7/29/2022 10:46	122.19	0	0.159	0.197	0.164	0.16
7/29/2022 10:47	122.19	0	0.159	0.197	0.167	0.1605
7/29/2022 10:48	122.19	0	0.16	0.197	0.168	0.1614
7/29/2022 10:49	122.19	0	0.161	0.198	0.165	0.1619
7/29/2022 10:50	122.19	0	0.161	0.198	0.166	0.1627
7/29/2022 10:51	122.19	0	0.162	0.199	0.164	0.1635
7/29/2022 10:52	122.19	0	0.163	0.199	0.165	0.1639
7/29/2022 10:53	122.19	0	0.163	0.199	0.164	0.1645
7/29/2022 10:54	122.19	0	0.164	0.2	0.167	0.1649
7/29/2022 10:55	122.19	0	0.164	0.2	0.167	0.1649
7/29/2022 10:56	122.19	0	0.164	0.2	0.172	0.1653
7/29/2022 10:57	122.19	0	0.164	0.201	0.169	0.1656
7/29/2022 10:58	122.19	0	0.165	0.201	0.17	0.1662
7/29/2022 10:59	122.19	0	0.165	0.201	0.172	0.1669
7/29/2022 11:00	122.19	0	0.166	0.202	0.172	0.1675
7/29/2022 11:01	122.19	0	0.166	0.202	0.166	0.1676
7/29/2022 11:02	122.19	0	0.167	0.202	0.189	0.1691
7/29/2022 11:03	122.19	0	0.167	0.203	0.192	0.1707
7/29/2022 11:04	122.19	0	0.167	0.203	0.161	0.1704
7/29/2022 11:05	122.19	0	0.167	0.203	0.162	0.1701
7/29/2022 11:06	122.19	0	0.166	0.204	0.165	0.1702
7/29/2022 11:07	122.19	0	0.166	0.204	0.165	0.1702
7/29/2022 11:08	122.19	0	0.167	0.204	0.167	0.1704
7/29/2022 11:09	122.19	0	0.167	0.205	0.171	0.1707
7/29/2022 11:10	122.19	0	0.167	0.205	0.172	0.171
7/29/2022 11:11	122.19	0	0.167	0.205	0.171	0.1709
7/29/2022 11:12	122.19	0	0.168	0.206	0.17	0.171
7/29/2022 11:13	122.19	0	0.168	0.206	0.17	0.171
7/29/2022 11:14	122.19	0	0.168	0.207	0.175	0.1712
7/29/2022 11:15	122.19	0	0.168	0.207	0.169	0.171
7/29/2022 11:16	122.19	0	0.168	0.207	0.171	0.1713
7/29/2022 11:17	122.19	0	0.168	0.208	0.175	0.1704
7/29/2022 11:18	122.19	0	0.168	0.208	0.171	0.169
7/29/2022 11:19	122.19	0	0.169	0.208	0.165	0.1693
7/29/2022 11:20	122.19	0	0.169	0.209	0.168	0.1697
7/29/2022 11:21	122.19	0	0.17	0.209	0.168	0.1699
7/29/2022 11:22	122.19	0	0.17	0.209	0.164	0.1698
7/29/2022 11:23	122.19	0	0.17	0.21	0.169	0.1699
7/29/2022 11:24	122.19	0	0.17	0.21	0.173	0.1701
7/29/2022 11:25	122.19	0	0.169	0.21	0.169	0.1699
7/29/2022 11:26	122.19	0	0.169	0.211	0.168	0.1697
7/29/2022 11:27	122.19	0	0.169	0.211	0.171	0.1697
7/29/2022 11:28	122.19	0	0.169	0.211	0.171	0.1698
7/29/2022 11:29	122.19	0	0.168	0.212	0.173	0.1697
7/29/2022 11:30	122.19	0	0.168	0.212	0.17	0.1697
7/29/2022 11:31	122.19	0	0.168	0.213	0.166	0.1694
7/29/2022 11:32	122.19	0	0.168	0.213	0.169	0.169
7/29/2022 11:33	122.19	0	0.168	0.213	0.179	0.1695
7/29/2022 11:34	122.19	0	0.168	0.214	0.168	0.1697
7/29/2022 11:35	122.19	0	0.168	0.214	0.169	0.1698
7/29/2022 11:36	122.19	0	0.168	0.214	0.169	0.1699
7/29/2022 11:37	122.19	0	0.168	0.215	0.163	0.1698
7/29/2022 11:38	122.19	0	0.168	0.215	0.163	0.1694
7/29/2022 11:39	122.19	0	0.167	0.215	0.165	0.1689
7/29/2022 11:40	122.19	0	0.167	0.216	0.165	0.1686
7/29/2022 11:41	122.19	0	0.167	0.216	0.168	0.1686
7/29/2022 11:42	122.19	0	0.167	0.216	0.166	0.1683
7/29/2022 11:43	122.19	0	0.167	0.217	0.165	0.1679
7/29/2022 11:44	122.19	0	0.166	0.217	0.168	0.1675
7/29/2022 11:45	122.19	0	0.166	0.217	0.164	0.1671
7/29/2022 11:46	122.19	0	0.166	0.218	0.166	0.1671
7/29/2022 11:47	122.19	0	0.166	0.218	0.163	0.1667
7/29/2022 11:48	122.19	0	0.165	0.218	0.164	0.1657
7/29/2022 11:49	122.19	0	0.165	0.219	0.164	0.1655
7/29/2022 11:50	122.19	0	0.165	0.219	0.166	0.1653

Community Air Monitoring Plan - Downwind Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B057949 VOC (Peak) (ppm)	RAE RS232(A) 0B057949 VOC (Low) (ppm)	RAE RS232(A) 0B057949 VOC (STEL) (ppm)	RAE RS232(A) 0B057949 VOC (TWA) (ppm)	RAE RS232(A) 0B057949 VOC (ppm)	VOC ppm AVG 15m (ppm)	
7/29/2022 11:51	122.19	0	0.165	0.219	0.174	0.1656	
7/29/2022 11:52	122.19	0	0.166	0.22	0.164	0.1657	
7/29/2022 11:53	122.19	0	0.166	0.22	0.164	0.1657	
7/29/2022 11:54	122.19	0	0.166	0.221	0.161	0.1655	
7/29/2022 11:55	122.19	0	0.166	0.221	0.158	0.165	
7/29/2022 11:56	122.19	0	0.166	0.221	0.162	0.1646	
7/29/2022 11:57	122.19	0	0.165	0.222	0.163	0.1644	
7/29/2022 11:58	122.19	0	0.165	0.222	0.161	0.1641	
7/29/2022 11:59	122.19	0	0.166	0.222	0.159	0.1635	
7/29/2022 12:00	122.19	0	0.165	0.223	0.16	0.1633	
7/29/2022 12:01	122.19	0	0.165	0.223	0.162	0.163	
7/29/2022 12:02	122.19	0	0.165	0.223	0.162	0.1629	
7/29/2022 12:03	122.19	0	0.165	0.224	0.193	0.1649	
7/29/2022 12:04	122.19	0	0.165	0.224	0.164	0.1649	
7/29/2022 12:05	122.19	0	0.165	0.224	0.163	0.1647	
7/29/2022 12:06	122.19	0	0.164	0.225	0.163	0.1639	
7/29/2022 12:07	122.19	0	0.163	0.225	0.167	0.1641	
7/29/2022 12:08	122.19	0	0.163	0.225	0.161	0.1639	
7/29/2022 12:09	122.19	0	0.162	0.226	0.16	0.1639	
7/29/2022 12:10	122.19	0	0.162	0.226	0.168	0.1645	
7/29/2022 12:11	122.19	0	0.162	0.226	0.158	0.1643	
7/29/2022 12:12	122.19	0	0.163	0.227	0.159	0.164	
7/29/2022 12:13	122.19	0	0.163	0.227	0.163	0.1641	
7/29/2022 12:14	122.19	0	0.163	0.227	0.16	0.1642	
7/29/2022 12:15	122.19	0	0.162	0.228	0.158	0.1641	
7/29/2022 12:16	122.19	0	0.162	0.228	0.162	0.1641	
7/29/2022 12:17	122.19	0	0.162	0.228	0.164	0.1642	
7/29/2022 12:18	122.19	0	0.162	0.229	0.163	0.1622	
7/29/2022 12:19	122.19	0	0.162	0.229	0.162	0.1621	
7/29/2022 12:20	122.19	0	0.162	0.229	0.157	0.1617	
7/29/2022 12:21	122.19	0	0.162	0.23	0.168	0.162	
7/29/2022 12:22	122.19	0	0.162	0.23	0.154	0.1611	
7/29/2022 12:23	122.19	0	0.162	0.23	0.155	0.1607	
7/29/2022 12:24	122.19	0	0.161	0.231	0.157	0.1605	
7/29/2022 12:25	122.19	0	0.161	0.231	0.153	0.1595	
7/29/2022 12:26	122.19	0	0.16	0.231	0.154	0.1593	
7/29/2022 12:27	122.19	0	0.16	0.232	0.15	0.1587	
7/29/2022 12:28	122.19	0	0.159	0.232	0.155	0.1581	
7/29/2022 12:29	122.19	0	0.158	0.232	0.159	0.1581	
7/29/2022 12:30	122.19	0	0.158	0.233	0.158	0.1581	
7/29/2022 12:31	122.19	0	0.158	0.233	0.162	0.1581	
7/29/2022 12:32	122.19	0	0.158	0.233	0.157	0.1576	
7/29/2022 12:33	122.19	0	0.157	0.234	0.163	0.1576	
7/29/2022 12:34	122.19	0	0.157	0.234	0.154	0.1571	
7/29/2022 12:35	122.19	0	0.156	0.234	0.156	0.157	
7/29/2022 12:36	122.19	0	0.156	0.235	0.153	0.156	
7/29/2022 12:37	122.19	0	0.155	0.235	0.152	0.1559	
7/29/2022 12:38	122.19	0	0.155	0.235	0.154	0.1558	
7/29/2022 12:39	122.19	0	0.155	0.236	0.152	0.1555	
7/29/2022 12:40	122.19	0	0.155	0.236	0.156	0.1557	
7/29/2022 12:41	122.19	0	0.155	0.236	0.151	0.1555	
7/29/2022 12:42	122.19	0	0.155	0.236	0.155	0.1558	
7/29/2022 12:43	122.19	0	0.155	0.237	0.154	0.1557	
7/29/2022 12:44	122.19	0	0.155	0.237	0.155	0.1555	
7/29/2022 12:45	122.19	0	0.155	0.237	0.151	0.155	
7/29/2022 12:46	122.19	0	0.154	0.238	0.152	0.1543	
7/29/2022 12:47	122.19	0	0.154	0.238	0.149	0.1538	
7/29/2022 12:48	122.19	0	0.154	0.238	0.15	0.1529	
7/29/2022 12:49	122.19	0	0.153	0.239	0.146	0.1524	
7/29/2022 12:50	122.19	0	0.153	0.239	0.148	0.1519	
7/29/2022 12:51	122.19	0	0.152	0.239	0.147	0.1515	
7/29/2022 12:52	122.19	0	0.152	0.24	0.145	0.151	
7/29/2022 12:53	122.19	0	0.151	0.24	0.148	0.1506	
7/29/2022 12:54	122.19	0	0.151	0.24	0.147	0.1503	
7/29/2022 12:55	122.19	0	0.15	0.241	0.148	0.1497	
7/29/2022 12:56	122.19	0	0.15	0.241	0.152	0.1498	
7/29/2022 12:57	122.19	0	0.15	0.241	0.153	0.1497	
7/29/2022 12:58	122.19	0	0.149	0.242	0.153	0.1496	
7/29/2022 12:59	122.19	0	0.149	0.242	0.148	0.1491	
7/29/2022 13:00	122.19	0	0.149	0.242	0.153	0.1493	
7/29/2022 13:01	122.19	0	0.149	0.242	0.147	0.1489	
7/29/2022 13:02	122.19	0	0.148	0.243	0.148	0.1489	
7/29/2022 13:03	122.19	0	0.148	0.243	0.148	0.1487	
7/29/2022 13:04	122.19	0	0.148	0.243	0.145	0.1487	
7/29/2022 13:05	122.19	0	0.147	0.244	0.147	0.1486	
7/29/2022 13:06	122.19	0	0.147	0.244	0.149	0.1487	
7/29/2022 13:07	122.19	0	0.148	0.244	0.149	0.149	
7/29/2022 13:08	122.19	0	0.148	0.245	0.147	0.1489	
7/29/2022 13:09	122.19	0	0.148	0.245	0.141	0.1485	
7/29/2022 13:10	122.19	0	0.148	0.245	0.139	0.1479	
7/29/2022 13:11	122.19	0	0.147	0.245	0.148	0.1477	
7/29/2022 13:12	122.19	0	0.146	0.246	0.135	0.1465	
7/29/2022 13:13	122.19	0	0.145	0.246	0.14	0.1456	
7/29/2022 13:14	122.19	0	0.144	0.246	0.139	0.145	
7/29/2022 13:15	122.19	0	0.143	0.247	0.144	0.1444	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:16	122.19	0	0.142	0.247	0.144	0.1442	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:17	122.19	0	0.142	0.247	0.146	0.1441	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:18	122.19	0	0.142	0.247	0.15	0.1442	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:19	122.19	0	0.142	0.248	0.153	0.1447	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:20	122.19	0	0.142	0.248	0.156	0.1453	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:21	122.19	0	0.143	0.248	0.162	0.1462	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:22	122.19	0	0.144	0.249	0.168	0.1475	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:23	122.19	0	0.145	0.249	0.165	0.1487	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:24	122.19	0	0.147	0.25	0.16	0.1499	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:25	122.19	0	0.148	0.25	0.296	0.1604	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:26	122.19	0	0.152	0.25	0.161	0.1613	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:27	122.19	0	0.154	0.251	0.173	0.1638	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:28	122.19	0	0.157	0.251	0.177	0.1663	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:29	122.19	0	0.16	0.251	0.18	0.169	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:30	122.19	0	0.163	0.252	0.182	0.1715	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:31	122.19	0	0.165	0.252	0.187	0.1744	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:32	122.19	0	0.168	0.252	0.192	0.1775	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:33	122.19	0	0.171	0.253	0.197	0.1806	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:34	122.19	0	0.174	0.253	0.197	0.1835	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:35	122.19	0	0.178	0.254	0.199	0.1864	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:36	122.19	0	0.18	0.254	0.203	0.1891	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:37	122.19	0	0.183	0.255	0.202	0.1914	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:38	122.19	0	0.185	0.255	0.203	0.1939	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:39	122.19	0	0.187	0.255	0.207	0.1971	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:40	122.19	0	0.19	0.256	0.206	0.1911	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:41	122.19	0	0.19	0.256	0.208	0.1942	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:42	122.19	0	0.193	0.257	0.201	0.1961	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:43	122.19	0	0.195	0.257	0.202	0.1977	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:44	122.19	0	0.197	0.257	0.204	0.1993	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:45	122.19	0	0.199	0.258	0.207	0.201	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:46	122.19	0	0.2	0.258	0.211	0.2026	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:47	122.19	0	0.202	0.259	0.214	0.2041	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:48	122.19	0	0.203	0.259	0.211	0.205	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:49	122.19	0	0.204	0.26	0.208	0.2057	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:50	122.19	0	0.205	0.26	0.2	0.2058	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:51	122.19	0	0.205	0.261	0.201	0.2057	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:52	122.19	0	0.206	0.261	0.202	0.2057	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:53	122.19	0	0.206	0.261	0.201	0.2055	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:54	122.19	0	0.206	0.262	0.202	0.2052	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:55	122.19	0	0.206	0.262	0.201	0.2049	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:56	122.19	0	0.206	0.263	0.199	0.2043	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:57	122.19	0	0.205	0.263	0.201	0.2043	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:58	122.19	0	0.205	0.263	0.2	0.2041	Data from Upwind Unit - Repositioned downwind.
7/29/2022 13:59	122.19	0	0.205	0.264	0.203	0.2041	Data from Upwind Unit - Repositioned downwind.

Community Air Monitoring Plan - Downwind Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B057949 VOC (Peak) (ppm)	RAE RS232(A) 0B057949 VOC (Low) (ppm)	RAE RS232(A) 0B057949 VOC (STEL) (ppm)	RAE RS232(A) 0B057949 VOC (TWA) (ppm)	RAE RS232(A) 0B057949 VOC (ppm)	VOC ppm AVG 15m (ppm)	
7/29/2022 14:00	122.19	0	0.204	0.264	0.2	0.2036	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:01	122.19	0	0.204	0.265	0.199	0.2028	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:02	122.19	0	0.203	0.265	0.204	0.2021	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:03	122.19	0	0.202	0.266	0.198	0.2013	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:04	122.19	0	0.202	0.266	0.204	0.201	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:05	122.19	0	0.202	0.266	0.202	0.2011	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:06	122.19	0	0.201	0.267	0.201	0.2011	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:07	122.19	0	0.2	0.267	0.202	0.2011	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:08	122.19	0	0.2	0.268	0.201	0.2011	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:09	122.19	0	0.2	0.268	0.201	0.2011	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:10	122.19	0	0.2	0.268	0.194	0.2006	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:11	122.19	0	0.2	0.269	0.199	0.2006	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:12	122.19	0	0.2	0.269	0.198	0.2004	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:13	122.19	0	0.199	0.27	0.197	0.2002	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:14	122.19	0	0.199	0.27	0.197	0.1998	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:15	122.19	0	0.199	0.271	0.198	0.1997	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:16	122.19	0	0.199	0.271	0.2	0.1997	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:17	122.19	0	0.199	0.271	0.198	0.1993	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:18	122.19	0	0.199	0.272	0.198	0.1993	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:19	122.19	0	0.199	0.272	0.198	0.1989	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:20	122.19	0	0.198	0.273	0.199	0.1987	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:21	122.19	0	0.198	0.273	0.201	0.1987	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:22	122.19	0	0.198	0.273	0.201	0.1987	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:23	122.19	0	0.198	0.274	0.197	0.1984	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:24	122.19	0	0.198	0.274	0.195	0.198	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:25	122.19	0	0.197	0.275	0.189	0.1977	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:26	122.19	0	0.197	0.275	0.197	0.1975	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:27	122.19	0	0.197	0.275	0.194	0.1973	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:28	122.19	0	0.197	0.276	0.194	0.1971	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:29	122.19	0	0.196	0.276	0.192	0.1967	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:30	122.19	0	0.196	0.277	0.194	0.1965	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:31	122.19	0	0.196	0.277	0.194	0.1961	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:32	122.19	0	0.195	0.278	0.19	0.1955	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:33	122.19	0	0.195	0.278	0.195	0.1953	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:34	122.19	0	0.195	0.278	0.193	0.195	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:35	122.19	0	0.194	0.279	0.194	0.1947	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:36	122.19	0	0.194	0.279	0.19	0.1939	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:37	122.19	0	0.193	0.28	0.19	0.1932	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:38	122.19	0	0.193	0.28	0.187	0.1925	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:39	122.19	0	0.192	0.28	0.186	0.1919	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:40	122.19	0	0.192	0.281	0.185	0.1917	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:41	122.19	0	0.191	0.281	0.187	0.191	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:42	122.19	0	0.191	0.281	0.185	0.1904	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:43	122.19	0	0.19	0.282	0.183	0.1897	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:44	122.19	0	0.189	0.282	0.185	0.1892	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:45	122.19	0	0.189	0.283	0.18	0.1883	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:46	122.19	0	0.188	0.283	0.181	0.1874	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:47	122.19	0	0.187	0.283	0.177	0.1865	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:48	122.19	0	0.186	0.284	0.177	0.1853	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:49	122.19	0	0.185	0.284	0.177	0.1843	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:50	122.19	0	0.184	0.284	0.175	0.183	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:51	122.19	0	0.183	0.285	0.177	0.1821	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:52	122.19	0	0.181	0.285	0.176	0.1812	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:53	122.19	0	0.18	0.286	0.177	0.1805	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:54	122.19	0	0.18	0.286	0.176	0.1799	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:55	122.19	0	0.179	0.286	0.171	0.1789	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:56	122.19	0	0.178	0.287	0.173	0.178	Data from Upwind Unit - Repositioned downwind.
7/29/2022 14:57	122.19	0	0.177	0.287	0.175	0.1773	Data from Upwind Unit - Repositioned downwind.

Community Air Monitoring Plan - Upwind Aerosol and Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B436251 VOC (Peak) (ppm)	RAE RS232(A) 0B436251 VOC (Low) (ppm)	RAE RS232(A) 0B436251 VOC (STEL) (ppm)	RAE RS232(A) 0B436251 VOC (TWA) (ppm)	RAE RS232(A) 0B436251 VOC (ppm)	DustTrak RS232(C) 0B436251 Total TWA (mg/m³)	DustTrak RS232(C) 0B436251 Mass Conc. Total (mg/m³)	Mass Conc. Total mg/m³ AVG 15m (mg/m³)	VOC ppm AVG 15m (ppm)
7/25/2022 8:14									
7/25/2022 8:15	0.294	0	0	0	0				0
7/25/2022 8:15									
7/25/2022 8:16	0.294	0	0.01	0	0				0
7/25/2022 8:17	0.294	0	0.002	0	0	0	0.015	0.015	0
7/25/2022 8:18	0.294	0	0	0	0	0	0.015	0.015	0
7/25/2022 8:19	0.294	0	0	0	0	0	0.015	0.015	0
7/25/2022 8:20	0.294	0	0	0	0	0	0.015	0.015	0
7/25/2022 8:21	0.294	0	0	0	0	0	0.015	0.015	0
7/25/2022 8:22	0.294	0	0	0	0	0	0.016	0.0152	0
7/25/2022 8:23	0.294	0	0	0	0	0	0.016	0.0153	0
7/25/2022 8:24	0.294	0	0	0	0	0	0.016	0.0154	0
7/25/2022 8:25	0.294	0	0	0	0	0	0.015	0.0153	0
7/25/2022 8:26	0.294	0	0	0	0	0	0.015	0.0153	0
7/25/2022 8:27	0.294	0	0	0	0	0	0.015	0.0153	0
7/25/2022 8:28	0.294	0	0	0	0	0	0.014	0.0152	0
7/25/2022 8:29	0.294	0	0	0	0	0	0.013	0.015	0
7/25/2022 8:30	0.294	0	0	0	0	0	0.013	0.0149	0
7/25/2022 8:31	0.294	0	0	0	0	0	0.012	0.0147	0
7/25/2022 8:32	0.294	0	0	0	0	0	0.012	0.0145	0
7/25/2022 8:33	0.294	0	0	0	0	0	0.011	0.0142	0
7/25/2022 8:34	0.294	0	0	0	0	0	0.011	0.0139	0
7/25/2022 8:35	0.294	0	0	0	0	0.001	0.01	0.0136	0
7/25/2022 8:36	0.294	0	0	0	0	0.001	0.008	0.0131	0
7/25/2022 8:37	0.294	0	0	0	0	0.001	0.009	0.0127	0
7/25/2022 8:38	0.294	0	0	0	0	0.001	0.009	0.0122	0
7/25/2022 8:39	0.294	0	0	0	0	0.001	0.009	0.0117	0
7/25/2022 8:40	0.294	0	0	0	0	0.001	0.009	0.0113	0
7/25/2022 8:41	0.294	0	0	0	0	0.001	0.008	0.0109	0
7/25/2022 8:42	0.294	0	0	0	0	0.001	0.008	0.0104	0
7/25/2022 8:43	0.294	0	0	0	0	0.001	0.008	0.01	0
7/25/2022 8:44	0.294	0	0	0	0	0.001	0.009	0.0097	0
7/25/2022 8:45	0.294	0	0	0	0	0.001	0.008	0.0094	0
7/25/2022 8:46	0.294	0	0	0	0	0.001	0.008	0.0091	0
7/25/2022 8:47	0.294	0	0	0	0	0.001	0.008	0.0089	0
7/25/2022 8:48	0.294	0	0	0	0	0.001	0.007	0.0086	0
7/25/2022 8:49	0.294	0	0	0	0	0.001	0.007	0.0083	0
7/25/2022 8:50	0.294	0	0	0	0	0.001	0.007	0.0081	0
7/25/2022 8:51	0.294	0	0	0	0	0.001	0.007	0.0081	0
7/25/2022 8:52	0.294	0	0	0	0	0.001	0.007	0.0079	0
7/25/2022 8:53	0.294	0	0	0	0	0.001	0.008	0.0079	0
7/25/2022 8:54	0.294	0	0	0	0	0.001	0.008	0.0078	0
7/25/2022 8:55	0.294	0	0	0	0	0.001	0.01	0.0079	0
7/25/2022 8:56	0.294	0	0	0	0	0.001	0.008	0.0079	0
7/25/2022 8:57	0.294	0	0	0	0	0.001	0.008	0.0079	0
7/25/2022 8:58	0.294	0	0	0	0	0.001	0.008	0.0079	0
7/25/2022 8:59	0.294	0	0	0	0	0.001	0.008	0.0078	0
7/25/2022 9:00	0.294	0	0	0	0	0.001	0.008	0.0078	0
7/25/2022 9:01	0.294	0	0	0	0	0.001	0.008	0.0078	0
7/25/2022 9:02	0.294	0	0	0	0	0.001	0.008	0.0078	0
7/25/2022 9:03	0.294	0	0	0	0	0.001	0.008	0.0079	0
7/25/2022 9:04	0.294	0	0	0	0	0.001	0.008	0.0079	0
7/25/2022 9:05	0.294	0	0	0	0	0.001	0.008	0.008	0
7/25/2022 9:06	0.294	0	0	0	0	0.001	0.008	0.0081	0
7/25/2022 9:07	0.294	0	0	0	0	0.001	0.008	0.0081	0
7/25/2022 9:08	0.294	0	0	0	0	0.001	0.008	0.0081	0
7/25/2022 9:09	0.294	0	0	0	0	0.001	0.008	0.0081	0
7/25/2022 9:10	0.294	0	0	0	0	0.001	0.008	0.008	0
7/25/2022 9:11	0.294	0	0	0	0	0.001	0.008	0.008	0
7/25/2022 9:12	0.294	0	0	0	0	0.001	0.008	0.008	0
7/25/2022 9:13	0.294	0	0	0	0	0.001	0.008	0.008	0
7/25/2022 9:14	0.294	0	0	0	0	0.001	0.009	0.0081	0
7/25/2022 9:15	0.294	0	0	0	0	0.001	0.008	0.0081	0
7/25/2022 9:16	0.294	0	0	0	0	0.001	0.009	0.0081	0
7/25/2022 9:17	0.294	0	0	0	0	0.001	0.008	0.0081	0
7/25/2022 9:18	0.294	0	0	0	0	0.001	0.009	0.0082	0
7/25/2022 9:19	0.294	0	0	0	0	0.001	0.009	0.0083	0
7/25/2022 9:20	0.294	0	0	0	0	0.001	0.009	0.0083	0
7/25/2022 9:21	0.294	0	0	0	0	0.001	0.009	0.0084	0
7/25/2022 9:22	0.294	0	0	0	0	0.001	0.009	0.0085	0

Community Air Monitoring Plan - Upwind Aerosol and Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B436251 VOC (Peak) (ppm)	RAE RS232(A) 0B436251 VOC (Low) (ppm)	RAE RS232(A) 0B436251 VOC (STEL) (ppm)	RAE RS232(A) 0B436251 VOC (TWA) (ppm)	RAE RS232(A) 0B436251 VOC (ppm)	DustTrak RS232(C) 0B436251 Total TWA (mg/m³)	DustTrak RS232(C) 0B436251 Mass Conc. Total (mg/m³)	Mass Conc. Total mg/m³ AVG 15m (mg/m³)	VOC ppm AVG 15m (ppm)
7/25/2022 9:23	0.294	0	0	0	0	0.001	0.009	0.0085	0
7/25/2022 9:24	0.294	0	0	0	0	0.001	0.008	0.0085	0
7/25/2022 9:25	0.294	0	0	0	0	0.001	0.009	0.0086	0
7/25/2022 9:26	0.294	0	0	0	0	0.001	0.009	0.0087	0
7/25/2022 9:27	0.294	0	0	0	0	0.001	0.009	0.0087	0
7/25/2022 9:28	0.294	0	0	0	0	0.001	0.009	0.0088	0
7/25/2022 9:29	0.294	0	0	0	0	0.001	0.009	0.0088	0
7/25/2022 9:30	0.294	0	0	0	0	0.001	0.009	0.0089	0
7/25/2022 9:31	0.294	0	0	0	0	0.001	0.009	0.0089	0
7/25/2022 9:32	0.294	0	0	0	0	0.002	0.01	0.009	0
7/25/2022 9:33	0.294	0	0	0	0	0.002	0.01	0.0091	0
7/25/2022 9:34	0.294	0	0	0	0	0.002	0.009	0.0091	0
7/25/2022 9:35	0.294	0	0	0	0	0.002	0.01	0.0091	0
7/25/2022 9:36	0.294	0	0	0	0	0.002	0.009	0.0091	0
7/25/2022 9:37	0.294	0	0	0	0	0.002	0.009	0.0091	0
7/25/2022 9:38	0.294	0	0	0	0	0.002	0.01	0.0092	0
7/25/2022 9:39	0.294	0	0	0	0	0.002	0.01	0.0093	0
7/25/2022 9:40	0.294	0	0	0	0	0.002	0.01	0.0094	0
7/25/2022 9:41	0.294	0	0	0	0	0.002	0.01	0.0095	0
7/25/2022 9:42	0.294	0	0	0	0	0.002	0.01	0.0095	0
7/25/2022 9:43	0.294	0	0	0	0	0.002	0.01	0.0096	0
7/25/2022 9:44	0.294	0	0	0	0	0.002	0.011	0.0097	0
7/25/2022 9:45	0.294	0	0	0	0	0.002	0.011	0.0099	0
7/25/2022 9:46	0.294	0	0	0	0	0.002	0.01	0.0099	0
7/25/2022 9:47	0.294	0	0	0	0	0.002	0.01	0.0099	0
7/25/2022 9:48	0.294	0	0	0	0	0.002	0.01	0.0099	0
7/25/2022 9:49	0.294	0	0	0	0	0.002	0.01	0.01	0
7/25/2022 9:50	0.294	0	0	0	0.002	0.002	0.01	0.01	0.0001
7/25/2022 9:51	0.294	0	0	0	0	0.002	0.01	0.0101	0.0001
7/25/2022 9:52	0.294	0	0	0	0.004	0.002	0.01	0.0101	0.0004
7/25/2022 9:53	0.294	0	0	0	0.004	0.002	0.011	0.0102	0.0007
7/25/2022 9:54	0.294	0	0.001	0	0.01	0.002	0.011	0.0103	0.0013
7/25/2022 9:55	0.294	0	0.001	0	0.019	0.002	0.011	0.0103	0.0026
7/25/2022 9:56	0.294	0	0.002	0	0.022	0.002	0.011	0.0104	0.0041
7/25/2022 9:57	0.294	0	0.004	0	0.013	0.002	0.011	0.0105	0.0049
7/25/2022 9:58	0.294	0	0.005	0	0.015	0.002	0.011	0.0105	0.0059
7/25/2022 9:59	0.294	0	0.006	0	0.019	0.002	0.011	0.0105	0.0072
7/25/2022 10:00	0.294	0	0.007	0	0.012	0.002	0.011	0.0105	0.008
7/25/2022 10:01	0.294	0	0.008	0	0.013	0.002	0.011	0.0106	0.0089
7/25/2022 10:02	0.294	0	0.009	0	0.012	0.002	0.011	0.0107	0.0097
7/25/2022 10:03	0.294	0	0.01	0	0.037	0.002	0.011	0.0107	0.0121
7/25/2022 10:04	0.294	0	0.013	0	0.034	0.002	0.011	0.0108	0.0144
7/25/2022 10:05	0.294	0	0.015	0	0.035	0.002	0.011	0.0109	0.0166
7/25/2022 10:06	0.294	0	0.017	0	0.032	0.002	0.011	0.0109	0.0187
7/25/2022 10:07	0.294	0	0.019	0	0.049	0.002	0.011	0.011	0.0217
7/25/2022 10:08	0.294	0	0.022	0.001	0.044	0.002	0.011	0.011	0.0244
7/25/2022 10:09	0.294	0	0.024	0.001	0.049	0.002	0.011	0.011	0.027
7/25/2022 10:10	0.294	0	0.026	0.001	0.047	0.002	0.011	0.011	0.0289
7/25/2022 10:11	0.294	0	0.029	0.001	0.035	0.002	0.012	0.0111	0.0297
7/25/2022 10:12	0.294	0	0.03	0.001	0.046	0.002	0.012	0.0111	0.0319
7/25/2022 10:13	0.294	0	0.032	0.001	0.044	0.002	0.012	0.0112	0.0339
7/25/2022 10:14	0.294	0	0.034	0.001	0.053	0.002	0.011	0.0112	0.0361
7/25/2022 10:15	0.294	0	0.037	0.001	0.073	0.002	0.011	0.0112	0.0402
7/25/2022 10:16	0.294	0	0.04	0.001	0.07	0.002	0.011	0.0112	0.044
7/25/2022 10:17	0.294	0	0.044	0.002	0.07	0.003	0.012	0.0113	0.0479
7/25/2022 10:18	0.294	0	0.048	0.002	0.074	0.003	0.012	0.0113	0.0503
7/25/2022 10:19	0.294	0	0.05	0.002	0.083	0.003	0.011	0.0113	0.0536
7/25/2022 10:20	0.294	0	0.053	0.002	0.075	0.003	0.011	0.0113	0.0563
7/25/2022 10:21	0.294	0	0.055	0.002	0.071	0.003	0.012	0.0114	0.0589
7/25/2022 10:22	0.294	0	0.058	0.002	0.081	0.003	0.011	0.0114	0.061
7/25/2022 10:23	0.294	0	0.061	0.002	0.084	0.003	0.012	0.0115	0.0637
7/25/2022 10:24	0.294	0	0.063	0.003	0.089	0.003	0.012	0.0115	0.0663
7/25/2022 10:25	0.294	0	0.066	0.003	0.086	0.003	0.011	0.0115	0.0689
7/25/2022 10:26	0.294	0	0.069	0.003	0.088	0.003	0.012	0.0115	0.0725
7/25/2022 10:27	0.294	0	0.072	0.003	0.089	0.003	0.012	0.0115	0.0753
7/25/2022 10:28	0.294	0	0.074	0.003	0.083	0.003	0.012	0.0115	0.0779
7/25/2022 10:29	0.294	0	0.077	0.004	0.088	0.003	0.012	0.0116	0.0803
7/25/2022 10:30	0.294	0	0.08	0.004	0.089	0.003	0.012	0.0117	0.0813
7/25/2022 10:31	0.294	0	0.081	0.004	0.094	0.003	0.012	0.0117	0.0829
7/25/2022 10:32	0.294	0	0.082	0.004	0.094	0.003	0.012	0.0117	0.0845

Community Air Monitoring Plan - Upwind Aerosol and Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B436251 VOC (Peak) (ppm)	RAE RS232(A) 0B436251 VOC (Low) (ppm)	RAE RS232(A) 0B436251 VOC (STEL) (ppm)	RAE RS232(A) 0B436251 VOC (TWA) (ppm)	RAE RS232(A) 0B436251 VOC (ppm)	DustTrak RS232(C) 0B436251 Total TWA (mg/m³)	DustTrak RS232(C) 0B436251 Mass Conc. Total (mg/m³)	Mass Conc. Total mg/m³ AVG 15m (mg/m³)	VOC ppm AVG 15m (ppm)
7/25/2022 10:33	0.294	0	0.084	0.004	0.094	0.003	0.012	0.0117	0.0859
7/25/2022 10:34	0.294	0	0.085	0.004	0.087	0.003	0.012	0.0118	0.0861
7/25/2022 10:35	0.294	0	0.086	0.005	0.086	0.003	0.012	0.0119	0.0869
7/25/2022 10:36	0.294	0	0.087	0.005	0.084	0.003	0.012	0.0119	0.0877
7/25/2022 10:37	0.294	0	0.087	0.005	0.086	0.003	0.012	0.0119	0.0881
7/25/2022 10:38	0.294	0	0.087	0.005	0.084	0.003	0.012	0.0119	0.0881
7/25/2022 10:39	0.294	0	0.087	0.005	0.084	0.003	0.012	0.0119	0.0877
7/25/2022 10:40	0.294	0	0.087	0.006	0.086	0.003	0.012	0.012	0.0877
7/25/2022 10:41	0.294	0	0.086	0.006	0.09	0.003	0.012	0.012	0.0879
7/25/2022 10:42	0.294	0	0.086	0.006	0.084	0.003	0.012	0.012	0.0875
7/25/2022 10:43	0.294	0	0.086	0.006	0.079	0.003	0.012	0.012	0.0873
7/25/2022 10:44	0.294	0	0.086	0.006	0.088	0.003	0.012	0.012	0.0873
7/25/2022 10:45	0.294	0	0.086	0.006	0.093	0.003	0.012	0.012	0.0875
7/25/2022 10:46	0.294	0	0.086	0.007	0.087	0.003	0.012	0.012	0.0871
7/25/2022 10:47	0.294	0	0.085	0.007	0.094	0.003	0.012	0.012	0.0871
7/25/2022 10:48	0.294	0	0.085	0.007	0.093	0.003	0.012	0.012	0.087
7/25/2022 10:49	0.294	0	0.086	0.007	0.096	0.003	0.012	0.012	0.0876
7/25/2022 10:50	0.294	0	0.086	0.007	0.099	0.003	0.012	0.012	0.0885
7/25/2022 10:51	0.294	0	0.087	0.008	0.094	0.003	0.012	0.012	0.0891
7/25/2022 10:52	0.294	0	0.088	0.008	0.102	0.003	0.012	0.012	0.0902
7/25/2022 10:53	0.294	0	0.089	0.008	0.108	0.003	0.012	0.012	0.0918
7/25/2022 10:54	0.294	0	0.091	0.008	0.111	0.003	0.011	0.0119	0.0936
7/25/2022 10:55	0.294	0	0.093	0.008	0.113	0.003	0.011	0.0119	0.0954
7/25/2022 10:56	0.294	0	0.095	0.009	0.119	0.003	0.012	0.0119	0.0973
7/25/2022 10:57	0.294	0	0.097	0.009	0.12	0.003	0.013	0.0119	0.0997
7/25/2022 10:58	0.294	0	0.1	0.009	0.125	0.004	0.012	0.0119	0.1028
7/25/2022 10:59	0.294	0	0.102	0.009	0.124	0.004	0.013	0.012	0.1052
7/25/2022 11:00	0.294	0	0.105	0.01	0.123	0.004	0.012	0.012	0.1072
7/25/2022 11:01	0.294	0	0.107	0.01	0.131	0.004	0.014	0.0121	0.1101
7/25/2022 11:02	0.294	0	0.11	0.01	0.129	0.004	0.012	0.0121	0.1125
7/25/2022 11:03	0.294	0	0.113	0.01	0.129	0.004	0.013	0.0122	0.1149
7/25/2022 11:04	0.294	0	0.115	0.011	0.13	0.004	0.012	0.0122	0.1171
7/25/2022 11:05	0.294	0	0.117	0.011	0.124	0.004	0.012	0.0122	0.1188
7/25/2022 11:06	0.294	0	0.119	0.011	0.123	0.004	0.011	0.0121	0.1207
7/25/2022 11:07	0.294	0	0.12	0.012	0.125	0.004	0.012	0.0121	0.1223
7/25/2022 11:08	0.294	0	0.121	0.012	0.118	0.004	0.011	0.0121	0.1229
7/25/2022 11:09	0.294	0	0.122	0.012	0.121	0.004	0.011	0.0121	0.1236
7/25/2022 11:10	0.294	0	0.123	0.012	0.12	0.004	0.013	0.0122	0.1241
7/25/2022 11:11	0.294	0	0.124	0.013	0.122	0.004	0.012	0.0122	0.1243
7/25/2022 11:12	0.294	0	0.124	0.013	0.122	0.004	0.012	0.0121	0.1244
7/25/2022 11:13	0.294	0	0.124	0.013	0.118	0.004	0.014	0.0123	0.1239
7/25/2022 11:14	0.294	0	0.124	0.013	0.121	0.004	0.012	0.0122	0.1237
7/25/2022 11:15	0.294	0	0.124	0.014	0.121	0.004	0.012	0.0122	0.1236
7/25/2022 11:16	0.294	0	0.124	0.014	0.126	0.004	0.012	0.0121	0.1233
7/25/2022 11:17	0.294	0	0.123	0.014	0.121	0.004	0.012	0.0121	0.1227
7/25/2022 11:18	0.294	0	0.123	0.014	0.123	0.004	0.012	0.012	0.1223
7/25/2022 11:19	0.294	0	0.122	0.015	0.128	0.004	0.012	0.012	0.1222
7/25/2022 11:20	0.294	0	0.122	0.015	0.122	0.004	0.012	0.012	0.1221
7/25/2022 11:21	0.294	0	0.122	0.015	0.12	0.004	0.012	0.0121	0.1219
7/25/2022 11:22	0.294	0	0.122	0.015	0.122	0.004	0.012	0.0121	0.1217
7/25/2022 11:23	0.294	0	0.122	0.016	0.127	0.004	0.012	0.0121	0.1223
7/25/2022 11:24	0.294	0	0.122	0.016	0.125	0.004	0.012	0.0122	0.1225
7/25/2022 11:25	0.294	0	0.122	0.016	0.125	0.004	0.012	0.0121	0.1229
7/25/2022 11:26	0.294	0	0.122	0.016	0.125	0.004	0.012	0.0121	0.1231
7/25/2022 11:27	0.294	0	0.123	0.017	0.123	0.004	0.012	0.0121	0.1231
7/25/2022 11:28	0.294	0	0.123	0.017	0.131	0.004	0.012	0.012	0.124
7/25/2022 11:29	0.294	0	0.123	0.017	0.129	0.004	0.012	0.012	0.1245
7/25/2022 11:30	0.294	0	0.124	0.017	0.132	0.004	0.012	0.012	0.1253
7/25/2022 11:31	0.294	0	0.124	0.018	0.131	0.004	0.012	0.012	0.1256
7/25/2022 11:32	0.294	0	0.125	0.018	0.129	0.004	0.012	0.012	0.1261
7/25/2022 11:33	0.294	0	0.125	0.018	0.134	0.004	0.013	0.0121	0.1269
7/25/2022 11:34	0.294	0	0.126	0.019	0.135	0.004	0.012	0.0121	0.1273
7/25/2022 11:35	0.294	0	0.127	0.019	0.143	0.004	0.012	0.0121	0.1287
7/25/2022 11:36	0.294	0	0.129	0.019	0.139	0.004	0.012	0.0121	0.13
7/25/2022 11:37	0.294	0	0.13	0.019	0.141	0.005	0.012	0.0121	0.1313
7/25/2022 11:38	0.294	0	0.132	0.02	0.141	0.005	0.012	0.0121	0.1322
7/25/2022 11:39	0.294	0	0.133	0.02	0.147	0.005	0.013	0.0121	0.1337
7/25/2022 11:40	0.294	0	0.134	0.02	0.146	0.005	0.013	0.0122	0.1351
7/25/2022 11:41	0.294	0	0.136	0.021	0.146	0.005	0.013	0.0123	0.1365
7/25/2022 11:42	0.294	0	0.137	0.021	0.147	0.005	0.013	0.0123	0.1381

Community Air Monitoring Plan - Upwind Aerosol and Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B436251 VOC (Peak) (ppm)	RAE RS232(A) 0B436251 VOC (Low) (ppm)	RAE RS232(A) 0B436251 VOC (STEL) (ppm)	RAE RS232(A) 0B436251 VOC (TWA) (ppm)	RAE RS232(A) 0B436251 VOC (ppm)	DustTrak RS232(C) 0B436251 Total TWA (mg/m³)	DustTrak RS232(C) 0B436251 Mass Conc. Total (mg/m³)	Mass Conc. Total mg/m³ AVG 15m (mg/m³)	VOC ppm AVG 15m (ppm)
7/25/2022 11:43	0.294	0	0.138	0.021	0.142	0.005	0.013	0.0124	0.1388
7/25/2022 11:44	0.294	0	0.139	0.022	0.142	0.005	0.013	0.0125	0.1397
7/25/2022 11:45	0.294	0	0.14	0.022	0.143	0.005	0.012	0.0125	0.1404
7/25/2022 11:46	0.294	0	0.141	0.022	0.146	0.005	0.013	0.0125	0.1414
7/25/2022 11:47	0.294	0	0.142	0.022	0.145	0.005	0.013	0.0126	0.1425
7/25/2022 11:48	0.294	0	0.143	0.023	0.146	0.005	0.013	0.0126	0.1433
7/25/2022 11:49	0.294	0	0.144	0.023	0.145	0.005	0.013	0.0127	0.1439
7/25/2022 11:50	0.294	0	0.144	0.023	0.148	0.005	0.013	0.0127	0.1443
7/25/2022 11:51	0.294	0	0.144	0.024	0.139	0.005	0.013	0.0128	0.1443
7/25/2022 11:52	0.294	0	0.144	0.024	0.144	0.005	0.013	0.0129	0.1445
7/25/2022 11:53	0.294	0	0.144	0.024	0.143	0.005	0.013	0.0129	0.1446
7/25/2022 11:54	0.294	0	0.144	0.025	0.147	0.005	0.013	0.0129	0.1446
7/25/2022 11:55	0.294	0	0.144	0.025	0.143	0.005	0.013	0.0129	0.1444
7/25/2022 11:56	0.294	0	0.144	0.025	0.139	0.005	0.013	0.0129	0.1439
7/25/2022 11:57	0.294	0	0.144	0.025	0.141	0.005	0.013	0.0129	0.1435
7/25/2022 11:58	0.294	0	0.144	0.026	0.148	0.005	0.013	0.0129	0.1439
7/25/2022 11:59	0.294	0	0.144	0.026	0.141	0.005	0.013	0.0129	0.1439
7/25/2022 12:00	0.294	0	0.144	0.026	0.145	0.005	0.013	0.013	0.144
7/25/2022 12:01	0.294	0	0.143	0.027	0.14	0.005	0.013	0.013	0.1436
7/25/2022 12:02	0.294	0	0.143	0.027	0.14	0.005	0.013	0.013	0.1433
7/25/2022 12:03	0.294	0	0.143	0.027	0.14	0.005	0.014	0.0131	0.1429
7/25/2022 12:04	0.294	0	0.142	0.028	0.143	0.005	0.014	0.0131	0.1427
7/25/2022 12:05	0.294	0	0.142	0.028	0.141	0.005	0.014	0.0132	0.1423
7/25/2022 12:06	0.294	0	0.142	0.028	0.144	0.005	0.014	0.0133	0.1426
7/25/2022 12:07	0.294	0	0.142	0.028	0.147	0.005	0.014	0.0133	0.1428
7/25/2022 12:08	0.294	0	0.142	0.029	0.141	0.005	0.013	0.0133	0.1427
7/25/2022 12:09	0.294	0	0.142	0.029	0.136	0.005	0.014	0.0134	0.1419
7/25/2022 12:10	0.294	0	0.142	0.029	0.138	0.005	0.014	0.0135	0.1416
7/25/2022 12:11	0.294	0	0.141	0.03	0.142	0.005	0.014	0.0135	0.1418
7/25/2022 12:12	0.294	0	0.141	0.03	0.142	0.005	0.014	0.0136	0.1419
7/25/2022 12:13	0.294	0	0.141	0.03	0.139	0.005	0.014	0.0137	0.1413
7/25/2022 12:14	0.294	0	0.14	0.03	0.131	0.006	0.014	0.0137	0.1406
7/25/2022 12:15	0.294	0	0.14	0.031	0.134	0.006	0.014	0.0138	0.1399
7/25/2022 12:16	0.294	0	0.139	0.031	0.135	0.006	0.014	0.0139	0.1395
7/25/2022 12:17	0.294	0	0.139	0.031	0.133	0.006	0.015	0.014	0.1391
7/25/2022 12:18	0.294	0	0.138	0.032	0.131	0.006	0.015	0.0141	0.1385
7/25/2022 12:19	0.294	0	0.138	0.032	0.134	0.006	0.014	0.0141	0.1379
7/25/2022 12:20	0.294	0	0.138	0.032	0.137	0.006	0.014	0.0141	0.1376
7/25/2022 12:21	0.294	0	0.137	0.032	0.138	0.006	0.014	0.0141	0.1372
7/25/2022 12:22	0.294	0	0.137	0.033	0.144	0.006	0.015	0.0141	0.137
7/25/2022 12:23	0.294	0	0.137	0.033	0.142	0.006	0.014	0.0142	0.1371
7/25/2022 12:24	0.294	0	0.137	0.033	0.142	0.006	0.014	0.0142	0.1375
7/25/2022 12:25	0.294	0	0.137	0.034	0.144	0.006	0.014	0.0142	0.1379
7/25/2022 12:26	0.294	0	0.138	0.034	0.144	0.006	0.013	0.0141	0.138
7/25/2022 12:27	0.294	0	0.138	0.034	0.141	0.006	0.014	0.0141	0.1379
7/25/2022 12:28	0.294	0	0.138	0.035	0.145	0.006	0.013	0.0141	0.1383
7/25/2022 12:29	0.294	0	0.138	0.035	0.141	0.006	0.014	0.0141	0.139
7/25/2022 12:30	0.294	0	0.139	0.035	0.142	0.006	0.014	0.0141	0.1395
7/25/2022 12:31	0.294	0	0.139	0.035	0.14	0.006	0.014	0.0141	0.1399
7/25/2022 12:32	0.294	0	0.14	0.036	0.141	0.006	0.013	0.0139	0.1404
7/25/2022 12:33	0.294	0	0.14	0.036	0.143	0.006	0.014	0.0139	0.1412
7/25/2022 12:34	0.294	0	0.141	0.036	0.145	0.006	0.014	0.0139	0.1419
7/25/2022 12:35	0.294	0	0.141	0.037	0.141	0.006	0.013	0.0138	0.1422
7/25/2022 12:36	0.294	0	0.141	0.037	0.132	0.006	0.014	0.0138	0.1418
7/25/2022 12:37	0.294	0	0.141	0.037	0.14	0.006	0.013	0.0137	0.1415
7/25/2022 12:38	0.294	0	0.141	0.037	0.14	0.006	0.013	0.0136	0.1414
7/25/2022 12:39	0.294	0	0.141	0.038	0.138	0.006	0.014	0.0136	0.1411
7/25/2022 12:40	0.294	0	0.14	0.038	0.142	0.006	0.014	0.0136	0.141
7/25/2022 12:41	0.294	0	0.14	0.038	0.143	0.006	0.013	0.0136	0.1409
7/25/2022 12:42	0.294	0	0.141	0.039	0.15	0.006	0.012	0.0135	0.1415
7/25/2022 12:43	0.294	0	0.141	0.039	0.148	0.006	0.013	0.0135	0.1417
7/25/2022 12:44	0.294	0	0.141	0.039	0.156	0.006	0.013	0.0134	0.1427
7/25/2022 12:45	0.294	0	0.142	0.04	0.153	0.006	0.012	0.0133	0.1435
7/25/2022 12:46	0.294	0	0.143	0.04	0.153	0.006	0.013	0.0132	0.1443
7/25/2022 12:47	0.294	0	0.144	0.04	0.16	0.006	0.013	0.0132	0.1456
7/25/2022 12:48	0.294	0	0.145	0.041	0.151	0.006	0.013	0.0131	0.1461
7/25/2022 12:49	0.294	0	0.146	0.041	0.158	0.007	0.013	0.0131	0.147
7/25/2022 12:50	0.294	0	0.147	0.041	0.16	0.007	0.012	0.013	0.1483
7/25/2022 12:51	0.294	0	0.148	0.041	0.164	0.007	0.012	0.0129	0.1504
7/25/2022 12:52	0.294	0	0.15	0.042	0.167	0.007	0.012	0.0128	0.1522

Community Air Monitoring Plan - Upwind Aerosol and Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B436251 VOC (Peak) (ppm)	RAE RS232(A) 0B436251 VOC (Low) (ppm)	RAE RS232(A) 0B436251 VOC (STEL) (ppm)	RAE RS232(A) 0B436251 VOC (TWA) (ppm)	RAE RS232(A) 0B436251 VOC (ppm)	DustTrak RS232(C) 0B436251 Total TWA (mg/m³)	DustTrak RS232(C) 0B436251 Mass Conc. Total (mg/m³)	Mass Conc. Total mg/m³ AVG 15m (mg/m³)	VOC ppm AVG 15m (ppm)
7/25/2022 12:53	0.294	0	0.152	0.042	0.168	0.007	0.012	0.0127	0.1541
7/25/2022 12:54	0.294	0	0.153	0.043	0.167	0.007	0.012	0.0126	0.156
7/25/2022 12:55	0.294	0	0.155	0.043	0.167	0.007	0.013	0.0125	0.1577
7/25/2022 12:56	0.294	0	0.156	0.043	0.167	0.007	0.012	0.0125	0.1593
7/25/2022 12:57	0.294	0	0.158	0.044	0.168	0.007	0.013	0.0125	0.1605
7/25/2022 12:58	0.294	0	0.159	0.044	0.171	0.007	0.012	0.0125	0.162
7/25/2022 12:59	0.294	0	0.161	0.044	0.174	0.007	0.012	0.0124	0.1632
7/25/2022 13:00	0.294	0	0.162	0.045	0.176	0.007	0.013	0.0125	0.1647
7/25/2022 13:01	0.294	0	0.163	0.045	0.173	0.007	0.012	0.0124	0.1661
7/25/2022 13:02	0.294	0	0.165	0.045	0.174	0.007	0.012	0.0123	0.167
7/25/2022 13:03	0.294	0	0.166	0.046	0.18	0.007	0.012	0.0123	0.1689
7/25/2022 13:04	0.294	0	0.168	0.046	0.183	0.007	0.012	0.0122	0.1706
7/25/2022 13:05	0.294	0	0.17	0.046	0.186	0.007	0.012	0.0122	0.1723
7/25/2022 13:06	0.294	0	0.172	0.047	0.189	0.007	0.012	0.0122	0.174
7/25/2022 13:07	0.294	0	0.173	0.047	0.185	0.007	0.012	0.0122	0.1752
7/25/2022 13:08	0.294	0	0.175	0.048	0.19	0.007	0.014	0.0123	0.1767
7/25/2022 13:09	0.294	0	0.176	0.048	0.19	0.007	0.012	0.0123	0.1782
7/25/2022 13:10	0.294	0	0.178	0.048	0.193	0.007	0.012	0.0123	0.1799
7/25/2022 13:11	0.294	0	0.179	0.049	0.189	0.007	0.011	0.0122	0.1814
7/25/2022 13:12	0.294	0	0.181	0.049	0.189	0.007	0.012	0.0121	0.1828
7/25/2022 13:13	0.294	0	0.182	0.05	0.184	0.007	0.011	0.0121	0.1837
7/25/2022 13:14	0.294	0	0.183	0.05	0.188	0.007	0.011	0.012	0.1846
7/25/2022 13:15	0.294	0	0.184	0.05	0.191	0.007	0.011	0.0119	0.1856
7/25/2022 13:16	0.294	0	0.186	0.051	0.19	0.007	0.012	0.0119	0.1867
7/25/2022 13:17	0.294	0	0.187	0.051	0.192	0.007	0.012	0.0119	0.1879
7/25/2022 13:18	0.294	0	0.188	0.052	0.19	0.007	0.011	0.0118	0.1886
7/25/2022 13:19	0.294	0	0.189	0.052	0.192	0.007	0.011	0.0117	0.1892
7/25/2022 13:20	0.294	0	0.189	0.052	0.195	0.007	0.011	0.0117	0.1898
7/25/2022 13:21	0.294	0	0.19	0.053	0.197	0.007	0.011	0.0116	0.1903
7/25/2022 13:22	0.294	0	0.19	0.053	0.195	0.007	0.011	0.0115	0.191
7/25/2022 13:23	0.294	0	0.191	0.054	0.194	0.007	0.011	0.0113	0.1913
7/25/2022 13:24	0.294	0	0.191	0.054	0.191	0.007	0.011	0.0113	0.1913
7/25/2022 13:25	0.294	0	0.191	0.054	0.19	0.007	0.011	0.0112	0.1911
7/25/2022 13:26	0.294	0	0.191	0.055	0.195	0.007	0.011	0.0112	0.1915
7/25/2022 13:27	0.294	0	0.192	0.055	0.197	0.007	0.012	0.0112	0.1921
7/25/2022 13:28	0.294	0	0.192	0.056	0.197	0.007	0.011	0.0112	0.1929
7/25/2022 13:29	0.294	0	0.193	0.056	0.199	0.007	0.011	0.0112	0.1937
7/25/2022 13:30	0.294	0	0.194	0.056	0.195	0.008	0.011	0.0112	0.1939
7/25/2022 13:31	0.294	0	0.194	0.057	0.196	0.008	0.01	0.0111	0.1943
7/25/2022 13:32	0.294	0	0.194	0.057	0.198	0.008	0.01	0.0109	0.1947
7/25/2022 13:33	0.294	0	0.195	0.058	0.178	0.008	0.01	0.0109	0.1939
7/25/2022 13:34							0.011	0.0109	
7/25/2022 13:35									
7/25/2022 13:40									
7/25/2022 13:45									
7/25/2022 13:50									
7/25/2022 13:55									
7/25/2022 14:00									
7/25/2022 14:05									
7/25/2022 14:10	0.018	0	0	0	0.014	0	0.011	0.011	0.014
7/25/2022 14:11	0.019	0	0	0	0.018	0	0.011	0.011	0.016
7/25/2022 14:12	0.026	0	0	0	0.023	0	0.01	0.0107	0.0183
7/25/2022 14:13	0.029	0	0	0	0.028	0	0.011	0.0108	0.0208
7/25/2022 14:14	0.034	0	0	0	0.034	0	0.011	0.0108	0.0234
7/25/2022 14:15	0.039	0	0	0	0.036	0	0.011	0.0108	0.0255
7/25/2022 14:16	0.046	0	0	0	0.04	0	0.01	0.0107	0.0276
7/25/2022 14:17	0.052	0	0	0	0.049	0	0.011	0.0107	0.0303
7/25/2022 14:18	0.054	0	0	0	0.049	0	0.014	0.0111	0.0323
7/25/2022 14:19	0.06	0	0	0	0.058	0	0.014	0.0114	0.0349
7/25/2022 14:20	0.068	0	0	0	0.068	0	0.013	0.0115	0.0379
7/25/2022 14:21	0.072	0	0	0	0.071	0	0.012	0.0116	0.0407
7/25/2022 14:22	0.075	0	0	0.001	0.075	0	0.015	0.0118	0.0433
7/25/2022 14:23	0.083	0	0	0.001	0.08	0	0.015	0.0121	0.0459
7/25/2022 14:24	0.091	0	0.042	0.001	0.084	0	0.015	0.0123	0.0485
7/25/2022 14:25	0.091	0	0.047	0.001	0.088	0	0.011	0.0123	0.0534
7/25/2022 14:26	0.094	0	0.052	0.001	0.092	0	0.016	0.0126	0.0583
7/25/2022 14:27	0.1	0	0.057	0.001	0.095	0	0.015	0.0129	0.0631
7/25/2022 14:28	0.1	0	0.062	0.002	0.082	0	0.015	0.0132	0.0667
7/25/2022 14:29	0.1	0	0.066	0.002	0.081	0.001	0.017	0.0136	0.0699
7/25/2022 14:30	0.1	0	0.069	0.002	0.083	0.001	0.017	0.014	0.073

Community Air Monitoring Plan - Upwind Aerosol and Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B436251 VOC (Peak) (ppm)	RAE RS232(A) 0B436251 VOC (Low) (ppm)	RAE RS232(A) 0B436251 VOC (STEL) (ppm)	RAE RS232(A) 0B436251 VOC (TWA) (ppm)	RAE RS232(A) 0B436251 VOC (ppm)	DustTrak RS232(C) 0B436251 Total TWA (mg/m³)	DustTrak RS232(C) 0B436251 Mass Conc. Total (mg/m³)	Mass Conc. Total mg/m³ AVG 15m (mg/m³)	VOC ppm AVG 15m (ppm)
7/25/2022 14:31	0.1	0	0.072	0.002	0.085	0.001	0.013	0.0142	0.076
7/25/2022 14:32	0.1	0	0.075	0.002	0.088	0.001	0.012	0.0143	0.0786
7/25/2022 14:33	0.1	0	0.078	0.002	0.092	0.001	0.011	0.0141	0.0815
7/25/2022 14:34	0.101	0	0.081	0.003	0.099	0.001	0.012	0.0139	0.0842
7/25/2022 14:35	0.108	0	0.084	0.003	0.103	0.001	0.012	0.0139	0.0865
7/25/2022 14:36	0.111	0	0.086	0.003	0.11	0.001	0.013	0.0139	0.0891
7/25/2022 14:37	0.113	0	0.088	0.003	0.111	0.001	0.016	0.014	0.0915
7/25/2022 14:38	0.12	0	0.091	0.004	0.115	0.001	0.028	0.0149	0.0939
7/25/2022 14:39	0.12	0	0.093	0.004	0.113	0.001	0.026	0.0156	0.0958
7/25/2022 14:40	0.124	0	0.095	0.004	0.114	0.001	0.016	0.0159	0.0975
7/25/2022 14:41	0.124	0	0.097	0.004	0.121	0.001	0.026	0.0166	0.0995
7/25/2022 14:42	0.124	0	0.098	0.004	0.121	0.001	0.022	0.0171	0.1012
7/25/2022 14:43	0.127	0	0.1	0.005	0.12	0.001	0.015	0.0171	0.1037
7/25/2022 14:44	0.127	0	0.103	0.005	0.117	0.001	0.017	0.0171	0.1061
7/25/2022 14:45	0.127	0	0.105	0.005	0.12	0.001	0.012	0.0167	0.1086
7/25/2022 14:46	0.127	0	0.108	0.005	0.122	0.001	0.01	0.0165	0.1111
7/25/2022 14:47	0.127	0	0.11	0.006	0.12	0.001	0.01	0.0164	0.1132
7/25/2022 14:48	0.127	0	0.112	0.006	0.122	0.001	0.011	0.0164	0.1152
7/25/2022 14:49	0.127	0	0.114	0.006	0.124	0.001	0.011	0.0163	0.1169
7/25/2022 14:50	0.127	0	0.115	0.006	0.12	0.001	0.01	0.0162	0.118
7/25/2022 14:51	0.127	0	0.116	0.007	0.118	0.001	0.011	0.0161	0.1185
7/25/2022 14:52	0.127	0	0.117	0.007	0.121	0.001	0.01	0.0157	0.1192
7/25/2022 14:53	0.13	0	0.118	0.007	0.125	0.001	0.01	0.0145	0.1199
7/25/2022 14:54	0.13	0	0.119	0.007	0.123	0.001	0.01	0.0134	0.1205
7/25/2022 14:55	0.13	0	0.119	0.008	0.121	0.001	0.01	0.013	0.121
7/25/2022 14:56	0.13	0	0.12	0.008	0.124	0.001	0.012	0.0121	0.1212
7/25/2022 14:57	0.13	0	0.12	0.008	0.126	0.001	0.01	0.0113	0.1215
7/25/2022 14:58	0.13	0	0.121	0.009	0.122	0.001	0.009	0.0109	0.1217
7/25/2022 14:59	0.13	0	0.121	0.009	0.125	0.001	0.011	0.0105	0.1222
7/25/2022 15:00	0.131	0	0.121	0.009	0.13	0.001	0.011	0.0104	0.1229
7/25/2022 15:01	0.131	0	0.122	0.009	0.115	0.001	0.016	0.0108	0.1224
7/25/2022 15:02	0.131	0	0.122	0.01	0.122	0.001	0.019	0.0114	0.1225
7/25/2022 15:03	0.134	0	0.122	0.01	0.117	0.002	0.031	0.0127	0.1222
7/25/2022 15:04	0.134	0	0.122	0.01	0.117	0.002	0.031	0.0141	0.1217
7/25/2022 15:05	0.134	0	0.121	0.01	0.12	0.002	0.019	0.0147	0.1217
7/25/2022 15:06	0.134	0	0.121	0.011	0.119	0.002	0.012	0.0147	0.1218
7/25/2022 15:07	0.134	0	0.121	0.011	0.122	0.002	0.011	0.0148	0.1219
7/25/2022 15:08	0.134	0	0.121	0.011	0.119	0.002	0.011	0.0149	0.1215
7/25/2022 15:09	0.134	0	0.121	0.011	0.121	0.002	0.011	0.0149	0.1213
7/25/2022 15:10	0.134	0	0.121	0.012	0.114	0.002	0.012	0.0151	0.1209
7/25/2022 15:11	0.134	0	0.12	0.012	0.119	0.002	0.018	0.0155	0.1205
7/25/2022 15:12	0.134	0	0.12	0.012	0.115	0.002	0.014	0.0157	0.1198
7/25/2022 15:13	0.134	0	0.12	0.012	0.118	0.002	0.011	0.0159	0.1195
7/25/2022 15:14	0.134	0	0.119	0.013	0.114	0.002	0.01	0.0158	0.1188
7/25/2022 15:15	0.134	0	0.119	0.013	0.115	0.002	0.011	0.0158	0.1178
7/25/2022 15:16	0.134	0	0.118	0.013	0.115	0.002	0.01	0.0154	0.1178
7/25/2022 15:17	0.134	0	0.117	0.013	0.114	0.002	0.012	0.0149	0.1173
7/25/2022 15:18	0.134	0	0.117	0.013	0.122	0.002	0.01	0.0135	0.1176
7/25/2022 15:19	0.134	0	0.117	0.014	0.121	0.002	0.01	0.0121	0.1179
7/25/2022 15:20	0.134	0	0.117	0.014	0.119	0.002	0.01	0.0115	0.1178
7/25/2022 15:21	0.134	0	0.117	0.014	0.118	0.002	0.02	0.0121	0.1177
7/25/2022 15:22	0.142	0	0.117	0.014	0.126	0.002	0.015	0.0123	0.118
7/25/2022 15:23	0.142	0	0.118	0.015	0.127	0.002	0.021	0.013	0.1185
7/25/2022 15:24	0.142	0	0.118	0.015	0.13	0.002	0.022	0.0137	0.1191
7/25/2022 15:25	0.142	0	0.119	0.015	0.126	0.002	0.029	0.0149	0.1199
7/25/2022 15:26	0.142	0	0.119	0.016	0.127	0.002	0.031	0.0157	0.1205
7/25/2022 15:27	0.142	0	0.12	0.016	0.121	0.002	0.029	0.0167	0.1209
7/25/2022 15:28	0.142	0	0.12	0.016	0.117	0.002	0.015	0.017	0.1208
7/25/2022 15:29	0.142	0	0.121	0.016	0.123	0.002	0.011	0.0171	0.1214
7/25/2022 15:30	0.142	0	0.121	0.017	0.119	0.002	0.011	0.0171	0.1217
7/25/2022 15:31	0.142	0	0.121	0.017	0.121	0.002	0.016	0.0175	0.1221
7/25/2022 15:32	0.142	0	0.122	0.017	0.124	0.003	0.036	0.0191	0.1227
7/25/2022 15:33	0.142	0	0.122	0.017	0.131	0.003	0.022	0.0199	0.1233
7/25/2022 15:34	0.142	0	0.123	0.018	0.125	0.003	0.028	0.0211	0.1236
7/25/2022 15:35	0.142	0	0.123	0.018	0.125	0.003	0.022	0.0219	0.124
7/25/2022 15:36	0.142	0	0.123	0.018	0.119	0.003	0.029	0.0225	0.1241
7/25/2022 15:37	0.142	0	0.124	0.018	0.122	0.003	0.017	0.0226	0.1238
7/25/2022 15:38	0.142	0	0.123	0.019	0.126	0.003	0.011	0.0219	0.1237
7/25/2022 15:39	0.142	0	0.123	0.019	0.123	0.003	0.012	0.0213	0.1233
7/25/2022 15:40	0.142	0	0.123	0.019	0.122	0.003	0.01	0.02	0.123

Community Air Monitoring Plan - Upwind Aerosol and Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B436251 VOC (Peak) (ppm)	RAE RS232(A) 0B436251 VOC (Low) (ppm)	RAE RS232(A) 0B436251 VOC (STEL) (ppm)	RAE RS232(A) 0B436251 VOC (TWA) (ppm)	RAE RS232(A) 0B436251 VOC (ppm)	DustTrak RS232(C) 0B436251 Total TWA (mg/m³)	DustTrak RS232(C) 0B436251 Mass Conc. Total (mg/m³)	Mass Conc. Total mg/m³ AVG 15m (mg/m³)	VOC ppm AVG 15m (ppm)
7/25/2022 15:41	0.142	0	0.122	0.019	0.127	0.003	0.009	0.0185	0.123
7/25/2022 15:42	0.142	0	0.122	0.02	0.126	0.003	0.01	0.0173	0.1233
7/25/2022 15:43	0.142	0	0.123	0.02	0.124	0.003	0.009	0.0169	0.1238
7/25/2022 15:44	0.142	0	0.123	0.02	0.127	0.003	0.01	0.0168	0.1241
7/25/2022 15:45	0.142	0	0.123	0.02	0.124	0.003	0.009	0.0167	0.1244
7/25/2022 15:46	0.142	0	0.124	0.021	0.124	0.003	0.01	0.0163	0.1246
7/25/2022 15:47	0.142	0	0.124	0.021	0.128	0.003	0.011	0.0146	0.1249
7/25/2022 15:48	0.142	0	0.124	0.021	0.13	0.003	0.01	0.0138	0.1248
7/25/2022 15:49	0.142	0	0.124	0.021	0.127	0.003	0.015	0.0129	0.1249
7/25/2022 15:50	0.142	0	0.124	0.022	0.126	0.003	0.014	0.0124	0.125
7/25/2022 15:51	0.142	0	0.124	0.022	0.127	0.003	0.01	0.0111	0.1255
7/25/2022 15:52	0.142	0	0.124	0.022	0.132	0.003	0.014	0.0109	0.1262
7/25/2022 15:53	0.142	0	0.125	0.023	0.121	0.003	0.013	0.0111	0.1259
7/25/2022 15:54	0.142	0	0.125	0.023	0.127	0.003	0.011	0.011	0.1261
7/25/2022 15:55	0.142	0	0.125	0.023	0.123	0.003	0.017	0.0115	0.1262
7/25/2022 15:56	0.142	0	0.126	0.023	0.127	0.003	0.02	0.0122	0.1262
7/25/2022 15:57	0.142	0	0.126	0.024	0.124	0.003	0.022	0.013	0.1261
7/25/2022 15:58	0.142	0	0.125	0.024	0.132	0.003	0.015	0.0134	0.1266
7/25/2022 15:59	0.142	0	0.126	0.024	0.124	0.003	0.014	0.0137	0.1264
7/25/2022 16:00	0.142	0	0.126	0.024	0.128	0.003	0.017	0.0142	0.1267
7/25/2022 16:01	0.142	0	0.126	0.025	0.126	0.003	0.027	0.0153	0.1268
7/25/2022 16:02	0.142	0	0.126	0.025	0.13	0.003	0.014	0.0155	0.1269
7/25/2022 16:03	0.143	0	0.126	0.025	0.133	0.003	0.01	0.0155	0.1271
7/25/2022 16:04	0.143	0	0.127	0.025	0.129	0.004	0.01	0.0152	0.1273
7/25/2022 16:05	0.143	0	0.127	0.026	0.129	0.004	0.01	0.0149	0.1275
7/25/2022 16:06	0.143	0	0.127	0.026	0.127	0.004	0.015	0.0153	0.1275
7/25/2022 16:07	0.143	0	0.128	0.026	0.132	0.004	0.02	0.0157	0.1275
7/25/2022 16:08	0.143	0	0.128	0.027	0.129	0.004	0.015	0.0158	0.128
7/25/2022 16:09	0.143	0	0.128	0.027	0.134	0.004	0.018	0.0163	0.1285
7/25/2022 16:10	0.143	0	0.129	0.027	0.129	0.004	0.016	0.0162	0.1289
7/25/2022 16:11	0.143	0	0.129	0.027	0.135	0.004	0.011	0.0156	0.1294
7/25/2022 16:12	0.143	0	0.13	0.028	0.135	0.004	0.014	0.0151	0.1301
7/25/2022 16:13	0.143	0	0.13	0.028	0.135	0.004	0.013	0.0149	0.1303
7/25/2022 16:14	0.143	0	0.131	0.028	0.133	0.004	0.016	0.0151	0.1309
7/25/2022 16:15	0.143	0	0.131	0.028	0.133	0.004	0.01	0.0146	0.1313
7/25/2022 16:16	0.143	0	0.131	0.029	0.135	0.004	0.026	0.0145	0.1319
7/25/2022 16:17	0.312	0	0.132	0.029	0.139	0.004	0.02	0.0149	0.1325
7/25/2022 16:18	0.312	0	0.134	0.029	0.148	0.004	0.052	0.0177	0.1335
7/25/2022 16:19	0.312	0	0.136	0.03	0.146	0.004	0.016	0.0181	0.1346
7/25/2022 16:20	0.312	0	0.137	0.03	0.138	0.004	0.014	0.0184	0.1352
7/25/2022 16:21	0.312	0	0.137	0.03	0.138	0.004	0.01	0.0181	0.1359
7/25/2022 16:22	0.312	0	0.138	0.031	0.133	0.004	0.012	0.0175	0.136
7/25/2022 16:23	0.312	0	0.138	0.031	0.131	0.004	0.01	0.0172	0.1361
7/25/2022 16:24	0.312	0	0.138	0.031	0.136	0.004	0.008	0.0165	0.1363
7/25/2022 16:25	0.312	0	0.138	0.031	0.132	0.004	0.009	0.0161	0.1365
7/25/2022 16:26	0.312	0	0.137	0.032	0.128	0.004	0.009	0.0159	0.136
7/25/2022 16:27	0.312	0	0.137	0.032	0.131	0.004	0.009	0.0156	0.1357
7/25/2022 16:28	0.312	0	0.137	0.032	0.134	0.004	0.01	0.0154	0.1357
7/25/2022 16:29	0.312	0	0.137	0.032	0.138	0.004	0.01	0.015	0.136
7/25/2022 16:30	0.312	0	0.137	0.033	0.135	0.004	0.013	0.0152	0.1361
7/25/2022 16:31	0.312	0	0.137	0.033	0.135	0.004	0.009	0.0141	0.1361
7/25/2022 16:32	0.312	0	0.137	0.033	0.135	0.004	0.01	0.0134	0.1359
7/25/2022 16:33	0.312	0	0.136	0.034	0.135	0.004	0.01	0.0106	0.135
7/25/2022 16:34	0.312	0	0.134	0.034	0.136	0.004	0.008	0.0101	0.1343
7/25/2022 16:35	0.312	0	0.133	0.034	0.136	0.004	0.01	0.0098	0.1342
7/25/2022 16:36	0.312	0	0.133	0.034	0.136	0.004	0.011	0.0099	0.1341
7/25/2022 16:37							0.009	0.0097	
7/25/2022 16:40									
7/25/2022 16:45									
7/26/2022 7:36									
7/26/2022 7:37	0.012	0	0	0	0				0
7/26/2022 7:38	0.012	0	0	0	0	0	0.007	0.007	0
7/26/2022 7:39	0.012	0	0	0	0	0	0.007	0.007	0
7/26/2022 7:40	0.012	0	0	0	0	0	0.008	0.0073	0
7/26/2022 7:41	0.012	0	0	0	0	0	0.008	0.0075	0
7/26/2022 7:42	0.012	0	0	0	0	0	0.007	0.0074	0
7/26/2022 7:43	0.012	0	0	0	0	0	0.007	0.0073	0
7/26/2022 7:44	0.012	0	0	0	0	0	0.007	0.0073	0
7/26/2022 7:45	0.012	0	0	0	0	0	0.006	0.0071	0
7/26/2022 7:46	0.012	0	0	0	0	0	0.007	0.0071	0

Community Air Monitoring Plan - Upwind Aerosol and Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B436251 VOC (Peak) (ppm)	RAE RS232(A) 0B436251 VOC (Low) (ppm)	RAE RS232(A) 0B436251 VOC (STEL) (ppm)	RAE RS232(A) 0B436251 VOC (TWA) (ppm)	RAE RS232(A) 0B436251 VOC (ppm)	DustTrak RS232(C) 0B436251 Total TWA (mg/m³)	DustTrak RS232(C) 0B436251 Mass Conc. Total (mg/m³)	Mass Conc. Total mg/m³ AVG 15m (mg/m³)	VOC ppm AVG 15m (ppm)
7/26/2022 7:47	0.012	0	0	0	0	0	0.008	0.0072	0
7/26/2022 7:48	0.012	0	0	0	0	0	0.008	0.0073	0
7/26/2022 7:49	0.012	0	0	0	0	0	0.007	0.0073	0
7/26/2022 7:50	0.012	0	0	0	0	0	0.007	0.0072	0
7/26/2022 7:51	0.012	0	0	0	0	0	0.007	0.0072	0
7/26/2022 7:52	0.012	0	0	0	0	0	0.043	0.0096	0
7/26/2022 7:53	0.012	0	0	0	0	0	0.058	0.013	0
7/26/2022 7:54	0.012	0	0		0	0.004	1.485	0.1115	0
7/26/2022 7:55	0.012	0	0	0	0	0.004	0.216	0.1254	0
7/26/2022 7:56	0.012	0	0	0	0	0.004	0.008	0.1254	0
7/26/2022 7:57	0.012	0	0	0	0	0.004	0.008	0.1255	0
7/26/2022 7:58	0.012	0	0	0	0	0.004	0.008	0.1255	0
7/26/2022 7:59	0.012	0	0	0	0	0.004	0.008	0.1256	0
7/26/2022 8:00	0.012	0	0	0	0	0.004	0.008	0.1257	0
7/26/2022 8:01	0.012	0	0	0	0	0.004	0.008	0.1258	0
7/26/2022 8:02	0.012	0	0	0	0	0.004	0.008	0.1258	0
7/26/2022 8:03	0.012	0	0	0	0	0.004	0.009	0.1259	0
7/26/2022 8:04	0.012	0	0	0	0	0.004	0.009	0.126	0
7/26/2022 8:05	0.012	0	0	0	0	0.004	0.009	0.1261	0
7/26/2022 8:06	0.012	0	0	0	0	0.004	0.009	0.1263	0
7/26/2022 8:07						0.004	0.009	0.124	
7/26/2022 8:08						0.004	0.008	0.1207	
7/26/2022 8:09						0.004	0.009	0.0223	
7/26/2022 8:10	111.11	0	4.172	0.13	0	0.004	0.009	0.0085	0
7/26/2022 8:11	111.11	0	4.172	0.13	0	0.004	0.008	0.0085	0
7/26/2022 8:12	111.11	0	4.172	0.13	0	0.004	0.008	0.0085	0
7/26/2022 8:13	111.11	0	4.172	0.13	0	0.004	0.009	0.0085	0
7/26/2022 8:14	111.11	0	4.172	0.13	0	0.004	0.008	0.0085	0
7/26/2022 8:15	111.11	0	4.172	0.13	0	0.004	0.008	0.0085	0
7/26/2022 8:16	111.11	0	4.172	0.13	0	0.004	0.008	0.0085	0
7/26/2022 8:17	111.11	0	4.172	0.13	0	0.004	0.008	0.0085	0
7/26/2022 8:18	111.11	0	4.172	0.13	0	0.004	0.009	0.0085	0
7/26/2022 8:19	111.11	0	4.172	0.13	0	0.004	0.009	0.0085	0
7/26/2022 8:20	111.11	0	4.172	0.13	0	0.004	0.008	0.0085	0
7/26/2022 8:21	111.11	0	4.172	0.13	0	0.004	0.008	0.0084	0
7/26/2022 8:22	111.11	0	4.172	0.13	0.001	0.004	0.008	0.0083	0.0001
7/26/2022 8:23	111.11	0	4.139	0.13	0.001	0.004	0.008	0.0083	0.0001
7/26/2022 8:24	111.11	0	0	0.13	0.002	0.004	0.008	0.0083	0.0003
7/26/2022 8:25	111.11	0	0	0.13	0.001	0.004	0.007	0.0081	0.0003
7/26/2022 8:26	111.11	0	0	0.13	0.007	0.005	0.007	0.0081	0.0008
7/26/2022 8:27	111.11	0	0.001	0.13	0.012	0.005	0.007	0.008	0.0016
7/26/2022 8:28	111.11	0	0.001	0.13	0.013	0.005	0.008	0.0079	0.0025
7/26/2022 8:29	111.11	0	0.002	0.13	0.012	0.005	0.007	0.0079	0.0033
7/26/2022 8:30	111.11	0	0.003	0.13	0.014	0.005	0.007	0.0078	0.0042
7/26/2022 8:31	111.11	0	0.004	0.13	0.014	0.005	0.007	0.0077	0.0051
7/26/2022 8:32	111.11	0	0.005	0.13	0.023	0.005	0.007	0.0077	0.0067
7/26/2022 8:33	111.11	0	0.006	0.13	0.02	0.005	0.008	0.0076	0.008
7/26/2022 8:34	111.11	0	0.008	0.13	0.019	0.005	0.008	0.0075	0.0093
7/26/2022 8:35	111.11	0	0.009	0.13	0.027	0.005	0.007	0.0075	0.0111
7/26/2022 8:36	111.11	0	0.011	0.13	0.024	0.005	0.007	0.0074	0.0127
7/26/2022 8:37	111.11	0	0.012	0.13	0.023	0.005	0.007	0.0073	0.0141
7/26/2022 8:38	111.11	0	0.014	0.13	0.024	0.005	0.007	0.0073	0.0157
7/26/2022 8:39	111.11	0	0.015	0.13	0.023	0.005	0.008	0.0073	0.0171
7/26/2022 8:40	111.11	0	0.016	0.13	0.022	0.005	0.008	0.0073	0.0185
7/26/2022 8:41	111.11	0	0.018	0.13	0.019	0.005	0.007	0.0073	0.0193
7/26/2022 8:42	111.11	0	0.018	0.131	0.019	0.005	0.007	0.0073	0.0197
7/26/2022 8:43	111.11	0	0.019	0.131	0.028	0.005	0.007	0.0073	0.0207
7/26/2022 8:44	111.11	0	0.02	0.131	0.018	0.005	0.008	0.0073	0.0211
7/26/2022 8:45	111.11	0	0.02	0.131	0.021	0.005	0.01	0.0075	0.0216
7/26/2022 8:46	111.11	0	0.021	0.131	0.027	0.005	0.012	0.0079	0.0225
7/26/2022 8:47	111.11	0	0.021	0.131	0.02	0.005	0.008	0.0079	0.0223
7/26/2022 8:48	111.11	0	0.021	0.131	0.025	0.005	0.007	0.0079	0.0226
7/26/2022 8:49	111.11	0	0.021	0.131	0.024	0.005	0.007	0.0078	0.0229
7/26/2022 8:50	111.11	0	0.021	0.131	0.034	0.005	0.007	0.0078	0.0234
7/26/2022 8:51	111.11	0	0.022	0.131	0.033	0.005	0.011	0.0081	0.024
7/26/2022 8:52	111.11	0	0.022	0.131	0.029	0.005	0.007	0.0081	0.0244
7/26/2022 8:53	111.11	0	0.023	0.131	0.038	0.005	0.007	0.0081	0.0253
7/26/2022 8:54	111.11	0	0.024	0.131	0.04	0.005	0.006	0.0079	0.0265
7/26/2022 8:55	111.11	0	0.025	0.131	0.038	0.005	0.006	0.0078	0.0275
7/26/2022 8:56	111.11	0	0.026	0.131	0.027	0.005	0.007	0.0078	0.0281

Community Air Monitoring Plan - Upwind Aerosol and Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B436251 VOC (Peak) (ppm)	RAE RS232(A) 0B436251 VOC (Low) (ppm)	RAE RS232(A) 0B436251 VOC (STEL) (ppm)	RAE RS232(A) 0B436251 VOC (TWA) (ppm)	RAE RS232(A) 0B436251 VOC (ppm)	DustTrak RS232(C) 0B436251 Total TWA (mg/m³)	DustTrak RS232(C) 0B436251 Mass Conc. Total (mg/m³)	Mass Conc. Total mg/m³ AVG 15m (mg/m³)	VOC ppm AVG 15m (ppm)
7/26/2022 8:57	111.11	0	0.027	0.131	0.036	0.005	0.006	0.0077	0.0292
7/26/2022 8:58	111.11	0	0.028	0.131	0.036	0.005	0.006	0.0077	0.0297
7/26/2022 8:59	111.11	0	0.029	0.132	0.035	0.005	0.007	0.0076	0.0309
7/26/2022 9:00	111.11	0	0.03	0.132	0.036	0.005	0.006	0.0073	0.0319
7/26/2022 9:01	111.11	0	0.031	0.132	0.04	0.005	0.006	0.0069	0.0327
7/26/2022 9:02	111.11	0	0.032	0.132	0.039	0.005	0.006	0.0068	0.034
7/26/2022 9:03	111.11	0	0.033	0.132	0.034	0.005	0.006	0.0067	0.0346
7/26/2022 9:04	111.11	0	0.034	0.132	0.041	0.005	0.006	0.0067	0.0357
7/26/2022 9:05	111.11	0	0.035	0.132	0.034	0.005	0.006	0.0066	0.0357
7/26/2022 9:06	111.11	0	0.036	0.132	0.034	0.005	0.006	0.0063	0.0358
7/26/2022 9:07	111.11	0	0.036	0.132	0.037	0.005	0.006	0.0062	0.0363
7/26/2022 9:08	111.11	0	0.036	0.132	0.043	0.005	0.006	0.0061	0.0367
7/26/2022 9:09	111.11	0	0.037	0.132	0.035	0.005	0.006	0.0061	0.0363
7/26/2022 9:10	111.11	0	0.037	0.132	0.033	0.005	0.006	0.0061	0.036
7/26/2022 9:11	111.11	0	0.037	0.132	0.04	0.005	0.006	0.0061	0.0369
7/26/2022 9:12	111.11	0	0.037	0.133	0.038	0.005	0.006	0.0061	0.037
7/26/2022 9:13	111.11	0	0.037	0.133	0.037	0.005	0.006	0.0061	0.0371
7/26/2022 9:14	111.11	0	0.037	0.133	0.043	0.005	0.006	0.006	0.0376
7/26/2022 9:15	111.11	0	0.038	0.133	0.046	0.005	0.006	0.006	0.0383
7/26/2022 9:16	111.11	0	0.038	0.133	0.037	0.005	0.006	0.006	0.0381
7/26/2022 9:17	111.11	0	0.038	0.133	0.043	0.005	0.006	0.006	0.0383
7/26/2022 9:18	111.11	0	0.038	0.133	0.047	0.005	0.006	0.006	0.0392
7/26/2022 9:19	111.11	0	0.039	0.133	0.044	0.005	0.006	0.006	0.0394
7/26/2022 9:20	111.11	0	0.039	0.133	0.042	0.005	0.006	0.006	0.0399
7/26/2022 9:21	111.11	0	0.04	0.133	0.04	0.005	0.005	0.0059	0.0403
7/26/2022 9:22	111.11	0	0.04	0.133	0.039	0.005	0.006	0.0059	0.0405
7/26/2022 9:23	111.11	0	0.04	0.133	0.045	0.005	0.006	0.0059	0.0406
7/26/2022 9:24	111.11	0	0.04	0.134	0.044	0.005	0.007	0.006	0.0412
7/26/2022 9:25	111.11	0	0.041	0.134	0.039	0.005	0.005	0.0059	0.0416
7/26/2022 9:26	111.11	0	0.041	0.134	0.041	0.005	0.006	0.0059	0.0417
7/26/2022 9:27	111.11	0	0.042	0.134	0.044	0.005	0.006	0.0059	0.0421
7/26/2022 9:28	111.11	0	0.042	0.134	0.051	0.005	0.005	0.0059	0.043
7/26/2022 9:29	111.11	0	0.042	0.134	0.045	0.005	0.006	0.0059	0.0431
7/26/2022 9:30	111.11	0	0.043	0.134	0.039	0.005	0.005	0.0058	0.0427
7/26/2022 9:31	111.11	0	0.042	0.134	0.043	0.005	0.006	0.0058	0.0431
7/26/2022 9:32	111.11	0	0.043	0.134	0.044	0.005	0.005	0.0057	0.0431
7/26/2022 9:33	111.11	0	0.043	0.134	0.05	0.005	0.006	0.0057	0.0433
7/26/2022 9:34	111.11	0	0.043	0.135	0.058	0.005	0.006	0.0057	0.0443
7/26/2022 9:35	111.11	0	0.044	0.135	0.057	0.005	0.005	0.0057	0.0453
7/26/2022 9:36	111.11	0	0.045	0.135	0.056	0.005	0.006	0.0057	0.0463
7/26/2022 9:37	111.11	0	0.046	0.135	0.062	0.005	0.005	0.0057	0.0479
7/26/2022 9:38	111.11	0	0.047	0.135	0.059	0.005	0.006	0.0057	0.0488
7/26/2022 9:39	111.11	0	0.048	0.135	0.06	0.005	0.006	0.0056	0.0499
7/26/2022 9:40	111.11	0	0.049	0.135	0.06	0.006	0.006	0.0057	0.0513
7/26/2022 9:41	111.11	0	0.051	0.135	0.054	0.006	0.006	0.0057	0.0521
7/26/2022 9:42	111.11	0	0.052	0.135	0.056	0.006	0.006	0.0057	0.0529
7/26/2022 9:43	111.11	0	0.052	0.136	0.059	0.006	0.006	0.0057	0.0535
7/26/2022 9:44	111.11	0	0.053	0.136	0.058	0.006	0.005	0.0057	0.0543
7/26/2022 9:45	111.11	0	0.054	0.136	0.062	0.006	0.005	0.0057	0.0559
7/26/2022 9:46	111.11	0	0.056	0.136	0.06	0.006	0.005	0.0056	0.057
7/26/2022 9:47	111.11	0	0.057	0.136	0.059	0.006	0.005	0.0056	0.058
7/26/2022 9:48	111.11	0	0.058	0.136	0.06	0.006	0.006	0.0056	0.0587
7/26/2022 9:49	111.11	0	0.058	0.136	0.055	0.006	0.006	0.0056	0.0585
7/26/2022 9:50	111.11	0	0.058	0.136	0.058	0.006	0.006	0.0057	0.0585
7/26/2022 9:51	111.11	0	0.058	0.137	0.057	0.006	0.005	0.0056	0.0586
7/26/2022 9:52	111.11	0	0.058	0.137	0.06	0.006	0.005	0.0056	0.0585
7/26/2022 9:53	111.11	0	0.058	0.137	0.06	0.006	0.005	0.0055	0.0585
7/26/2022 9:54	111.11	0	0.059	0.137	0.066	0.006	0.005	0.0055	0.0589
7/26/2022 9:55	111.11	0	0.059	0.137	0.061	0.006	0.004	0.0053	0.059
7/26/2022 9:56	111.11	0	0.059	0.137	0.072	0.006	0.004	0.0052	0.0602
7/26/2022 9:57	111.11	0	0.06	0.137	0.072	0.006	0.004	0.0051	0.0613
7/26/2022 9:58	111.11	0	0.061	0.138	0.066	0.006	0.004	0.0049	0.0617
7/26/2022 9:59	111.11	0	0.062	0.138	0.065	0.006	0.005	0.0049	0.0622
7/26/2022 10:00	111.11	0	0.062	0.138	0.069	0.006	0.005	0.0049	0.0627
7/26/2022 10:01	111.11	0	0.062	0.138	0.068	0.006	0.005	0.0049	0.0632
7/26/2022 10:02	111.11	0	0.063	0.138	0.074	0.006	0.004	0.0049	0.0642
7/26/2022 10:03	111.11	0	0.064	0.138	0.077	0.006	0.004	0.0047	0.0653
7/26/2022 10:04	111.11	0	0.065	0.138	0.072	0.006	0.005	0.0047	0.0665
7/26/2022 10:05	111.11	0	0.066	0.139	0.073	0.006	0.005	0.0046	0.0675
7/26/2022 10:06	111.11	0	0.067	0.139	0.073	0.006	0.004	0.0045	0.0685

Community Air Monitoring Plan - Upwind Aerosol and Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B436251 VOC (Peak) (ppm)	RAE RS232(A) 0B436251 VOC (Low) (ppm)	RAE RS232(A) 0B436251 VOC (STEL) (ppm)	RAE RS232(A) 0B436251 VOC (TWA) (ppm)	RAE RS232(A) 0B436251 VOC (ppm)	DustTrak RS232(C) 0B436251 Total TWA (mg/m³)	DustTrak RS232(C) 0B436251 Mass Conc. Total (mg/m³)	Mass Conc. Total mg/m³ AVG 15m (mg/m³)	VOC ppm AVG 15m (ppm)
7/26/2022 10:07	111.11	0	0.068	0.139	0.07	0.006	0.005	0.0045	0.0692
7/26/2022 10:08	111.11	0	0.069	0.139	0.073	0.006	0.004	0.0045	0.0701
7/26/2022 10:09	111.11	0	0.07	0.139	0.075	0.006	0.004	0.0044	0.0707
7/26/2022 10:10	111.11	0	0.07	0.139	0.085	0.006	0.004	0.0044	0.0723
7/26/2022 10:11	111.11	0	0.071	0.139	0.084	0.006	0.004	0.0044	0.0731
7/26/2022 10:12	111.11	0	0.072	0.14	0.083	0.006	0.004	0.0044	0.0738
7/26/2022 10:13	111.11	0	0.073	0.14	0.087	0.006	0.004	0.0044	0.0752
7/26/2022 10:14	111.11	0	0.075	0.14	0.097	0.006	0.004	0.0043	0.0773
7/26/2022 10:15	111.11	0	0.076	0.14	0.093	0.006	0.004	0.0043	0.0789
7/26/2022 10:16	111.11	0	0.078	0.14	0.096	0.006	0.004	0.0042	0.0808
7/26/2022 10:17	111.11	0	0.08	0.141	0.099	0.006	0.004	0.0042	0.0825
7/26/2022 10:18	111.11	0	0.081	0.141	0.095	0.006	0.004	0.0042	0.0837
7/26/2022 10:19							0.004	0.0041	
7/26/2022 10:20									
7/26/2022 10:25									
7/26/2022 10:30									
7/26/2022 10:35									
7/26/2022 10:40									
7/26/2022 10:45									
7/26/2022 10:50									
7/26/2022 10:55									
7/26/2022 11:00									
7/26/2022 11:05									
7/26/2022 11:10									
7/26/2022 11:15									
7/26/2022 11:20									
7/26/2022 11:25									
7/26/2022 11:30									
7/26/2022 11:35									
7/27/2022 12:54									
7/27/2022 12:55	0	0	0	0	0	0	0.018	0.018	0
7/27/2022 12:56	0	0	0	0	0	0	0.018	0.018	0
7/27/2022 12:57	0	0	0	0	0	0	0.017	0.0177	0
7/27/2022 12:58	0.001	0	0	0	0	0	0.017	0.0175	0
7/27/2022 12:59	0.001	0	0	0	0.001	0	0.017	0.0174	0.0002
7/27/2022 13:00	0.006	0	0	0	0.005	0	0.017	0.0173	0.001
7/27/2022 13:01	0.015	0	0	0	0.009	0	0.018	0.0174	0.0021
7/27/2022 13:02	0.02	0	0	0	0.017	0	0.02	0.0178	0.004
7/27/2022 13:03	0.02	0	0	0	0.011	0	0.017	0.0177	0.0048
7/27/2022 13:04	0.021	0	0	0	0.011	0	0.017	0.0176	0.0054
7/27/2022 13:05	0.026	0	0	0	0.023	0	0.017	0.0175	0.007
7/27/2022 13:06	0.037	0	0.004	0	0.03	0	0.017	0.0175	0.0089
7/27/2022 13:07	0.042	0	0.006	0	0.038	0	0.016	0.0174	0.0112
7/27/2022 13:08	0.042	0	0.008	0	0.034	0	0.017	0.0174	0.0128
7/27/2022 13:09	0.053	0	0.011	0	0.042	0	0.017	0.0173	0.0147
7/27/2022 13:10	0.054	0	0.014	0	0.054	0.001	0.017	0.0173	0.0183
7/27/2022 13:11	0.058	0	0.017	0	0.058	0.001	0.016	0.0171	0.0222
7/27/2022 13:12	0.064	0	0.02	0	0.062	0.001	0.016	0.0171	0.0263
7/27/2022 13:13	0.191	0	0.024	0	0.069	0.001	0.183	0.0281	0.0309
7/27/2022 13:14	0.191	0	0.03	0	0.071	0.001	0.101	0.0337	0.0356
7/27/2022 13:15	0.191	0	0.035	0.001	0.08	0.001	0.061	0.0367	0.0406
7/27/2022 13:16	0.191	0	0.039	0.001	0.076	0.002	0.126	0.0439	0.0451
7/27/2022 13:17	0.191	0	0.044	0.001	0.102	0.002	0.074	0.0475	0.0507
7/27/2022 13:18	0.191	0	0.05	0.001	0.089	0.002	0.026	0.0481	0.0559
7/27/2022 13:19	0.191	0	0.055	0.001	0.099	0.002	0.019	0.0482	0.0618
7/27/2022 13:20	0.191	0	0.06	0.001	0.096	0.002	0.017	0.0482	0.0667
7/27/2022 13:21	0.191	0	0.065	0.002	0.096	0.002	0.017	0.0482	0.0711
7/27/2022 13:22	0.191	0	0.07	0.002	0.102	0.002	0.017	0.0483	0.0753
7/27/2022 13:23	0.191	0	0.074	0.002	0.105	0.002	0.017	0.0483	0.0801
7/27/2022 13:24	0.191	0	0.079	0.002	0.112	0.002	0.018	0.0483	0.0847
7/27/2022 13:25	0.191	0	0.083	0.003	0.114	0.002	0.018	0.0484	0.0887
7/27/2022 13:26	0.191	0	0.088	0.003	0.119	0.002	0.016	0.0484	0.0928
7/27/2022 13:27	0.191	0	0.092	0.003	0.122	0.002	0.016	0.0484	0.0968
7/27/2022 13:28	0.191	0	0.096	0.003	0.118	0.002	0.017	0.0373	0.1001
7/27/2022 13:29	0.191	0	0.098	0.004	0.128	0.002	0.017	0.0317	0.1039
7/27/2022 13:30	0.191	0	0.102	0.004	0.128	0.002	0.017	0.0288	0.1071
7/27/2022 13:31	0.191	0	0.106	0.004	0.133	0.002	0.017	0.0215	0.1109
7/27/2022 13:32	0.191	0	0.109	0.004	0.128	0.002	0.016	0.0177	0.1126
7/27/2022 13:33	0.191	0	0.111	0.005	0.133	0.002	0.016	0.017	0.1155
7/27/2022 13:34	0.191	0	0.114	0.005	0.14	0.002	0.016	0.0168	0.1183

Community Air Monitoring Plan - Upwind Aerosol and Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B436251 VOC (Peak) (ppm)	RAE RS232(A) 0B436251 VOC (Low) (ppm)	RAE RS232(A) 0B436251 VOC (STEL) (ppm)	RAE RS232(A) 0B436251 VOC (TWA) (ppm)	RAE RS232(A) 0B436251 VOC (ppm)	DustTrak RS232(C) 0B436251 Total TWA (mg/m³)	DustTrak RS232(C) 0B436251 Mass Conc. Total (mg/m³)	Mass Conc. Total mg/m³ AVG 15m (mg/m³)	VOC ppm AVG 15m (ppm)
7/27/2022 13:35	0.191	0	0.117	0.005	0.142	0.002	0.016	0.0167	0.1213
7/27/2022 13:36	0.191	0	0.12	0.005	0.142	0.002	0.016	0.0167	0.1244
7/27/2022 13:37	0.191	0	0.123	0.006	0.148	0.002	0.016	0.0166	0.1275
7/27/2022 13:38	0.191	0	0.126	0.006	0.155	0.003	0.029	0.0174	0.1308
7/27/2022 13:39	0.191	0	0.129	0.006	0.149	0.003	0.016	0.0173	0.1333
7/27/2022 13:40	0.191	0	0.131	0.007	0.149	0.003	0.016	0.0171	0.1356
7/27/2022 13:41	0.191	0	0.134	0.007	0.154	0.003	0.016	0.0171	0.1379
7/27/2022 13:42	0.191	0	0.136	0.007	0.16	0.003	0.016	0.0171	0.1405
7/27/2022 13:43	0.191	0	0.139	0.008	0.163	0.003	0.018	0.0172	0.1435
7/27/2022 13:44	0.191	0	0.142	0.008	0.174	0.003	0.016	0.0171	0.1465
7/27/2022 13:45	0.191	0	0.145	0.008	0.175	0.003	0.016	0.0171	0.1497
7/27/2022 13:46	0.191	0	0.148	0.009	0.176	0.003	0.016	0.017	0.1525
7/27/2022 13:47	0.191	0	0.151	0.009	0.177	0.003	0.016	0.017	0.1558
7/27/2022 13:48	0.191	0	0.154	0.009	0.177	0.003	0.022	0.0174	0.1587
7/27/2022 13:49	0.191	0	0.157	0.01	0.181	0.003	0.016	0.0174	0.1615
7/27/2022 13:50	0.191	0	0.16	0.01	0.179	0.003	0.016	0.0174	0.1639
7/27/2022 13:51	0.191	0	0.162	0.011	0.183	0.003	0.015	0.0173	0.1667
7/27/2022 13:52	0.191	0	0.165	0.011	0.183	0.003	0.016	0.0173	0.169
7/27/2022 13:53	0.191	0	0.167	0.011	0.181	0.003	0.016	0.0165	0.1707
7/27/2022 13:54	0.191	0	0.169	0.012	0.178	0.003	0.015	0.0164	0.1727
7/27/2022 13:55	0.191	0	0.171	0.012	0.18	0.003	0.016	0.0164	0.1747
7/27/2022 13:56	0.191	0	0.173	0.012	0.182	0.003	0.015	0.0163	0.1766
7/27/2022 13:57	0.191	0	0.175	0.013	0.184	0.003	0.015	0.0163	0.1782
7/27/2022 13:58	0.191	0	0.176	0.013	0.179	0.003	0.015	0.0161	0.1793
7/27/2022 13:59	0.191	0	0.178	0.014	0.182	0.003	0.015	0.016	0.1798
7/27/2022 14:00	0.191	0	0.179	0.014	0.184	0.003	0.015	0.0159	0.1804
7/27/2022 14:01	0.191	0	0.179	0.014	0.183	0.003	0.016	0.0159	0.1809
7/27/2022 14:02	0.191	0	0.18	0.015	0.179	0.003	0.015	0.0159	0.181
7/27/2022 14:03	0.191	0	0.18	0.015	0.181	0.003	0.016	0.0155	0.1813
7/27/2022 14:04	0.191	0	0.18	0.015	0.181	0.003	0.016	0.0155	0.1813
7/27/2022 14:05	0.191	0	0.181	0.016	0.176	0.003	0.016	0.0155	0.1811
7/27/2022 14:06	0.191	0	0.181	0.016	0.176	0.003	0.015	0.0155	0.1806
7/27/2022 14:07	0.191	0	0.181	0.017	0.177	0.004	0.016	0.0155	0.1802
7/27/2022 14:08	0.191	0	0.18	0.017	0.173	0.004	0.015	0.0154	0.1797
7/27/2022 14:09	0.191	0	0.179	0.017	0.175	0.004	0.016	0.0155	0.1795
7/27/2022 14:10	0.191	0	0.179	0.018	0.168	0.004	0.016	0.0155	0.1787
7/27/2022 14:11	0.191	0	0.179	0.018	0.168	0.004	0.015	0.0155	0.1777
7/27/2022 14:12	0.191	0	0.177	0.018	0.168	0.004	0.016	0.0155	0.1767
7/27/2022 14:13	0.191	0	0.176	0.019	0.171	0.004	0.015	0.0155	0.1761
7/27/2022 14:14	0.22	0	0.175	0.019	0.195	0.004	0.019	0.0158	0.177
7/27/2022 14:15	0.22	0	0.175	0.019	0.195	0.004	0.042	0.0176	0.1777
7/27/2022 14:16	0.22	0	0.174	0.02	0.165	0.004	0.04	0.0192	0.1765
7/27/2022 14:17	0.22	0	0.173	0.02	0.165	0.004	0.016	0.0193	0.1756
7/27/2022 14:18	0.22	0	0.172	0.02	0.169	0.004	0.015	0.0192	0.1748
7/27/2022 14:19	0.22	0	0.171	0.021	0.174	0.004	0.015	0.0191	0.1743
7/27/2022 14:20	0.22	0	0.171	0.021	0.176	0.004	0.016	0.0191	0.1743
7/27/2022 14:21	0.22	0	0.17	0.022	0.176	0.004	0.019	0.0194	0.1743
7/27/2022 14:22	0.22	0	0.171	0.022	0.173	0.004	0.016	0.0194	0.1741
7/27/2022 14:23	0.22	0	0.171	0.022	0.179	0.004	0.016	0.0195	0.1745
7/27/2022 14:24	0.22	0	0.171	0.023	0.183	0.004	0.016	0.0195	0.175
7/27/2022 14:25	0.22	0	0.171	0.023	0.181	0.004	0.016	0.0195	0.1759
7/27/2022 14:26	0.22	0	0.172	0.023	0.178	0.004	0.015	0.0195	0.1765
7/27/2022 14:27	0.22	0	0.173	0.024	0.186	0.004	0.016	0.0195	0.1777
7/27/2022 14:28	0.22	0	0.174	0.024	0.186	0.004	0.016	0.0195	0.1787
7/27/2022 14:29	0.22	0	0.175	0.025	0.187	0.004	0.015	0.0193	0.1782
7/27/2022 14:30	0.22	0	0.176	0.025	0.186	0.004	0.015	0.0175	0.1776
7/27/2022 14:31	0.22	0	0.177	0.025	0.194	0.004	0.016	0.0159	0.1795
7/27/2022 14:32	0.22	0	0.179	0.026	0.19	0.004	0.016	0.0159	0.1812
7/27/2022 14:33	0.22	0	0.18	0.026	0.193	0.004	0.015	0.0159	0.1828
7/27/2022 14:34	0.22	0	0.182	0.027	0.193	0.004	0.016	0.0159	0.1841
7/27/2022 14:35	0.22	0	0.183	0.027	0.192	0.005	0.016	0.0159	0.1851
7/27/2022 14:36	0.22	0	0.184	0.027	0.193	0.005	0.016	0.0157	0.1863
7/27/2022 14:37	0.22	0	0.185	0.028	0.193	0.005	0.015	0.0157	0.1876
7/27/2022 14:38	0.22	0	0.186	0.028	0.19	0.005	0.015	0.0156	0.1883
7/27/2022 14:39	0.22	0	0.187	0.029	0.196	0.005	0.015	0.0155	0.1892
7/27/2022 14:40	0.22	0	0.188	0.029	0.188	0.005	0.016	0.0155	0.1897
7/27/2022 14:41	0.22	0	0.188	0.029	0.191	0.005	0.017	0.0157	0.1905
7/27/2022 14:42	0.22	0	0.189	0.03	0.187	0.005	0.016	0.0157	0.1906
7/27/2022 14:43	0.22	0	0.189	0.03	0.18	0.005	0.016	0.0157	0.1902
7/27/2022 14:44	0.22	0	0.189	0.03	0.182	0.005	0.016	0.0157	0.1899

Community Air Monitoring Plan - Upwind Aerosol and Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B436251 VOC (Peak) (ppm)	RAE RS232(A) 0B436251 VOC (Low) (ppm)	RAE RS232(A) 0B436251 VOC (STEL) (ppm)	RAE RS232(A) 0B436251 VOC (TWA) (ppm)	RAE RS232(A) 0B436251 VOC (ppm)	DustTrak RS232(C) 0B436251 Total TWA (mg/m³)	DustTrak RS232(C) 0B436251 Mass Conc. Total (mg/m³)	Mass Conc. Total mg/m³ AVG 15m (mg/m³)	VOC ppm AVG 15m (ppm)
7/27/2022 14:45	0.22	0	0.189	0.031	0.18	0.005	0.016	0.0158	0.1895
7/27/2022 14:46	0.22	0	0.188	0.031	0.178	0.005	0.016	0.0158	0.1884
7/27/2022 14:47	0.22	0	0.188	0.032	0.185	0.005	0.016	0.0158	0.1881
7/27/2022 14:48	0.22	0	0.187	0.032	0.18	0.005	0.016	0.0159	0.1872
7/27/2022 14:49	0.22	0	0.186	0.032	0.179	0.005	0.016	0.0159	0.1863
7/27/2022 14:50	0.22	0	0.185	0.033	0.181	0.005	0.016	0.0159	0.1855
7/27/2022 14:51	0.22	0	0.185	0.033	0.183	0.005	0.016	0.0159	0.1849
7/27/2022 14:52	0.22	0	0.184	0.033	0.181	0.005	0.016	0.0159	0.1841
7/27/2022 14:53	0.22	0	0.183	0.034	0.181	0.005	0.016	0.016	0.1835
7/27/2022 14:54	0.22	0	0.183	0.034	0.181	0.005	0.016	0.0161	0.1825
7/27/2022 14:55	0.22	0	0.182	0.035	0.183	0.005	0.016	0.0161	0.1821
7/27/2022 14:56	0.22	0	0.181	0.035	0.187	0.005	0.016	0.016	0.1819
7/27/2022 14:57	0.22	0	0.181	0.035	0.183	0.005	0.016	0.016	0.1816
7/27/2022 14:58	0.22	0	0.181	0.036	0.189	0.005	0.017	0.0161	0.1822
7/27/2022 14:59	0.22	0	0.181	0.036	0.187	0.005	0.016	0.0161	0.1825
7/27/2022 15:00	0.22	0	0.182	0.037	0.186	0.005	0.017	0.0161	0.1829
7/27/2022 15:01	0.22	0	0.182	0.037	0.192	0.005	0.016	0.0161	0.1839
7/27/2022 15:02	0.22	0	0.183	0.037	0.198	0.005	0.016	0.0161	0.1847
7/27/2022 15:03	0.22	0	0.183	0.038	0.193	0.005	0.017	0.0162	0.1856
7/27/2022 15:04	0.22	0	0.184	0.038	0.19	0.006	0.017	0.0163	0.1863
7/27/2022 15:05	0.22	0	0.185	0.039	0.185	0.006	0.018	0.0164	0.1866
7/27/2022 15:06	0.22	0	0.185	0.039	0.189	0.006	0.017	0.0165	0.187
7/27/2022 15:07	0.22	0	0.186	0.039	0.19	0.006	0.017	0.0165	0.1876
7/27/2022 15:08	0.22	0	0.186	0.04	0.183	0.006	0.017	0.0166	0.1877
7/27/2022 15:09	0.22	0	0.186	0.04	0.181	0.006	0.017	0.0167	0.1877
7/27/2022 15:10	0.22	0	0.186	0.04	0.183	0.006	0.018	0.0168	0.1877
7/27/2022 15:11	0.22	0	0.186	0.041	0.178	0.006	0.017	0.0169	0.1871
7/27/2022 15:12	0.22	0	0.186	0.041	0.175	0.006	0.017	0.0169	0.1866
7/27/2022 15:13	0.22	0	0.185	0.042	0.176	0.006	0.017	0.0169	0.1857
7/27/2022 15:14	0.22	0	0.184	0.042	0.174	0.006	0.017	0.017	0.1849
7/27/2022 15:15	0.22	0	0.183	0.042	0.179	0.006	0.017	0.017	0.1844
7/27/2022 15:16	0.22	0	0.183	0.043	0.179	0.006	0.017	0.0171	0.1835
7/27/2022 15:17	0.22	0	0.182	0.043	0.174	0.006	0.017	0.0171	0.1819
7/27/2022 15:18	0.22	0	0.181	0.043	0.174	0.006	0.017	0.0171	0.1807
7/27/2022 15:19	0.22	0	0.179	0.044	0.174	0.006	0.017	0.0171	0.1796
7/27/2022 15:20	0.22	0	0.179	0.044	0.176	0.006	0.017	0.0171	0.179
7/27/2022 15:21	0.22	0	0.178	0.044	0.178	0.006	0.017	0.0171	0.1783
7/27/2022 15:22	0.22	0	0.177	0.045	0.174	0.006	0.017	0.0171	0.1772
7/27/2022 15:23	0.22	0	0.176	0.045	0.179	0.006	0.017	0.0171	0.1769
7/27/2022 15:24	0.22	0	0.176	0.046	0.173	0.006	0.017	0.0171	0.1764
7/27/2022 15:25	0.22	0	0.176	0.046	0.173	0.006	0.017	0.017	0.1757
7/27/2022 15:26	0.22	0	0.175	0.046	0.177	0.006	0.017	0.017	0.1757
7/27/2022 15:27	0.22	0	0.175	0.047	0.177	0.006	0.017	0.017	0.1758
7/27/2022 15:28	0.22	0	0.175	0.047	0.178	0.006	0.017	0.017	0.1759
7/27/2022 15:29	0.22	0	0.175	0.047	0.175	0.006	0.017	0.017	0.176
7/27/2022 15:30	0.22	0	0.175	0.048	0.175	0.006	0.017	0.017	0.1757
7/27/2022 15:31	0.22	0	0.175	0.048	0.177	0.006	0.018	0.0171	0.1756
7/27/2022 15:32	0.22	0	0.175	0.049	0.181	0.007	0.017	0.0171	0.1761
7/27/2022 15:33	0.22	0	0.175	0.049	0.178	0.007	0.017	0.0171	0.1763
7/27/2022 15:34	0.22	0	0.175	0.049	0.177	0.007	0.017	0.0171	0.1765
7/27/2022 15:35	0.22	0	0.175	0.05	0.181	0.007	0.017	0.0171	0.1769
7/27/2022 15:36	0.22	0	0.175	0.05	0.181	0.007	0.018	0.0171	0.1771
7/27/2022 15:37	0.22	0	0.176	0.05	0.183	0.007	0.019	0.0173	0.1777
7/27/2022 15:38	0.22	0	0.176	0.051	0.167	0.007	0.047	0.0193	0.1769
7/27/2022 15:39	0.22	0	0.176	0.051	0.166	0.007	0.021	0.0195	0.1764
7/27/2022 15:40	0.22	0	0.175	0.051	0.165	0.007	0.019	0.0197	0.1759
7/27/2022 15:41	0.22	0	0.174	0.052	0.171	0.007	0.021	0.0199	0.1755
7/27/2022 15:42	0.22	0	0.174	0.052	0.174	0.007	0.021	0.0202	0.1753
7/27/2022 15:43	0.22	0	0.174	0.052	0.174	0.007	0.018	0.0203	0.175
7/27/2022 15:44	0.22	0	0.174	0.053	0.174	0.007	0.019	0.0204	0.1749
7/27/2022 15:45	0.22	0	0.174	0.053	0.175	0.007	0.018	0.0205	0.1749
7/27/2022 15:46	0.22	0	0.173	0.054	0.177	0.007	0.019	0.0205	0.1749
7/27/2022 15:47	0.22	0	0.173	0.054	0.178	0.007	0.018	0.0206	0.1747
7/27/2022 15:48	0.22	0	0.173	0.054	0.164	0.007	0.029	0.0214	0.1738
7/27/2022 15:49	0.22	0	0.173	0.055	0.165	0.007	0.023	0.0218	0.173
7/27/2022 15:50	0.22	0	0.172	0.055	0.171	0.007	0.018	0.0219	0.1723
7/27/2022 15:51	0.22	0	0.171	0.055	0.165	0.007	0.018	0.0219	0.1713
7/27/2022 15:52	0.22	0	0.17	0.056	0.171	0.007	0.018	0.0218	0.1705
7/27/2022 15:53	0.22	0	0.169	0.056	0.173	0.007	0.018	0.0199	0.1709
7/27/2022 15:54	0.22	0	0.169	0.056	0.168	0.007	0.018	0.0197	0.171

Community Air Monitoring Plan - Upwind Aerosol and Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B436251 VOC (Peak) (ppm)	RAE RS232(A) 0B436251 VOC (Low) (ppm)	RAE RS232(A) 0B436251 VOC (STEL) (ppm)	RAE RS232(A) 0B436251 VOC (TWA) (ppm)	RAE RS232(A) 0B436251 VOC (ppm)	DustTrak RS232(C) 0B436251 Total TWA (mg/m³)	DustTrak RS232(C) 0B436251 Mass Conc. Total (mg/m³)	Mass Conc. Total mg/m³ AVG 15m (mg/m³)	VOC ppm AVG 15m (ppm)
7/27/2022 15:55	0.22	0	0.17	0.057	0.166	0.007	0.018	0.0196	0.1711
7/27/2022 15:56	0.22	0	0.17	0.057	0.176	0.008	0.018	0.0194	0.1714
7/27/2022 15:57	0.22	0	0.17	0.057	0.181	0.008	0.019	0.0193	0.1719
7/27/2022 15:58	0.22	0	0.17	0.058	0.176	0.008	0.018	0.0193	0.172
7/27/2022 15:59	0.22	0	0.17	0.058	0.169	0.008	0.018	0.0192	0.1717
7/27/2022 16:00	0.22	0	0.171	0.059	0.179	0.008	0.018	0.0192	0.1719
7/27/2022 16:01	0.22	0	0.171	0.059	0.174	0.008	0.019	0.0192	0.1717
7/27/2022 16:02	0.22	0	0.171	0.059	0.184	0.008	0.018	0.0192	0.1721
7/27/2022 16:03	0.22	0	0.171	0.06	0.182	0.008	0.018	0.0185	0.1733
7/27/2022 16:04	0.22	0	0.172	0.06	0.19	0.008	0.018	0.0181	0.175
7/27/2022 16:05	0.22	0	0.174	0.06	0.184	0.008	0.018	0.0181	0.1759
7/27/2022 16:06	0.22	0	0.175	0.061	0.191	0.008	0.018	0.0181	0.1776
7/27/2022 16:07	0.22	0	0.176	0.061	0.187	0.008	0.018	0.0181	0.1787
7/27/2022 16:08	0.22	0	0.177	0.062	0.187	0.008	0.018	0.0181	0.1796
7/27/2022 16:09	0.22	0	0.179	0.062	0.192	0.008	0.018	0.0181	0.1812
7/27/22 16:10							0.033		
7/27/22 16:11							0.032		
7/27/22 16:12							0.033		
7/27/22 16:13							0.033		
7/27/22 16:14							0.033		
7/27/22 16:15							0.032		
7/27/22 16:16							0.033		
7/27/22 16:17							0.032		
7/27/22 16:18							0.032		
7/27/22 16:19							0.032		
7/27/22 16:20							0.032		
7/27/22 16:21							0.032		
7/27/22 16:22							0.033		
7/27/22 16:23							0.032		
7/27/22 16:24							0.032		
7/27/22 16:25							0.032		
7/27/22 16:26							0.033		
7/27/22 16:27							0.032		
7/27/22 16:28							0.024		
7/27/22 16:29							0.049		
7/27/22 16:30							0.042		
7/27/22 16:31							0.035		
7/27/22 16:32							0.039		
7/27/22 16:33							0.021		
7/27/22 16:34							0.015		
7/27/22 16:35							0.034		
7/27/22 16:36							0.032		
7/27/22 16:37							0.018		
7/27/22 16:38							0.019		
7/27/22 16:39							0.014		
7/27/22 16:40							0.014		

Community Air Monitoring Plan - Upwind Aerosol and Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B436251 VOC (Peak) (ppm)	RAE RS232(A) 0B436251 VOC (Low) (ppm)	RAE RS232(A) 0B436251 VOC (STEL) (ppm)	RAE RS232(A) 0B436251 VOC (TWA) (ppm)	RAE RS232(A) 0B436251 VOC (ppm)	DustTrak RS232(C) 0B436251 Total TWA (mg/m³)	DustTrak RS232(C) 0B436251 Mass Conc. Total (mg/m³)	Mass Conc. Total mg/m³ AVG 15m (mg/m³)	VOC ppm AVG 15m (ppm)
7/28/2022 8:30									
7/28/2022 8:31						0	0.117	0.117	
7/28/2022 8:32						0	0.038	0.0775	
7/28/2022 8:33						0	0.069	0.0747	
7/28/2022 8:34						0	0.032	0.064	
7/28/2022 8:35						0	0.032	0.0576	
7/28/2022 8:36						0	0.031	0.0532	
7/28/2022 8:37						0	0.038	0.051	
7/28/2022 8:38						0	0.032	0.0486	
7/28/2022 8:39						0	0.032	0.0468	
7/28/2022 8:40						0	0.036	0.0457	
7/28/2022 8:41						0	0.031	0.0444	
7/28/2022 8:42						0	0.032	0.0433	
7/28/2022 8:43						0	0.032	0.0425	
7/28/2022 8:44						0	0.031	0.0416	
7/28/2022 8:45						0	0.031	0.0409	
7/28/2022 8:46						0	0.031	0.0352	
7/28/2022 8:47						0.001	0.031	0.0347	
7/28/2022 8:48						0.001	0.031	0.0322	
7/28/2022 8:49						0.001	0.03	0.0321	
7/28/2022 8:50						0.001	0.03	0.0319	
7/28/2022 8:51						0.001	0.03	0.0319	
7/28/2022 8:52						0.001	0.03	0.0313	
7/28/2022 8:53						0.001	0.029	0.0311	
7/28/2022 8:54						0.001	0.03	0.031	
7/28/2022 8:55						0.001	0.029	0.0305	
7/28/2022 8:56						0.001	0.029	0.0304	
7/28/2022 8:57						0.001	0.03	0.0303	
7/28/2022 8:58						0.001	0.03	0.0301	
7/28/2022 8:59						0.001	0.029	0.03	
7/28/2022 9:00						0.001	0.029	0.0299	
7/28/2022 9:01						0.001	0.028	0.0297	

Community Air Monitoring Plan - Upwind Aerosol and Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B436251 VOC (Peak) (ppm)	RAE RS232(A) 0B436251 VOC (Low) (ppm)	RAE RS232(A) 0B436251 VOC (STEL) (ppm)	RAE RS232(A) 0B436251 VOC (TWA) (ppm)	RAE RS232(A) 0B436251 VOC (ppm)	DustTrak RS232(C) 0B436251 Total TWA (mg/m³)	DustTrak RS232(C) 0B436251 Mass Conc. Total (mg/m³)	Mass Conc. Total mg/m³ AVG 15m (mg/m³)	VOC ppm AVG 15m (ppm)
7/28/2022 9:02						0.002	0.028	0.0295	
7/28/2022 9:03						0.002	0.028	0.0293	
7/28/2022 9:04						0.002	0.027	0.0291	
7/28/2022 9:05						0.002	0.029	0.029	
7/28/2022 9:06						0.002	0.027	0.0288	
7/28/2022 9:07						0.002	0.027	0.0286	
7/28/2022 9:08						0.002	0.028	0.0285	
7/28/2022 9:09						0.002	0.026	0.0283	
7/28/2022 9:10						0.002	0.026	0.0281	
7/28/2022 9:11						0.002	0.026	0.0279	
7/28/2022 9:12						0.002	0.027	0.0277	
7/28/2022 9:13						0.002	0.027	0.0275	
7/28/2022 9:14						0.002	0.027	0.0273	
7/28/2022 9:15						0.002	0.026	0.0271	
7/28/2022 9:16						0.002	0.027	0.0271	
7/28/2022 9:17						0.003	0.026	0.0269	
7/28/2022 9:18						0.003	0.029	0.027	
7/28/2022 9:19						0.003	0.025	0.0269	
7/28/2022 9:20						0.003	0.025	0.0266	
7/28/2022 9:21						0.003	0.08	0.0301	
7/28/2022 9:22						0.003	0.06	0.0323	
7/28/2022 9:23						0.003	0.022	0.0319	
7/28/2022 9:24						0.003	0.02	0.0315	
7/28/2022 9:25						0.003	0.021	0.0312	
7/28/2022 9:26						0.003	0.02	0.0308	
7/28/2022 9:27						0.003	0.02	0.0303	
7/28/2022 9:28						0.003	0.02	0.0299	
7/28/2022 9:29						0.003	0.026	0.0298	
7/28/2022 9:30						0.003	0.024	0.0297	
7/28/2022 9:31						0.003	0.02	0.0292	
7/28/2022 9:32						0.004	0.02	0.0288	
7/28/2022 9:33						0.004	0.019	0.0281	
7/28/2022 9:34						0.004	0.02	0.0278	
7/28/2022 9:35						0.004	0.019	0.0274	
7/28/2022 9:36						0.004	0.019	0.0233	
7/28/2022 9:37						0.004	0.019	0.0206	
7/28/2022 9:38						0.004	0.02	0.0205	
7/28/2022 9:39						0.004	0.021	0.0205	
7/28/2022 9:42									
7/28/2022 9:43	0.079	0	0	0	0.073	0	0.021	0.0207	0.073
7/28/2022 9:44	0.082	0	0	0	0.077	0	0.021	0.0202	0.075
7/28/2022 9:45	0.085	0	0	0	0.079	0	0.02	0.0199	0.0763
7/28/2022 9:46	0.09	0	0	0	0.087	0	0.02	0.0199	0.079
7/28/2022 9:47	0.097	0	0	0.001	0.092	0	0.022	0.0201	0.0816
7/28/2022 9:48	0.098	0	0	0.001	0.097	0	0.024	0.0205	0.0842
7/28/2022 9:49	0.109	0	0	0.001	0.108	0	0.021	0.0206	0.0876
7/28/2022 9:50	0.109	0	0	0.001	0.095	0	0.02	0.0207	0.0885
7/28/2022 9:51	0.109	0	0	0.001	0.098	0	0.02	0.0207	0.0896
7/28/2022 9:52	0.111	0	0	0.002	0.11	0	0.019	0.0207	0.0916
7/28/2022 9:53	0.112	0	0	0.002	0.102	0	0.02	0.0207	0.0925
7/28/2022 9:54	0.112	0	0	0.002	0.104	0	0.02	0.0207	0.0935
7/28/2022 9:55	0.112	0	0.087	0.002	0.109	0	0.019	0.0205	0.0947
7/28/2022 9:56	0.112	0	0.092	0.002	0.112	0	0.02	0.0205	0.0959
7/28/2022 9:57	0.112	0	0.094	0.003	0.102	0	0.02	0.0205	0.0963
7/28/2022 9:58	0.112	0	0.096	0.003	0.108	0.001	0.02	0.0204	0.0987
7/28/2022 9:59	0.113	0	0.098	0.003	0.112	0.001	0.02	0.0203	0.101
7/28/2022 10:00	0.116	0	0.1	0.003	0.109	0.001	0.019	0.0203	0.103
7/28/2022 10:01	0.117	0	0.102	0.004	0.115	0.001	0.02	0.0203	0.1049
7/28/2022 10:02	0.121	0	0.104	0.004	0.116	0.001	0.02	0.0201	0.1065
7/28/2022 10:03	0.131	0	0.106	0.004	0.129	0.001	0.019	0.0198	0.1086
7/28/2022 10:04	0.132	0	0.107	0.004	0.121	0.001	0.019	0.0197	0.1095
7/28/2022 10:05	0.132	0	0.109	0.005	0.123	0.001	0.021	0.0197	0.1113
7/28/2022 10:06	0.134	0	0.111	0.005	0.127	0.001	0.021	0.0198	0.1133
7/28/2022 10:07	0.135	0	0.113	0.005	0.131	0.001	0.02	0.0199	0.1147
7/28/2022 10:08	0.137	0	0.115	0.005	0.136	0.001	0.026	0.0203	0.1169
7/28/2022 10:09	0.14	0	0.117	0.006	0.139	0.001	0.019	0.0202	0.1193
7/28/2022 10:10	0.149	0	0.119	0.006	0.147	0.001	0.018	0.0201	0.1218
7/28/2022 10:11	0.15	0	0.122	0.006	0.149	0.001	0.018	0.02	0.1243
7/28/2022 10:12	0.154	0	0.125	0.007	0.149	0.001	0.022	0.0201	0.1274
7/28/2022 10:13	0.154	0	0.128	0.007	0.153	0.001	0.021	0.0202	0.1304

Community Air Monitoring Plan - Upwind Aerosol and Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B436251 VOC (Peak) (ppm)	RAE RS232(A) 0B436251 VOC (Low) (ppm)	RAE RS232(A) 0B436251 VOC (STEL) (ppm)	RAE RS232(A) 0B436251 VOC (TWA) (ppm)	RAE RS232(A) 0B436251 VOC (ppm)	DustTrak RS232(C) 0B436251 Total TWA (mg/m³)	DustTrak RS232(C) 0B436251 Mass Conc. Total (mg/m³)	Mass Conc. Total mg/m³ AVG 15m (mg/m³)	VOC ppm AVG 15m (ppm)
7/28/2022 10:14	0.155	0	0.131	0.007	0.152	0.001	0.018	0.0201	0.1331
7/28/2022 10:15	0.157	0	0.134	0.008	0.152	0.001	0.023	0.0203	0.1359
7/28/2022 10:16	0.16	0	0.137	0.008	0.154	0.001	0.019	0.0203	0.1385
7/28/2022 10:17	0.165	0	0.139	0.008	0.156	0.001	0.018	0.0201	0.1412
7/28/2022 10:18	0.165	0	0.141	0.008	0.16	0.001	0.018	0.0201	0.1433
7/28/2022 10:19	0.165	0	0.143	0.009	0.157	0.002	0.018	0.02	0.1457
7/28/2022 10:20	0.165	0	0.145	0.009	0.152	0.002	0.019	0.0199	0.1476
7/28/2022 10:21	0.165	0	0.147	0.009	0.152	0.002	0.02	0.0198	0.1493
7/28/2022 10:22	0.165	0	0.148	0.01	0.152	0.002	0.019	0.0197	0.1507
7/28/2022 10:23	0.165	0	0.15	0.01	0.153	0.002	0.02	0.0193	0.1518
7/28/2022 10:24	0.165	0	0.151	0.01	0.157	0.002	0.02	0.0194	0.153
7/28/2022 10:25	0.165	0	0.152	0.011	0.156	0.002	0.02	0.0195	0.1536
7/28/2022 10:26	0.165	0	0.153	0.011	0.154	0.002	0.02	0.0197	0.1539
7/28/2022 10:27	0.165	0	0.153	0.011	0.15	0.002	0.02	0.0195	0.154
7/28/2022 10:28	0.165	0	0.154	0.012	0.155	0.002	0.02	0.0195	0.1541
7/28/2022 10:29	0.165	0	0.154	0.012	0.152	0.002	0.02	0.0196	0.1541
7/28/2022 10:30	0.165	0	0.154	0.012	0.158	0.002	0.02	0.0194	0.1545
7/28/2022 10:31	0.165	0	0.153	0.013	0.151	0.002	0.021	0.0195	0.1543
7/28/2022 10:32	0.165	0	0.153	0.013	0.157	0.002	0.02	0.0197	0.1544
7/28/2022 10:33	0.165	0	0.153	0.013	0.154	0.002	0.02	0.0198	0.154
7/28/2022 10:34	0.165	0	0.153	0.014	0.151	0.002	0.02	0.0199	0.1536
7/28/2022 10:35	0.165	0	0.153	0.014	0.151	0.002	0.02	0.02	0.1535
7/28/2022 10:36	0.165	0	0.153	0.014	0.154	0.002	0.021	0.0201	0.1537
7/28/2022 10:37	0.165	0	0.153	0.015	0.155	0.002	0.074	0.0237	0.1539
7/28/2022 10:38	0.165	0	0.152	0.015	0.159	0.002	0.022	0.0239	0.1543
7/28/2022 10:39	0.165	0	0.153	0.015	0.158	0.009	3.367	0.247	0.1543
7/28/2022 10:40	0.165	0	0.153	0.016	0.16	0.01	0.222	0.2605	0.1546
7/28/2022 10:41	0.165	0	0.153	0.016	0.158	0.01	0.021	0.2605	0.1549
7/28/2022 10:42	0.166	0	0.153	0.016	0.163	0.01	0.032	0.2613	0.1557
7/28/2022 10:43	0.168	0	0.154	0.017	0.165	0.01	0.02	0.2613	0.1564
7/28/2022 10:44	0.326	0	0.155	0.017	0.326	0.01	0.02	0.2613	0.168
7/28/2022 10:45	0.329	0	0.158	0.017	0.169	0.01	0.021	0.2614	0.1687
7/28/2022 10:46	0.329	0	0.159	0.018	0.168	0.01	0.023	0.2615	0.1699
7/28/2022 10:47	0.329	0	0.16	0.018	0.169	0.01	0.019	0.2615	0.1707
7/28/2022 10:48	0.329	0	0.161	0.018	0.173	0.01	0.02	0.2615	0.1719
7/28/2022 10:49	0.329	0	0.162	0.019	0.168	0.01	0.022	0.2616	0.1731
7/28/2022 10:50	0.329	0	0.164	0.019	0.176	0.01	0.048	0.2635	0.1747
7/28/2022 10:51	0.329	0	0.165	0.019	0.167	0.01	0.019	0.2633	0.1756
7/28/2022 10:52	0.329	0	0.166	0.02	0.177	0.011	0.019	0.2597	0.1771
7/28/2022 10:53	0.329	0	0.167	0.02	0.176	0.011	0.024	0.2598	0.1782
7/28/2022 10:54	0.329	0	0.169	0.02	0.169	0.011	0.024	0.0369	0.1789
7/28/2022 10:55	0.329	0	0.17	0.021	0.175	0.011	0.021	0.0235	0.1799
7/28/2022 10:56	0.329	0	0.17	0.021	0.161	0.011	0.116	0.0299	0.1801
7/28/2022 10:57	0.329	0	0.171	0.022	0.166	0.011	0.021	0.0291	0.1803
7/28/2022 10:58	0.329	0	0.171	0.022	0.173	0.011	0.023	0.0293	0.1809
7/28/2022 10:59	0.329	0	0.171	0.022	0.176	0.011	0.02	0.0293	0.1709
7/28/2022 11:00	0.329	0	0.169	0.023	0.173	0.011	0.019	0.0292	0.1711
7/28/2022 11:01	0.329	0	0.169	0.023	0.168	0.011	0.02	0.029	0.1711
7/28/2022 11:02	0.329	0	0.169	0.023	0.184	0.011	0.02	0.0291	0.1721
7/28/2022 11:03	0.329	0	0.17	0.024	0.174	0.011	0.02	0.0291	0.1722
7/28/2022 11:04	0.329	0	0.171	0.024	0.18	0.011	0.019	0.0289	0.173
7/28/2022 11:05	0.329	0	0.171	0.024	0.171	0.011	0.019	0.0269	0.1727
7/28/2022 11:06	0.329	0	0.171	0.025	0.175	0.011	0.023	0.0272	0.1732
7/28/2022 11:07	0.329	0	0.171	0.025	0.177	0.011	0.019	0.0272	0.1732
7/28/2022 11:08	0.329	0	0.171	0.025	0.172	0.011	0.02	0.0269	0.1729
7/28/2022 11:09	0.329	0	0.171	0.026	0.178	0.011	0.019	0.0266	0.1735
7/28/2022 11:10	0.329	0	0.171	0.026	0.181	0.011	0.019	0.0265	0.1739
7/28/2022 11:11	0.329	0	0.172	0.027	0.19	0.012	0.02	0.0201	0.1759
7/28/2022 11:12	0.329	0	0.174	0.027	0.19	0.012	0.019	0.0199	0.1775
7/28/2022 11:13	0.329	0	0.175	0.027	0.185	0.012	0.018	0.0196	0.1783
7/28/2022 11:14	0.329	0	0.176	0.028	0.186	0.012	0.019	0.0195	0.1789
7/28/2022 11:15	0.329	0	0.178	0.028	0.194	0.012	0.018	0.0195	0.1803
7/28/2022 11:16	0.329	0	0.179	0.029	0.196	0.012	0.018	0.0193	0.1822
7/28/2022 11:17	0.329	0	0.181	0.029	0.204	0.012	0.019	0.0193	0.1835
7/28/2022 11:18	0.329	0	0.183	0.029	0.199	0.012	0.018	0.0191	0.1852
7/28/2022 11:19	0.329	0	0.184	0.03	0.197	0.012	0.018	0.0191	0.1863
7/28/2022 11:20	0.329	0	0.186	0.03	0.198	0.012	0.018	0.019	0.1881
7/28/2022 11:21	0.329	0	0.188	0.031	0.199	0.012	0.018	0.0187	0.1897
7/28/2022 11:22	0.329	0	0.19	0.031	0.203	0.012	0.017	0.0185	0.1915
7/28/2022 11:23	0.329	0	0.192	0.032	0.21	0.012	0.018	0.0184	0.194

Community Air Monitoring Plan - Upwind Aerosol and Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B436251 VOC (Peak) (ppm)	RAE RS232(A) 0B436251 VOC (Low) (ppm)	RAE RS232(A) 0B436251 VOC (STEL) (ppm)	RAE RS232(A) 0B436251 VOC (TWA) (ppm)	RAE RS232(A) 0B436251 VOC (ppm)	DustTrak RS232(C) 0B436251 Total TWA (mg/m³)	DustTrak RS232(C) 0B436251 Mass Conc. Total (mg/m³)	Mass Conc. Total mg/m³ AVG 15m (mg/m³)	VOC ppm AVG 15m (ppm)
7/28/2022 11:24	0.329	0	0.195	0.032	0.207	0.012	0.018	0.0183	0.1959
7/28/2022 11:25	0.329	0	0.197	0.032	0.208	0.012	0.017	0.0182	0.1977
7/28/2022 11:26	0.329	0	0.198	0.033	0.209	0.012	0.018	0.0181	0.199
7/28/2022 11:27	0.329	0	0.2	0.033	0.21	0.012	0.018	0.018	0.2003
7/28/2022 11:28	0.329	0	0.202	0.034	0.219	0.012	0.018	0.018	0.2026
7/28/2022 11:29	0.329	0	0.203	0.034	0.222	0.012	0.018	0.0179	0.205
7/28/2022 11:30	0.329	0	0.205	0.035	0.218	0.012	0.018	0.0179	0.2066
7/28/2022 11:31	0.329	0	0.206	0.035	0.206	0.012	0.018	0.0179	0.2073
7/28/2022 11:32	0.329	0	0.207	0.035	0.218	0.012	0.017	0.0178	0.2082
7/28/2022 11:33	0.329	0	0.208	0.036	0.223	0.012	0.017	0.0177	0.2098
7/28/2022 11:34	0.329	0	0.21	0.036	0.215	0.012	0.017	0.0177	0.211
7/28/2022 11:35	0.329	0	0.211	0.037	0.219	0.012	0.017	0.0176	0.2124
7/28/2022 11:36	0.329	0	0.212	0.037	0.22	0.012	0.018	0.0176	0.2138
7/28/2022 11:37	0.329	0	0.213	0.038	0.219	0.012	0.018	0.0177	0.2149
7/28/2022 11:38	0.329	0	0.213	0.038	0.216	0.013	0.018	0.0177	0.2153
7/28/2022 11:39	0.329	0	0.214	0.039	0.222	0.013	0.019	0.0177	0.2163
7/28/2022 11:40	0.329	0	0.214	0.039	0.212	0.013	0.018	0.0178	0.2165
7/28/2022 11:41	0.329	0	0.215	0.04	0.211	0.013	0.018	0.0178	0.2167
7/28/2022 11:42	0.329	0	0.215	0.04	0.215	0.013	0.018	0.0178	0.217
7/28/2022 11:43	0.329	0	0.215	0.04	0.209	0.013	0.018	0.0178	0.2163
7/28/2022 11:44	0.329	0	0.215	0.041	0.218	0.013	0.018	0.0178	0.2161
7/28/2022 11:45	0.329	0	0.214	0.041	0.212	0.013	0.018	0.0178	0.2157
7/28/2022 11:46	0.329	0	0.214	0.042	0.208	0.013	0.018	0.0178	0.2158
7/28/2022 11:47	0.329	0	0.214	0.042	0.208	0.013	0.018	0.0179	0.2151
7/28/2022 11:48	0.329	0	0.214	0.043	0.216	0.013	0.018	0.0179	0.2147
7/28/2022 11:49	0.329	0	0.213	0.043	0.213	0.013	0.017	0.0179	0.2145
7/28/2022 11:50	0.329	0	0.213	0.044	0.213	0.013	0.018	0.018	0.2141
7/28/2022 11:51	0.329	0	0.213	0.044	0.211	0.013	0.017	0.0179	0.2135
7/28/2022 11:52	0.329	0	0.212	0.044	0.21	0.013	0.018	0.0179	0.2129
7/28/2022 11:53	0.329	0	0.212	0.045	0.208	0.013	0.018	0.0179	0.2124
7/28/2022 11:54	0.329	0	0.211	0.045	0.208	0.013	0.018	0.0179	0.2115
7/28/2022 11:55	0.329	0	0.211	0.046	0.21	0.013	0.017	0.0178	0.2113
7/28/2022 11:56	0.329	0	0.21	0.046	0.208	0.013	0.017	0.0177	0.2111
7/28/2022 11:57	0.329	0	0.21	0.047	0.209	0.013	0.018	0.0177	0.2107
7/28/2022 11:58	0.329	0	0.21	0.047	0.213	0.013	0.018	0.0177	0.211
7/28/2022 11:59	0.329	0	0.21	0.047	0.217	0.013	0.017	0.0177	0.2109
7/28/2022 12:00	0.329	0	0.211	0.048	0.214	0.013	0.018	0.0177	0.2111
7/28/2022 12:01	0.329	0	0.211	0.048	0.209	0.013	0.017	0.0176	0.2111
7/28/2022 12:02	0.329	0	0.21	0.049	0.209	0.013	0.017	0.0175	0.2112
7/28/2022 12:03	0.329	0	0.21	0.049	0.212	0.013	0.018	0.0175	0.2109
7/28/2022 12:04	0.329	0	0.21	0.05	0.213	0.013	0.017	0.0175	0.2109
7/28/2022 12:05	0.329	0	0.21	0.05	0.205	0.014	0.019	0.0176	0.2104
7/28/2022 12:06	0.329	0	0.21	0.051	0.209	0.014	0.017	0.0176	0.2103
7/28/2022 12:07	0.329	0	0.21	0.051	0.206	0.014	0.017	0.0175	0.21
7/28/2022 12:08	0.329	0	0.209	0.051	0.213	0.014	0.019	0.0176	0.2103
7/28/2022 12:09	0.329	0	0.21	0.052	0.213	0.014	0.018	0.0176	0.2107
7/28/2022 12:10	0.329	0	0.21	0.052	0.223	0.014	0.017	0.0176	0.2115
7/28/2022 12:11	0.329	0	0.211	0.053	0.221	0.014	0.017	0.0176	0.2124
7/28/2022 12:12	0.329	0	0.212	0.053	0.223	0.014	0.019	0.0177	0.2133
7/28/2022 12:13	0.329	0	0.213	0.054	0.22	0.014	0.017	0.0176	0.2138
7/28/2022 12:14									
7/28/2022 12:15									
7/28/2022 12:16	0.165	0	0	0	0.165	0	0.018	0.0177	0.2102
7/28/2022 12:17	0.183	0	0	0	0.183	0	0.017	0.0177	0.2082
7/28/2022 12:18	0.185	0	0	0	0.183	0	0.016	0.0175	0.2059
7/28/2022 12:19	0.191	0	0	0.001	0.191	0	0.016	0.0175	0.2042
7/28/2022 12:20	0.197	0	0	0.001	0.19	0	0.016	0.0172	0.2031
7/28/2022 12:21	0.199	0	0	0.002	0.194	0	0.017	0.0172	0.2019
7/28/2022 12:22	0.2	0	0	0.002	0.198	0	0.017	0.0172	0.2013
7/28/2022 12:23	0.342	0	0	0.002	0.202	0	0.02	0.0173	0.2005
7/28/2022 12:24	0.342	0	0	0.003	0.197	0	0.017	0.0172	0.1992
7/28/2022 12:25	0.342	0	0	0.003	0.205	0	0.017	0.0172	0.1978
7/28/2022 12:26	0.342	0	0	0.004	0.204	0	0.016	0.0172	0.1965
7/28/2022 12:27	0.342	0	0	0.004	0.198	0	0.017	0.017	0.1946
7/28/2022 12:28	0.342	0	0	0.005	0.203	0	0.016	0.0169	0.1933
7/28/2022 12:29	0.342	0	0	0.005	0.196	0	0.016	0.0169	0.1935
7/28/2022 12:30	0.342	0	0.188	0.005	0.201	0	0.016	0.0168	0.194
7/28/2022 12:31	0.342	0	0.195	0.006	0.209	0.001	0.016	0.0167	0.1969
7/28/2022 12:32	0.342	0	0.198	0.006	0.207	0.001	0.015	0.0165	0.1985
7/28/2022 12:33	0.342	0	0.2	0.007	0.207	0.001	0.016	0.0165	0.2001

Community Air Monitoring Plan - Upwind Aerosol and Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B436251 VOC (Peak) (ppm)	RAE RS232(A) 0B436251 VOC (Low) (ppm)	RAE RS232(A) 0B436251 VOC (STEL) (ppm)	RAE RS232(A) 0B436251 VOC (TWA) (ppm)	RAE RS232(A) 0B436251 VOC (ppm)	DustTrak RS232(C) 0B436251 Total TWA (mg/m³)	DustTrak RS232(C) 0B436251 Mass Conc. Total (mg/m³)	Mass Conc. Total mg/m³ AVG 15m (mg/m³)	VOC ppm AVG 15m (ppm)
7/28/2022 12:34	0.342	0	0.201	0.007	0.208	0.001	0.016	0.0165	0.2013
7/28/2022 12:35	0.342	0	0.203	0.008	0.215	0.001	0.016	0.0165	0.2029
7/28/2022 12:36	0.342	0	0.204	0.008	0.212	0.001	0.015	0.0164	0.2041
7/28/2022 12:37	0.342	0	0.205	0.008	0.219	0.001	0.016	0.0163	0.2055
7/28/2022 12:38	0.342	0	0.205	0.009	0.21	0.001	0.015	0.016	0.2061
7/28/2022 12:39	0.342	0	0.206	0.009	0.22	0.001	0.018	0.0161	0.2076
7/28/2022 12:40	0.342	0	0.207	0.01	0.22	0.001	0.016	0.016	0.2086
7/28/2022 12:41	0.342	0	0.208	0.01	0.224	0.001	0.016	0.016	0.2099
7/28/2022 12:42	0.342	0	0.21	0.011	0.222	0.001	0.015	0.0159	0.2115
7/28/2022 12:43	0.342	0	0.211	0.011	0.215	0.001	0.015	0.0158	0.2123
7/28/2022 12:44	0.342	0	0.212	0.012	0.22	0.001	0.015	0.0157	0.2139
7/28/2022 12:45	0.342	0	0.213	0.012	0.222	0.001	0.015	0.0157	0.2153
7/28/2022 12:46	0.342	0	0.214	0.013	0.219	0.001	0.015	0.0156	0.216
7/28/2022 12:47	0.342	0	0.215	0.013	0.22	0.001	0.015	0.0156	0.2169
7/28/2022 12:48	0.342	0	0.216	0.013	0.218	0.001	0.014	0.0155	0.2176
7/28/2022 12:49	0.342	0	0.217	0.014	0.22	0.001	0.015	0.0154	0.2184
7/28/2022 12:50	0.342	0	0.217	0.014	0.219	0.001	0.015	0.0153	0.2187
7/28/2022 12:51	0.342	0	0.218	0.015	0.216	0.001	0.015	0.0153	0.2189
7/28/2022 12:52	0.342	0	0.219	0.015	0.22	0.001	0.014	0.0152	0.219
7/28/2022 12:53	0.342	0	0.219	0.016	0.219	0.001	0.015	0.0152	0.2196
7/28/2022 12:54	0.342	0	0.219	0.016	0.221	0.001	0.014	0.0149	0.2197
7/28/2022 12:55	0.342	0	0.22	0.017	0.221	0.001	0.014	0.0148	0.2197
7/28/2022 12:56	0.342	0	0.22	0.017	0.219	0.001	0.015	0.0147	0.2194
7/28/2022 12:57	0.342	0	0.22	0.018	0.229	0.001	0.015	0.0147	0.2199
7/28/2022 12:58	0.342	0	0.22	0.018	0.233	0.001	0.014	0.0147	0.2211
7/28/2022 12:59	0.342	0	0.221	0.019	0.236	0.001	0.014	0.0146	0.2221
7/28/2022 13:00	0.342	0	0.223	0.019	0.232	0.001	0.014	0.0145	0.2228
7/28/2022 13:01	0.342	0	0.224	0.02	0.227	0.001	0.015	0.0145	0.2233
7/28/2022 13:02	0.342	0	0.224	0.02	0.227	0.002	0.015	0.0145	0.2238
7/28/2022 13:03	0.342	0	0.225	0.02	0.229	0.002	0.014	0.0145	0.2245
7/28/2022 13:04	0.342	0	0.226	0.021	0.229	0.002	0.014	0.0145	0.2251
7/28/2022 13:05	0.342	0	0.226	0.021	0.232	0.002	0.014	0.0144	0.226
7/28/2022 13:06	0.342	0	0.227	0.022	0.232	0.002	0.014	0.0143	0.2271
7/28/2022 13:07	0.342	0	0.228	0.022	0.234	0.002	0.014	0.0143	0.228
7/28/2022 13:08	0.342	0	0.229	0.023	0.239	0.002	0.016	0.0144	0.2293
7/28/2022 13:09	0.342	0	0.23	0.023	0.244	0.002	0.014	0.0144	0.2309
7/28/2022 13:10	0.342	0	0.231	0.024	0.237	0.002	0.018	0.0147	0.2319
7/28/2022 13:11	0.342	0	0.232	0.024	0.236	0.002	0.016	0.0147	0.2331
7/28/2022 13:12	0.342	0	0.233	0.025	0.232	0.002	0.017	0.0149	0.2333
7/28/2022 13:13	0.342	0	0.234	0.025	0.237	0.002	0.016	0.015	0.2335
7/28/2022 13:14	0.342	0	0.234	0.026	0.235	0.002	0.015	0.0151	0.2335
7/28/2022 13:15	0.342	0	0.234	0.026	0.233	0.002	0.014	0.0151	0.2335
7/28/2022 13:16	0.342	0	0.234	0.027	0.23	0.002	0.014	0.015	0.2337
7/28/2022 13:17	0.342	0	0.234	0.027	0.23	0.002	0.014	0.0149	0.2339
7/28/2022 13:18	0.342	0	0.234	0.028	0.229	0.002	0.014	0.0149	0.2339
7/28/2022 13:19	0.342	0	0.234	0.028	0.232	0.002	0.014	0.0149	0.2341
7/28/2022 13:20	0.342	0	0.234	0.029	0.227	0.002	0.014	0.0149	0.2338
7/28/2022 13:21	0.342	0	0.233	0.029	0.223	0.002	0.015	0.015	0.2332
7/28/2022 13:22	0.342	0	0.232	0.03	0.227	0.002	0.014	0.015	0.2327
7/28/2022 13:23	0.342	0	0.232	0.03	0.226	0.002	0.015	0.0149	0.2319
7/28/2022 13:24	0.342	0	0.231	0.031	0.223	0.002	0.014	0.0149	0.2305
7/28/2022 13:25	0.342	0	0.23	0.031	0.23	0.002	0.014	0.0147	0.23
7/28/2022 13:26	0.342	0	0.229	0.032	0.217	0.002	0.016	0.0147	0.2287
7/28/2022 13:27	0.342	0	0.228	0.032	0.219	0.002	0.014	0.0145	0.2279
7/28/2022 13:28	0.342	0	0.227	0.032	0.216	0.002	0.014	0.0143	0.2265
7/28/2022 13:29	0.342	0	0.226	0.033	0.215	0.002	0.014	0.0143	0.2251
7/28/2022 13:30	0.342	0	0.224	0.033	0.217	0.002	0.014	0.0143	0.2241
7/28/2022 13:31	0.342	0	0.223	0.034	0.215	0.002	0.014	0.0143	0.2231
7/28/2022 13:32	0.342	0	0.222	0.034	0.217	0.002	0.014	0.0143	0.2222
7/28/2022 13:33	0.342	0	0.222	0.035	0.212	0.002	0.015	0.0143	0.2211
7/28/2022 13:34	0.342	0	0.221	0.035	0.214	0.003	0.014	0.0143	0.2199
7/28/2022 13:35	0.342	0	0.219	0.036	0.208	0.003	0.014	0.0143	0.2186
7/28/2022 13:36	0.342	0	0.218	0.036	0.212	0.003	0.014	0.0143	0.2179
7/28/2022 13:37	0.342	0	0.217	0.036	0.218	0.003	0.014	0.0143	0.2173
7/28/2022 13:38	0.342	0	0.216	0.037	0.207	0.003	0.015	0.0143	0.216
7/28/2022 13:39	0.342	0	0.215	0.037	0.21	0.003	0.015	0.0143	0.2151
7/28/2022 13:40	0.342	0	0.214	0.038	0.213	0.003	0.014	0.0143	0.214
7/28/2022 13:41	0.342	0	0.213	0.038	0.213	0.003	0.015	0.0143	0.2137
7/28/2022 13:42	0.342	0	0.212	0.039	0.21	0.003	0.015	0.0143	0.2131
7/28/2022 13:43	0.342	0	0.212	0.039	0.212	0.003	0.015	0.0144	0.2129

Community Air Monitoring Plan - Upwind Aerosol and Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B436251 VOC (Peak) (ppm)	RAE RS232(A) 0B436251 VOC (Low) (ppm)	RAE RS232(A) 0B436251 VOC (STEL) (ppm)	RAE RS232(A) 0B436251 VOC (TWA) (ppm)	RAE RS232(A) 0B436251 VOC (ppm)	DustTrak RS232(C) 0B436251 Total TWA (mg/m³)	DustTrak RS232(C) 0B436251 Mass Conc. Total (mg/m³)	Mass Conc. Total mg/m³ AVG 15m (mg/m³)	VOC ppm AVG 15m (ppm)
7/28/2022 13:44	0.342	0	0.212	0.04	0.216	0.003	0.015	0.0145	0.2129
7/28/2022 13:45	0.342	0	0.212	0.04	0.216	0.003	0.015	0.0145	0.2129
7/28/2022 13:46	0.342	0	0.212	0.04	0.214	0.003	0.015	0.0146	0.2128
7/28/2022 13:47	0.342	0	0.212	0.041	0.22	0.003	0.015	0.0147	0.213
7/28/2022 13:48	0.342	0	0.212	0.041	0.217	0.003	0.015	0.0147	0.2133
7/28/2022 13:49	0.342	0	0.212	0.042	0.214	0.003	0.015	0.0147	0.2133
7/28/2022 13:50	0.342	0	0.212	0.042	0.213	0.003	0.014	0.0147	0.2137
7/28/2022 13:51	0.342	0	0.212	0.043	0.214	0.003	0.014	0.0147	0.2138
7/28/2022 13:52	0.342	0	0.212	0.043	0.219	0.003	0.016	0.0149	0.2139
7/28/2022 13:53	0.342	0	0.213	0.044	0.224	0.003	0.015	0.0149	0.215
7/28/2022 13:54	0.342	0	0.214	0.044	0.216	0.003	0.015	0.0149	0.2154
7/28/2022 13:55	0.342	0	0.214	0.044	0.218	0.003	0.016	0.015	0.2157
7/28/2022 13:56	0.342	0	0.215	0.045	0.216	0.003	0.015	0.015	0.2159
7/28/2022 13:57	0.342	0	0.215	0.045	0.221	0.003	0.013	0.0149	0.2167
7/28/2022 13:58	0.342	0	0.216	0.046	0.211	0.003	0.013	0.0147	0.2166
7/28/2022 13:59	0.342	0	0.216	0.046	0.207	0.003	0.012	0.0145	0.216
7/28/2022 14:00	0.342	0	0.215	0.047	0.211	0.003	0.011	0.0143	0.2157
7/28/2022 14:01	0.342	0	0.215	0.047	0.203	0.003	0.012	0.0141	0.2149
7/28/2022 14:02	0.342	0	0.215	0.048	0.206	0.003	0.011	0.0138	0.214
7/28/2022 14:03	0.342	0	0.214	0.048	0.215	0.003	0.011	0.0135	0.2139
7/28/2022 14:04	0.342	0	0.214	0.048	0.206	0.003	0.012	0.0133	0.2133
7/28/2022 14:05	0.342	0	0.213	0.049	0.202	0.003	0.012	0.0132	0.2126
7/28/2022 14:06	0.342	0	0.212	0.049	0.198	0.003	0.011	0.013	0.2115
7/28/2022 14:07	0.342	0	0.211	0.05	0.197	0.003	0.011	0.0127	0.2101
7/28/2022 14:08	0.342	0	0.21	0.05	0.195	0.003	0.011	0.0124	0.2081
7/28/2022 14:09	0.342	0	0.208	0.051	0.189	0.003	0.013	0.0123	0.2063
7/28/2022 14:10	0.342	0	0.206	0.051	0.193	0.004	0.011	0.0119	0.2047
7/28/2022 14:11	0.342	0	0.204	0.051	0.182	0.004	0.015	0.0119	0.2024
7/28/2022 14:12	0.342	0	0.202	0.052	0.189	0.004	0.012	0.0119	0.2003
7/28/2022 14:13	0.342	0	0.2	0.052	0.18	0.004	0.011	0.0117	0.1982
7/28/2022 14:14	0.342	0	0.198	0.053	0.184	0.004	0.01	0.0116	0.1967
7/28/2022 14:15	0.342	0	0.195	0.053	0.183	0.004	0.01	0.0115	0.1948
7/28/2022 14:16	0.342	0	0.194	0.053	0.19	0.004	0.01	0.0114	0.1939
7/28/2022 14:17	0.342	0	0.192	0.054	0.18	0.004	0.01	0.0113	0.1922
7/28/2022 14:18	0.342	0	0.191	0.054	0.18	0.004	0.01	0.0113	0.1899
7/28/2022 14:19	0.342	0	0.188	0.054	0.18	0.004	0.01	0.0111	0.1881
7/28/2022 14:20	0.342	0	0.187	0.055	0.179	0.004	0.014	0.0113	0.1866
7/28/2022 14:21	0.342	0	0.185	0.055	0.176	0.004	0.011	0.0113	0.1851
7/28/2022 14:22	0.342	0	0.184	0.056	0.181	0.004	0.011	0.0113	0.1841
7/28/2022 14:23	0.342	0	0.183	0.056	0.183	0.004	0.013	0.0114	0.1833
7/28/2022 14:24	0.342	0	0.182	0.056	0.181	0.004	0.01	0.0112	0.1827
7/28/2022 14:25	0.342	0	0.181	0.057	0.176	0.004	0.011	0.0112	0.1816
7/28/2022 14:26	0.342	0	0.181	0.057	0.182	0.004	0.011	0.0109	0.1816
7/28/2022 14:27	0.342	0	0.18	0.057	0.179	0.004	0.01	0.0108	0.1809
7/28/2022 14:28	0.342	0	0.18	0.058	0.175	0.004	0.01	0.0107	0.1806
7/28/2022 14:29	0.342	0	0.179	0.058	0.18	0.004	0.01	0.0107	0.1803
7/28/2022 14:30	0.342	0	0.179	0.058	0.17	0.004	0.012	0.0109	0.1795
7/28/2022 14:31	0.342	0	0.178	0.059	0.167	0.004	0.01	0.0109	0.1779
7/28/2022 14:32	0.342	0	0.177	0.059	0.163	0.004	0.01	0.0109	0.1768
7/28/2022 14:33	0.342	0	0.176	0.06	0.166	0.004	0.011	0.0109	0.1759
7/28/2022 14:34	0.342	0	0.175	0.06	0.17	0.004	0.011	0.011	0.1752
7/28/2022 14:35	0.342	0	0.174	0.06	0.171	0.004	0.012	0.0109	0.1747
7/28/2022 14:36	0.342	0	0.174	0.061	0.17	0.004	0.013	0.011	0.1743
7/28/2022 14:37	0.342	0	0.173	0.061	0.183	0.004	0.012	0.0111	0.1744
7/28/2022 14:38	0.342	0	0.173	0.061	0.174	0.004	0.01	0.0109	0.1738
7/28/2022 14:39	0.342	0	0.172	0.062	0.176	0.004	0.01	0.0109	0.1735
7/28/2022 14:40	0.342	0	0.172	0.062	0.176	0.004	0.012	0.0109	0.1735
7/28/2022 14:41	0.342	0	0.172	0.062	0.175	0.004	0.011	0.0109	0.173
7/28/2022 14:42	0.342	0	0.172	0.063	0.175	0.004	0.011	0.011	0.1727
7/28/2022 14:43	0.342	0	0.172	0.063	0.184	0.004	0.011	0.0111	0.1733
7/28/2022 14:44	0.342	0	0.173	0.064	0.182	0.004	0.011	0.0111	0.1735
7/28/2022 14:45	0.342	0	0.173	0.064	0.185	0.004	0.011	0.0111	0.1745
7/28/2022 14:46	0.342	0	0.174	0.064	0.187	0.004	0.013	0.0113	0.1758
7/28/2022 14:47	0.342	0	0.175	0.065	0.187	0.004	0.011	0.0113	0.1774
7/28/2022 14:48	0.342	0	0.176	0.065	0.196	0.004	0.01	0.0113	0.1794
7/28/2022 14:49	0.342	0	0.178	0.065	0.189	0.004	0.011	0.0113	0.1807
7/28/2022 14:50	0.342	0	0.18	0.066	0.198	0.004	0.011	0.0112	0.1825
7/28/2022 14:51	0.342	0	0.181	0.066	0.195	0.004	0.012	0.0111	0.1841
7/28/2022 14:52	0.342	0	0.183	0.067	0.19	0.004	0.01	0.011	0.1846
7/28/2022 14:53	0.342	0	0.184	0.067	0.197	0.005	0.01	0.011	0.1861

Community Air Monitoring Plan - Upwind Aerosol and Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B436251 VOC (Peak) (ppm)	RAE RS232(A) 0B436251 VOC (Low) (ppm)	RAE RS232(A) 0B436251 VOC (STEL) (ppm)	RAE RS232(A) 0B436251 VOC (TWA) (ppm)	RAE RS232(A) 0B436251 VOC (ppm)	DustTrak RS232(C) 0B436251 Total TWA (mg/m³)	DustTrak RS232(C) 0B436251 Mass Conc. Total (mg/m³)	Mass Conc. Total mg/m³ AVG 15m (mg/m³)	VOC ppm AVG 15m (ppm)
7/28/2022 14:54	0.342	0	0.185	0.067	0.193	0.005	0.011	0.0111	0.1873
7/28/2022 14:55	0.342	0	0.187	0.068	0.193	0.005	0.011	0.011	0.1884
7/28/2022 14:56	0.342	0	0.188	0.068	0.201	0.005	0.011	0.011	0.1901
7/28/2022 14:57	0.342	0	0.189	0.069	0.195	0.005	0.011	0.011	0.1915
7/28/2022 14:58	0.342	0	0.19	0.069	0.193	0.005	0.011	0.011	0.1921
7/28/2022 14:59	0.342	0	0.191	0.07	0.198	0.005	0.011	0.011	0.1931
7/28/2022 15:00	0.342	0	0.192	0.07	0.19	0.005	0.01	0.0109	0.1935
7/28/2022 15:01	0.342	0	0.192	0.07	0.197	0.005	0.01	0.0107	0.1941
7/28/2022 15:02	0.342	0	0.193	0.071	0.192	0.005	0.01	0.0107	0.1945
7/28/2022 15:03	0.342	0	0.193	0.071	0.187	0.005	0.01	0.0107	0.1939
7/28/2022 15:04	0.342	0	0.193	0.072	0.197	0.005	0.011	0.0107	0.1944
7/28/2022 15:05	0.342	0	0.194	0.072	0.197	0.005	0.011	0.0107	0.1943
7/28/2022 15:06	0.342	0	0.194	0.072	0.198	0.005	0.011	0.0106	0.1945
7/28/2022 15:07	0.342	0	0.194	0.073	0.201	0.005	0.01	0.0106	0.1953
7/28/2022 15:08	0.342	0	0.195	0.073	0.2	0.005	0.012	0.0107	0.1955
7/28/2022 15:09	0.342	0	0.195	0.074	0.206	0.005	0.011	0.0107	0.1963
7/28/2022 15:10	0.342	0	0.196	0.074	0.205	0.005	0.01	0.0107	0.1971
7/28/2022 15:11	0.342	0	0.196	0.074	0.205	0.005	0.028	0.0118	0.1974
7/28/2022 15:12	0.342	0	0.197	0.075	0.208	0.005	0.015	0.0121	0.1983
7/28/2022 15:13	0.342	0	0.198	0.075	0.203	0.005	0.01	0.012	0.1989
7/28/2022 15:14	0.342	0	0.198	0.076	0.196	0.005	0.01	0.0119	0.1988
7/28/2022 15:15	0.342	0	0.198	0.076	0.202	0.005	0.009	0.0119	0.1996
7/28/2022 15:16	0.342	0	0.199	0.077	0.204	0.005	0.01	0.0119	0.2001
7/28/2022 15:17	0.342	0	0.2	0.077	0.215	0.005	0.013	0.0121	0.2016
7/28/2022 15:18	0.342	0	0.201	0.077	0.202	0.005	0.012	0.0122	0.2026
7/28/2022 15:19	0.342	0	0.201	0.078	0.205	0.005	0.014	0.0124	0.2031
7/28/2022 15:20	0.342	0	0.202	0.078	0.206	0.005	0.013	0.0125	0.2037
7/28/2022 15:21	0.342	0	0.203	0.079	0.197	0.005	0.01	0.0125	0.2037
7/28/2022 15:22	0.342	0	0.203	0.079	0.204	0.005	0.01	0.0125	0.2039
7/28/2022 15:23	0.342	0	0.203	0.08	0.204	0.005	0.011	0.0124	0.2041
7/28/2022 15:24	0.342	0	0.204	0.08	0.205	0.005	0.01	0.0123	0.2041
7/28/2022 15:25	0.342	0	0.204	0.08	0.2	0.005	0.011	0.0124	0.2037
7/28/2022 15:26	0.342	0	0.203	0.081	0.199	0.005	0.01	0.0112	0.2033
7/28/2022 15:27	0.342	0	0.203	0.081	0.204	0.005	0.01	0.0109	0.2031
7/28/2022 15:28	0.342	0	0.202	0.082	0.203	0.005	0.01	0.0109	0.2031
7/28/2022 15:29	0.342	0	0.202	0.082	0.202	0.005	0.012	0.011	0.2035
7/28/2022 15:30	0.342	0	0.202	0.082	0.202	0.005	0.01	0.0111	0.2035
7/28/2022 15:31	0.342	0	0.202	0.083	0.199	0.005	0.01	0.0111	0.2031
7/28/2022 15:32	0.342	0	0.202	0.083	0.199	0.005	0.01	0.0109	0.2021
7/28/2022 15:33	0.342	0	0.201	0.084	0.198	0.005	0.01	0.0107	0.2018
7/28/2022 15:34	0.342	0	0.201	0.084	0.206	0.005	0.011	0.0105	0.2019
7/28/2022 15:35	0.342	0	0.201	0.085	0.197	0.005	0.011	0.0104	0.2013
7/28/2022 15:36	0.342	0	0.2	0.085	0.194	0.006	0.011	0.0105	0.2011
7/28/2022 15:37	0.342	0	0.2	0.085	0.204	0.006	0.012	0.0106	0.2011
7/28/2022 15:38	0.342	0	0.2	0.086	0.207	0.006	0.011	0.0106	0.2013
7/28/2022 15:39	0.342	0	0.2	0.086	0.201	0.006	0.011	0.0107	0.201
7/28/2022 15:40	0.342	0	0.2	0.087	0.207	0.006	0.012	0.0107	0.2015
7/28/2022 15:41	0.342	0	0.2	0.087	0.203	0.006	0.012	0.0109	0.2017
7/28/2022 15:42	0.342	0	0.201	0.087	0.207	0.006	0.011	0.0109	0.2019
7/28/2022 15:43	0.342	0	0.201	0.088	0.204	0.006	0.012	0.0111	0.202
7/28/2022 15:44	0.342	0	0.201	0.088	0.21	0.006	0.012	0.0111	0.2025
7/28/2022 15:45	0.342	0	0.202	0.089	0.202	0.006	0.011	0.0111	0.2025
7/28/2022 15:46	0.342	0	0.202	0.089	0.208	0.006	0.012	0.0113	0.2031
7/28/2022 15:47	0.342	0	0.203	0.09	0.2	0.006	0.011	0.0113	0.2032
7/28/2022 15:48	0.342	0	0.203	0.09	0.206	0.006	0.011	0.0114	0.2037
7/28/2022 15:49	0.342	0	0.203	0.09	0.201	0.006	0.011	0.0114	0.2034
7/28/2022 15:50	0.342	0	0.203	0.091	0.203	0.006	0.011	0.0114	0.2038
7/28/2022 15:51	0.342	0	0.203	0.091	0.202	0.006	0.011	0.0114	0.2043
7/28/2022 15:52	0.342	0	0.203	0.092	0.197	0.006	0.011	0.0113	0.2039
7/28/2022 15:53	0.342	0	0.203	0.092	0.197	0.006	0.011	0.0113	0.2032
7/28/2022 15:54	0.342	0	0.203	0.093	0.191	0.006	0.012	0.0114	0.2025
7/28/2022 15:55	0.342	0	0.202	0.093	0.197	0.006	0.011	0.0113	0.2019
7/28/2022 15:56	0.342	0	0.201	0.093	0.195	0.006	0.011	0.0113	0.2013
7/28/2022 15:57	0.342	0	0.201	0.094	0.192	0.006	0.011	0.0113	0.2003
7/28/2022 15:58	0.342	0	0.2	0.094	0.191	0.006	0.012	0.0113	0.1995
7/28/2022 15:59	0.342	0	0.199	0.095	0.198	0.006	0.01	0.0111	0.1987
7/28/2022 16:00	0.342	0	0.197	0.095	0.192	0.006	0.011	0.0111	0.198
7/28/2022 16:01	0.342	0	0.197	0.095	0.196	0.006	0.011	0.0111	0.1972
7/28/2022 16:02	0.342	0	0.196	0.096	0.191	0.006	0.011	0.0111	0.1966
7/28/2022 16:03	0.342	0	0.196	0.096	0.195	0.006	0.011	0.0111	0.1959

Community Air Monitoring Plan - Upwind Aerosol and Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B436251 VOC (Peak) (ppm)	RAE RS232(A) 0B436251 VOC (Low) (ppm)	RAE RS232(A) 0B436251 VOC (STEL) (ppm)	RAE RS232(A) 0B436251 VOC (TWA) (ppm)	RAE RS232(A) 0B436251 VOC (ppm)	DustTrak RS232(C) 0B436251 Total TWA (mg/m³)	DustTrak RS232(C) 0B436251 Mass Conc. Total (mg/m³)	Mass Conc. Total mg/m³ AVG 15m (mg/m³)	VOC ppm AVG 15m (ppm)
7/28/2022 16:04	0.342	0	0.195	0.097	0.194	0.006	0.011	0.0111	0.1954
7/28/2022 16:05	0.342	0	0.195	0.097	0.195	0.006	0.011	0.0111	0.1949
7/28/2022 16:06	0.342	0	0.194	0.097	0.199	0.006	0.011	0.0111	0.1947
7/28/2022 16:07	0.342	0	0.194	0.098	0.191	0.006	0.011	0.0111	0.1943
7/28/2022 16:08	0.342	0	0.194	0.098	0.194	0.006	0.011	0.0111	0.1941
7/28/2022 16:09	0.342	0	0.193	0.099	0.189	0.006	0.011	0.011	0.1939
7/28/2022 16:10	0.342	0	0.193	0.099	0.183	0.006	0.011	0.011	0.193
7/28/2022 16:11	0.342	0	0.192	0.099	0.188	0.006	0.011	0.011	0.1925
7/28/2022 16:12	0.342	0	0.192	0.1	0.189	0.006	0.012	0.0111	0.1923
7/28/2022 16:13	0.342	0	0.191	0.1	0.19	0.006	0.012	0.0111	0.1923
7/28/2022 16:14	0.342	0	0.191	0.101	0.191	0.006	0.011	0.0111	0.1918
7/28/2022 16:15	0.342	0	0.19	0.101	0.185	0.006	0.011	0.0111	0.1913
7/28/2022 16:16	0.342	0	0.19	0.101	0.189	0.006	0.011	0.0111	0.1909
7/28/2022 16:17	0.342	0	0.19	0.102	0.192	0.006	0.011	0.0111	0.1909
7/28/2022 16:18	0.342	0	0.19	0.102	0.19	0.006	0.011	0.0111	0.1906
7/28/2022 16:19	0.342	0	0.189	0.103	0.191	0.007	0.011	0.0111	0.1904
7/28/2022 16:20	0.342	0	0.189	0.103	0.19	0.007	0.011	0.0111	0.1901
7/28/2022 16:21	0.342	0	0.189	0.103	0.196	0.007	0.011	0.0111	0.1899
7/28/2022 16:22	0.342	0	0.189	0.104	0.189	0.007	0.011	0.0111	0.1897
7/28/2022 16:23	0.342	0	0.188	0.104	0.187	0.007	0.011	0.0111	0.1893
7/28/2022 16:24	0.342	0	0.188	0.105	0.193	0.007	0.011	0.0111	0.1895
7/28/2022 16:25	0.342	0	0.188	0.105	0.186	0.007	0.011	0.0111	0.1897
7/28/2022 16:26	0.342	0	0.189	0.105	0.18	0.007	0.011	0.0111	0.1892
7/28/2022 16:27	0.342	0	0.188	0.106	0.186	0.007	0.011	0.0111	0.189
7/28/2022 16:28	0.342	0	0.188	0.106	0.185	0.007	0.011	0.011	0.1887
7/28/2022 16:29	0.342	0	0.188	0.106	0.184	0.007	0.011	0.011	0.1882
7/28/2022 16:30	0.342	0	0.188	0.107	0.184	0.007	0.011	0.011	0.1881
7/28/2022 16:31	0.342	0	0.188	0.107	0.185	0.007	0.011	0.011	0.1879
7/28/2022 16:32	0.342	0	0.187	0.108	0.185	0.007	0.01	0.0109	0.1874
7/28/2022 16:33	0.342	0	0.187	0.108	0.185	0.007	0.011	0.0109	0.1871
7/28/2022 16:34	0.342	0	0.186	0.108	0.185	0.007	0.011	0.0109	0.1867
7/28/2022 16:35	0.342	0	0.186	0.109	0.187	0.007	0.01	0.0109	0.1865
7/28/2022 16:36	0.342	0	0.186	0.109	0.191	0.007	0.011	0.0109	0.1861
7/28/2022 16:37	0.342	0	0.186	0.11	0.187	0.007	0.011	0.0109	0.186
7/28/2022 16:38	0.342	0	0.185	0.11	0.183	0.007	0.011	0.0109	0.1857
7/28/2022 16:39	0.342	0	0.185	0.11	0.189	0.007	0.01	0.0108	0.1855
7/28/2022 16:40	0.342	0	0.185	0.111	0.181	0.007	0.01	0.0107	0.1851
7/28/2022 16:41	0.342	0	0.185	0.111	0.183	0.007	0.011	0.0107	0.1853
7/28/2022 16:42	0.342	0	0.185	0.111	0.184	0.007	0.013	0.0109	0.1852
7/28/2022 16:43	0.342	0	0.185	0.112	0.197	0.007	0.013	0.011	0.186
7/28/2022 16:44	0.342	0	0.185	0.112	0.189	0.007	0.012	0.0111	0.1863
7/28/2022 16:45	0.342	0	0.185	0.113	0.185	0.007	0.01	0.011	0.1864
7/28/2022 16:46	0.342	0	0.185	0.113	0.191	0.007	0.011	0.011	0.1868
7/28/2022 16:47	0.342	0	0.185	0.113	0.188	0.007	0.011	0.0111	0.187
7/28/2022 16:48	0.342	0	0.185	0.114	0.191	0.007	0.011	0.0111	0.1874
7/28/2022 16:49	0.342	0	0.185	0.114	0.182	0.007	0.011	0.0111	0.1872
7/28/2022 16:50	0.342	0	0.185	0.115	0.181	0.007	0.01	0.0111	0.1868
7/28/2022 16:51	0.342	0	0.185	0.115	0.186	0.007	0.011	0.0111	0.1865
7/28/2022 16:52	0.342	0	0.185	0.115	0.187	0.007	0.011	0.0111	0.1865
7/28/2022 16:53	0.342	0	0.185	0.116	0.184	0.007	0.011	0.0111	0.1865
7/28/2022 16:54	0.342	0	0.185	0.116	0.186	0.007	0.011	0.0111	0.1863
7/28/2022 16:55	0.342	0	0.185	0.116	0.177	0.007	0.011	0.0112	0.1861
7/28/2022 16:56	0.342	0	0.184	0.117	0.174	0.007	0.01	0.0111	0.1855
7/28/2022 16:57	0.342	0	0.184	0.117	0.182	0.007	0.01	0.0109	0.1853
7/28/2022 16:58	0.342	0	0.184	0.118	0.176	0.007	0.012	0.0109	0.1839
7/28/2022 16:59	0.342	0	0.183	0.118	0.179	0.007	0.011	0.0108	0.1833
7/28/2022 17:00	0.342	0	0.182	0.118	0.177	0.007	0.011	0.0109	0.1827
7/28/2022 17:01	0.342	0	0.182	0.119	0.169	0.007	0.011	0.0109	0.1813
7/28/2022 17:02	0.342	0	0.181	0.119	0.165	0.007	0.011	0.0109	0.1797
7/28/2022 17:03	0.342	0	0.18	0.119	0.173	0.008	0.012	0.0109	0.1785
7/28/2022 17:04	0.342	0	0.179	0.12	0.172	0.008	0.011	0.0109	0.1779
7/28/2022 17:05	0.342	0	0.178	0.12	0.169	0.008	0.011	0.011	0.1771
7/28/2022 17:06	0.342	0	0.177	0.121	0.167	0.008	0.011	0.011	0.1758
7/28/2022 17:07	0.342	0	0.176	0.121	0.165	0.008	0.011	0.011	0.1743
7/28/2022 17:08	0.342	0	0.175	0.121	0.17	0.008	0.012	0.0111	0.1734
7/28/2022 17:09	0.342	0	0.174	0.122	0.169	0.008	0.011	0.0111	0.1723
7/28/2022 17:10							0.012	0.0111	
7/28/2022 17:15									
7/28/2022 17:20									
7/28/2022 17:25									

Community Air Monitoring Plan - Upwind Aerosol and Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B436251 VOC (Peak) (ppm)	RAE RS232(A) 0B436251 VOC (Low) (ppm)	RAE RS232(A) 0B436251 VOC (STEL) (ppm)	RAE RS232(A) 0B436251 VOC (TWA) (ppm)	RAE RS232(A) 0B436251 VOC (ppm)	DustTrak RS232(C) 0B436251 Total TWA (mg/m³)	DustTrak RS232(C) 0B436251 Mass Conc. Total (mg/m³)	Mass Conc. Total mg/m³ AVG 15m (mg/m³)	VOC ppm AVG 15m (ppm)
7/29/2022 7:29									
7/29/2022 7:30							0		
7/29/2022 7:31							0	0	0
7/29/2022 7:32							0	0	0
7/29/2022 7:33							0	0	0
7/29/2022 7:34							0	0	0
7/29/2022 7:35							0	0	0
7/29/2022 7:36							0	0	0
7/29/2022 7:37							0	0.007	0.001
7/29/2022 7:38							0	0.044	0.0064
7/29/2022 7:39							0	0.034	0.0094
7/29/2022 7:40							0	0.032	0.0117
7/29/2022 7:41	115.48	0	3.659	0.114	0	0	0.038	0.0141	0
7/29/2022 7:42	115.48	0	3.661	0.114	0	0	0.038	0.0161	0
7/29/2022 7:43	115.48	0	3.661	0.114	0	0	0.029	0.0171	0
7/29/2022 7:44	115.48	0	3.661	0.114	0	0	0.029	0.0179	0
7/29/2022 7:45	115.48	0	3.661	0.114	0	0	0.029	0.0187	0
7/29/2022 7:46	115.48	0	3.661	0.114	0	0	0.029	0.0206	0
7/29/2022 7:47	115.48	0	3.661	0.114	0	0	0.03	0.0226	0
7/29/2022 7:48	115.48	0	3.661	0.114	0	0	0.028	0.0245	0
7/29/2022 7:49	115.48	0	3.661	0.114	0.001	0	0.028	0.0263	0.0001
7/29/2022 7:50	115.48	0	3.661	0.114	0	0	0.028	0.0282	0.0001
7/29/2022 7:51	115.48	0	3.661	0.114	0	0	0.029	0.0301	0.0001
7/29/2022 7:52	115.48	0	3.661	0.114	0	0	0.032	0.0318	0.0001
7/29/2022 7:53	115.48	0	3.661	0.114	0.001	0.001	0.031	0.0309	0.0002
7/29/2022 7:54	115.48	0	3.661	0.114	0.001	0.001	0.029	0.0306	0.0002
7/29/2022 7:55	115.48	0	3.661	0.114	0.002	0.001	0.028	0.0303	0.0003
7/29/2022 7:56	115.48	0	0.001	0.114	0	0.001	0.028	0.0297	0.0003
7/29/2022 7:57	115.48	0	0	0.114	0	0.001	0.028	0.029	0.0003
7/29/2022 7:58	115.48	0	0	0.114	0.003	0.001	0.028	0.0289	0.0005
7/29/2022 7:59	115.48	0	0	0.114	0.002	0.001	0.028	0.0289	0.0007
7/29/2022 8:00	115.48	0	0	0.114	0.002	0.001	0.028	0.0288	0.0008
7/29/2022 8:01	115.48	0	0	0.114	0.006	0.001	0.028	0.0287	0.0012
7/29/2022 8:02	115.48	0	0	0.114	0.007	0.001	0.027	0.0285	0.0017
7/29/2022 8:03	115.48	0	0.001	0.114	0.006	0.001	0.027	0.0285	0.0021
7/29/2022 8:04	115.48	0	0.001	0.114	0.004	0.001	0.028	0.0285	0.0023
7/29/2022 8:05	115.48	0	0.001	0.114	0.002	0.001	0.027	0.0284	0.0024
7/29/2022 8:06	115.48	0	0.001	0.114	0	0.001	0.027	0.0283	0.0024
7/29/2022 8:07	115.48	0	0.002	0.114	0.005	0.001	0.028	0.028	0.0027
7/29/2022 8:08	115.48	0	0.002	0.114	0.005	0.002	0.027	0.0277	0.003
7/29/2022 8:09	115.48	0	0.002	0.114	0	0.002	0.027	0.0276	0.0029
7/29/2022 8:10	115.48	0	0.002	0.114	0	0.002	0.027	0.0275	0.0028
7/29/2022 8:11	115.48	0	0.002	0.114	0.012	0.002	0.027	0.0275	0.0036
7/29/2022 8:12	115.48	0	0.002	0.114	0.01	0.002	0.027	0.0274	0.0043
7/29/2022 8:13	115.48	0	0.002	0.114	0.013	0.002	0.027	0.0273	0.0049
7/29/2022 8:14	115.48	0	0.003	0.114	0.012	0.002	0.027	0.0273	0.0056
7/29/2022 8:15	115.48	0	0.004	0.114	0.012	0.002	0.027	0.0272	0.0063
7/29/2022 8:16	115.48	0	0.004	0.114	0.01	0.002	0.027	0.0271	0.0065
7/29/2022 8:17	115.48	0	0.005	0.114	0.016	0.002	0.027	0.0271	0.0071
7/29/2022 8:18	115.48	0	0.006	0.114	0.019	0.002	0.026	0.0271	0.008
7/29/2022 8:19	115.48	0	0.007	0.114	0.022	0.002	0.026	0.0269	0.0092
7/29/2022 8:20	115.48	0	0.007	0.114	0.016	0.002	0.026	0.0269	0.0101
7/29/2022 8:21	115.48	0	0.008	0.114	0.012	0.002	0.026	0.0268	0.0109
7/29/2022 8:22	115.48	0	0.009	0.114	0.025	0.002	0.027	0.0267	0.0123
7/29/2022 8:23	115.48	0	0.01	0.114	0.033	0.003	0.027	0.0267	0.0141
7/29/2022 8:24	115.48	0	0.012	0.114	0.033	0.003	0.027	0.0267	0.0163
7/29/2022 8:25	115.48	0	0.015	0.115	0.038	0.003	0.026	0.0267	0.0189
7/29/2022 8:26	115.48	0	0.017	0.115	0.042	0.003	0.026	0.0266	0.0209
7/29/2022 8:27	115.48	0	0.019	0.115	0.042	0.003	0.025	0.0265	0.023
7/29/2022 8:28	115.48	0	0.021	0.115	0.039	0.003	0.025	0.0263	0.0247
7/29/2022 8:29	115.48	0	0.022	0.115	0.041	0.003	0.025	0.0262	0.0267
7/29/2022 8:30	115.48	0	0.027	0.115	0.047	0.003	0.025	0.0261	0.029
7/29/2022 8:31	115.48	0	0.029	0.115	0.045	0.003	0.025	0.0259	0.0313
7/29/2022 8:32	115.48	0	0.031	0.115	0.047	0.003	0.025	0.0258	0.0334
7/29/2022 8:33	115.48	0	0.033	0.115	0.048	0.003	0.024	0.0257	0.0353
7/29/2022 8:34	115.48	0	0.035	0.115	0.051	0.003	0.023	0.0255	0.0373
7/29/2022 8:35	115.48	0	0.035	0.115	0.059	0.003	0.024	0.0253	0.0401
7/29/2022 8:36	115.48	0	0.037	0.115	0.057	0.003	0.024	0.0252	0.0431
7/29/2022 8:37	115.48	0	0.04	0.116	0.062	0.003	0.023	0.0249	0.0456
7/29/2022 8:38	115.48	0	0.042	0.116	0.063	0.003	0.024	0.0247	0.0476

Community Air Monitoring Plan - Upwind Aerosol and Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B436251 VOC (Peak) (ppm)	RAE RS232(A) 0B436251 VOC (Low) (ppm)	RAE RS232(A) 0B436251 VOC (STEL) (ppm)	RAE RS232(A) 0B436251 VOC (TWA) (ppm)	RAE RS232(A) 0B436251 VOC (ppm)	DustTrak RS232(C) 0B436251 Total TWA (mg/m³)	DustTrak RS232(C) 0B436251 Mass Conc. Total (mg/m³)	Mass Conc. Total mg/m³ AVG 15m (mg/m³)	VOC ppm AVG 15m (ppm)
7/29/2022 8:39	115.48	0	0.045	0.116	0.065	0.003	0.023	0.0245	0.0497
7/29/2022 8:40	115.48	0	0.047	0.116	0.072	0.003	0.023	0.0243	0.052
7/29/2022 8:41	115.48	0	0.049	0.116	0.066	0.003	0.024	0.0241	0.0536
7/29/2022 8:42	115.48	0	0.051	0.116	0.079	0.003	0.023	0.024	0.0561
7/29/2022 8:43	115.48	0	0.053	0.116	0.078	0.003	0.023	0.0239	0.0587
7/29/2022 8:44	115.48	0	0.059	0.117	0.073	0.003	0.022	0.0237	0.0608
7/29/2022 8:45	115.48	0	0.061	0.117	0.079	0.003	0.022	0.0235	0.0629
7/29/2022 8:46	115.48	0	0.063	0.117	0.08	0.003	0.022	0.0233	0.0653
7/29/2022 8:47	115.48	0	0.066	0.117	0.083	0.003	0.022	0.0231	0.0677
7/29/2022 8:48	115.48	0	0.068	0.117	0.082	0.003	0.023	0.023	0.0699
7/29/2022 8:49	115.48	0	0.071	0.118	0.084	0.003	0.022	0.0229	0.0721
7/29/2022 8:50	115.48	0	0.071	0.118	0.089	0.003	0.021	0.0227	0.0741
7/29/2022 8:51	115.48	0	0.073	0.118	0.093	0.003	0.021	0.0225	0.0765
7/29/2022 8:52	115.48	0	0.075	0.118	0.094	0.003	0.021	0.0224	0.0787
7/29/2022 8:53	115.48	0	0.077	0.118	0.104	0.004	0.021	0.0222	0.0814
7/29/2022 8:54	115.48	0	0.08	0.118	0.099	0.004	0.02	0.022	0.0837
7/29/2022 8:55	115.48	0	0.082	0.119	0.094	0.004	0.021	0.0219	0.0851
7/29/2022 8:56	115.48	0	0.085	0.119	0.099	0.004	0.021	0.0217	0.0873
7/29/2022 8:57	115.48	0	0.087	0.119	0.106	0.004	0.021	0.0215	0.0891
7/29/2022 8:58	115.48	0	0.089	0.119	0.105	0.004	0.021	0.0214	0.0909
7/29/2022 8:59	115.48	0	0.091	0.12	0.101	0.004	0.021	0.0213	0.0928
7/29/2022 9:00	115.48	0	0.093	0.12	0.112	0.004	0.02	0.0212	0.095
7/29/2022 9:01	115.48	0	0.093	0.12	0.11	0.004	0.02	0.0211	0.097
7/29/2022 9:02	115.48	0	0.095	0.12	0.115	0.004	0.02	0.0209	0.0991
7/29/2022 9:03	115.48	0	0.097	0.12	0.114	0.004	0.019	0.0207	0.1013
7/29/2022 9:04	115.48	0	0.099	0.121	0.113	0.004	0.02	0.0205	0.1032
7/29/2022 9:05	115.48	0	0.1	0.121	0.117	0.004	0.02	0.0205	0.1051
7/29/2022 9:06	115.48	0	0.102	0.121	0.116	0.004	0.019	0.0203	0.1066
7/29/2022 9:07	115.48	0	0.104	0.121	0.116	0.004	0.019	0.0202	0.1081
7/29/2022 9:08	115.48	0	0.105	0.121	0.124	0.005	0.018	0.02	0.1094
7/29/2022 9:09	115.48	0	0.108	0.122	0.123	0.005	0.018	0.0199	0.111
7/29/2022 9:10	115.48	0	0.11	0.122	0.123	0.005	0.018	0.0197	0.1129
7/29/2022 9:11	115.48	0	0.112	0.122	0.124	0.005	0.018	0.0195	0.1146
7/29/2022 9:12	115.48	0	0.114	0.123	0.124	0.005	0.019	0.0193	0.1158
7/29/2022 9:13	115.48	0	0.115	0.123	0.124	0.005	0.018	0.0191	0.1171
7/29/2022 9:14	115.48	0	0.117	0.123	0.127	0.005	0.017	0.0189	0.1188
7/29/2022 9:15	115.48	0	0.117	0.123	0.129	0.005	0.017	0.0187	0.1199
7/29/2022 9:16	115.48	0	0.118	0.124	0.127	0.005	0.017	0.0185	0.1211
7/29/2022 9:17	115.48	0	0.12	0.124	0.129	0.005	0.018	0.0183	0.122
7/29/2022 9:18	115.48	0	0.121	0.124	0.134	0.005	0.018	0.0183	0.1233
7/29/2022 9:19	115.48	0	0.123	0.124	0.142	0.005	0.017	0.0181	0.1253
7/29/2022 9:20	115.48	0	0.124	0.125	0.138	0.005	0.017	0.0179	0.1267
7/29/2022 9:21	115.48	0	0.127	0.125	0.138	0.005	0.017	0.0177	0.1281
7/29/2022 9:22	115.48	0	0.128	0.125	0.133	0.005	0.017	0.0176	0.1293
7/29/2022 9:23	115.48	0	0.13	0.126	0.137	0.005	0.017	0.0175	0.1301
7/29/2022 9:24	115.48	0	0.131	0.126	0.14	0.005	0.017	0.0175	0.1313
7/29/2022 9:25	115.48	0	0.132	0.126	0.137	0.005	0.016	0.0173	0.1322
7/29/2022 9:26	115.48	0	0.133	0.127	0.137	0.005	0.017	0.0173	0.1331
7/29/2022 9:27	115.48	0	0.134	0.127	0.151	0.005	0.017	0.0171	0.1349
7/29/2022 9:28	115.48	0	0.136	0.127	0.147	0.005	0.017	0.0171	0.1364
7/29/2022 9:29	115.48	0	0.137	0.128	0.144	0.005	0.017	0.0171	0.1375
7/29/2022 9:30	115.48	0	0.138	0.128	0.153	0.005	0.018	0.0171	0.1391
7/29/2022 9:31	115.48	0	0.138	0.128	0.152	0.005	0.017	0.0171	0.1408
7/29/2022 9:32	115.48	0	0.14	0.128	0.151	0.005	0.017	0.0171	0.1423
7/29/2022 9:33	115.48	0	0.142	0.129	0.152	0.005	0.017	0.017	0.1435
7/29/2022 9:34	115.48	0	0.143	0.129	0.153	0.005	0.017	0.017	0.1442
7/29/2022 9:35	115.48	0	0.144	0.129	0.153	0.005	0.016	0.0169	0.1452
7/29/2022 9:36	115.48	0	0.145	0.13	0.156	0.005	0.016	0.0169	0.1464
7/29/2022 9:37	115.48	0	0.147	0.13	0.161	0.005	0.016	0.0168	0.1483
7/29/2022 9:38	115.48	0	0.148	0.13	0.152	0.006	0.016	0.0167	0.1493
7/29/2022 9:39	115.48	0	0.149	0.131	0.16	0.006	0.016	0.0167	0.1506
7/29/2022 9:40	115.48	0	0.151	0.131	0.169	0.006	0.017	0.0167	0.1527
7/29/2022 9:41	115.48	0	0.151	0.131	0.162	0.006	0.016	0.0167	0.1544
7/29/2022 9:42	115.48	0	0.153	0.131	0.167	0.006	0.015	0.0165	0.1555
7/29/2022 9:43	115.48	0	0.154	0.132	0.174	0.006	0.015	0.0164	0.1573
7/29/2022 9:44	115.48	0	0.157	0.132	0.173	0.006	0.015	0.0163	0.1592
7/29/2022 9:45	115.48	0	0.159	0.133	0.172	0.006	0.016	0.0161	0.1605
7/29/2022 9:46	115.48	0	0.16	0.133	0.171	0.006	0.015	0.016	0.1617
7/29/2022 9:47	115.48	0	0.162	0.134	0.176	0.006	0.014	0.0158	0.1634
7/29/2022 9:48	115.48	0	0.163	0.134	0.179	0.006	0.014	0.0156	0.1652

Community Air Monitoring Plan - Upwind Aerosol and Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B436251 VOC (Peak) (ppm)	RAE RS232(A) 0B436251 VOC (Low) (ppm)	RAE RS232(A) 0B436251 VOC (STEL) (ppm)	RAE RS232(A) 0B436251 VOC (TWA) (ppm)	RAE RS232(A) 0B436251 VOC (ppm)	DustTrak RS232(C) 0B436251 Total TWA (mg/m³)	DustTrak RS232(C) 0B436251 Mass Conc. Total (mg/m³)	Mass Conc. Total mg/m³ AVG 15m (mg/m³)	VOC ppm AVG 15m (ppm)
7/29/2022 9:49	115.48	0	0.165	0.134	0.182	0.006	0.014	0.0154	0.1671
7/29/2022 9:50	115.48	0	0.167	0.135	0.181	0.006	0.014	0.0153	0.169
7/29/2022 9:51	115.48	0	0.169	0.135	0.183	0.006	0.013	0.0151	0.1708
7/29/2022 9:52	115.48	0	0.171	0.135	0.188	0.006	0.013	0.0149	0.1726
7/29/2022 9:53	115.48	0	0.173	0.136	0.191	0.006	0.012	0.0146	0.1752
7/29/2022 9:54	115.48	0	0.175	0.136	0.192	0.006	0.012	0.0143	0.1773
7/29/2022 9:55	115.48	0	0.177	0.137	0.192	0.006	0.012	0.014	0.1789
7/29/2022 9:56	115.48	0	0.179	0.137	0.192	0.006	0.012	0.0137	0.1809
7/29/2022 9:57	115.48	0	0.181	0.137	0.195	0.006	0.012	0.0135	0.1827
7/29/2022 9:58	115.48	0	0.182	0.138	0.196	0.006	0.012	0.0133	0.1842
7/29/2022 9:59	115.48	0	0.184	0.138	0.199	0.006	0.011	0.0131	0.1859
7/29/2022 10:00	115.48	0	0.186	0.139	0.203	0.006	0.012	0.0128	0.188
7/29/2022 10:01	115.48	0	0.186	0.139	0.198	0.006	0.013	0.0127	0.1898
7/29/2022 10:02	115.48	0	0.188	0.139	0.199	0.006	0.014	0.0127	0.1913
7/29/2022 10:03	115.48	0	0.19	0.139	0.198	0.006	0.012	0.0125	0.1926
7/29/2022 10:04	115.48	0	0.192	0.14	0.203	0.006	0.014	0.0125	0.194
7/29/2022 10:05	115.48	0	0.193	0.14	0.197	0.006	0.012	0.0124	0.1951
7/29/2022 10:06	115.48	0	0.195	0.141	0.206	0.006	0.012	0.0123	0.1966
7/29/2022 10:07	115.48	0	0.197	0.142	0.203	0.006	0.011	0.0122	0.1976
7/29/2022 10:08	115.48	0	0.197	0.142	0.203	0.007	0.012	0.0122	0.1984
7/29/2022 10:09	115.48	0	0.198	0.142	0.203	0.007	0.014	0.0123	0.1991
7/29/2022 10:10	115.48	0	0.199	0.143	0.207	0.007	0.012	0.0123	0.2001
7/29/2022 10:11	115.48	0	0.2	0.143	0.207	0.007	0.014	0.0125	0.2011
7/29/2022 10:12	115.48	0	0.201	0.144	0.211	0.007	0.012	0.0125	0.2022
7/29/2022 10:13	115.48	0	0.201	0.144	0.207	0.007	0.012	0.0125	0.2029
7/29/2022 10:14	115.48	0	0.202	0.145	0.207	0.007	0.012	0.0125	0.2035
7/29/2022 10:15	115.48	0	0.202	0.145	0.206	0.007	0.012	0.0125	0.2037
7/29/2022 10:16	115.48	0	0.203	0.145	0.213	0.007	0.012	0.0125	0.2047
7/29/2022 10:17	115.48	0	0.204	0.146	0.214	0.007	0.012	0.0123	0.2057
7/29/2022 10:18	115.48	0	0.205	0.146	0.213	0.007	0.012	0.0123	0.2067
7/29/2022 10:19	115.48	0	0.205	0.147	0.221	0.007	0.012	0.0122	0.2079
7/29/2022 10:20	115.48	0	0.207	0.147	0.216	0.007	0.012	0.0122	0.2091
7/29/2022 10:21	115.48	0	0.208	0.148	0.218	0.007	0.012	0.0122	0.2099
7/29/2022 10:22	115.48	0	0.209	0.148	0.217	0.007	0.012	0.0123	0.2109
7/29/2022 10:23	115.48	0	0.21	0.149	0.211	0.007	0.012	0.0123	0.2114
7/29/2022 10:24	115.48	0	0.21	0.149	0.213	0.007	0.012	0.0121	0.2121
7/29/2022 10:25	115.48	0	0.211	0.149	0.214	0.007	0.012	0.0121	0.2125
7/29/2022 10:26	115.48	0	0.212	0.15	0.216	0.007	0.013	0.0121	0.2131
7/29/2022 10:27	115.48	0	0.213	0.15	0.213	0.007	0.013	0.0121	0.2133
7/29/2022 10:28	115.48	0	0.213	0.151	0.218	0.007	0.011	0.0121	0.214
7/29/2022 10:29	115.48	0	0.214	0.151	0.218	0.007	0.012	0.0121	0.2147
7/29/2022 10:30	115.48	0	0.215	0.152	0.217	0.007	0.011	0.012	0.2155
7/29/2022 10:31	115.48	0	0.215	0.152	0.223	0.007	0.011	0.0119	0.2161
7/29/2022 10:32	115.48	0	0.216	0.153	0.219	0.007	0.01	0.0118	0.2165
7/29/2022 10:33	115.48	0	0.216	0.153	0.222	0.007	0.011	0.0117	0.2171
7/29/2022 10:34	115.48	0	0.217	0.154	0.225	0.007	0.011	0.0117	0.2173
7/29/2022 10:35	115.48	0	0.217	0.154	0.223	0.007	0.011	0.0116	0.2178
7/29/2022 10:36	115.48	0	0.217	0.154	0.223	0.007	0.011	0.0115	0.2181
7/29/2022 10:37	115.48	0	0.218	0.155	0.224	0.007	0.011	0.0115	0.2186
7/29/2022 10:38	115.48	0	0.219	0.155	0.225	0.007	0.011	0.0114	0.2195
7/29/2022 10:39	115.48	0	0.219	0.156	0.228	0.007	0.01	0.0113	0.2205
7/29/2022 10:40	115.48	0	0.22	0.156	0.226	0.007	0.01	0.0111	0.2213
7/29/2022 10:41	115.48	0	0.221	0.157	0.225	0.007	0.009	0.0109	0.2219
7/29/2022 10:42	115.48	0	0.222	0.157	0.225	0.007	0.009	0.0106	0.2227
7/29/2022 10:43	115.48	0	0.222	0.158	0.231	0.007	0.009	0.0105	0.2236
7/29/2022 10:44	115.48	0	0.223	0.158	0.229	0.007	0.009	0.0103	0.2243
7/29/2022 10:45	115.48	0	0.224	0.159	0.228	0.007	0.008	0.0101	0.2251
7/29/2022 10:46	115.48	0	0.225	0.159	0.233	0.007	0.009	0.0099	0.2257
7/29/2022 10:47	115.48	0	0.226	0.16	0.232	0.007	0.008	0.0098	0.2266
7/29/2022 10:48	115.48	0	0.227	0.16	0.233	0.007	0.009	0.0097	0.2273
7/29/2022 10:49	115.48	0	0.227	0.161	0.233	0.007	0.01	0.0096	0.2279
7/29/2022 10:50	115.48	0	0.228	0.161	0.232	0.007	0.009	0.0095	0.2285
7/29/2022 10:51	115.48	0	0.228	0.162	0.234	0.007	0.01	0.0094	0.2292
7/29/2022 10:52	115.48	0	0.229	0.162	0.235	0.007	0.01	0.0093	0.2299
7/29/2022 10:53	115.48	0	0.23	0.163	0.234	0.008	0.009	0.0092	0.2305
7/29/2022 10:54	115.48	0	0.231	0.163	0.242	0.008	0.009	0.0091	0.2315
7/29/2022 10:55	115.48	0	0.231	0.164	0.241	0.008	0.009	0.0091	0.2325
7/29/2022 10:56	115.48	0	0.232	0.164	0.236	0.008	0.01	0.0091	0.2332
7/29/2022 10:57	115.48	0	0.233	0.165	0.238	0.008	0.009	0.0091	0.2341
7/29/2022 10:58	115.48	0	0.233	0.165	0.238	0.008	0.008	0.0091	0.2345

Community Air Monitoring Plan - Upwind Aerosol and Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B436251 VOC (Peak) (ppm)	RAE RS232(A) 0B436251 VOC (Low) (ppm)	RAE RS232(A) 0B436251 VOC (STEL) (ppm)	RAE RS232(A) 0B436251 VOC (TWA) (ppm)	RAE RS232(A) 0B436251 VOC (ppm)	DustTrak RS232(C) 0B436251 Total TWA (mg/m³)	DustTrak RS232(C) 0B436251 Mass Conc. Total (mg/m³)	Mass Conc. Total mg/m³ AVG 15m (mg/m³)	VOC ppm AVG 15m (ppm)
7/29/2022 10:59	115.48	0	0.234	0.166	0.234	0.008	0.009	0.0091	0.2349
7/29/2022 11:00	115.48	0	0.234	0.166	0.238	0.008	0.01	0.0092	0.2355
7/29/2022 11:01	115.48	0	0.234	0.166	0.234	0.008	0.011	0.0093	0.2356
7/29/2022 11:02	115.48	0	0.235	0.167	0.239	0.008	0.01	0.0095	0.2361
7/29/2022 11:03	115.48	0	0.235	0.167	0.236	0.008	0.009	0.0095	0.2363
7/29/2022 11:04	115.48	0	0.235	0.168	0.234	0.008	0.009	0.0094	0.2363
7/29/2022 11:05	115.48	0	0.236	0.168	0.237	0.008	0.009	0.0094	0.2367
7/29/2022 11:06	115.48	0	0.236	0.169	0.232	0.008	0.009	0.0093	0.2365
7/29/2022 11:07	115.48	0	0.236	0.17	0.233	0.008	0.009	0.0093	0.2364
7/29/2022 11:08	115.48	0	0.236	0.17	0.233	0.008	0.008	0.0092	0.2363
7/29/2022 11:09	115.48	0	0.236	0.17	0.24	0.008	0.009	0.0092	0.2362
7/29/2022 11:10	115.48	0	0.236	0.171	0.234	0.008	0.009	0.0092	0.2357
7/29/2022 11:11	115.48	0	0.236	0.171	0.239	0.008	0.008	0.0091	0.2359
7/29/2022 11:12	115.48	0	0.236	0.172	0.237	0.008	0.01	0.0091	0.2359
7/29/2022 11:13	115.48	0	0.236	0.172	0.237	0.008	0.008	0.0091	0.2358
7/29/2022 11:14	115.48	0	0.236	0.173	0.24	0.008	0.008	0.0091	0.2362
7/29/2022 11:15	115.48	0	0.236	0.173	0.236	0.008	0.008	0.0089	0.2361
7/29/2022 11:16	115.48	0	0.236	0.174	0.238	0.008	0.008	0.0087	0.2363
7/29/2022 11:17	115.48	0	0.236	0.174	0.242	0.008	0.008	0.0086	0.2365
7/29/2022 11:18	115.48	0	0.236	0.175	0.239	0.008	0.007	0.0085	0.2367
7/29/2022 11:19	115.48	0	0.236	0.175	0.241	0.008	0.008	0.0084	0.2372
7/29/2022 11:20	115.48	0	0.236	0.176	0.241	0.008	0.008	0.0083	0.2375
7/29/2022 11:21	115.48	0	0.236	0.176	0.234	0.008	0.008	0.0083	0.2376
7/29/2022 11:22	115.48	0	0.237	0.177	0.232	0.008	0.008	0.0082	0.2375
7/29/2022 11:23	115.48	0	0.237	0.177	0.24	0.008	0.008	0.0082	0.238
7/29/2022 11:24	115.48	0	0.237	0.178	0.237	0.008	0.01	0.0083	0.2378
7/29/2022 11:25	115.48	0	0.237	0.178	0.237	0.008	0.009	0.0083	0.238
7/29/2022 11:26	115.48	0	0.237	0.179	0.238	0.008	0.01	0.0084	0.2379
7/29/2022 11:27	115.48	0	0.237	0.179	0.24	0.008	0.012	0.0085	0.2381
7/29/2022 11:28	115.48	0	0.237	0.18	0.242	0.008	0.01	0.0087	0.2385
7/29/2022 11:29	115.48	0	0.237	0.18	0.239	0.008	0.01	0.0088	0.2384
7/29/2022 11:30	115.48	0	0.238	0.181	0.243	0.008	0.008	0.0088	0.2389
7/29/2022 11:31	115.48	0	0.238	0.181	0.238	0.008	0.009	0.0089	0.2389
7/29/2022 11:32	115.48	0	0.238	0.182	0.241	0.008	0.007	0.0088	0.2388
7/29/2022 11:33	115.48	0	0.238	0.182	0.241	0.008	0.008	0.0089	0.2389
7/29/2022 11:34	115.48	0	0.238	0.183	0.24	0.008	0.007	0.0088	0.2389
7/29/2022 11:35	115.48	0	0.238	0.183	0.241	0.008	0.007	0.0087	0.2389
7/29/2022 11:36	115.48	0	0.239	0.184	0.238	0.008	0.007	0.0087	0.2391
7/29/2022 11:37	115.48	0	0.239	0.184	0.24	0.008	0.007	0.0086	0.2397
7/29/2022 11:38	115.48	0	0.239	0.185	0.24	0.009	0.008	0.0086	0.2397
7/29/2022 11:39	115.48	0	0.239	0.185	0.239	0.009	0.007	0.0084	0.2398
7/29/2022 11:40	115.48	0	0.239	0.186	0.235	0.009	0.008	0.0083	0.2397
7/29/2022 11:41	115.48	0	0.238	0.186	0.239	0.009	0.008	0.0082	0.2397
7/29/2022 11:42	115.48	0	0.238	0.187	0.232	0.009	0.007	0.0079	0.2392
7/29/2022 11:43	115.48	0	0.237	0.187	0.228	0.009	0.008	0.0077	0.2383
7/29/2022 11:44	115.48	0	0.237	0.188	0.229	0.009	0.007	0.0075	0.2376
7/29/2022 11:45	115.48	0	0.236	0.188	0.234	0.009	0.007	0.0075	0.237
7/29/2022 11:46	115.48	0	0.236	0.189	0.229	0.009	0.007	0.0073	0.2364
7/29/2022 11:47	115.48	0	0.235	0.189	0.232	0.009	0.007	0.0073	0.2358
7/29/2022 11:48	115.48	0	0.235	0.19	0.231	0.009	0.007	0.0073	0.2351
7/29/2022 11:49	115.48	0	0.234	0.19	0.227	0.009	0.007	0.0073	0.2343
7/29/2022 11:50	115.48	0	0.233	0.191	0.231	0.009	0.007	0.0073	0.2336
7/29/2022 11:51	115.48	0	0.233	0.191	0.23	0.009	0.007	0.0073	0.2331
7/29/2022 11:52	115.48	0	0.232	0.192	0.232	0.009	0.007	0.0073	0.2325
7/29/2022 11:53	115.48	0	0.232	0.192	0.233	0.009	0.007	0.0072	0.2321
7/29/2022 11:54	115.48	0	0.231	0.193	0.233	0.009	0.007	0.0072	0.2317
7/29/2022 11:55	115.48	0	0.231	0.193	0.234	0.009	0.007	0.0071	0.2316
7/29/2022 11:56	115.48	0	0.231	0.194	0.237	0.009	0.007	0.0071	0.2315
7/29/2022 11:57	115.48	0	0.231	0.194	0.239	0.009	0.007	0.0071	0.2319
7/29/2022 11:58	115.48	0	0.232	0.195	0.234	0.009	0.007	0.007	0.2323
7/29/2022 11:59	115.48	0	0.232	0.195	0.239	0.009	0.007	0.007	0.233
7/29/2022 12:00	115.48	0	0.233	0.196	0.236	0.009	0.007	0.007	0.2331
7/29/2022 12:01	115.48	0	0.233	0.196	0.24	0.009	0.007	0.007	0.2339
7/29/2022 12:02	115.48	0	0.233	0.197	0.238	0.009	0.007	0.007	0.2343
7/29/2022 12:03	115.48	0	0.234	0.197	0.235	0.009	0.007	0.007	0.2345
7/29/2022 12:04	115.48	0	0.234	0.198	0.238	0.009	0.007	0.007	0.2353
7/29/2022 12:05	115.48	0	0.235	0.198	0.236	0.009	0.007	0.007	0.2356
7/29/2022 12:06	115.48	0	0.235	0.199	0.237	0.009	0.007	0.007	0.2361
7/29/2022 12:07	115.48	0	0.236	0.199	0.241	0.009	0.007	0.007	0.2367
7/29/2022 12:08	115.48	0	0.236	0.2	0.234	0.009	0.007	0.007	0.2367

Community Air Monitoring Plan - Upwind Aerosol and Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B436251 VOC (Peak) (ppm)	RAE RS232(A) 0B436251 VOC (Low) (ppm)	RAE RS232(A) 0B436251 VOC (STEL) (ppm)	RAE RS232(A) 0B436251 VOC (TWA) (ppm)	RAE RS232(A) 0B436251 VOC (ppm)	DustTrak RS232(C) 0B436251 Total TWA (mg/m³)	DustTrak RS232(C) 0B436251 Mass Conc. Total (mg/m³)	Mass Conc. Total mg/m³ AVG 15m (mg/m³)	VOC ppm AVG 15m (ppm)
7/29/2022 12:09	115.48	0	0.236	0.2	0.236	0.009	0.007	0.007	0.2369
7/29/2022 12:10	115.48	0	0.236	0.201	0.232	0.009	0.007	0.007	0.2368
7/29/2022 12:11	115.48	0	0.236	0.201	0.24	0.009	0.007	0.007	0.237
7/29/2022 12:12	115.48	0	0.237	0.202	0.238	0.009	0.007	0.007	0.2369
7/29/2022 12:13	115.48	0	0.237	0.202	0.24	0.009	0.007	0.007	0.2373
7/29/2022 12:14	115.48	0	0.237	0.203	0.239	0.009	0.007	0.007	0.2373
7/29/2022 12:15	115.48	0	0.237	0.203	0.238	0.009	0.006	0.0069	0.2375
7/29/2022 12:16	115.48	0	0.237	0.204	0.235	0.009	0.006	0.0069	0.2371
7/29/2022 12:17	115.48	0	0.237	0.204	0.239	0.009	0.007	0.0069	0.2372
7/29/2022 12:18	115.48	0	0.237	0.204	0.238	0.009	0.006	0.0068	0.2374
7/29/2022 12:19	115.48	0	0.237	0.205	0.239	0.009	0.008	0.0069	0.2375
7/29/2022 12:20	115.48	0	0.237	0.205	0.238	0.009	0.007	0.0069	0.2376
7/29/2022 12:21	115.48	0	0.237	0.206	0.236	0.009	0.006	0.0068	0.2375
7/29/2022 12:22	115.48	0	0.236	0.206	0.235	0.009	0.006	0.0067	0.2371
7/29/2022 12:23	115.48	0	0.236	0.207	0.238	0.009	0.006	0.0067	0.2374
7/29/2022 12:24	115.48	0	0.237	0.207	0.24	0.009	0.006	0.0066	0.2377
7/29/2022 12:25	115.48	0	0.237	0.208	0.237	0.009	0.006	0.0065	0.238
7/29/2022 12:26	115.48	0	0.237	0.208	0.236	0.009	0.006	0.0065	0.2377
7/29/2022 12:27	115.48	0	0.237	0.209	0.234	0.009	0.006	0.0064	0.2375
7/29/2022 12:28	115.48	0	0.236	0.209	0.239	0.009	0.006	0.0063	0.2374
7/29/2022 12:29	115.48	0	0.236	0.21	0.236	0.009	0.006	0.0063	0.2372
7/29/2022 12:30	115.48	0	0.236	0.21	0.236	0.009	0.007	0.0063	0.2371
7/29/2022 12:31	115.48	0	0.236	0.211	0.237	0.009	0.006	0.0063	0.2372
7/29/2022 12:32	115.48	0	0.236	0.211	0.239	0.009	0.006	0.0063	0.2372
7/29/2022 12:33	115.48	0	0.236	0.212	0.237	0.009	0.006	0.0063	0.2371
7/29/2022 12:34	115.48	0	0.236	0.212	0.234	0.009	0.006	0.0061	0.2368
7/29/2022 12:35	115.48	0	0.236	0.213	0.234	0.009	0.006	0.0061	0.2365
7/29/2022 12:36	115.48	0	0.236	0.213	0.236	0.009	0.006	0.0061	0.2365
7/29/2022 12:37	115.48	0	0.236	0.214	0.233	0.009	0.006	0.0061	0.2364
7/29/2022 12:38	115.48	0	0.236	0.214	0.238	0.009	0.006	0.0061	0.2364
7/29/2022 12:39	115.48	0	0.236	0.215	0.237	0.009	0.006	0.0061	0.2362
7/29/2022 12:40	115.48	0	0.236	0.215	0.237	0.009	0.006	0.0061	0.2362
7/29/2022 12:41	115.48	0	0.236	0.216	0.234	0.009	0.006	0.0061	0.2361
7/29/2022 12:42	115.48	0	0.236	0.216	0.24	0.009	0.006	0.0061	0.2365
7/29/2022 12:43	115.48	0	0.236	0.217	0.24	0.009	0.006	0.0061	0.2365
7/29/2022 12:44	115.48	0	0.236	0.217	0.24	0.009	0.006	0.0061	0.2368
7/29/2022 12:45	115.48	0	0.236	0.218	0.236	0.009	0.006	0.006	0.2368
7/29/2022 12:46	115.48	0	0.237	0.218	0.241	0.009	0.006	0.006	0.2371
7/29/2022 12:47	115.48	0	0.237	0.219	0.243	0.009	0.006	0.006	0.2373
7/29/2022 12:48	115.48	0	0.237	0.219	0.242	0.009	0.006	0.006	0.2377
7/29/2022 12:49	115.48	0	0.237	0.22	0.239	0.009	0.006	0.006	0.238
7/29/2022 12:50	115.48	0	0.237	0.22	0.244	0.009	0.006	0.006	0.2387
7/29/2022 12:51	115.48	0	0.238	0.221	0.24	0.009	0.006	0.006	0.2389
7/29/2022 12:52	115.48	0	0.238	0.221	0.241	0.009	0.006	0.006	0.2395
7/29/2022 12:53	115.48	0	0.238	0.222	0.235	0.01	0.006	0.006	0.2393
7/29/2022 12:54	115.48	0	0.238	0.222	0.233	0.01	0.005	0.0059	0.239
7/29/2022 12:55	115.48	0	0.238	0.223	0.234	0.01	0.006	0.0059	0.2388
7/29/2022 12:56	115.48	0	0.238	0.223	0.235	0.01	0.005	0.0059	0.2389
7/29/2022 12:57	115.48	0	0.238	0.224	0.238	0.01	0.005	0.0058	0.2387
7/29/2022 12:58	115.48	0	0.238	0.224	0.237	0.01	0.005	0.0057	0.2385
7/29/2022 12:59	115.48	0	0.238	0.225	0.236	0.01	0.006	0.0057	0.2383
7/29/2022 13:00	115.48	0	0.237	0.225	0.235	0.01	0.006	0.0057	0.2382
7/29/2022 13:01	115.48	0	0.237	0.226	0.232	0.01	0.006	0.0057	0.2376
7/29/2022 13:02	115.48	0	0.236	0.226	0.232	0.01	0.006	0.0057	0.2369
7/29/2022 13:03	115.48	0	0.236	0.227	0.233	0.01	0.006	0.0057	0.2363
7/29/2022 13:04	115.48	0	0.235	0.227	0.232	0.01	0.006	0.0057	0.2358
7/29/2022 13:05	115.48	0	0.235	0.228	0.236	0.01	0.005	0.0057	0.2353
7/29/2022 13:06	115.48	0	0.234	0.228	0.232	0.01	0.006	0.0057	0.2347
7/29/2022 13:07	115.48	0	0.234	0.229	0.224	0.01	0.006	0.0057	0.2336
7/29/2022 13:08	115.48	0	0.233	0.229	0.231	0.01	0.006	0.0057	0.2333
7/29/2022 13:09	115.48	0	0.233	0.23	0.233	0.01	0.006	0.0057	0.2333
7/29/2022 13:10	115.48	0	0.232	0.23	0.223	0.01	0.007	0.0058	0.2326
7/29/2022 13:11	115.48	0	0.231	0.231	0.224	0.01	0.005	0.0058	0.2319
7/29/2022 13:12	115.48	0	0.231	0.231	0.222	0.01	0.006	0.0059	0.2308
7/29/2022 13:13	115.48	0	0.23	0.231	0.224	0.01	0.006	0.0059	0.2299
7/29/2022 13:14	115.48	0	0.229	0.232	0.222	0.01	0.006	0.0059	0.229
7/29/2022 13:15	122.19	0	0.143	0.247	0.144				0.1444
7/29/2022 13:16	122.19	0	0.142	0.247	0.144				0.1442
7/29/2022 13:17	122.19	0	0.142	0.247	0.146				0.1441
7/29/2022 13:18	122.19	0	0.142	0.247	0.15				0.1442

Community Air Monitoring Plan - Upwind Aerosol and Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B436251 VOC (Peak) (ppm)	RAE RS232(A) 0B436251 VOC (Low) (ppm)	RAE RS232(A) 0B436251 VOC (STEL) (ppm)	RAE RS232(A) 0B436251 VOC (TWA) (ppm)	RAE RS232(A) 0B436251 VOC (ppm)	DustTrak RS232(C) 0B436251 Total TWA (mg/m³)	DustTrak RS232(C) 0B436251 Mass Conc. Total (mg/m³)	Mass Conc. Total mg/m³ AVG 15m (mg/m³)	VOC ppm AVG 15m (ppm)
7/29/2022 13:19	122.19	0	0.142	0.248	0.153				0.1447
7/29/2022 13:20	122.19	0	0.142	0.248	0.156				0.1453
7/29/2022 13:21	122.19	0	0.143	0.248	0.162				0.1462
7/29/2022 13:22	122.19	0	0.144	0.249	0.168				0.1475
7/29/2022 13:23	122.19	0	0.145	0.249	0.165				0.1487
7/29/2022 13:24	122.19	0	0.147	0.25	0.16				0.1499
7/29/2022 13:25	122.19	0	0.148	0.25	0.296				0.1604
7/29/2022 13:26	122.19	0	0.152	0.25	0.161				0.1613
7/29/2022 13:27	122.19	0	0.154	0.251	0.173				0.1638
7/29/2022 13:28	122.19	0	0.157	0.251	0.177				0.1663
7/29/2022 13:29	122.19	0	0.16	0.251	0.18				0.169
7/29/2022 13:30	122.19	0	0.163	0.252	0.182				0.1715
7/29/2022 13:31	122.19	0	0.165	0.252	0.187				0.1744
7/29/2022 13:32	122.19	0	0.168	0.252	0.192				0.1775
7/29/2022 13:33	122.19	0	0.171	0.253	0.197				0.1806
7/29/2022 13:34	122.19	0	0.174	0.253	0.197				0.1835
7/29/2022 13:35	122.19	0	0.178	0.254	0.199				0.1864
7/29/2022 13:36	122.19	0	0.18	0.254	0.203				0.1891
7/29/2022 13:37	122.19	0	0.183	0.255	0.202				0.1914
7/29/2022 13:38	122.19	0	0.185	0.255	0.203				0.1939
7/29/2022 13:39	122.19	0	0.187	0.255	0.207				0.1971
7/29/2022 13:40	122.19	0	0.19	0.256	0.206				0.1911
7/29/2022 13:41	122.19	0	0.19	0.256	0.208				0.1942
7/29/2022 13:42	122.19	0	0.193	0.257	0.201				0.1961
7/29/2022 13:43	122.19	0	0.195	0.257	0.202				0.1977
7/29/2022 13:44	122.19	0	0.197	0.257	0.204				0.1993
7/29/2022 13:45	122.19	0	0.199	0.258	0.207				0.201
7/29/2022 13:46	122.19	0	0.2	0.258	0.211				0.2026
7/29/2022 13:47	122.19	0	0.202	0.259	0.214				0.2041
7/29/2022 13:48	122.19	0	0.203	0.259	0.211				0.205
7/29/2022 13:49	122.19	0	0.204	0.26	0.208				0.2057
7/29/2022 13:50	122.19	0	0.205	0.26	0.2				0.2058
7/29/2022 13:51	122.19	0	0.205	0.261	0.201				0.2057
7/29/2022 13:52	122.19	0	0.206	0.261	0.202				0.2057
7/29/2022 13:53	122.19	0	0.206	0.261	0.201				0.2055
7/29/2022 13:54	122.19	0	0.206	0.262	0.202				0.2052
7/29/2022 13:55	122.19	0	0.206	0.262	0.201				0.2049
7/29/2022 13:56	122.19	0	0.206	0.263	0.199				0.2043
7/29/2022 13:57	122.19	0	0.205	0.263	0.201				0.2043
7/29/2022 13:58	122.19	0	0.205	0.263	0.2				0.2041
7/29/2022 13:59	122.19	0	0.205	0.264	0.203				0.2041
7/29/2022 14:00	122.19	0	0.204	0.264	0.2				0.2036
7/29/2022 14:01	122.19	0	0.204	0.265	0.199				0.2028
7/29/2022 14:02	122.19	0	0.203	0.265	0.204				0.2021
7/29/2022 14:03	122.19	0	0.202	0.266	0.198				0.2013
7/29/2022 14:04	122.19	0	0.202	0.266	0.204				0.201
7/29/2022 14:05	122.19	0	0.202	0.266	0.202				0.2011
7/29/2022 14:06	122.19	0	0.201	0.267	0.201				0.2011
7/29/2022 14:07	122.19	0	0.2	0.267	0.202				0.2011
7/29/2022 14:08	122.19	0	0.2	0.268	0.201				0.2011
7/29/2022 14:09	122.19	0	0.2	0.268	0.201				0.2011
7/29/2022 14:10	122.19	0	0.2	0.268	0.194				0.2006
7/29/2022 14:11	122.19	0	0.2	0.269	0.199				0.2006
7/29/2022 14:12	122.19	0	0.2	0.269	0.198				0.2004
7/29/2022 14:13	122.19	0	0.199	0.27	0.197				0.2002
7/29/2022 14:14	122.19	0	0.199	0.27	0.197				0.1998
7/29/2022 14:15	122.19	0	0.199	0.271	0.198				0.1997
7/29/2022 14:16	122.19	0	0.199	0.271	0.2				0.1997
7/29/2022 14:17	122.19	0	0.199	0.271	0.198				0.1993
7/29/2022 14:18	122.19	0	0.199	0.272	0.198				0.1993
7/29/2022 14:19	122.19	0	0.199	0.272	0.198				0.1989
7/29/2022 14:20	122.19	0	0.198	0.273	0.199				0.1987
7/29/2022 14:21	122.19	0	0.198	0.273	0.201				0.1987
7/29/2022 14:22	122.19	0	0.198	0.273	0.201				0.1987
7/29/2022 14:23	122.19	0	0.198	0.274	0.197				0.1984
7/29/2022 14:24	122.19	0	0.198	0.274	0.195				0.198
7/29/2022 14:25	122.19	0	0.197	0.275	0.189				0.1977
7/29/2022 14:26	122.19	0	0.197	0.275	0.197				0.1975
7/29/2022 14:27	122.19	0	0.197	0.275	0.194				0.1973
7/29/2022 14:28	122.19	0	0.197	0.276	0.194				0.1971

Community Air Monitoring Plan - Upwind Aerosol and Photoionization Detector Log

Device Timestamp (America/New_York)	RAE RS232(A) 0B436251 VOC (Peak) (ppm)	RAE RS232(A) 0B436251 VOC (Low) (ppm)	RAE RS232(A) 0B436251 VOC (STEL) (ppm)	RAE RS232(A) 0B436251 VOC (TWA) (ppm)	RAE RS232(A) 0B436251 VOC (ppm)	DustTrak RS232(C) 0B436251 Total TWA (mg/m³)	DustTrak RS232(C) 0B436251 Mass Conc. Total (mg/m³)	Mass Conc. Total mg/m³ AVG 15m (mg/m³)	VOC ppm AVG 15m (ppm)
7/29/2022 14:29	122.19	0	0.196	0.276	0.192				0.1967
7/29/2022 14:30	122.19	0	0.196	0.277	0.194				0.1965
7/29/2022 14:31	122.19	0	0.196	0.277	0.194				0.1961
7/29/2022 14:32	122.19	0	0.195	0.278	0.19				0.1955
7/29/2022 14:33	122.19	0	0.195	0.278	0.195				0.1953
7/29/2022 14:34	122.19	0	0.195	0.278	0.193				0.195
7/29/2022 14:35	122.19	0	0.194	0.279	0.194				0.1947
7/29/2022 14:36	122.19	0	0.194	0.279	0.19				0.1939
7/29/2022 14:37	122.19	0	0.193	0.28	0.19				0.1932
7/29/2022 14:38	122.19	0	0.193	0.28	0.187				0.1925
7/29/2022 14:39	122.19	0	0.192	0.28	0.186				0.1919
7/29/2022 14:40	122.19	0	0.192	0.281	0.185				0.1917
7/29/2022 14:41	122.19	0	0.191	0.281	0.187				0.191
7/29/2022 14:42	122.19	0	0.191	0.281	0.185				0.1904
7/29/2022 14:43	122.19	0	0.19	0.282	0.183				0.1897
7/29/2022 14:44	122.19	0	0.189	0.282	0.185				0.1892
7/29/2022 14:45	122.19	0	0.189	0.283	0.18				0.1883
7/29/2022 14:46	122.19	0	0.188	0.283	0.181				0.1874
7/29/2022 14:47	122.19	0	0.187	0.283	0.177				0.1865
7/29/2022 14:48	122.19	0	0.186	0.284	0.177				0.1853
7/29/2022 14:49	122.19	0	0.185	0.284	0.177				0.1843
7/29/2022 14:50	122.19	0	0.184	0.284	0.175				0.183
7/29/2022 14:51	122.19	0	0.183	0.285	0.177				0.1821
7/29/2022 14:52	122.19	0	0.181	0.285	0.176				0.1812
7/29/2022 14:53	122.19	0	0.18	0.286	0.177				0.1805
7/29/2022 14:54	122.19	0	0.18	0.286	0.176				0.1799
7/29/2022 14:55	122.19	0	0.179	0.286	0.171				0.1789
7/29/2022 14:56	122.19	0	0.178	0.287	0.173				0.178
7/29/2022 14:57	122.19	0	0.177	0.287	0.175				0.1773

Integral Engineering, P.C.
31 West 34th Street
Suite 7196
New York, NY 10001

telephone: 212.962.4303
www.integral-corp.com

PROGRESS REPORT

To:	Samantha Salotto, P.E.
From:	Jeffrey Marsh, P.E.
Subject:	Corning Refractories Plant Site Characterization
Reporting Period:	September 12 – September 16, 2022
Integral Project No.:	EF1017
NYSDEC Project No.:	851048

ACTIVITIES PERFORMED

Site characterization field work was performed September 12 through September 16, 2022, in accordance with the NYSDEC-approved P-Site Characterization Work Plan. A summary of the work completed is as follows:

- Sampling and logging of SS1 through SS4 was completed.
- Boring SB2 was completed to a refusal depth of 16.5 ft below ground surface (bgs). A second attempt was made but refusal was again encountered at 16.5 ft bgs. A 1-inch PVC stick up monitoring well was installed as the bottom portion of the boring was saturated. The depth to water was measured the day after the well was installed and the well was dry.
- Boring SB4 was completed to a refusal depth of 8 ft bgs. A second attempt was made but refusal was again encountered at 8 ft bgs.
- SB3 was installed using a 10 ft sand pre-pack and 5 ft bentonite pre-pack. MW3 was installed to a depth of 20 ft bgs. The depth to water was measured the day after the well was installed and the well was dry.
- MW1 and MW5 were developed.

WORK PLAN MODIFICATIONS

MW4 was not installed and no soil sample was collected from the interval 2 feet above the water table due to refusal at 8 ft bgs.

MW2 was installed but may not be a viable well due to refusal at 16.5 ft bgs.

AIR MONITORING RESULTS

Air monitoring was performed in accordance with the NYSDEC-approved Community Air Monitoring Plan (CAMP). Data was collected with a hand held DustTrak and PID unit collected manually in 30-minute increments. Data collected during this work are attached.

UPCOMING ACTIVITIES AND SCHEDULE

Groundwater sampling of MW1 and MW5 will be performed the week of October 3. Water levels will be recorded for MW2 and MW3 at this time.

Corning Refractories Plant
1 Front Street, Corning, NY 14830
NYSDEC Project # 851048
Air Monitoring Results

Date	Upwind				Downwind			
	Time	Type of Reading (Pre-Sample, During, Post-Sample)	Mass Concentration (mg/m^3) [a]	PID (ppm)	Time	Type of Reading (Pre-Sample, During, Post-Sample)	Mass Concentration (mg/m^3) [a]	PID (ppm)
9/12/2022	07:00 - 07:30				07:00 - 07:30			
	07:30 - 08:00				07:30 - 08:00			
	08:00 - 08:30				08:00 - 08:30			
	08:30 - 09:00				08:30 - 09:00			
	09:00 - 09:30				09:00 - 09:30			
	09:30 - 10:00				09:30 - 10:00			
	10:00 - 10:30				10:00 - 10:30			
	10:30 - 11:00				10:30 - 11:00			
	11:00 - 11:30				11:00 - 11:30			
	11:30 - 12:00				11:30 - 12:00			
	12:00 - 12:30				12:00 - 12:30			
	12:30 - 13:00				12:30 - 13:00			
	13:00 - 13:30				13:00 - 13:30			
	13:30 - 14:00				13:30 - 14:00			
	14:00 - 14:30				14:00 - 14:30			
	14:30 - 15:00				14:30 - 15:00			
	15:00 - 15:30	Pre-boring at SS1	0.012	0.2	15:00 - 15:30	Pre-boring at SS1	0.012	0.2
	15:30 - 16:00	During boring at SS1	0.013	0.2	15:30 - 16:00	During boring at SS1	0.011	0.2
	16:00 - 16:30	No intrusive work	0.012	0.2	16:00 - 16:30	No intrusive work	0.013	0.2
	16:30 - 17:00	Demobe	0.012	0.2	16:30 - 17:00	Demobe	0.013	0.2

Notes:

CAMP = Community Air Monitoring Plan

NYSDEC = New York State Department of Environmental Conservation

PID = photoionization detector

ppb = parts per billion

ppm = parts per million

VOC = volatile organic compound

[a] Alarms were as set as defined in the CAMP: at 100 ppb and 150 ppb for Particulates; and at 5 ppm (5,000 ppb), > 5 ppm (5,000 ppb) and <25 ppm (25,000 ppb), and >25 ppm (25,000 ppb) for VOCs. All alarm settings were in reference to the upwind air monitoring. Note that 1 ppb equals 1 mg/m^3.

Corning Refractories Plant
1 Front Street, Corning, NY 14830
NYSDEC Project # 851048
Air Monitoring Results

Date	Upwind				Downwind			
	Time	Type of Reading (Pre-Sample, During, Post-Sample)	Mass Concentration (mg/m^3) [a]	PID (ppm)	Time	Type of Reading (Pre-Sample, During, Post-Sample)	Mass Concentration (mg/m^3) [a]	PID (ppm)
9/13/2022	07:00 - 07:30				07:00 - 07:30			
	07:30 - 08:00				07:30 - 08:00			
	08:00 - 08:30				08:00 - 08:30			
	08:30 - 09:00	Pre-boring at SS4	0.013	0.0	08:30 - 09:00	Pre-boring at SS4	0.013	0.0
	09:00 - 09:30	During boring at SS4	0.014	0.0	09:00 - 09:30	During boring at SS4	0.014	0.0
	09:30 - 10:00	No intrusive work	0.013	0.0	09:30 - 10:00	No intrusive work	0.012	0.0
	10:00 - 10:30	No intrusive work	0.011	0.0	10:00 - 10:30	No intrusive work	0.011	0.1
	10:30 - 11:00	During boring at SS2	0.012	0.1	10:30 - 11:00	During boring at SS2	0.012	0.1
	11:00 - 11:30	Mobe to MW3	0.012	0.1	11:00 - 11:30	Mobe to MW3	0.012	0.1
	11:30 - 12:00	No intrusive work	0.012	0.1	11:30 - 12:00	No intrusive work	0.012	0.1
	12:00 - 12:30	No intrusive work	0.013	0.0	12:00 - 12:30	No intrusive work	0.011	0.0
	12:30 - 13:00	During installation of MW3	0.012	0.1	12:30 - 13:00	During installation of MW3	0.012	0.1
	13:00 - 13:30	No intrusive work	0.012	0.1	13:00 - 13:30	No intrusive work	0.012	0.1
	13:30 - 14:00	No intrusive work, mobe to setup to develop MW5	0.010	0.1	13:30 - 14:00	No intrusive work, mobe to setup to develop MW5	0.011	0.1
	14:00 - 14:30				14:00 - 14:30			
	14:30 - 15:00				14:30 - 15:00			
	15:00 - 15:30				15:00 - 15:30			
	15:30 - 16:00				15:30 - 16:00			
	16:00 - 16:30				16:00 - 16:30			
	16:30 - 17:00				16:30 - 17:00			

Notes:

CAMP = Community Air Monitoring Plan

NYSDEC = New York State Department of Environmental Conservation

PID = photoionization detector

ppb = parts per billion

ppm = parts per million

VOC = volatile organic compound

[a] Alarms were as set as defined in the CAMP: at 100 ppb and 150 ppb for Particulates; and at 5 ppm (5,000 ppb), > 5 ppm (5,000 ppb) and <25 ppm (25,000 ppb), and >25 ppm (25,000 ppb) for VOCs. All alarm settings were in reference to the upwind air monitoring. Note that 1 ppb equals 1 mg/m^3.

Corning Refractories Plant
1 Front Street, Corning, NY 14830
NYSDEC Project # 851048
Air Monitoring Results

Date	Upwind				Downwind			
	Time	Type of Reading (Pre-Sample, During, Post-Sample)	Mass Concentration (mg/m^3) [a]	PID (ppm)	Time	Type of Reading (Pre-Sample, During, Post-Sample)	Mass Concentration (mg/m^3) [a]	PID (ppm)
9/14/2022	07:00 - 07:30				07:00 - 07:30			
	07:30 - 08:00				07:30 - 08:00			
	08:00 - 08:30				08:00 - 08:30			
	08:30 - 09:00				08:30 - 09:00			
	09:00 - 09:30				09:00 - 09:30			
	09:30 - 10:00				09:30 - 10:00			
	10:00 - 10:30				10:00 - 10:30			
	10:30 - 11:00				10:30 - 11:00			
	11:00 - 11:30				11:00 - 11:30			
	11:30 - 12:00				11:30 - 12:00			
	12:00 - 12:30				12:00 - 12:30			
	12:30 - 13:00				12:30 - 13:00			
	13:00 - 13:30				13:00 - 13:30			
	13:30 - 14:00				13:30 - 14:00			
	14:00 - 14:30				14:00 - 14:30			
	14:30 - 15:00	Pre-boring at SB2	0.032	0.3	14:30 - 15:00	Pre-boring at SB2	0.041	0.7
	15:00 - 15:30	During boring at SB2	0.028	0.3	15:00 - 15:30	During boring at SB2	0.039	0.8
	15:30 - 16:00	No intrusive work	0.046	0.3	15:30 - 16:00	No intrusive work	0.068	1.8
	16:00 - 16:30	During boring at SB2	0.025	0.5	16:00 - 16:30	During boring at SB2	0.036	0.6
	16:30 - 17:00	No intrusive work, install MW2	0.048	0.4	16:30 - 17:00	No intrusive work, install MW2	0.031	0.4
	17:00 - 17:30	During second attempt at SB2	0.058	0.4	17:00 - 17:30	During second attempt at SB2	0.039	0.4
	17:30 - 18:00	During second attempt at SB2	0.047	1.7	17:30 - 18:00	During second attempt at SB2	0.078	1.7
	18:00 - 18:30	No intrusive work, demobe	0.023	0.5	18:00 - 18:30	No intrusive work, demobe	0.025	0.4

Notes:

CAMP = Community Air Monitoring Plan

NYSDEC = New York State Department of Environmental Conservation

PID = photoionization detector

ppb = parts per billion

ppm = parts per million

VOC = volatile organic compound

[a] Alarms were as set as defined in the CAMP: at 100 ppb and 150 ppb for Particulates; and at 5 ppm (5,000 ppb), > 5 ppm (5,000 ppb) and <25 ppm (25,000 ppb), and >25 ppm (25,000 ppb) for VOCs. All alarm settings were in reference to the upwind air monitoring. Note that 1 ppb equals 1 mg/m^3.

Corning Refractories Plant
1 Front Street, Corning, NY 14830
NYSDEC Project # 851048
Air Monitoring Results

Date	Upwind				Downwind			
	Time	Type of Reading (Pre-Sample, During, Post-Sample)	Mass Concentration (mg/m^3) [a]	PID (ppm)	Time	Type of Reading (Pre-Sample, During, Post-Sample)	Mass Concentration (mg/m^3) [a]	PID (ppm)
9/15/2022	07:00 - 07:30				07:00 - 07:30			
	07:30 - 08:00				07:30 - 08:00			
	08:00 - 08:30	Pre-boring at SB4	0.056	0.2	08:00 - 08:30	Pre-boring at SB4	0.068	0.2
	08:30 - 09:00	No intrusive work	0.086	0.2	08:30 - 09:00	No intrusive work	0.078	0.2
	09:00 - 09:30	During second boring at SB4	0.014	0.7	09:00 - 09:30	During second boring at SB4	0.037	1.2
	09:30 - 10:00	No intrusive work	0.027	1.5	09:30 - 10:00	No intrusive work	0.014	0.8
	10:00 - 10:30	No intrusive work, complete boring at SB4	0.048	2.2	10:00 - 10:30	No intrusive work, complete boring at SB4	0.035	1.1
	10:30 - 11:00				10:30 - 11:00			
	11:00 - 11:30				11:00 - 11:30			
	11:30 - 12:00				11:30 - 12:00			
	12:00 - 12:30				12:00 - 12:30			
	12:30 - 13:00				12:30 - 13:00			
	13:00 - 13:30				13:00 - 13:30			
	13:30 - 14:00				13:30 - 14:00			
	14:00 - 14:30				14:00 - 14:30			
	14:30 - 15:00				14:30 - 15:00			
	15:00 - 15:30				15:00 - 15:30			
	15:30 - 16:00				15:30 - 16:00			
	16:00 - 16:30				16:00 - 16:30			
	16:30 - 17:00				16:30 - 17:00			

Notes:

CAMP = Community Air Monitoring Plan

NYSDEC = New York State Department of Environmental Conservation

PID = photoionization detector

ppb = parts per billion

ppm = parts per million

VOC = volatile organic compound

[a] Alarms were as set as defined in the CAMP: at 100 ppb and 150 ppb for Particulates; and at 5 ppm (5,000 ppb), > 5 ppm (5,000 ppb) and <25 ppm (25,000 ppb), and >25 ppm (25,000 ppb) for VOCs. All alarm settings were in reference to the upwind air monitoring. Note that 1 ppb equals 1 mg/m^3.

Appendix C

Disposal Documentation

SHIPPING DOCUMENT

IN THE EVENT OF AN EMERGENCY CALL **24-Hr-Number** 1-800-468-1760 (SAFETY-KLEEN SYSTEMS, INC.)
REFERENCE NBR.
91430531 - 2301387849

CUSTOMER / GENERATOR: C0116053 Corning
1 Front Street
Corning NY 14831-0000
PHONE 607-438-7724

GENERATOR USEPA ID: NYD000824375
GENERATOR STATE ID:

MANIFEST#: FORM CD : NR SHIP# 239559030

TRANSPORTER 1 TXR000081205 Safety Kleen
Address Transporter1: SAFETY-KLEEN SYSTEMS INC.
1722 COOPER CREEK RD
Ste 100
DENTON, TX
US PostalCode: 76208
Phone: 800-669-5840
TRANSPORTER 2

US DOT DESCRIPTION (INCLUDING PROPER SHIPPING NAME, HAZARD CLASS, AND ID)
NONE, NON D.O.T. REGULATED, N/A, (IDW
SOLIDS)

FEDERAL WASTE CODES NONE
STATE WASTE CODES
TOTAL CONT 3 TYPE: DM WT/VOL P SKDOT 9666265
CNT# 230314136666 SZ: 55 GAL/205 L CONTAINERS QTY: 400 PROF# CH2510112
CNT# 230314136667 SZ: 55 GAL/205 L CONTAINERS QTY: 400 PROF# CH2510112
CNT# 230314136668 SZ: 55 GAL/205 L CONTAINERS QTY: 400 PROF# CH2510112

DESIGNATED FACILITY NAME/ADDRESS:
SPRING GROVE RESOURCE RECOVERY INC
4879 SPRING GROVE AVE
CINCINNATI
OH 45232
TSD PHONE: 513-681-6242

FACILITY USEPA ID NO OHD000816629
FACILITY STATE ID NO 9390610002

GENERATOR STATUS 2200+ lbs/month

Katelyn Zatwarnicki As Agent For Corning Incorporated

CUSTOMER / GENERATOR: corning

TRANSPORTER: Makin,Douglas Scott

TRANSPORTER 2:

SHIPPING DOCUMENT

IN THE EVENT OF AN EMERGENCY CALL **24-Hr-Number** 1-800-468-1760 (SAFETY-KLEEN SYSTEMS, INC.)
REFERENCE NBR.
91430531 - 2301387849

CUSTOMER / GENERATOR: CO116053 Corning
1 Front Street
Corning NY 14831-0000
PHONE 607-438-7724
GENERATOR USEPA ID: NYD000824375
GENERATOR STATE ID:

MANIFEST#: FORM CD : NR SHIP# 239559394

TRANSPORTER 1 TXR000081205 Safety Kleen
Address Transporter1: SAFETY-KLEEN SYSTEMS INC.
1722 COOPER CREEK RD
Ste 100
DENTON, TX
US PostalCode: 76208
Phone: 800-669-5840
TRANSPORTER 2

US DOT DESCRIPTION (INCLUDING PROPER SHIPPING NAME, HAZARD CLASS, AND ID)
NONE, NON D.O.T. REGULATED, N/A

FEDERAL WASTE CODES NONE
STATE WASTE CODES
TOTAL CONT 2 TYPE: DM WT/VOL P SKDOT 9665183
CNT# 230314136658 SZ: 55 GAL/205 L CONTAINERS QTY: 150 PROF# CH2510089
CNT# 230314136659 SZ: 55 GAL/205 L CONTAINERS QTY: 150 PROF# CH2510089

DESIGNATED FACILITY NAME/ADDRESS:
SPRING GROVE RESOURCE RECOVERY INC
4879 SPRING GROVE AVE
CINCINNATI
OH 45232
TSD PHONE: 513-681-6242

FACILITY USEPA ID NO OHD000816629
FACILITY STATE ID NO 9390610002

GENERATOR STATUS 2200+ lbs/month

Katelyn Zatwarnicki As Agent For Corning Incorporated

CUSTOMER / GENERATOR: corning

TRANSPORTER: Makin,Douglas Scott

TRANSPORTER 2:

SHIPPING DOCUMENT

IN THE EVENT OF AN EMERGENCY CALL **24-Hr-Number** 1-800-468-1760 (SAFETY-KLEEN SYSTEMS, INC.)

REFERENCE NBR.
91430531 - 2301387849

CUSTOMER / GENERATOR: CO116053 Corning
1 Front Street
Corning NY 14831-0000
PHONE 607-438-7724
GENERATOR USEPA ID: NYD000824375
GENERATOR STATE ID:

MANIFEST#: FORM CD : NR SHIP# 239559039

TRANSPORTER 1 TXR000081205 Safety Kleen
Address Transporter1: SAFETY-KLEEN SYSTEMS INC.
1722 COOPER CREEK RD
Ste 100
DENTON, TX
US PostalCode: 76208
Phone: 800-669-5840
TRANSPORTER 2

US DOT DESCRIPTION (INCLUDING PROPER SHIPPING NAME, HAZARD CLASS, AND ID)
NONE, NON D.O.T. REGULATED, N/A

FEDERAL WASTE CODES NONE
STATE WASTE CODES
TOTAL CONT 10 TYPE: DM WT/VOL P SKDOT 9664784

CNT# 230314136671	SZ: 55 GAL/205 L CONTAINERS	QTY: 400	PROF# CH2510175
CNT# 230314136672	SZ: 55 GAL/205 L CONTAINERS	QTY: 400	PROF# CH2510175
CNT# 230314136673	SZ: 55 GAL/205 L CONTAINERS	QTY: 400	PROF# CH2510175
CNT# 230314136674	SZ: 55 GAL/205 L CONTAINERS	QTY: 400	PROF# CH2510175
CNT# 230314136675	SZ: 55 GAL/205 L CONTAINERS	QTY: 400	PROF# CH2510175
CNT# 230314136676	SZ: 55 GAL/205 L CONTAINERS	QTY: 400	PROF# CH2510175
CNT# 230314136677	SZ: 55 GAL/205 L CONTAINERS	QTY: 400	PROF# CH2510175
CNT# 230321273844	SZ: 55 GAL/205 L CONTAINERS	QTY: 400	PROF# CH2510175
CNT# 230314136679	SZ: 55 GAL/205 L CONTAINERS	QTY: 400	PROF# CH2510175
CNT# 230314136680	SZ: 55 GAL/205 L CONTAINERS	QTY: 400	PROF# CH2510175

DESIGNATED FACILITY NAME/ADDRESS:
SPRING GROVE RESOURCE RECOVERY INC
4879 SPRING GROVE AVE
CINCINNATI
OH 45232
TSD PHONE: 513-681-6242

FACILITY USEPA ID NO OHD000816629
FACILITY STATE ID NO 9390610002

GENERATOR STATUS 2200+ lbs/month

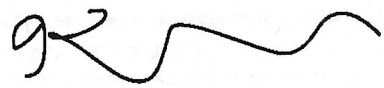
Kaitlyn Zatwarnicki As Agent For Corning Incorporated

CUSTOMER / GENERATOR: corning

TRANSPORTER: Makin,Douglas Scott

Katelyn Zatwarnicki As Agent for Corning Incorporated

CUSTOMER / GENERATOR: katelyn



TRANSPORTER: Vickers II,Kevin M

CSG SK – ASV – BOX – 24 Vickers II,Kevin M 12 – 08 – 2022 12:25

SHIPPING DOCUMENT

IN THE EVENT OF AN EMERGENCY CALL **24–Hr–Number** 1 – 800 – 468 – 1760 (SAFETY–KLEEN SYSTEMS, INC.)

REFERENCE NBR.

90691946 –

CUSTOMER / GENERATOR: C0116053 Corning Incorporated
1 Front Street
Corning NY 14831 – 0000
PHONE: 607 – 438 – 7724

GENERATOR USEPAID: NYD000824375
GENERATOR STATE ID:
MANIFEST#: FORM CD : NR SHIP# 238747134

TRANSPORTER 1 TXR000081205 Safety Kleen
Address Transporter1: SAFETY – KLEEN SYSTEMS INC.
1722 COOPER CREEK RD
Ste 100
DENTON , TX,
US PostalCode: 76208
Phone: 800 – 669 – 5840
TRANSPORTER 2

US DOT DESCRIPTION (INCLUDING PROPER SHIPPING NAME, HAZARD CLASS, AND ID)
NONE, NON D.O.T. REGULATED, N/A
FEDERAL WASTE CODES NONE
STATE WASTE CODES
TOTAL CONT 3 TYPE: DM WT/VOL P SKDOT 9665183
CNT# 221130080965 SZ: 55 GAL/205 L CONTAINERS QTY: 150 PROF# CH2510089
CNT# 221130080967 SZ: 55 GAL/205 L CONTAINERS QTY: 150 PROF# CH2510089
CNT# 221130080966 SZ: 55 GAL/205 L CONTAINERS QTY: 150 PROF# CH2510089
NONE, NON D.O.T. REGULATED, N/A, (IDW
SOLIDS)
FEDERAL WASTE CODES NONE
STATE WASTE CODES
TOTAL CONT 6 TYPE: DM WT/VOL P SKDOT 9666265
CNT# 221130080982 SZ: 55 GAL/205 L CONTAINERS QTY: 450 PROF# CH2510112
CNT# 221130080983 SZ: 55 GAL/205 L CONTAINERS QTY: 450 PROF# CH2510112
CNT# 221130080980 SZ: 55 GAL/205 L CONTAINERS QTY: 450 PROF# CH2510112
CNT# 221130080981 SZ: 55 GAL/205 L CONTAINERS QTY: 450 PROF# CH2510112
CNT# 221130080985 SZ: 55 GAL/205 L CONTAINERS QTY: 450 PROF# CH2510112
CNT# 221130080984 SZ: 55 GAL/205 L CONTAINERS QTY: 450 PROF# CH2510112
NONE, NON D.O.T. REGULATED, N/A
FEDERAL WASTE CODES NONE
STATE WASTE CODES
TOTAL CONT 5 TYPE: DM WT/VOL P SKDOT 9665184
CNT# 221130081022 SZ: 55 GAL/205 L CONTAINERS QTY: 600 PROF# CH2510342
CNT# 221130081020 SZ: 55 GAL/205 L CONTAINERS QTY: 600 PROF# CH2510342
CNT# 221130081021 SZ: 55 GAL/205 L CONTAINERS QTY: 600 PROF# CH2510342
CNT# 221130081018 SZ: 55 GAL/205 L CONTAINERS QTY: 600 PROF# CH2510342
CNT# 221130081019 SZ: 55 GAL/205 L CONTAINERS QTY: 600 PROF# CH2510342
NONE, NON D.O.T. REGULATED, N/A
FEDERAL WASTE CODES NONE
STATE WASTE CODES
TOTAL CONT 1 TYPE: DM WT/VOL P SKDOT 9664784
CNT# 221130081014 SZ: 55 GAL/205 L CONTAINERS QTY: 300 PROF# CH2510175

DESIGNATED FACILITY NAME/ADDRESS:

US DOT DESCRIPTION (INCLUDING PROPER SHIPPING NAME, HAZARD CLASS, AND ID)
NONE, NON D.O.T. REGULATED, N/A
FEDERAL WASTE CODES NONE
STATE WASTE CODES
TOTAL CONT 3 TYPE: DM WT/VOL P SKDOT 9665183
CNT# 221130080965 SZ: 55 GAL/205 L CONTAINERS QTY: 150 PROF# CH2510089
CNT# 221130080967 SZ: 55 GAL/205 L CONTAINERS QTY: 150 PROF# CH2510089
CNT# 221130080966 SZ: 55 GAL/205 L CONTAINERS QTY: 150 PROF# CH2510089
NONE, NON D.O.T. REGULATED, N/A (IDW
SOLIDS)
FEDERAL WASTE CODES NONE
STATE WASTE CODES
TOTAL CONT 6 TYPE: DM WT/VOL P SKDOT 9666265
CNT# 221130080982 SZ: 55 GAL/205 L CONTAINERS QTY: 450 PROF# CH2510112
CNT# 221130080983 SZ: 55 GAL/205 L CONTAINERS QTY: 450 PROF# CH2510112
CNT# 221130080980 SZ: 55 GAL/205 L CONTAINERS QTY: 450 PROF# CH2510112
CNT# 221130080981 SZ: 55 GAL/205 L CONTAINERS QTY: 450 PROF# CH2510112
CNT# 221130080985 SZ: 55 GAL/205 L CONTAINERS QTY: 450 PROF# CH2510112
CNT# 221130080984 SZ: 55 GAL/205 L CONTAINERS QTY: 450 PROF# CH2510112
NONE, NON D.O.T. REGULATED, N/A
FEDERAL WASTE CODES NONE
STATE WASTE CODES
TOTAL CONT 5 TYPE: DM WT/VOL P SKDOT 9665184
CNT# 221130081022 SZ: 55 GAL/205 L CONTAINERS QTY: 600 PROF# CH2510342
CNT# 221130081020 SZ: 55 GAL/205 L CONTAINERS QTY: 600 PROF# CH2510342
CNT# 221130081021 SZ: 55 GAL/205 L CONTAINERS QTY: 600 PROF# CH2510342
CNT# 221130081018 SZ: 55 GAL/205 L CONTAINERS QTY: 600 PROF# CH2510342
CNT# 221130081019 SZ: 55 GAL/205 L CONTAINERS QTY: 600 PROF# CH2510342
NONE, NON D.O.T. REGULATED, N/A
FEDERAL WASTE CODES NONE
STATE WASTE CODES
TOTAL CONT 1 TYPE: DM WT/VOL P SKDOT 9664784
CNT# 221130081014 SZ: 55 GAL/205 L CONTAINERS QTY: 300 PROF# CH2510175

DESIGNATED FACILITY NAME/ADDRESS:
SPRING GROVE RESOURCE RECOVERY INC
4879 SPRING GROVE AVE
CINCINNATI
OH 45232
TSD PHONE: 513 - 681 - 6242

FACILITY USEPAID NO OHD000816629
FACILITY STATE ID NO 9390610002

GENERATOR STATUS 2200 + lbs/month

Katelyn Zatwarnicki As Agent for Corning Incorporated

CUSTOMER / GENERATOR: katelyn

TRANSPORTER: Vickers II,Kevin M

TRANSPORTER 2:

LAST PAGE

Appendix D

Photo Log

P-Site Characterization Report
Corning Refractories Plant
Site Photographs

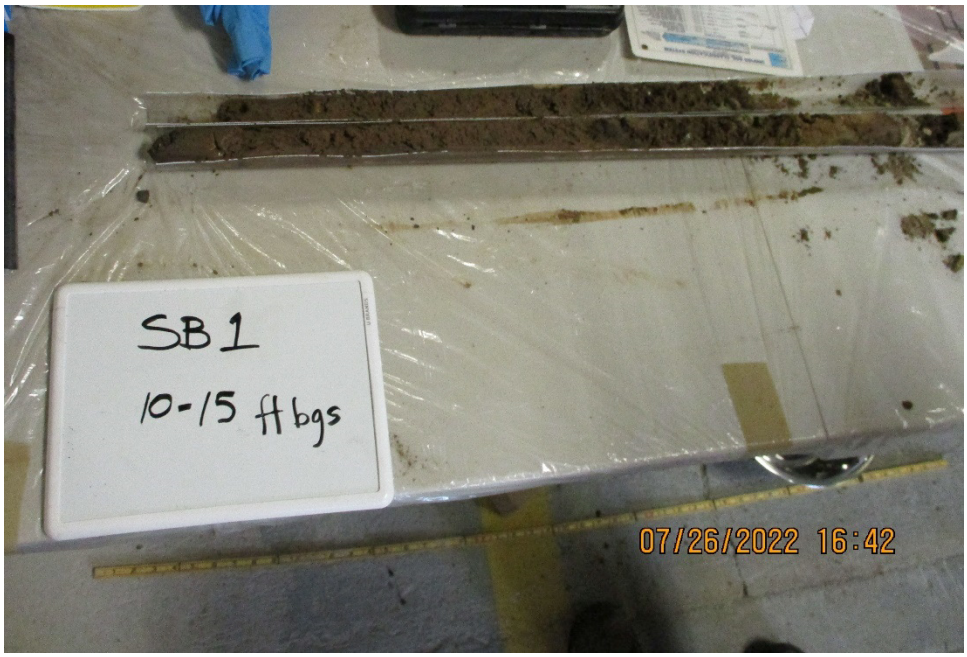


Photograph 1. SB1 0–5 ft bgs (July 26, 2022)



Photograph 2. SB1 5–10 ft bgs (July 26, 2022)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs



Photograph 3. SB1 10–15 ft bgs (July 26, 2022)



Photograph 4. SB1 10–15 ft bgs (July 26, 2022)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs



Photograph 5. SB1 15–20 ft bgs (July 26, 2022)



Photograph 6. SB1 15–20 ft bgs (July 26, 2022)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs

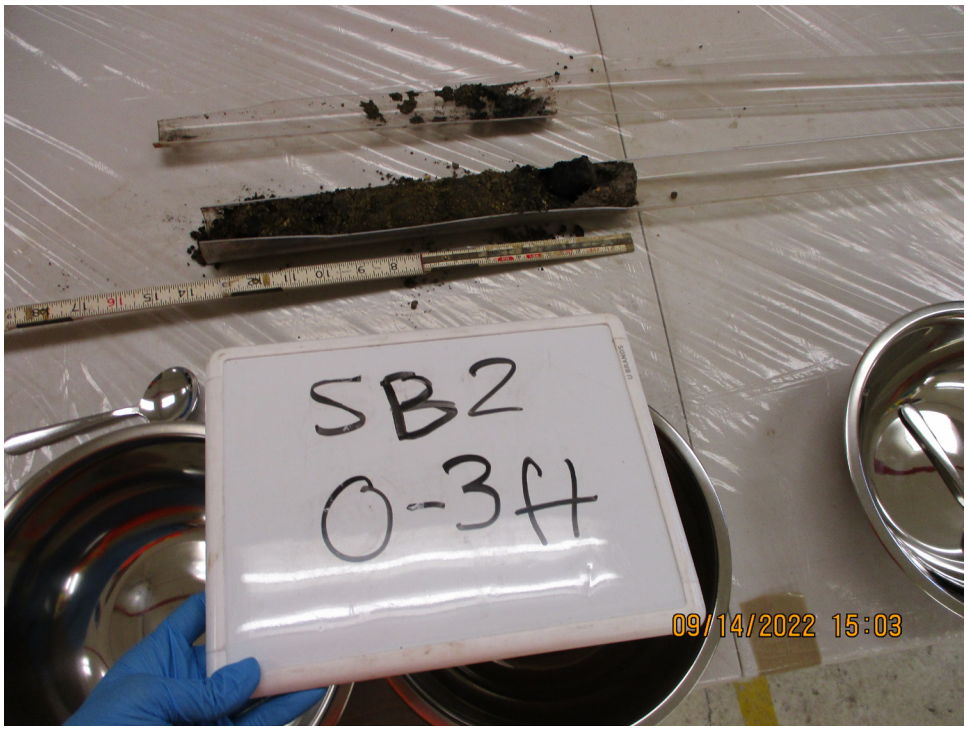


Photograph 7. SB1 20–25 ft bgs (July 26, 2022)



Photograph 8. SB1 20–25 ft bgs (July 26, 2022)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs

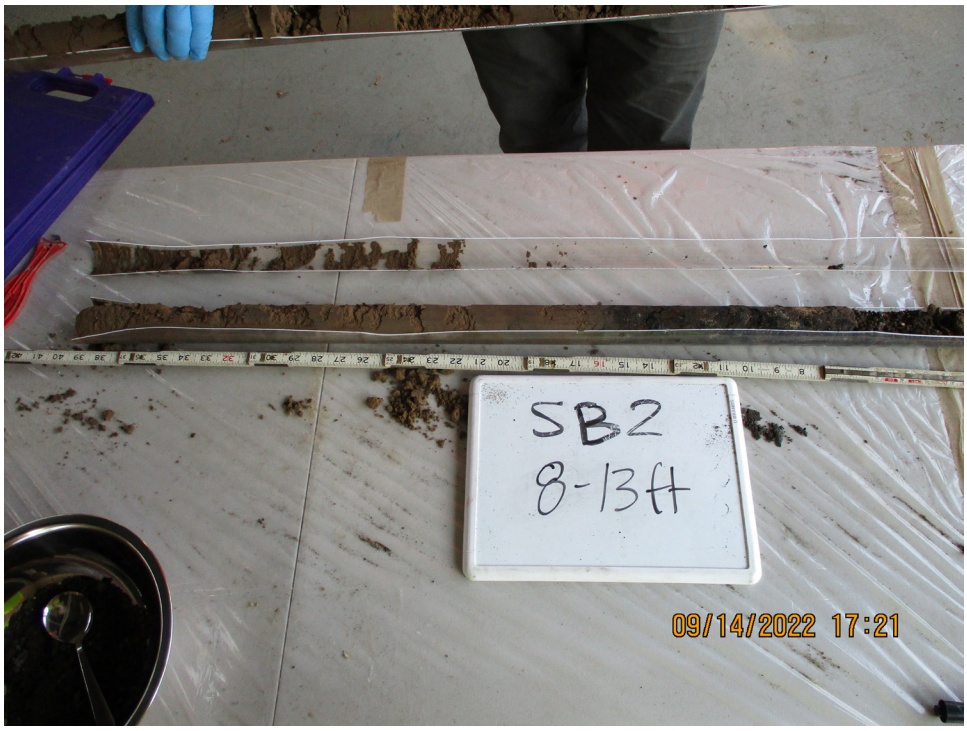


Photograph 9. SB2 0–3 ft bgs (September 14, 2022)



Photograph 10. SB2 3–8 ft bgs (September 14, 2022)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs



Photograph 11. SB2 8–13 ft bgs (September 14, 2022)



Photograph 12. SB2 13–16.5 ft bgs (September 14, 2022)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs



Photograph 13. SB2 0–4 ft bgs (December 21, 2022)

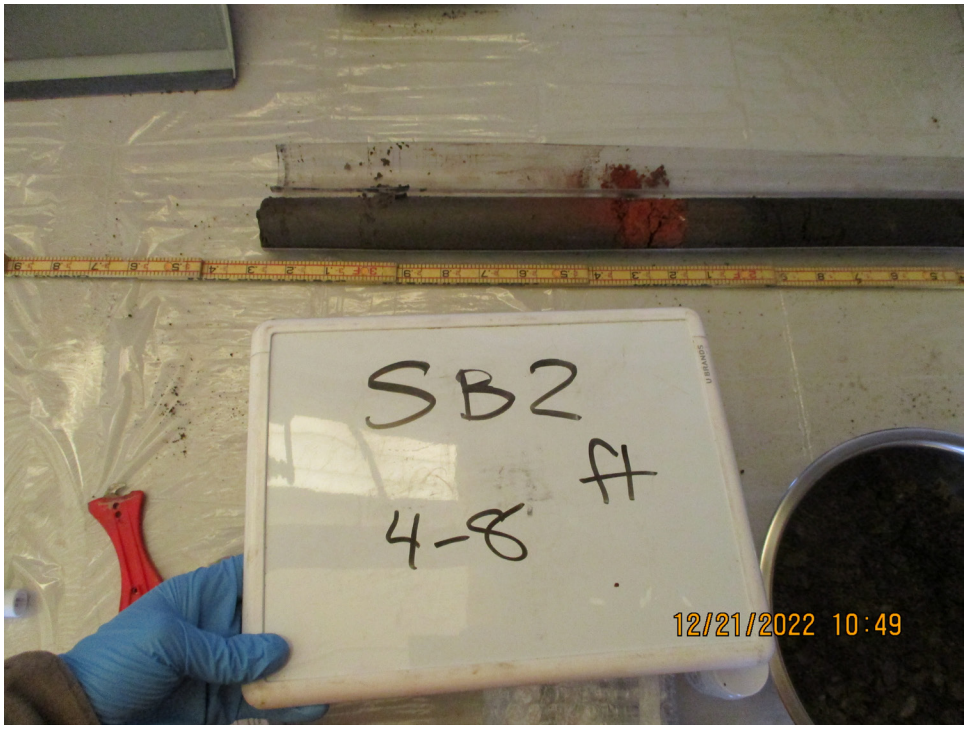


Photograph 14. SB2 0–4 ft bgs (December 21, 2022)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs



Photograph 15. SB2 4–8 ft bgs (December 21, 2022)



Photograph 16. SB2 4–8 ft bgs (December 21, 2022)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs



Photograph 17. SB2 8–12 ft bgs (December 21, 2022)



Photograph 18. SB2 8–12 ft bgs (December 21, 2022)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs



Photograph 19. SB2 12–16 ft bgs (December 21, 2022)



Photograph 20. SB2 12–16 ft bgs (December 21, 2022)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs

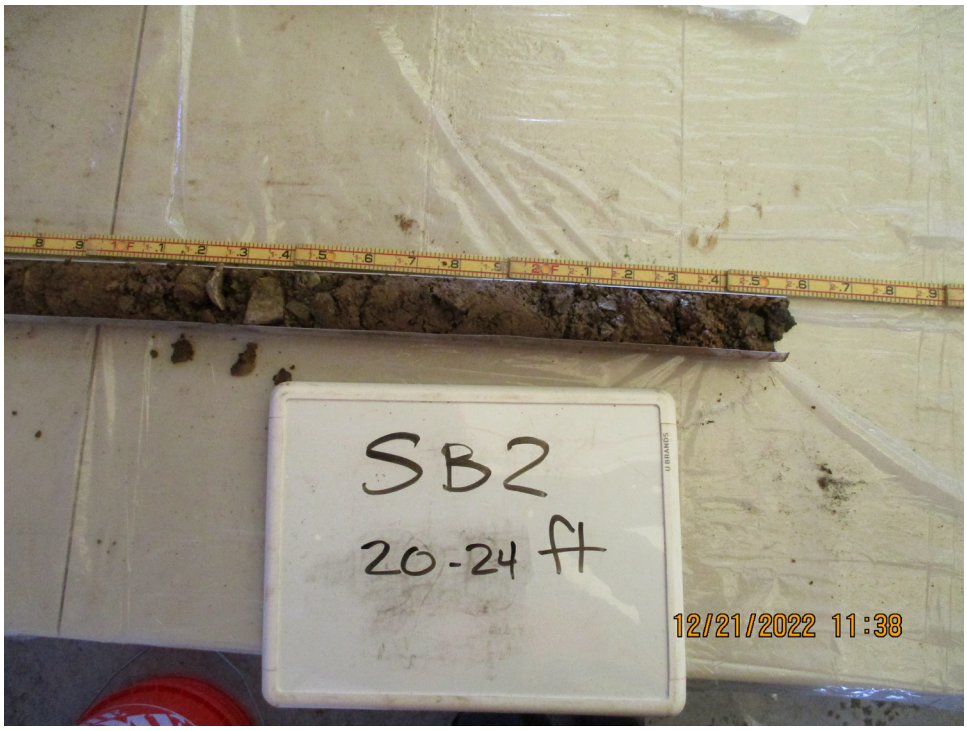


Photograph 21. SB2 16–20 ft bgs (December 21, 2022)



Photograph 22. SB2 20–24 ft bgs (December 21, 2022)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs



Photograph 23. SB2 20–24 ft bgs (December 21, 2022)



Photograph 24. SB2 24–28 ft bgs (December 21, 2022)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs

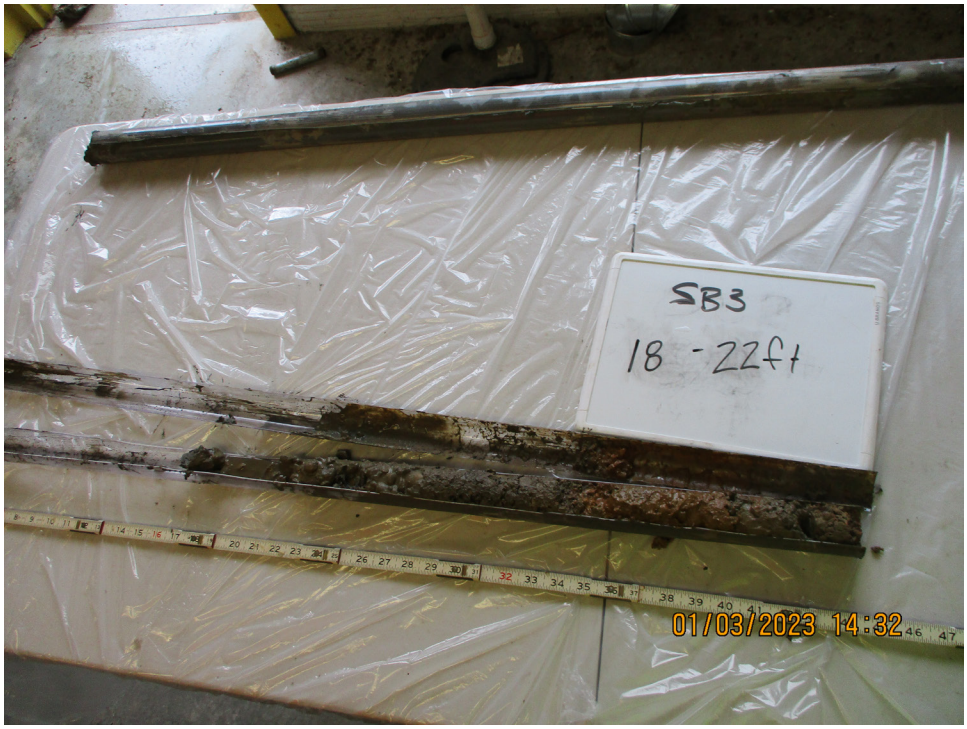


Photograph 25. SB2 28–32 ft bgs (December 21, 2022)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs



Photograph 26. SB3 14–18 ft bgs. Note no recovery from 0–14 ft bgs (January 3, 2023)

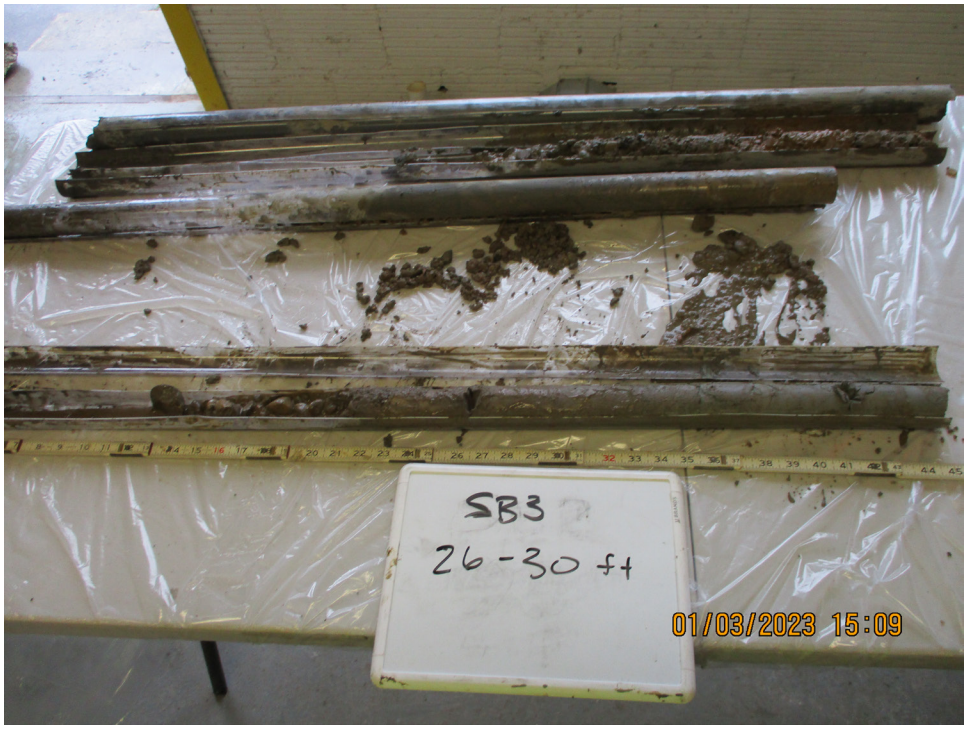


Photograph 27. SB3 18–22 ft bgs (January 3, 2023)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs



Photograph 28. SB3 22–26 ft bgs (January 3, 2023)



Photograph 29. SB3 26–30 ft bgs (January 3, 2023)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs



Photograph 30. SB4 0–5 ft bgs (September 15, 2022)



Photograph 31. SB4 0–5 ft bgs (September 15, 2022)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs

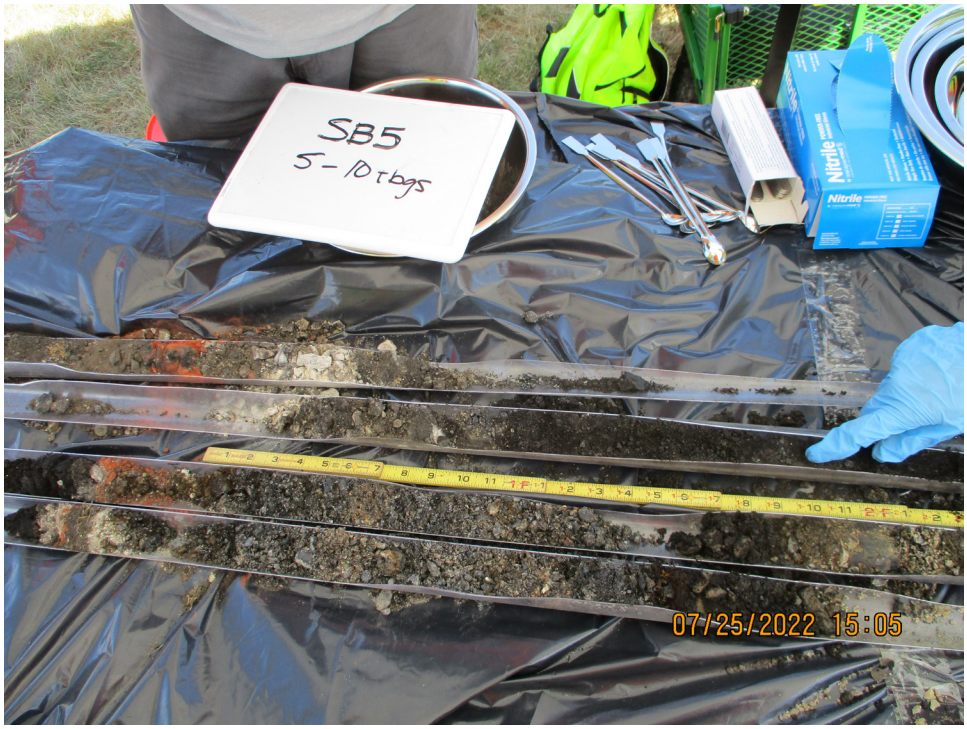


Photograph 32. SB4 5–8 ft bgs (September 15, 2022)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs



Photograph 33. SB5 0–5 ft bgs (July 25, 2022)



Photograph 34. SB5 5–10 ft bgs (July 25, 2022)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs



Photograph 35. SB5 10–15 ft bgs core in foreground (July 25, 2022)



Photograph 36. SB5 20–25 ft bgs (July 25, 2022)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs

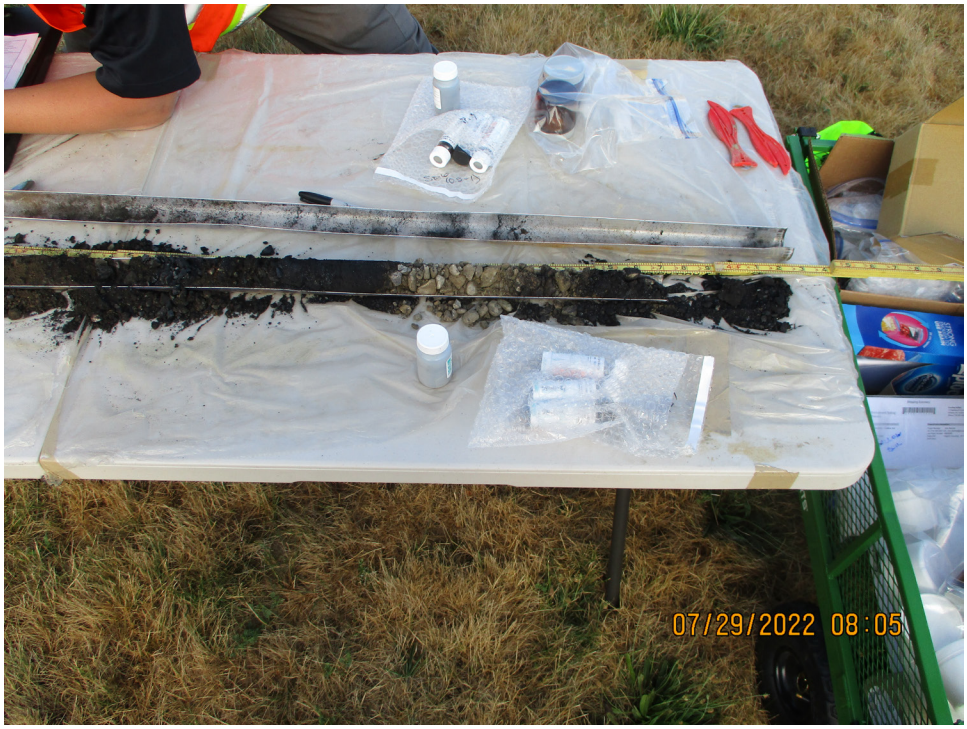


Photograph 37. SB5 20–25 ft bgs (July 25, 2022)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs



Photograph 38. SB6 0–5 ft bgs (July 29, 2022)



Photograph 39. SB6 0–5 ft bgs (July 29, 2022)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs



Photograph 40. SB6 5–10 ft bgs (July 29, 2022)



Photograph 41. SB6 5–10 ft bgs (July 29, 2022)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs



Photograph 42. SB6 10–15 ft bgs (July 29, 2022)



Photograph 43. SB6 10–15 and 15–20 ft bgs (July 29, 2022)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs



Photograph 44. SS1 0–4 ft bgs (September 12, 2022)



Photograph 45. SS1 0–4 ft bgs (September 12, 2022)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs



Photograph 46. SS1 0–4 ft bgs (September 12, 2022)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs



Photograph 47. SS2 0–2 ft bgs (September 13, 2022)



Photograph 48. SS2 0–2 ft bgs (September 13, 2022)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs



Photograph 49. SS3 0–2 ft bgs (September 13, 2022)



Photograph 50. SS3 0–2 ft bgs (September 13, 2022)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs



Photograph 51. SS3 0–2 ft bgs (September 13, 2022)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs



Photograph 52. SS4 0–4 ft bgs (September 13, 2022)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs



Photograph 53. SS5 0–2 ft bgs (July 29, 2022) [Note: interval is mislabeled on whiteboard]

P-Site Characterization Report
Corning Refractories Plant
Site Photographs



Photograph 54. SS6 0–2 ft bgs (July 29, 2022)

P-Site Characterization Report
Corning Refractories Plant
Site Photographs



Photograph 55. SS7 0–2 ft bgs (July 27, 2022)

Appendix E

Boring/Monitoring Well Logs

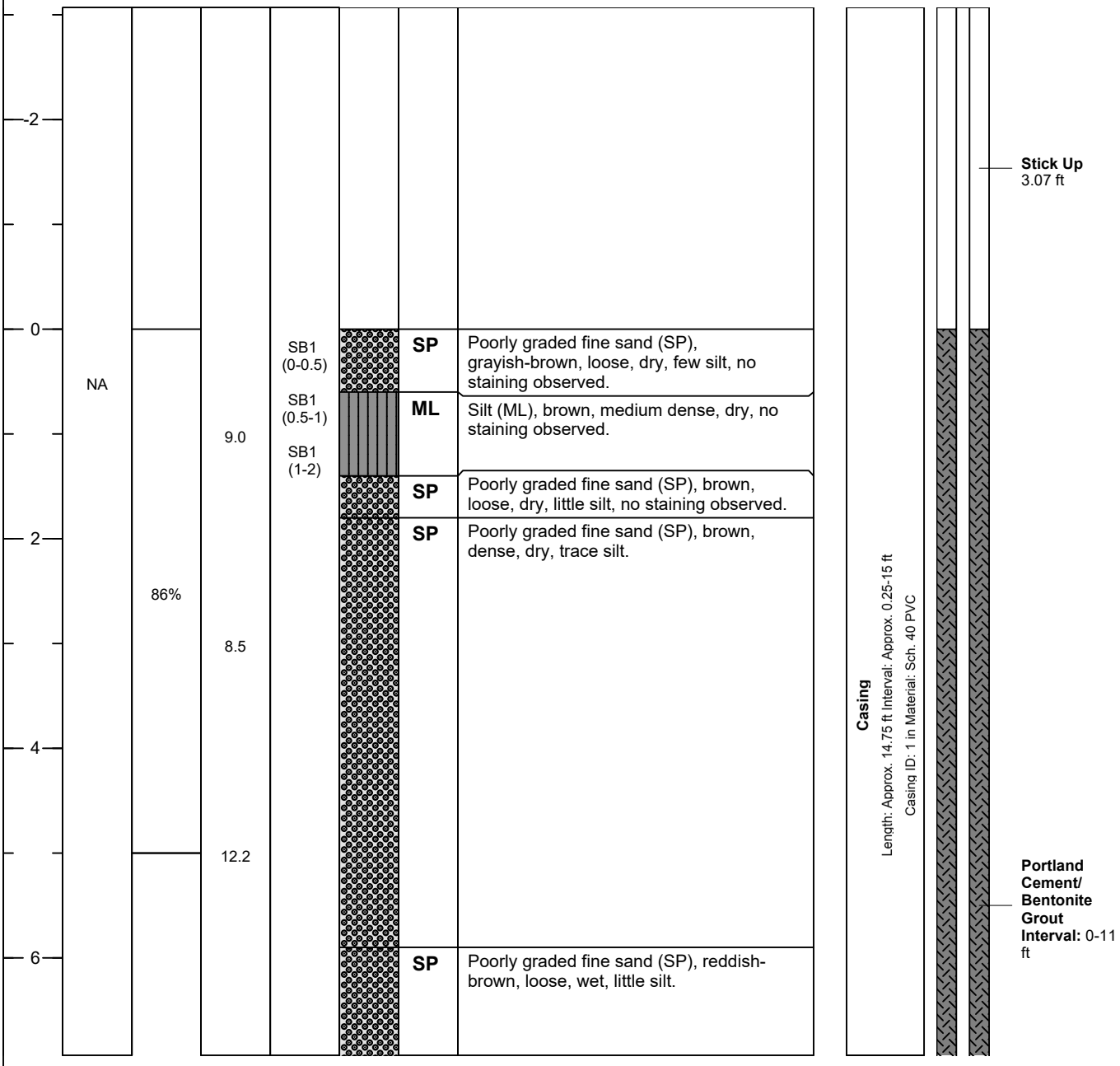
SETTLEMENT CONFIDENTIAL
INADMISSIBLE IN THIS OR ANY OTHER PROCEEDING

integral engineering p.c.

Boring ID: **SB1 / MW1**

		Location:	**Corning, NY**		
		Date Started:	**7/26/22**	Northing:	**42.145876**
Project Name:	**Refractories**	Date Completed:	**7/27/22**	Easting:	**-77.059104**
Project Number:	**EF1017**	Drilling Contractor:	**Cascade Environmental**	Projection:	**NA**
Drilling Method:	**Direct Push**	Logged by:	**Chris Wood**	Zone:	**18N**
Borehole Diameter:	**2-in**	Ground Elevation:	**927.30**	Vertical Datum:	**WGS 84**
Sampling Method:	**2-in Geoprobe Macro-Core**	Depth to Water:	**16.2 ft bgs**	Units:	**Degrees**

Depth (ft bgs)	Blow Count	% Recov. (depth ft)	PID Reading	Sample ID	USCS Group Symbol	Soil Description
0	NA	86%	9.0	SB1 (0-0.5)	SP	Poorly graded fine sand (SP), grayish-brown, loose, dry, few silt, no staining observed.
				SB1 (0.5-1)	ML	Silt (ML), brown, medium dense, dry, no staining observed.
				SB1 (1-2)	SP	Poorly graded fine sand (SP), brown, loose, dry, little silt, no staining observed.
2			8.5		SP	Poorly graded fine sand (SP), brown, dense, dry, trace silt.
4			12.2			
6					SP	Poorly graded fine sand (SP), reddish-brown, loose, wet, little silt.



Notes:

Borehole begins at bottom of a sump that is 4 ft bgs. Soil descriptions and well construction are based on 0 ft bgs at bottom of sump. Water encountered at 5.9 - 8.2 ft bgs interval is interprated to be perched water due to underlying tight and dryer sands. Groundwater interpreted at approx. 16.2 ft bgs.

bgs = below ground surface
ft = feet
in = inches

integral engineering p.c.

Boring ID: **SB1 / MW1**

		Location:	**Corning, NY**		
		Date Started:	**7/26/22**	Northing:	**42.145876**
Project Name:	**Refractories**	Date Completed:	**7/27/22**	Easting:	**-77.059104**
Project Number:	**EF1017**	Drilling Contractor:	**Cascade Environmental**	Projection:	**NA**
Drilling Method:	**Direct Push**	Logged by:	**Chris Wood**	Zone:	**18N**
Borehole Diameter:	**2-in**	Ground Elevation:	**927.30**	Vertical Datum:	**WGS 84**
Sampling Method:	**2-in Geoprobe Macro-Core**	Depth to Water:	**16.2 ft bgs**	Units:	**Degrees**

Depth (ft bgs)	Blow Count	% Recov. (depth ft)	PID Reading	Sample ID	USCS Group Symbol	Soil Description
8		100%				
			0.7		**SP**	Poorly graded fine sand (SP), brown, medium dense, moist.
					GW	Well graded angular and sub-angular gravel with sand (GW), grayish-brown, medium dense, moist.
10			0.6		**SP**	Poorly graded sand with gravel (SP), grayish-brown, dense, moist, pulverized gray stone lens at 11.2 - 11.4 ft bgs, little medium and coarse sand.
12		72%				
			1.5			
14						
			10.0	SB1 (15-16)		
16					**GW**	Well graded gravel (GW), gray, dense, wet, little medium and coarse sand.

Casing
Length: Approx. 14.75 ft Interval: Approx. 0.25-15 ft
Casing ID: 1 in Material: Sch. 40 PVC

Screen

Seal Interval: 11-13 ft
Material: Hydrated Bentonite Chips

Notes:

Borehole begins at bottom of a sump that is 4 ft bgs. Soil descriptions and well construction are based on 0 ft bgs at bottom of sump. Water encountered at 5.9 - 8.2 ft bgs interval is interprated to be perched water due to underlying tight and dryer sands. Groundwater interpreted at approx. 16.2 ft bgs.

bgs = below ground surface
ft = feet
in = inches

integral engineering p.c.

Boring ID: **SB1 / MW1**

		Location:	**Corning, NY**		
		Date Started:	**7/26/22**	Northing:	**42.145876**
Project Name:	**Refractories**	Date Completed:	**7/27/22**	Easting:	**-77.059104**
Project Number:	**EF1017**	Drilling Contractor:	**Cascade Environmental**	Projection:	**NA**
Drilling Method:	**Direct Push**	Logged by:	**Chris Wood**	Zone:	**18N**
Borehole Diameter:	**2-in**	Ground Elevation:	**927.30**	Vertical Datum:	**WGS 84**
Sampling Method:	**2-in Geoprobe Macro-Core**	Depth to Water:	**16.2 ft bgs**	Units:	**Degrees**

Depth (ft bgs)	Blow Count	% Recov. (depth ft)	PID Reading	Sample ID	USCS Group Symbol	Soil Description	Well Completion Details
18		62%	6.4		CH	Fat clay (CH), gray, very dense, moist.	**Screen** Length: 10 ft Interval 15-25 ft Screen ID: 1 in Material: Sch. 40 PVC 0.010-slot; **Filter Pack Interval:** 13-25 ft **Material:** Sand (#0 and #1)
20			4.5				
22		100%	10.2				
24							

Notes:

Borehole begins at bottom of a sump that is 4 ft bgs. Soil descriptions and well construction are based on 0 ft bgs at bottom of sump. Water encountered at 5.9 - 8.2 ft bgs interval is interprated to be perched water due to underlying tight and dryer sands. Groundwater interpreted at approx. 16.2 ft bgs.

bgs = below ground surface
ft = feet
in = inches

SETTLEMENT CONFIDENTIAL
INADMISSIBLE IN THIS OR ANY OTHER PROCEEDING

integral engineering p.c.

Boring ID: **SB2 / MW2**

		Location:	**Corning, NY**		
		Date Started:	**12/21/22**	Northing:	**42.146335**
Project Name:	**Refractories**	Date Completed:	**12/22/22**	Easting:	**-77.060575**
Project Number:	**EF1017**	Drilling Contractor:	**Parratt-Wolff**	Projection:	**NA**
Drilling Method:	**Direct Push\Auger**	Logged by:	**Chris Wood**	Zone:	**18N**
Borehole Diameter:	**8-in**	Ground Elevation:	**934.71**	Vertical Datum:	**WGS 84**
Sampling Method:	**2-in Geoprobe Macro-Core**	Depth to Water:	**20 - 24 ft bgs**	Units:	**Degrees**

Depth (ft bgs)	Blow Count	% Recov. (depth ft)	PID Reading	Sample ID	USCS Group Symbol	Soil Description
0	NA		0.0	SB2 (0-0.5)	ML	Silt with sand (ML), dark brown, loose, dry, no staining observed.
				SB2 (0.5-1)	SP-SM	Poorly graded sand with silt and sub-angular gravel (SP-SM), dry, medium dense, little coarse sand, no staining observed.
			0	SB2 (1-2)	Fill	Fill consisting of poorly graded sand, grayish-brown, loose, dry, no staining observed.
					Fill	
2		80%	8.3		Fill	Fill consisting of poorly graded sand, dark brown, loose, dry, no staining observed, little coarse sand, trace angular clear glass and decomposed wood fragments, fragments of off-white and black brick-like material.
			1.5			Fill consisting of poorly graded fine sand, dark brown, loose, dry, no staining observed, decomposed wood at 2.5 ft bgs, fragment of dark brown easily breakable brick-like material at 3.1 ft bgs.
			0.6			
4					Fill	Fill consisting of poorly graded fine sand, dark brown, loose, dry, lens of gray clayey sand from 5.1 - 5.2 ft bgs., little gravel-size black and orange slag-like fragments throughout interval.
			0			
6		82.5%			Fill	Fill consisting of poorly graded sand, gray, loose, dry, trace gravel.
					Fill	Red building brick.
					ML	Silt (ML), reddish-brown, medium dense, moist.
			0			
8					SP	Poorly graded sand (SP), dark brown, loose, dry, trace coarse sand.
					SW	Well graded sand (SW), loose, dry, gray, pulverized red building brick fragments at 8.7 ft bgs.
			0		SP-SM	Poorly graded sand with silt (SP-SM), medium dense, brown, dry, trace small roots.
10		87.5%				

Casing
Length: Approx. 21.75 ft Interval: Approx. 0.25-22 ft
Casing ID: 2 in Material: Sch. 40 PVC

Surface Casing: 6 in diameter
Material: Steel

Surface Seal Interval: 0-2 ft
Material: Cement

Portland Cement/ Bentonite

Notes:

Water table between approximately 20 - 24 ft bgs.

bgs = below ground surface
ft = feet
in = inches

integral engineering p.c.

Boring ID: **SB2 / MW2**

		Location:	**Corning, NY**		
		Date Started:	**12/21/22**	Northing:	**42.146335**
Project Name:	**Refractories**	Date Completed:	**12/22/22**	Easting:	**-77.060575**
Project Number:	**EF1017**	Drilling Contractor:	**Parratt-Wolff**	Projection:	**NA**
Drilling Method:	**Direct Push\Auger**	Logged by:	**Chris Wood**	Zone:	**18N**
Borehole Diameter:	**8-in**	Ground Elevation:	**934.71**	Vertical Datum:	**WGS 84**
Sampling Method:	**2-in Geoprobe Macro-Core**	Depth to Water:	**20 - 24 ft bgs**	Units:	**Degrees**

Depth (ft bgs)	Blow Count	% Recov. (depth ft)	PID Reading	Sample ID	USCS Group Symbol	Soil Description
		87.5%	0		SP	Poorly graded fine sand (SP), reddish-brown, medium dense, dry.
12						
			0		SP	Poorly graded fine sand (SP), reddish-brown, medium dense, moist, becomes wet between 13 - 14.1 ft bgs.
14		87.5%				
			0			
16					GW	Well graded gravel with sand (GW), grayish-brown, dense, wet.
			0		SP-SM	Poorly graded sand with silt (SP-SM), grayish-brown, wet, medium dense.
					GW	Well graded gravel with sand (GW), grayish-brown, dense, wet.
18		57.5%				
			0			
20						

Well Completion Details

Casing
Length: Approx. 21.75 ft Interval: Approx. 0.25-22 ft
Casing ID: 2 in Material: Sch. 40 PVC

Grout Interval: 2-18 ft

Seal Interval: 18-20 ft
Material: Hydrated Bentonite Chips

Notes:

Water table between approximately 20 - 24 ft bgs.

bgs = below ground surface
ft = feet
in = inches

integral engineering p.c.

Boring ID: **SB2 / MW2**

		Location:	**Corning, NY**		
		Date Started:	**12/21/22**	Northing:	**42.146335**
Project Name:	**Refractories**	Date Completed:	**12/22/22**	Easting:	**-77.060575**
Project Number:	**EF1017**	Drilling Contractor:	**Parratt-Wolff**	Projection:	**NA**
Drilling Method:	**Direct Push\Auger**	Logged by:	**Chris Wood**	Zone:	**18N**
Borehole Diameter:	**8-in**	Ground Elevation:	**934.71**	Vertical Datum:	**WGS 84**
Sampling Method:	**2-in Geoprobe Macro-Core**	Depth to Water:	**20 - 24 ft bgs**	Units:	**Degrees**

Depth (ft bgs)	Blow Count	% Recov. (depth ft)	PID Reading	Sample ID	USCS Group Symbol	Soil Description	Well Completion Details
22		62.5%	0	SB2 (20.4-22.4)	GW	Well graded gravel with sand (GW), grayish-brown, dense, moist, becomes wet from 22.1 - 22.5 ft bgs.	Casing
			0				
24					GW	Well graded gravel with sand (GW), grayish-brown, dense, wet.	
		26%	0				
26							Filter Pack Interval: 20-32 ft Material: Sand (#0)
			0				
28							Screen Length: 10 ft Interval 22-32 ft Screen ID: 2 in Material: Sch. 40 PVC 0.010-slot
			0				
30		60%			CL	Lean clay (CL), gray, dense, dry.	

Notes:

Water table between approximately 20 - 24 ft bgs.

bgs = below ground surface
ft = feet
in = inches

SETTLEMENT CONFIDENTIAL
INADMISSIBLE IN THIS OR ANY OTHER PROCEEDING

integral engineering p.c.

Boring ID: **SB2 / MW2**

		Location:	**Corning, NY**		
		Date Started:	**12/21/22**	Northing:	**42.146335**
Project Name:	**Refractories**	Date Completed:	**12/22/22**	Easting:	**-77.060575**
Project Number:	**EF1017**	Drilling Contractor:	**Parratt-Wolff**	Projection:	**NA**
Drilling Method:	**Direct Push\Auger**	Logged by:	**Chris Wood**	Zone:	**18N**
Borehole Diameter:	**8-in**	Ground Elevation:	**934.71**	Vertical Datum:	**WGS 84**
Sampling Method:	**2-in Geoprobe Macro-Core**	Depth to Water:	**20 - 24 ft bgs**	Units:	**Degrees**

Depth (ft bgs)	Blow Count	% Recov. (depth ft)	PID Reading	Sample ID	USCS Group Symbol	Soil Description	Well Completion Details
32		60%	0				Screen — Material: Sch. 40 PVC 0.010-slot

Notes:

Water table between approximately 20 - 24 ft bgs.

bgs = below ground surface
ft = feet
in = inches

SETTLEMENT CONFIDENTIAL
INADMISSIBLE IN THIS OR ANY OTHER PROCEEDING

integral engineering p.c.

Boring ID: SB2

		Location:	**Corning, NY**		
		Date Started:	**9/14/22**	Northing:	**42.146169**
Project Name:	**Refractories**	Date Completed:	**9/14/22**	Easting:	**-77.060537**
Project Number:	**EF1017**	Drilling Contractor:	**Cascade Environmental**	Projection:	**NA**
Drilling Method:	**Direct Push**	Logged by:	**Chris Sinton**	Zone:	**18N**
Borehole Diameter:	**2-in**	Ground Elevation:	**NA**	Vertical Datum:	**WGS 84**
Sampling Method:	**Geoprobe Macro-Core**	Depth to Water:	**NA**	Units:	**Degrees**

Depth (ft bgs)	Blow Count	% Recov. (depth ft)	PID Reading	Sample ID	USCS Group Symbol	Soil Description
0	NA	40%	8.1	SB2 (0-0.5)	**Fill**	Fill consisting of ash, dark brown, moist, mixed with sand and silt, chunk of coal.
			8.2	SB2 (0.5-1)		
2				SB2 (1-2)		
					Fill	Fill consisting of ash, slag and cinders, dark brown, moist.
			18.5		**Fill**	Fill consisting of silt with sand, light brown, moist.
4			16.8			
		60%	15.2			
6						
			12.8			
8					**Fill**	Fill consisting of ash, cinder, and slag.
			5.8			
					Fill	Fill consisting of well graded silty sand.
			6.4			
10						

Notes:

bgs = below ground surface
ft = feet
in = inches
NA = not applicable

Duplicate bore hole but refusal at 16.5 feet. Similar lithology to first borehole.
Refusal at 16.5 feet below ground surface.
Ground water interpreted at 16 ft bgs; PVC pipe installed but no water.

SETTLEMENT CONFIDENTIAL
INADMISSIBLE IN THIS OR ANY OTHER PROCEEDING

integral engineering p.c.

Boring ID: SB2

		Location:	**Corning, NY**		
		Date Started:	**9/14/22**	Northing:	**42.146169**
Project Name:	**Refractories**	Date Completed:	**9/14/22**	Easting:	**-77.060537**
Project Number:	**EF1017**	Drilling Contractor:	**Cascade Environmental**	Projection:	**NA**
Drilling Method:	**Direct Push**	Logged by:	**Chris Sinton**	Zone:	**18N**
Borehole Diameter:	**2-in**	Ground Elevation:	**NA**	Vertical Datum:	**WGS 84**
Sampling Method:	**Geoprobe Macro-Core**	Depth to Water:	**NA**	Units:	**Degrees**

Depth (ft bgs)	Blow Count	% Recov. (depth ft)	PID Reading	Sample ID	USCS Group Symbol	Soil Description
12		90%				
14		90%	2.9 4.1 2.6	SB2 (13.5-15.5)	**Fill**	Fill consisting of ash, cinders, slag, dark brown, moist.
					SW-SM	Well graded sand with silt (SW-SM), light brown, moist to wet.
16					**SW**	Well graded sand with gravel (SW), wet.

Notes:

bgs = below ground surface
ft = feet
in = inches
NA = not applicable

Duplicate bore hole but refusal at 16.5 feet. Similar lithology to first borehole.
Refusal at 16.5 feet below ground surface.
Ground water interpreted at 16 ft bgs; PVC pipe installed but no water.

SETTLEMENT CONFIDENTIAL
INADMISSIBLE IN THIS OR ANY OTHER PROCEEDING

integral engineering p.c.

Boring ID: SB3

		Location:	**Corning, NY**		
		Date Started:	**7/28/22**	Northing:	**42.145909**
Project Name:	**Refractories**	Date Completed:	**7/28/22**	Easting:	**-77.060379**
Project Number:	**EF1017**	Drilling Contractor:	**Cascade Environmental**	Projection:	**NA**
Drilling Method:	**Direct Push**	Logged by:	**Chris Wood**	Zone:	**18N**
Borehole Diameter:	**2-in**	Ground Elevation:	**NA**	Vertical Datum:	**WGS 84**
Sampling Method:	**Geoprobe Macro-Core**	Depth to Water:	**NA**	Units:	**Degrees**

Depth (ft bgs)	Blow Count	% Recov. (depth ft)	PID Reading	Sample ID	USCS Group Symbol	Soil Description
0	NA	0%				No recovery.
2						
4						
6		10%			**GW**	Well graded gravel with sand (GW), brown, medium dense, moist.
8						
10						

Notes:

bgs = below ground surface
ft = feet
in = inches
NA = not applicable

SB3 location is in an area that was previously backfilled with gravel clean fill to approximately 8.5-9.0 feet below ground surface. Lack of recovery from 0-10 feet below ground surface is potentially a result of the clean fill not being captured by GeoProbe MacroCore.

SETTLEMENT CONFIDENTIAL
INADMISSIBLE IN THIS OR ANY OTHER PROCEEDING

integral engineering p.c.

Boring ID: SB3

		Location:	**Corning, NY**		
		Date Started:	**7/28/22**	Northing:	**42.145909**
Project Name:	**Refractories**	Date Completed:	**7/28/22**	Easting:	**-77.060379**
Project Number:	**EF1017**	Drilling Contractor:	**Cascade Environmental**	Projection:	**NA**
Drilling Method:	**Direct Push**	Logged by:	**Chris Wood**	Zone:	**18N**
Borehole Diameter:	**2-in**	Ground Elevation:	**NA**	Vertical Datum:	**WGS 84**
Sampling Method:	**Geoprobe Macro-Core**	Depth to Water:	**NA**	Units:	**Degrees**

Depth (ft bgs)	Blow Count	% Recov. (depth ft)	PID Reading	Sample ID	USCS Group Symbol	Soil Description
					GW / ML	Silt (ML), gray, loose, wet, little fine sand.
			6.7			
12		100%				
			15.3			
14						
						Poorly graded fine sand with silt (SW-SM), medium dense, wet.
			14.3		SW-SM / ML	Silty Sand (ML), gray, loose, wet, reddish-brown fine sand lens at 16.6-16.9 feet.
16						
			8.5			
		100%				
18						
			15.1		GW	Well graded angular to sub-angular gravel with sand (GW), grayish-brown, medium dense, wet.
20						

Notes:

bgs = below ground surface
ft = feet
in = inches
NA = not applicable

SB3 location is in an area that was previously backfilled with gravel clean fill to approximately 8.5-9.0 feet below ground surface. Lack of recovery from 0-10 feet below ground surface is potentially a result of the clean fill not being captured by GeoProbe MacroCore.

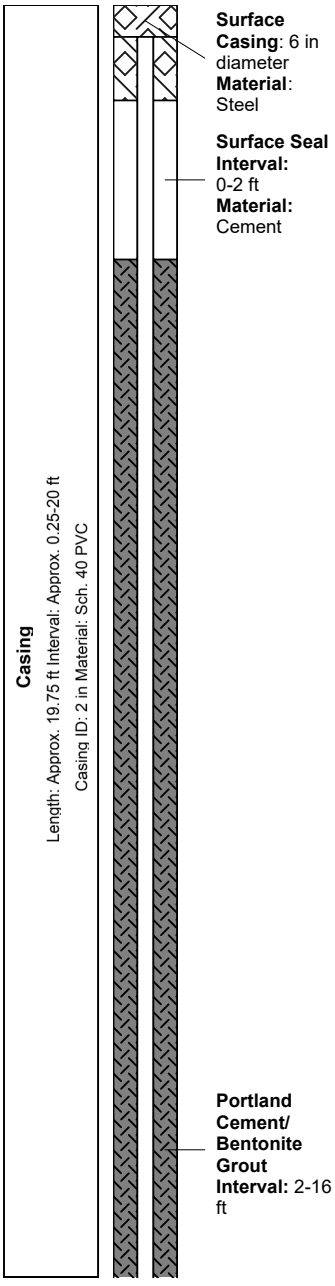
SETTLEMENT CONFIDENTIAL
INADMISSIBLE IN THIS OR ANY OTHER PROCEEDING

integral engineering p.c.

Boring ID: **SB3 / MW3**

		Location:	**Corning, NY**		
		Date Started:	**1/3/23**	Northing:	**42.145902**
Project Name:	**Refractories**	Date Completed:	**1/3/23**	Easting:	**-77.060382**
Project Number:	**EF1017**	Drilling Contractor:	**Parratt Wolff**	Projection:	**NA**
Drilling Method:	**Direct Push/Auger**	Logged by:	**Chris Sinton**	Zone:	**18N**
Borehole Diameter:	**8-in**	Ground Elevation:	**932.59**	Vertical Datum:	**WGS 84**
Sampling Method:	**2-in GeoProbe Macro-Core**	Depth to Water:	**25 ft bgs**	Units:	**Degrees**

Depth (ft bgs)	Blow Count	% Recov. (depth ft)	PID Reading	Sample ID	USCS Group Symbol	Soil Description
0	NA	0%				No recovery.
2						
4						
6						
8						
10						



Notes:

Groundwater encountered at approximately 20 ft bgs.

bgs = below ground surface
ft = feet
in = inches

integral engineering p.c.

Boring ID: **SB3 / MW3**

		Location:	**Corning, NY**		
		Date Started:	**1/3/23**	Northing:	**42.145902**
Project Name:	**Refractories**	Date Completed:	**1/3/23**	Easting:	**-77.060382**
Project Number:	**EF1017**	Drilling Contractor:	**Parratt Wolff**	Projection:	**NA**
Drilling Method:	**Direct Push/Auger**	Logged by:	**Chris Sinton**	Zone:	**18N**
Borehole Diameter:	**8-in**	Ground Elevation:	**932.59**	Vertical Datum:	**WGS 84**
Sampling Method:	**2-in GeoProbe Macro-Core**	Depth to Water:	**25 ft bgs**	Units:	**Degrees**

Depth (ft bgs)	Blow Count	% Recov. (depth ft)	PID Reading	Sample ID	USCS Group Symbol	Soil Description	Well Completion Details
12		0%					
14			0.1		ML	Silt (ML), gray, wet, trace sand, some gravel at top of core likely from overlying gravel fill.	
			0.1				
16		100%			ML	Silt (ML), brown, wet, trace sand.	
			0.1				
18					GW	Well graded sub-angular to rounded gravel with sand (GW), gray to brown, wet, some wood fragments.	
20		50%					

Casing
Length: Approx. 19.75 ft Interval: Approx. 0.25-20 ft
Casing ID: 2 in Material: Sch. 40 PVC

Hydrated Bentonite Seal Interval: 16-18 ft

Notes:

Groundwater encountered at approximately 20 ft bgs.

bgs = below ground surface
ft = feet
in = inches

integral engineering p.c.

Boring ID: **SB3 / MW3**

		Location:	**Corning, NY**		
		Date Started:	**1/3/23**	Northing:	**42.145902**
Project Name:	**Refractories**	Date Completed:	**1/3/23**	Easting:	**-77.060382**
Project Number:	**EF1017**	Drilling Contractor:	**Parratt Wolff**	Projection:	**NA**
Drilling Method:	**Direct Push/Auger**	Logged by:	**Chris Sinton**	Zone:	**18N**
Borehole Diameter:	**8-in**	Ground Elevation:	**932.59**	Vertical Datum:	**WGS 84**
Sampling Method:	**2-in GeoProbe Macro-Core**	Depth to Water:	**25 ft bgs**	Units:	**Degrees**

Depth (ft bgs)	Blow Count	% Recov. (depth ft)	PID Reading	Sample ID	USCS Group Symbol	Soil Description	Well Completion Details
22		50%	0.1	SB3 (23-25)	GW	Well graded sub-rounded and rounded gravel with sand (GW), brown, moist to wet.	
24		50%	0.1				
26			0.1		CH	Fat clay (CH), mottled green and brown, dense, moist.	
28		75%	0.2				
30							

Screen
Length: 10 ft Interval 20-30 ft Screen ID: 2 in
Material: Sch. 40 PVC 0.010-slot

Filter Pack
Interval: 18-30 ft
Material: Sand (#0)

Notes:

Groundwater encountered at approximately 20 ft bgs.

bgs = below ground surface
ft = feet
in = inches

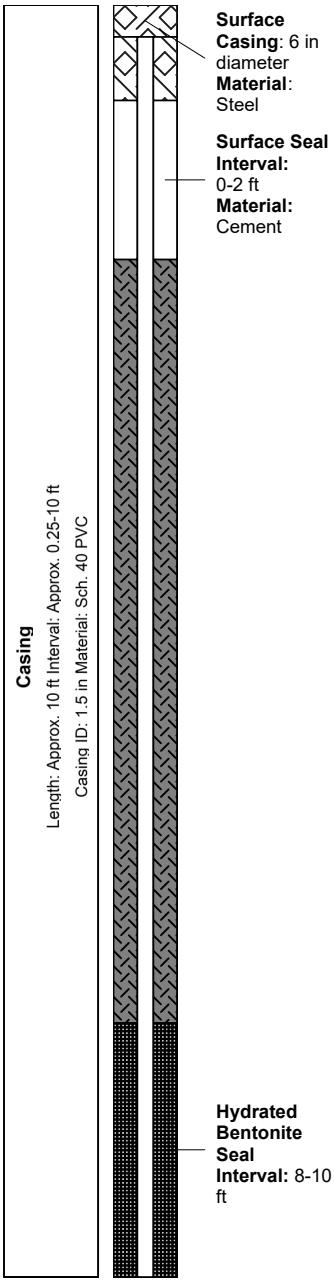
SETTLEMENT CONFIDENTIAL
INADMISSIBLE IN THIS OR ANY OTHER PROCEEDING

integral engineering p.c.

Boring ID: SB3 / MW3

		Location:	**Corning, NY**		
		Date Started:	**9/13/22**	Northing:	**42.145902**
Project Name:	**Refractories**	Date Completed:	**9/13/22**	Easting:	**-77.060382**
Project Number:	**EF1017**	Drilling Contractor:	**Cascade Environmental**	Projection:	**NA**
Drilling Method:	**Direct Push/Auger**	Logged by:	**NA**	Zone:	**18N**
Borehole Diameter:	**8-in**	Ground Elevation:	**NA**	Vertical Datum:	**WGS 84**
Sampling Method:	**2-in GeoProbe Macro-Core**	Depth to Water:	**NA**	Units:	**Degrees**

Depth (ft bgs)	Blow Count	% Recov. (depth ft)	PID Reading	Sample ID	USCS Group Symbol	Soil Description	Well Completion Details
0						Soil was not logged during this well installation because the soil was logged at this location in July 2022.	
2							
4							
6							
8							
10							



Notes:

Enter Notes Here

bgs = below ground surface
ft = feet
in = inches

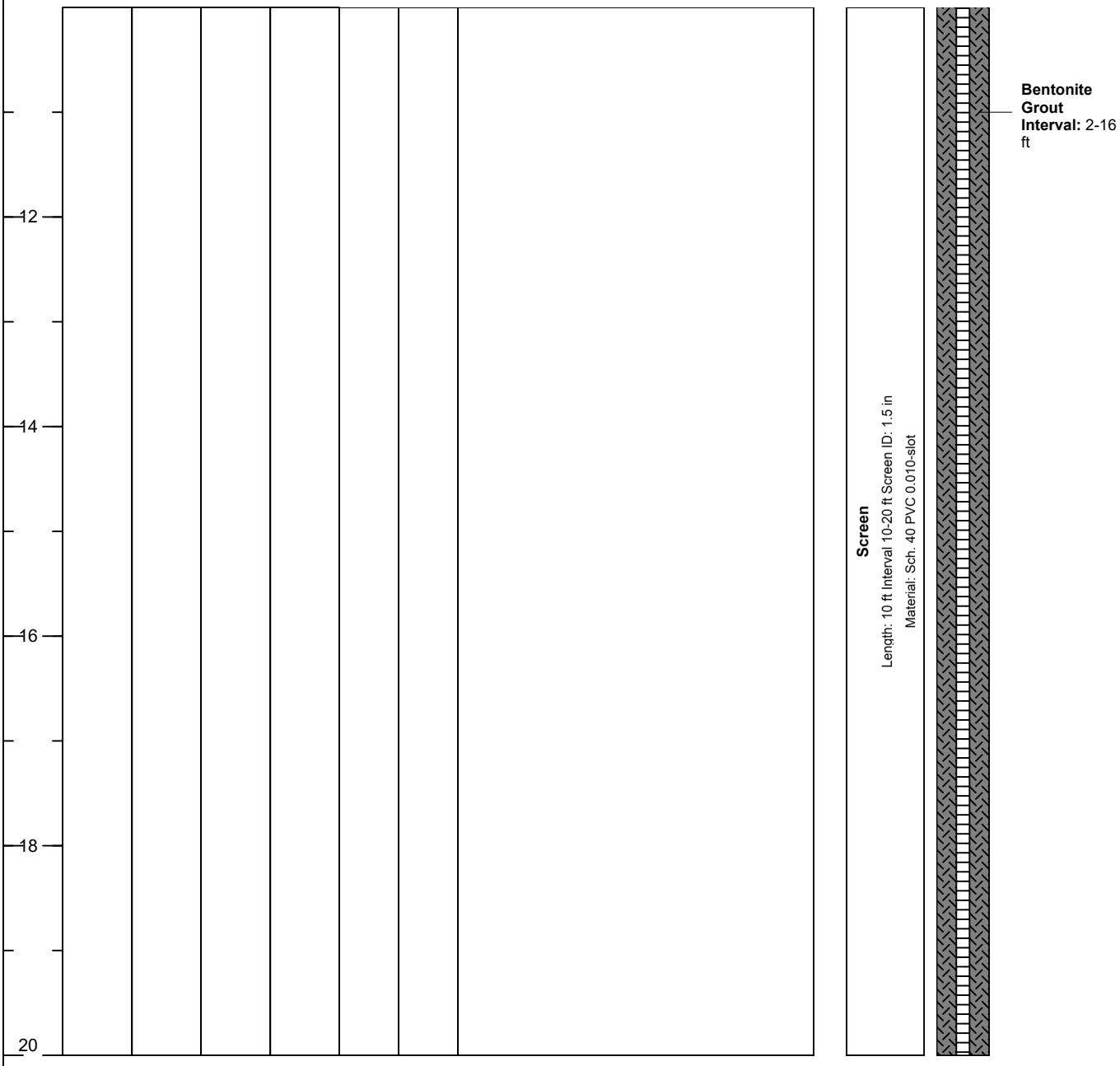
SETTLEMENT CONFIDENTIAL
INADMISSIBLE IN THIS OR ANY OTHER PROCEEDING

integral engineering p.c.

Boring ID: **SB3 / MW3**

		Location:	**Corning, NY**		
		Date Started:	**9/13/22**	Northing:	**42.145902**
Project Name:	**Refractories**	Date Completed:	**9/13/22**	Easting:	**-77.060382**
Project Number:	**EF1017**	Drilling Contractor:	**Cascade Environmental**	Projection:	**NA**
Drilling Method:	**Direct Push/Auger**	Logged by:	**NA**	Zone:	**18N**
Borehole Diameter:	**8-in**	Ground Elevation:	**NA**	Vertical Datum:	**WGS 84**
Sampling Method:	**2-in GeoProbe Macro-Core**	Depth to Water:	**NA**	Units:	**Degrees**

Depth (ft bgs)	Blow Count	% Recov. (depth ft)	PID Reading	Sample ID	USCS Group Symbol	Soil Description	Well Completion Details



Notes:

Enter Notes Here

bgs = below ground surface
ft = feet
in = inches

SETTLEMENT CONFIDENTIAL
INADMISSIBLE IN THIS OR ANY OTHER PROCEEDING

integral engineering p.c.

Boring ID: **SB4**

		Location:	**Corning, NY**		
		Date Started:	**9/15/22**	Northing:	**42.146267**
Project Name:	**Refractories**	Date Completed:	**9/15/22**	Easting:	**-77.059975**
Project Number:	**EF1017**	Drilling Contractor:	**Cascade Environmental**	Projection:	**NA**
Drilling Method:	**Direct Push**	Logged by:	**Chris Sinton**	Zone:	**18N**
Borehole Diameter:	**2 in**	Ground Elevation:	**NA**	Vertical Datum:	**WGS 84**
Sampling Method:	**GeoProbe Macro-Core**	Depth to Water:	**NA**	Units:	**Degrees**

Depth (ft bgs)	Blow Count	% Recov. (depth ft)	PID Reading	Sample ID	USCS Group Symbol		Soil Description
-2							Upper concrete floor.
							Select gravel and sand fill.
							Second concrete subfloor.
0	NA		1.0	SB4 (0-0.5)		**Fill**	Fill consisting of ash with pulverized red building brick, dark brown, no staining observed, trace glass at 20".
			1.2	SB4 (0.5-1)			
			0.9	SB4 (1-2)			
2		90%	0.7			**Fill**	Fill consisting of sandy silt, brown, moist, some ash.
			0.1				
4							
			2.8			**Fill**	Fill consisting of sand and ash, dark brown, some red building brick.
6		100%	2.8			**ML**	Silt with sand (ML), light brown, trace sub-angular gravel, coarsens to poorly graded sand with gravel (SP) with depth.
			3.0				
8							

Notes:

Indoor boring under slab. Two cores were collected and refusal was encountered at 8 ft below the concrete floor in the building. The floor slab is approx 32 inches above the soil surface where boring began.

bgs = below ground surface
ft = feet
in = inches
NA = not applicable

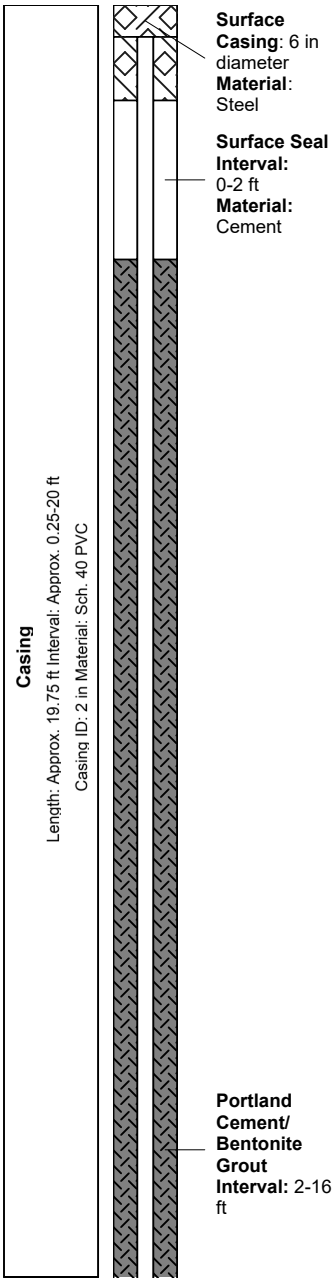
SETTLEMENT CONFIDENTIAL
INADMISSIBLE IN THIS OR ANY OTHER PROCEEDING

integral engineering p.c.

Boring ID: **SB5 / MW5**

		Location:	**Corning, NY**		
		Date Started:	**7/25/22**	Northing:	**42.145241**
Project Name:	**Refractories**	Date Completed:	**7/25/22**	Easting:	**-77.059778**
Project Number:	**EF1017**	Drilling Contractor:	**Cascade Environmental**	Projection:	**NA**
Drilling Method:	**Direct Push/Auger**	Logged by:	**Chris Wood**	Zone:	**18N**
Borehole Diameter:	**8-in**	Ground Elevation:	**934.67**	Vertical Datum:	**WGS 84**
Sampling Method:	**2-in Geoprobe Macro-Core**	Depth to Water:	**15 ft bgs**	Units:	**Degrees**

Depth (ft bgs)	Blow Count	% Recov. (depth ft)	PID Reading	Sample ID	USCS Group Symbol	Soil Description
0	NA	77%	6.3	SB5 (0-0.5)	SP-SM	Poorly graded sand with silt (SP-SM), dark brown, loose, dry, no staining observed, roots and grass at surface.
				SB5 (0.5-1)	SP	Poorly graded fine sand (SP), grayish-brown to brown, loose, dry, no staining observed, few medium and coarse sand.
2				SB5 (1-2)	Fill	Red building brick, no staining observed.
					SP	Poorly graded fine sand with gravel (SP), dark brown, dry, no staining observed, pulverized cement at 1.75 - 1.9 ft bgs.
			8.8		SP	Poorly graded fine to medium sand (SP), dark brown to black, medium dense, dry, few burnt coal and slag fragments.
4						
6		50%			SW	Well graded sand (SW), dark brown to dark gray, loose, dry, few burnt coal and slag-like angular fragments.
8						
10						



Notes:

Soil from borehole was logged to 25 ft bgs. Driller drilled to 30 ft bgs for well installation.
Groundwater encountered at approximately 15 ft bgs.

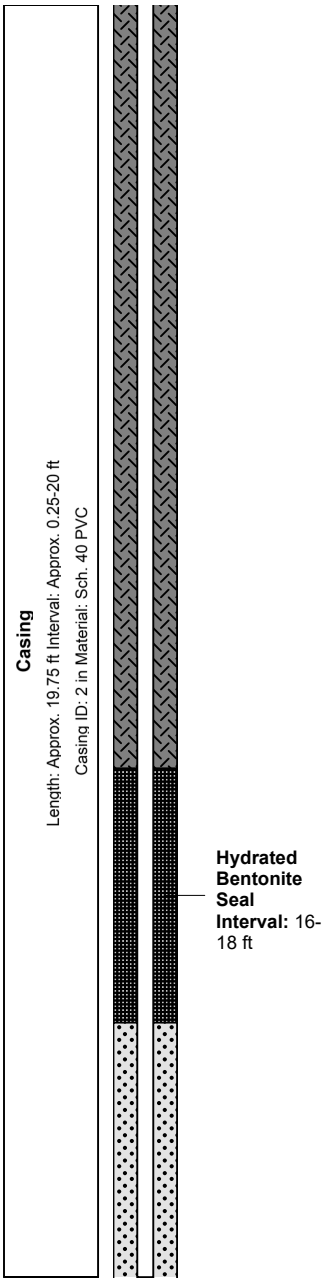
bgs = below ground surface
ft = feet
in = inches

integral engineering p.c.

Boring ID: **SB5 / MW5**

		Location:	**Corning, NY**		
		Date Started:	**7/25/22**	Northing:	**42.145241**
Project Name:	**Refractories**	Date Completed:	**7/25/22**	Easting:	**-77.059778**
Project Number:	**EF1017**	Drilling Contractor:	**Cascade Environmental**	Projection:	**NA**
Drilling Method:	**Direct Push/Auger**	Logged by:	**Chris Wood**	Zone:	**18N**
Borehole Diameter:	**8-in**	Ground Elevation:	**934.67**	Vertical Datum:	**WGS 84**
Sampling Method:	**2-in Geoprobe Macro-Core**	Depth to Water:	**15 ft bgs**	Units:	**Degrees**

Depth (ft bgs)	Blow Count	% Recov. (depth ft)	PID Reading	Sample ID	USCS Group Symbol	Soil Description
					SW	Well graded sand (SW), dark brown, loose, dry, little medium to coarse sand, small gravel lens at 10.1 - 10.2 ft bgs.
					CH	Fat clay (CH), reddish-brown, medium dense, moist.
12		65%	10.3	SB5 (13-15)		
14			11.1			
					SP-SM	Poorly graded fine sand with silt (SP-SM), reddish-brown, medium dense, wet.
16			10.5			
		42%				
18						
20						



Notes:

Soil from borehole was logged to 25 ft bgs. Driller drilled to 30 ft bgs for well installation.
Groundwater encountered at approximately 15 ft bgs.

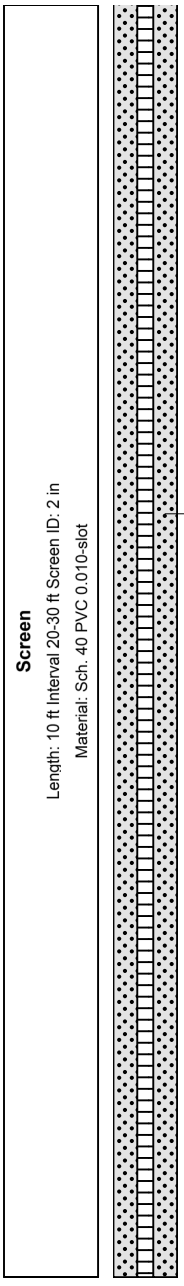
bgs = below ground surface
ft = feet
in = inches

integral engineering p.c.

Boring ID: **SB5 / MW5**

		Location:	**Corning, NY**		
		Date Started:	**7/25/22**	Northing:	**42.145241**
Project Name:	**Refractories**	Date Completed:	**7/25/22**	Easting:	**-77.059778**
Project Number:	**EF1017**	Drilling Contractor:	**Cascade Environmental**	Projection:	**NA**
Drilling Method:	**Direct Push/Auger**	Logged by:	**Chris Wood**	Zone:	**18N**
Borehole Diameter:	**8-in**	Ground Elevation:	**934.67**	Vertical Datum:	**WGS 84**
Sampling Method:	**2-in Geoprobe Macro-Core**	Depth to Water:	**15 ft bgs**	Units:	**Degrees**

Depth (ft bgs)	Blow Count	% Recov. (depth ft)	PID Reading	Sample ID	USCS Group Symbol	Soil Description
					SP-SM	Poorly graded fine sand with silt (SP-SM), gray, loose, wet.
22		50%			**GP**	Poorly graded gravel with sand (GP) gray, medium dense, wet, thin medium to coarse sand lens at approx. 22.6 ft bgs, pulverized stone at approx. 22.08 - 22.5 ft bgs.
24						
26						
28						
30						



Notes:

Soil from borehole was logged to 25 ft bgs. Driller drilled to 30 ft bgs for well installation.
Groundwater encountered at approximately 15 ft bgs.

bgs = below ground surface
ft = feet
in = inches

SETTLEMENT CONFIDENTIAL
INADMISSIBLE IN THIS OR ANY OTHER PROCEEDING

integral engineering p.c.

Boring ID: SB6

		Location:	**Corning, NY**		
		Date Started:	**7/29/22**	Northing:	**42.145078**
Project Name:	**Refractories**	Date Completed:	**7/29/22**	Easting:	**-77.059315**
Project Number:	**EF1017**	Drilling Contractor:	**Cascade Environmental**	Projection:	**NA**
Drilling Method:	**Direct Push**	Logged by:	**Chris Wood**	Zone:	**18N**
Borehole Diameter:	**2 in**	Ground Elevation:	**NA**	Vertical Datum:	**WGS 84**
Sampling Method:	**GeoProbe Macro-Core**	Depth to Water:	**NA**	Units:	**Degrees**

Depth (ft bgs)	Blow Count	% Recov. (depth ft)	PID Reading	Sample ID	USCS Group Symbol	Soil Description
0	NA	74%	0.1	SB6 (0-0.5)	SP	Poorly graded fine sand (SP), brown, loose, dry, no staining observed, roots and grass surface at surface.
			0.2	SB6 (0.5-1)	Fill	Fill consisting of poorly graded fine sand, dark brown, medium dense, dry, no staining observed, few gravel and large coal particles, little medium and coarse sand.
2			0.2	SB6 (1-2)	Fill	Fill consisting of small to large coal and off-white coal and ash particles, few or some black well graded sand, dry, no staining observed, tan silt (ML) lens at 2.4 - 2.5 feet bgs.
					Fill	Fill consisting of well graded sub-angular gravel, gray, medium dense, dry.
4					Fill	Fill consisting of poorly graded fine sand with fine coal particles, black, dry.
						Fill consisting of well graded sub-angular gravel, gray, medium dense, dry.
6		88%	18.7		Fill	Fill consisting of well graded sand with gravel, grayish-brown, medium dense, dry.
					Fill	Fill consisting of well graded sand, black, medium dense, dry, some fine to large coal particles.
					Fill	Fill consisting of well graded sand, reddish-brown, medium dense, dry.
8			22.9		Fill	Fill consisting of well graded sand, reddish-brown, medium dense, dry, few gravel and crushed stone.
					Fill	Fill consisting of well graded sand, black, loose, some fine coal particles, large gravel-sized red building brick fragment at 7.7 ft bgs.
10					ML	Silt with sand (ML), grayish-brown, medium dense, wet, slight petroleum-like odor.
		44%	32.5		ML	Silt with sand (ML), medium dense, moist, petroleum-like odor is stronger with depth, dark staining present throughout interior of core in this interval.
12						
				SB6 (13-15)		
14						
		34%		SB6 (15-20)	GW -GM	Well graded gravel with silt (GW-GM), grayish- brown, medium dense, wet, slight petroleum-like odor.
16						
18						
20						

Notes: SB-6(15-20) was collected and archived.

bgs = below ground surface
ft = feet
in = inches
NA = not applicable

SETTLEMENT CONFIDENTIAL
INADMISSIBLE IN THIS OR ANY OTHER PROCEEDING

integral engineering p.c.

Boring ID: SS1

		Location:	**Corning, NY**		
		Date Started:	**9/12/22**	Northing:	**42.146020**
Project Name:	**Refractories**	Date Completed:	**9/12/22**	Easting:	**-77.058929**
Project Number:	**EF1017**	Drilling Contractor:	**Cascade Environmental**	Projection:	**NA**
Drilling Method:	**Direct Push**	Logged by:	**Chris Sinton**	Zone:	**18N**
Borehole Diameter:	**2-in**	Ground Elevation:	**NA**	Vertical Datum:	**WGS 84**
Sampling Method:	**Geoprobe Macro-Core**	Depth to Water:	**NA**	Units:	**Degrees**

Depth (ft bgs)	Blow Count	% Recov. (depth ft)	PID Reading	Sample ID	USCS Group Symbol	Soil Description
0	NA	100%	0	SS1 (0-2)	**ML**	Silt with sand (ML), brown, moist, no staining observed.
			0	SS1 (0-6)		
			0	SS1 (6-12)	**Fill**	Fill consisting of well graded sub-angular gravel, light brown, dry, no staining observed.
			0	SS1 (12-24)	**Fill**	Fill consisting of fine friable ash, mottled black, brown, and gray in color, no staining observed.
2			0		**Fill**	Fill consisting of pulverized tan brick, slag, cinders and ash.
4						

Notes:

bgs = below ground surface
ft = feet
in = inches
NA = not applicable

SETTLEMENT CONFIDENTIAL
INADMISSIBLE IN THIS OR ANY OTHER PROCEEDING

integral engineering p.c.

Boring ID: **SS2**

Location:	**Corning, NY**				
Date Started:	**9/13/22**			Northing:	**42.146283**
Project Name:	**Refractories**	Date Completed:	**9/13/22**	Easting:	**-77.060599**
Project Number:	**EF1017**	Drilling Contractor:	**Cascade Environmental**	Projection:	**NA**
Drilling Method:	**Direct Push**	Logged by:	**Chris Sinton**	Zone:	**18N**
Borehole Diameter:	**2-in**	Ground Elevation:	**NA**	Vertical Datum:	**WGS 84**
Sampling Method:	**Geoprobe Macro-Core**	Depth to Water:	**NA**	Units:	**Degrees**

Depth (ft bgs)	Blow Count	% Recov. (depth ft)	PID Reading	Sample ID	USCS Group Symbol	Soil Description
0	NA	100%	0	SS2 (0-2)	ML	Silt (ML), brown, moist, no staining observed.
			0	SS2 (0-6)	Fill	Fill consisting of silty sand, light brown, moist, no staining observed, little angular to sub-angular gravel, red building brick at approx 0.7 ft bgs.
			0	SS2 (6-12)		
			0.1	SS2 (12-24)	Fill	Fill consisting of red building brick and white brick, dark black fine sand-sized ash particles, and gravel-sized slag, no staining observed.
2						
4						

Notes:

bgs = below ground surface
ft = feet
in = inches
NA = not applicable

SETTLEMENT CONFIDENTIAL
INADMISSIBLE IN THIS OR ANY OTHER PROCEEDING

integral engineering p.c.

Boring ID: SS3

		Location:	**Corning, NY**		
		Date Started:	**9/13/22**	Northing:	**42.145661**
Project Name:	**Refractories**	Date Completed:	**9/13/22**	Easting:	**-77.060519**
Project Number:	**EF1017**	Drilling Contractor:	**Cascade Environmental**	Projection:	**NA**
Drilling Method:	**Direct Push**	Logged by:	**Chris Sinton**	Zone:	**18N**
Borehole Diameter:	**2-in**	Ground Elevation:	**NA**	Vertical Datum:	**WGS 84**
Sampling Method:	**Geoprobe Macro-Core**	Depth to Water:	**NA**	Units:	**Degrees**

Depth (ft bgs)	Blow Count	% Recov. (depth ft)	PID Reading	Sample ID	USCS Group Symbol		Soil Description
0	NA	100%	0	SS3 (0-2)		SC	Clayey sand (SC), dark brown, moist, trace gravel, no staining observed.
			0	SS3 (0-6)		Fill	Fill comprised of dark, sand-sized ash, no staining observed.
			0	SS3 (6-12)		Fill	Fill consisting of poorly graded sand with silt and sub-angular gravel, no staining observed.
			0	SS3 (12-24)		Fill	Fill consisting of dark ash and pulverized red building brick, no staining observed.
2			0.1			Fill	Fill consisting of ash and pulverized red building brick with some slag.
4							

Notes:

bgs = below ground surface
ft = feet
in = inches
NA = not applicable

SETTLEMENT CONFIDENTIAL
INADMISSIBLE IN THIS OR ANY OTHER PROCEEDING

integral engineering p.c.

Boring ID: **SS4**

		Location:	**Corning, NY**		
		Date Started:	**9/13/22**	Northing:	**42.145278**
Project Name:	**Refractories**	Date Completed:	**9/13/22**	Easting:	**-77.060364**
Project Number:	**EF1017**	Drilling Contractor:	**Cascade Environmental**	Projection:	**NA**
Drilling Method:	**Direct Push**	Logged by:	**Chris Sinton**	Zone:	**18N**
Borehole Diameter:	**2-in**	Ground Elevation:	**NA**	Vertical Datum:	**WGS 84**
Sampling Method:	**Geoprobe Macro-Core**	Depth to Water:	**NA**	Units:	**Degrees**

Depth (ft bgs)	Blow Count	% Recov. (depth ft)	PID Reading	Sample ID	USCS Group Symbol	Soil Description
0	NA	100%	0	SS4 (0-2)	CL	Lean clay (CL), brown, moist, trace gravel, no staining observed.
			0	SS4 (0-6)	Fill	Fill consisting of ash mixed with silt and sand, trace slag, no staining observed.
			0	SS4 (6-12)		
			0			
			0	SS4 (12-24)	Fill	Fill consisting of poorly graded sand with silt and sub-angular gravel, dry, no staining observed.
2			0		Fill	Fill comprised of dark ash.
4						

Notes:

bgs = below ground surface
ft = feet
in = inches
NA = not applicable

SETTLEMENT CONFIDENTIAL
INADMISSIBLE IN THIS OR ANY OTHER PROCEEDING

integral engineering p.c.

Boring ID: SS5

		Location:	**Corning, NY**		
		Date Started:	**7/29/22**	Northing:	**42.145393**
Project Name:	**Refractories**	Date Completed:	**7/29/22**	Easting:	**-77.059416**
Project Number:	**EF1017**	Drilling Contractor:	**Cascade Environmental**	Projection:	**NA**
Drilling Method:	**Direct Push**	Logged by:	**Chris Wood**	Zone:	**18N**
Borehole Diameter:	**2-in**	Ground Elevation:	**NA**	Vertical Datum:	**WGS 84**
Sampling Method:	**Geoprobe Macro-Core**	Depth to Water:	**NA**	Units:	**Degrees**

Depth (ft bgs)	Blow Count	% Recov. (depth ft)	PID Reading	Sample ID	USCS Group Symbol	Soil Description
0	NA	100%	0	SS5 (0-2)	SP	Poorly graded find sand (SP), grayish-brown, dry, loose, no staining observed.
					SP	Poorly graded fine sand (SP), gray, dry, loose, no staining observed.
			0	SS5 (0-6)	SP	Poorly graded fine sand (SP), grayish-brown, dry, no staining observed, loose, little medium to coarse sand, trace sub-angular gravel.
			0	SS5 (6-12)	SP	Poorly graded fine sand (SP), grayish-brown, dry, no staining observed, loose, little medium to coarse sand, trace sub-angular gravel, trace fine coal fragments between 0.7'-1.0'.
			0	SS5 (12-24)	SP	Poorly graded fine sand with sub-angular gravel (SP), grayish-brown, dry, medium dense, no staining observed.
2			0		SP	Poorly graded fine sand (SP), reddish-brown to grayish-brown, dry, loose, little sub-angular gravel and medium to coarse sand and slag clasts.
					SP	Fine sand (SP), orange, dry, loose.
4						

Notes:

Driller drove to 4 feet on last run.

bgs = below ground surface
ft = feet
in = inches
NA = not applicable

SETTLEMENT CONFIDENTIAL
INADMISSIBLE IN THIS OR ANY OTHER PROCEEDING

integral engineering p.c.

Boring ID: **SS6**

Location:	**Corning, NY**				
Date Started:	**7/29/22**			Northing:	**42.145613**
Project Name:	**Refractories**	Date Completed:	**7/29/22**	Easting:	**-77.059068**
Project Number:	**EF1017**	Drilling Contractor:	**Cascade Environmental**	Projection:	**NA**
Drilling Method:	**Direct Push**	Logged by:	**Chris Wood**	Zone:	**18N**
Borehole Diameter:	**2-in**	Ground Elevation:	**NA**	Vertical Datum:	**WGS 84**
Sampling Method:	**Geoprobe Macro-Core**	Depth to Water:	**NA**	Units:	**Degrees**

Depth (ft bgs)	Blow Count	% Recov. (depth ft)	PID Reading	Sample ID	USCS Group Symbol		Soil Description
0	NA	100%	0.2	SS6 (0-2)		**SP**	Poorly graded sand with silt (SP), brown, dry, no staining observed, loose, grass and roots at surface.
				SS6 (0-6)		**Fill**	Fill consisting of poorly graded sand, dark brown, dry, no staining observed, loose, trace medium and coarse sand, coarse off-white ash fragments at 0.3 ft bgs.
			1.2	SS6 (6-12)		**Fill**	Fill consisting of poorly graded fine sand, dark brown, dry, no staining observed, medium dense, little small and large sub-angular gravel.
			35	SS6 (12-24)		**Fill**	Fill consisting of poorly graded fine sand, dark brown, medium dense, dry, no staining observed, few large gravel-sized tan and mottled orange brick, trace off-white ash, little coarse slag fragments.
			35				
2							
4							

Notes:

bgs = below ground surface
ft = feet
in = inches
NA = not applicable

SETTLEMENT CONFIDENTIAL
INADMISSIBLE IN THIS OR ANY OTHER PROCEEDING

integral engineering p.c.

Boring ID: SS7

		Location:	**Corning, NY**		
		Date Started:	**7/27/22**	Northing:	**42.145172**
Project Name:	**Refractories**	Date Completed:	**7/27/22**	Easting:	**-77.059675**
Project Number:	**EF1017**	Drilling Contractor:	**Cascade Environmental**	Projection:	**NA**
Drilling Method:	**Direct Push**	Logged by:	**Chris Wood**	Zone:	**18N**
Borehole Diameter:	**2-in**	Ground Elevation:	**NA**	Vertical Datum:	**WGS 84**
Sampling Method:	**Geoprobe Macro-Core**	Depth to Water:	**NA**	Units:	**Degrees**

Depth (ft bgs)	Blow Count	% Recov. (depth ft)	PID Reading	Sample ID	USCS Group Symbol		Soil Description
0	NA	100%	6.7	SS7 (0-0.167) SS7 (0-0.5)		SP	Poorly graded fine sand (SP), brown, dry, no staining observed, loose, grass and roots at surface.
			2.8	SS7 (0.5-1)		Fill	Fill consisting of poorly graded fine sand, grayish-brown to brown, dry, no staining observed, loose, few medium and coarse sand, pulverized stone at 0.4 - 0.5 ft bgs.
			2.8			Fill	Fill consisting of poorly graded fine sand with gravel (SP), dark brown, dry, no staining observed, loose, little medium and coarse sand, trace slag fragments, coal fragments between 1.7-1.9 ft bgs.
2			2.8	SS7 (1-2)			
4							

Notes:

bgs = below ground surface
ft = feet
in = inches
NA = not applicable

Appendix F

Well Development Logs and
Groundwater Sampling Logs

integral engineering p.c.
31 West 34th Street
Suite 7196
New York, NY 10001

Monitoring Well Development Form

Well ID	MW5	Date:	9/13/2022 Time:	13:45 Well Diameter (in.*) :	2
PROJECT	Corning Refractories Plant	Depth to Water (ft below TOC)	25.38	Total Depth (ft)	**30.00**
LOCATION	1 Front Street, Corning, NY, 14830	Water Column (ft)	4.62		
PROJECT No.	EF1017	Well Volume (gal.*)	0.7854		
Personnel:	K. Zatwarnicki/C. Sinton/C. Zatwarnicki				

*well volumes per casing diam.: 1.25" = 0.08 gal/ft; 2" = 0.17 gal/ft; 3" = 0.38 gal/ft; 4" = 0.66 gal/ft

Time	Volume (gallons)	Temp. (°C)	Turbidity (NTUs)	pH	Cond. (S/m)	ORP (mV)	DO (mg/L)	Notes
13:45								Start
14:20	2							pumped well dry
15:00	6							
15:35			698					
15:45	10							
16:25			352					
16:35	14							
16:40								Complete well development

integral engineering p.c.
31 West 34th Street
Suite 7196
New York, NY 10001

Monitoring Well Development Form

Well ID	MW5	Date:	9/15/2022 Time:	12:35 Well Diameter (in.*) :	2
PROJECT	Corning Refractories Plant	Depth to Water (ft below TOC)	25.16	Total Depth (ft)	**30.00**
LOCATION	1 Front Street, Corning, NY, 14830	Water Column (ft)	4.84		
PROJECT No.	EF1017	Well Volume (gal.*)	0.8228		
Personnel:	K. Zatwarnicki/C. Sinton/C. Zatwarnicki				

*well volumes per casing diam.: 1.25" = 0.08 gal/ft; 2" = 0.17 gal/ft; 3" = 0.38 gal/ft; 4" = 0.66 gal/ft

Time	Volume (gallons)	Temp. (°C)	Turbidity (NTUs)	pH	Cond. (S/m)	ORP (mV)	DO (mg/L)	Notes
12:35								Start
13:45	5							
14:00			350					
15:30	10		289					
16:15			311					
16:30			226					
16:50	15							
17:15			143					DTW = 27.31 ft
17:20								Complete well development

SETTLEMENT CONFIDENTIAL
INADMISSIBLE IN THIS OR ANY OTHER PROCEEDING

integral engineering p.c.
31 West 34th Street
Suite 7196
New York, NY 10001

Monitoring Well Development Form

Well ID	MW1	Date:	9/15/2022 Time:	11:55 Well Diameter (in.*) :	1
PROJECT	Corning Refractories Plant	Depth to Water (ft below TOC)	20.62	Total Depth (ft)	**29.45**
LOCATION	1 Front Street, Corning, NY, 14830	Water Column (ft)	8.83		
PROJECT No.	EF1017	Well Volume (gal.*)	1.5011		
Personnel:	K. Zatwarnicki/C. Sinton/C. Zatwarnicki				

*well volumes per casing diam.: 1.25" = 0.08 gal/ft; 2" = 0.17 gal/ft; 3" = 0.38 gal/ft; 4" = 0.66 gal/ft

Time	Volume (gallons)	Temp. (°C)	Turbidity (NTUs)	pH	Cond. (S/m)	ORP (mV)	DO (mg/L)	Notes
11:55								Start
13:45			282					
14:40	3		166					
15:55			196					
16:30			112					
16:50			130					
17:00	4.5		236					Recharged DTW 20.60 ft
17:20								Complete well development

integral engineering p.c.
31 West 34th Street
Suite 7196
New York, NY 10001

Monitoring Well Development Form

Well ID	MW2	Date:	1/5/2023 Time:	9:50 Well Diameter (in.*) :	2
PROJECT	Corning Refractories Plant	Depth to Water (ft below TOC)	20.46	Total Depth (ft)	**32.00**
LOCATION	1 Front Street, Corning, NY, 14830	Water Column (ft)	11.54		
PROJECT No.	EF1017	Well Volume (gal.*)	1.9618		
Personnel:	K. Zatwarnicki				

*well volumes per casing diam.: 1.25" = 0.08 gal/ft; 2" = 0.17 gal/ft; 3" = 0.38 gal/ft; 4" = 0.66 gal/ft

Time	Volume (gallons)	Temp. (°C)	Turbidity (NTUs)	pH	Cond. (S/m)	ORP (mV)	DO (mg/L)	Notes
9:50								Start
10:00								
10:10	5							
10:15	10							
10:20	15							
10:30	20							
10:35	20							
10:40	25							
11:00	30							Surge well
11:05	30							
11:20	35							
11:30	40							
11:40	45							
11:45	50							
11:50	55		624.0					
11:55	55							
12:10	60							
12:20	65							
12:35	70							
12:40	75							
12:50	80							
13:00	85							
13:05	90							
13:10	95							
13:15	100		152					
13:25	105							
13:35	110							
13:40	115							
13:45	120		52.9					
14:00	125		75.0					
14:10	130							
14:15	135							
14:20	140		30.5					
14:30	145							
14:40	150		23.0					
15:00	155		20.32					
15:10	160							
15:20	165							
15:25	170							
15:30	175		32.7					
15:40	180							Complete well development

SETTLEMENT CONFIDENTIAL
INADMISSIBLE IN THIS OR ANY OTHER PROCEEDING

integral engineering p.c.
31 West 34th Street
Suite 7196
New York, NY 10001

Monitoring Well Development Form

Well ID	MW3	Date:	1/5/2023 Time:	12:45 Well Diameter (in.*) :	2
PROJECT	Corning Refractories Plant	Depth to Water (ft below TOC)	20.46	Total Depth (ft)	**30.00**
LOCATION	1 Front Street, Corning, NY, 14830	Water Column (ft)	9.54		
PROJECT No.	EF1017	Well Volume (gal.*)	1.6218		
Personnel:	K. Zatwarnicki				

*well volumes per casing diam.: 1.25" = 0.08 gal/ft; 2" = 0.17 gal/ft; 3" = 0.38 gal/ft; 4" = 0.66 gal/ft

Time	Volume (gallons)	Temp. (°C)	Turbidity (NTUs)	pH	Cond. (S/m)	ORP (mV)	DO (mg/L)	Notes
12:45								Start
12:50	15							
12:55	30							
13:00	45							
13:05	60							
13:10	70							
13:15	75							
13:20	80							
13:25	85		118					
13:30	90							
13:35	95							
13:40	100							
13:45	105		67.9					
13:50	115							
13:55	120							
14:00	125		523					
14:05	140							
14:10	155							
14:15	170							
14:20	180		216					
14:25	190							
14:30	200							
14:35	210							
14:40	215		25.6					
14:45	225							
14:50	235							
14:55	245							
15:00	250		75.9					
15:05	255							
15:10	260							
15:15	265							
15:20	270							
15:25	275							
15:30	280		21.1					
15:35								Complete well development

SETTLEMENT CONFIDENTIAL
INADMISSIBLE IN THIS OR ANY OTHER PROCEEDING

integral engineering p.c.
31 West 34th Street
Suite 7196
New York, NY 10001

Groundwater Sample Collection Form

Well ID	MW1	Date:	10/5/2022	Time: 10:05	Well Diameter (in.*) : 1
PROJECT	Corning Refractories Plant	Depth to Water (ft below TOC)	20.03	Total Depth (ft)	**29.03**
LOCATION	1 Front Street, Corning, NY, 14830	Water Column (ft)	9		
PROJECT No.	EF1017	Well Volume (gal.*)	1.53		
Personnel:	C. Wood/C. Zatwarnicki				

*well volumes per casing diam.: 1.25" = 0.08 gal/ft; 2" = 0.17 gal/ft; 3" = 0.38 gal/ft; 4" = 0.66 gal/ft

Time	Volume (Liter)	Temp. (°C)	Turbidity (NTUs)	pH	Cond. (S/m)	ORP (mV)	DO (mg/L)	Notes
10:40	0.0							Start
10:45	0.5	15.60	703	6.22	1.43	250	1.51	
10:50	1.0	15.92	158	6.72	1.28	222	1.90	
10:55	1.5	15.98	110	6.70	1.21	220	2.10	
11:00	2.0	16.03	44.6	6.74	1.15	214	2.16	
11:05	2.5	16.06	30.6	6.73	1.12	218	1.99	
11:10	3.0	16.07	8.8	6.69	1.06	208	2.11	
11:15	3.5	16.09	6.1	6.70	1.03	230	2.17	
11:20	4.0	16.12	4.1	6.70	1.00	234	2.42	
11:25	4.5	16.12	2.7	6.69	0.991	238	2.56	
11:30	5.0	16.15	3.3	6.67	0.973	243	2.72	
11:35	5.5	16.17	2.8	6.68	0.954	246	2.71	
11:40	6.0	16.18	0.3	6.68	0.963	250	2.71	

SETTLEMENT CONFIDENTIAL
INADMISSIBLE IN THIS OR ANY OTHER PROCEEDING

integral engineering p.c.
31 West 34th Street
Suite 7196
New York, NY 10001

Groundwater Sample Collection Form

Well ID	MW5	Date:	10/5/2022 Time:	14:20 Well Diameter (in.*) :	2
PROJECT	Corning Refractories Plant	Depth to Water (ft below TOC)	24.79	Total Depth (ft)	**30.00**
LOCATION	1 Front Street, Corning, NY, 14830	Water Column (ft)	5.21		
PROJECT No.	EF1017	Well Volume (gal.*)	0.8857		
Personnel:	C. Wood/C. Zatwarnicki				

*well volumes per casing diam.: 1.25" = 0.08 gal/ft; 2" = 0.17 gal/ft; 3" = 0.38 gal/ft; 4" = 0.66 gal/ft

Time	Volume (Liter)	Temp. (°C)	Turbidity (NTUs)	pH	Cond. (S/m)	ORP (mV)	DO (mg/L)	Notes
14:58	1.0	21.26	241	6.57	0.910	28	4.58	
15:03	1.5	21.07	234	6.56	0.907	24	4.24	
15:08	2.0	20.98	203	6.56	0.906	21	3.96	
15:13	2.5	20.94	186	6.56	0.904	18	3.72	
15:18	3.0	20.91	159	6.56	0.902	13	3.63	
15:23	3.5	20.85	133	6.57	0.899	8	3.35	
15:28	4.0	20.84	124	6.56	0.898	2	3.13	
15:33	4.5	20.85	118	6.56	0.897	-1	3.00	
15:38	5.0	21.13	105	6.56	0.890	-3	2.83	
15:43	5.5	21.19	105	6.57	0.887	-3	2.62	
15:48	6.0	21.26	55.7	6.56	0.887	-2	2.40	
15:53	6.5	21.29	31.5	6.57	0.887	-1	2.39	
15:58	7.0	21.29	27.4	6.57	0.885	0	2.19	
16:03	7.5	21.26	27.0	6.57	0.883	2	1.93	
16:08	8.0	21.25	20.7	6.56	0.883	4	1.95	
16:13	8.5	21.22	19.3	6.57	0.883	5	1.83	
16:18	9.0	21.21	18.5	6.57	0.882	5	1.78	

SETTLEMENT CONFIDENTIAL
INADMISSIBLE IN THIS OR ANY OTHER PROCEEDING

integral engineering p.c.
31 West 34th Street
Suite 7196
New York, NY 10001

Groundwater Sample Collection Form

Well ID	MW1	Date:	1/31/2023	Time: 15:45	Well Diameter (in.*) : 1
PROJECT	Corning Refractories Plant	Depth to Water (ft below TOC)	16.05	Total Depth (ft)	**29.03**
LOCATION	1 Front Street, Corning, NY, 14830	Water Column (ft)	12.98		
PROJECT No.	EF1017	Well Volume (gal.*)	2.2066		
Personnel:	C. Wood/K. Zatwarnicki				

*well volumes per casing diam.: 1.25" = 0.08 gal/ft; 2" = 0.17 gal/ft; 3" = 0.38 gal/ft; 4" = 0.66 gal/ft

Time	Volume (Liter)	Temp. (°C)	Turbidity (NTUs)	pH	Cond. (S/m)	ORP (mV)	DO (mg/L)	Notes
15:52	2.275	15.3	263	6.95	1.393	105.1	1.08	
15:57	3.275	15.3	382	6.65	1.240	109.7	1.54	Adjusted flow to 0.20 LPM at 15:55.
16:07	5.275	15.3	16.35	6.44	1.120	132.0	2.12	Cleaned flow cell due to fluctuating
16:12	6.275	15.3	126.3	6.41	1.088	94.9	2.13	turbidity at 16:00. Recalibrated YSI for
16:32	10.275	15.3	0.81	5.61	1.022	161.1	3.65	turbidity at 16:15
16:37	11.275	15.3	0.17	6.18	1.029	134.6	2.52	
16:42	12.275	15.3	0.36	6.23	1.025	130.0	2.51	
16:47	13.275	15.3	1.14	6.26	1.022	129.6	2.52	

SETTLEMENT CONFIDENTIAL
INADMISSIBLE IN THIS OR ANY OTHER PROCEEDING

integral engineering p.c.
31 West 34th Street
Suite 7196
New York, NY 10001

Groundwater Sample Collection Form

Well ID	MW2	Date:	1/31/2023 Time:	9:25 Well Diameter (in.*) :	2
PROJECT	Corning Refractories Plant	Depth to Water (ft below TOC)	19.89	Total Depth (ft)	**31.90**
LOCATION	1 Front Street, Corning, NY, 14830	Water Column (ft)	12.01		
PROJECT No.	EF1017	Well Volume (gal.*)	2.0417		
Personnel:	C. Wood/K. Zatwarnicki				

*well volumes per casing diam.: 1.25" = 0.08 gal/ft; 2" = 0.17 gal/ft; 3" = 0.38 gal/ft; 4" = 0.66 gal/ft

Time	Volume (Liter)	Temp. (°C)	Turbidity (NTUs)	pH	Cond. (S/m)	ORP (mV)	DO (mg/L)	Notes
9:40	1.9	11.9	21.51	6.69	0.732	120.6	0.98	Increased flow to 0.325 LPM at 09:35
9:45	3.52	12.0	14.80	6.77	0.731	113.4	0.95	
9:50	5.15	12.0	10.30	6.80	0.733	110.0	0.97	
9:55	6.78	12.2	8.92	6.85	0.733	80.3	1.00	
10:00	8.40	12.1	6.65	6.86	0.734	84.6	1.13	
10:05	10.00	12.2	5.77	6.86	0.734	85.9	1.24	
10:10	10.33	12.0	4.95	6.91	0.734	70.2	1.31	
10:15	11.95	12.0	4.87	6.88	0.733	74.6	1.38	
10:20	13.58	12.0	4.92	6.87	0.731	78.2	1.41	

SETTLEMENT CONFIDENTIAL
INADMISSIBLE IN THIS OR ANY OTHER PROCEEDING

integral engineering p.c.
31 West 34th Street
Suite 7196
New York, NY 10001

Groundwater Sample Collection Form

Well ID	MW3	Date:	1/31/2023 Time:	11:35 Well Diameter (in.*) :	2
PROJECT	Corning Refractories Plant	Depth to Water (ft below TOC)	18.62	Total Depth (ft)	**29.26**
LOCATION	1 Front Street, Corning, NY, 14830	Water Column (ft)	10.64		
PROJECT No.	EF1017	Well Volume (gal.*)	1.8088		
Personnel:	C. Wood/K. Zatwarnicki				

*well volumes per casing diam.: 1.25" = 0.08 gal/ft; 2" = 0.17 gal/ft; 3" = 0.38 gal/ft; 4" = 0.66 gal/ft

Time	Volume (Liter)	Temp. (°C)	Turbidity (NTUs)	pH	Cond. (S/m)	ORP (mV)	DO (mg/L)	Notes
11:42	2.5	13.4	4.65	6.35	0.764	138.8	4.88	flow rate to 0.35 LPM at 11:37
11:47	4.25	13.5	3.71	6.31	0.767	143.8	4.83	
11:52	6.0	13.4	3.95	6.29	0.768	147.7	4.82	
11:57	7.75	13.6	3.61	6.29	0.769	149.9	4.83	
12:02	9.5	13.6	2.80	6.28	0.768	150.6	4.83	

integral engineering p.c.
31 West 34th Street
Suite 7196
New York, NY 10001

Groundwater Sample Collection Form

Well ID	MW5	Date:	1/31/2023 Time:	14:05 Well Diameter (in.*) :	2
PROJECT	Corning Refractories Plant	Depth to Water (ft below TOC)	20.05	Total Depth (ft)	**30.02**
LOCATION	1 Front Street, Corning, NY, 14830	Water Column (ft)	9.97		
PROJECT No.	EF1017	Well Volume (gal.*)	1.6949		
Personnel:	C. Wood/K. Zatwarnicki				

*well volumes per casing diam.: 1.25" = 0.08 gal/ft; 2" = 0.17 gal/ft; 3" = 0.38 gal/ft; 4" = 0.66 gal/ft

Time	Volume (Liter)	Temp. (°C)	Turbidity (NTUs)	pH	Cond. (S/m)	ORP (mV)	DO (mg/L)	Notes
14:10	1.75	12.8	19.48	6.14	0.696	126.9	0.64	
14:15	3.50	12.6	10.15	6.13	0.689	125.4	0.49	
14:20	5.25	12.7	8.17	6.12	0.690	123.2	0.45	
14:25	7.0	12.8	5.79	6.12	0.685	119.6	0.38	
14:30	8.75	12.7	6.73	6.11	0.686	116.6	0.36	
14:35	10.5	12.8	8.48	6.11	0.685	113.8	0.34	
14:40	12.25	12.8	7.71	6.10	0.685	113.0	0.33	
14:45	14.0	12.8	8.75	6.10	0.682	111.5	0.32	
14:50	15.75	--	--	--	--	--	--	clean flow through cell due to fluctuating turbidity values
14:55	17.50	12.5	5.25	6.08	0.684	125.6	0.47	
15:00	19.25	12.6	5.01	6.09	0.684	121.2	0.36	
15:05	21.0	12.6	5.31	6.09	0.685	117.5	0.33	

Appendix G

Final Data Usability Summary Report

Data Usability Summary Report

Refractories Plant
P-Site Characterization
July/September/October 2022 Sampling

Corning, New York
NYSDEC Project ID 851048

Prepared for
Corning Incorporated
Corning, NY 14831

Prepared by

31 West 34th Street
Suite 7196
New York, NY 10001

July 11, 2023

Affiliated with Integral Consulting Inc.

CONTENTS

LIST OF TABLES ..... **iii**

ACRONYMS AND ABBREVIATIONS ..... **iii**

1 INTRODUCTION **1**

2 OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES **3**

3 REFERENCES **6**

Appendix A. Data Validation Report

Appendix B. Quality Control Summary Forms

Appendix C. Data Validation Resumes

LIST OF TABLES

Table 2-1. Corning Refractories Plant, Validated Analytical Results—Soils

Table 2-2. Corning Refractories Plant, Validated Analytical Results—Groundwater

ACRONYMS AND ABBREVIATIONS

ASP	Analytical Services Protocol
DUSR	Data Usability Summary Report
EPA	U.S. Environmental Protection Agency
NYSDEC	New York State Department of Environmental Conservation
QAPP	Quality Assurance Project Plan
Refractories Plant	Corning Refractories Plant P-Site
SDG	sample delivery group
SOP	standard operating procedure

1 INTRODUCTION

This Data Usability Summary Report (DUSR) has been prepared by Integral Engineering, P.C. on behalf of Corning Incorporated to detail the quality assurance and quality control of analytical data collected within the Corning Refractories Plant P-Site (the "Refractories Plant"). The Refractories Plant is located at 1 Front Street in Corning, Steuben County, New York. The subject site consists of a ±102,882-ft^2 slab-on-grade structure situated on 3.87 acres of land. The structure comprises 13 interconnected buildings/additions.

Shallow soil, soil boring, and groundwater samples were collected on July 25–27, 2022, July 29, 2022, September 12–15, 2022, October 5, 2022, December 21, 2022, January 3, 2023, and January 31, 2023. The samples were analyzed by Eurofins TestAmerica in Buffalo, New York, Eurofins TestAmerica in Burlington, Vermont, and Eurofins Lancaster Laboratories Environment in Lancaster, Pennsylvania, in accordance with the quality assurance project plan (QAPP, Integral 2022). The Eurofins laboratories in all three locations are certified to conduct project analyses through the New York State Department of Health Environmental Laboratory Approval Program and the National Environmental Laboratory Accreditation Program. Sample preparation, extraction, and analyses were performed using laboratory standard operating procedures (SOPs) in accordance with U.S. Environmental Protection Agency (EPA) methods. Analytical results for these samples are reported in the laboratory data package sample delivery groups (SDGs), and analyses reviewed are listed in Table 2-1 of the data validation report (Appendix A). The SDGs covered by this report are:

- 480-200114-1
- 480-200130-1
- 480-200156-1
- 480-200248-1
- 480-201563-1
- 480-201615-1
- 480-201707-1
- 480-202448-1
- 480-204989-1
- 480-205124-1
- 480-205868-1
- 480-205868-2.

Integral Consulting Inc. validated all sample analytical results to ensure adherence to the required protocols and to evaluate usability. Data validation is performed in accordance with the requirements of the New York State Department of Environmental Conservation (NYSDEC) DER-10 Technical Guidance for Site Investigation and Remediation (NYSDEC 2010) and in accordance with method and QAPP specifications, NYSDEC's Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) under NYSDEC's Part 375 Remedial Programs (NYSDEC 2022), EPA Region 2 SOPs, and the guidance set forth in the EPA inorganic and organic data validation methods (USEPA 2020a,b). Any exceptions are noted.

2 OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES

The laboratory data deliverable packages were reviewed for the following:

- Completeness
- Chain-of-custody documents to verify sample identities
- Sample log-in documents to identify potential problems with factors including custody seals, container integrity, sample preservation, and labeling
- Sample analysis methods and holding times
- Method blank data to determine the presence of sources of contamination in the analytical process, where applicable
- Surrogate, laboratory control sample, matrix spike, and serial dilution data as a measure of analytical accuracy, where applicable
- Laboratory and field duplicate data as a measure of analytical and field sampling precision
- Instrument performance and initial and continuing calibration data
- Completeness as a percentage of measurements made that are judged to be valid measurements compared to the total number of measurements planned, where applicable
- Data summary sheets and qualifiers for consistency with raw data and qualifier definitions
- Sample preparation and analysis logs, system performance checks, raw data, mass spectral and target compound identification, and calculations.

Data validation has been completed for the data packages generated by the laboratory for the samples collected from the Refractories Plant and reported in the subject SDGs. A data validation report was prepared to document the specific findings from review of the data packages and the validation of analytical results (Appendix A). Category B laboratory data deliverables are provided in Appendix B.

Data validation was performed by individuals qualified to perform these tasks (Appendix C). The data validators do not have other positions on the project that involve project productivity or profitability as a criterion for job performance.

Verification of the analytical data packages and the data validation procedures performed for the subject SDGs and described in this DUSR meet the requirements of the DER-10 Appendix 2B guidance and yielded the following findings:

- The laboratory data packages are complete and meet the requirements of a NYSDEC Analytical Services Protocol (ASP) Category B data deliverable. No data were qualified based on these findings.
- All holding times were met unless otherwise noted in the appended data validation report.
- All quality control data including blanks, calibration standards, instrument tunings, calibration verifications, spike recoveries, replicate analyses, laboratory controls, and sample data fall within the protocol limits and specifications unless otherwise noted in the appended data validation report.
- Evaluation of the raw data confirms the results provided in the data summary sheets and quality control verification forms unless otherwise noted in the appended data validation reports.
- Correct data qualifiers consistent with the NYSDEC ASP have been used in the analytical data package or have been subsequently applied in the validated analytical results summary table.
- Quality control exceedances are specifically noted in the appended data validation report. Copies of quality control summary forms associated with any exceedances are provided in Appendix B.

Based on validation, qualified sample results are usable as estimated values in conjunction with the qualifiers presented and discussed in this report. Validation qualifiers are described in Table 1-3 of the data validation report (Appendix A). Summaries of the validated analytical results and qualifiers from the SDGs covered in this DUSR are provided in Table 3-2 of the data validation report. Rejected sample results are considered unusable. Sample results to which validation qualifiers were not applied met the criteria for those quality control parameters that were evaluated. The data qualifications resulting from the data validation review and statements on the laboratory analytical precision, accuracy, representativeness, completeness, and comparability are discussed in the data validation report.

A total of 13,814 results were reported. A total of 2,241 results (16 percent) were qualified as estimated, tentatively identified, or not detected. Some data points were qualified for multiple reasons; therefore, the sum of the qualifiers assigned is greater than the total number of data points qualified. A total of 151 results (1.1 percent) were rejected based on very low internal standard or matrix spike recoveries. Completeness was 99 percent, which meets the completeness goal of 90 to 100 percent. Sixty-seven rejected results were qualified as do-not-report because a more appropriate result was available, and these results were not included in

the completeness calculation. A summary of the validated results, excluding trip blank, equipment blank, field blank results, and rejected (do-not-report) results, is presented in Tables 2-1 and 2-2.

3 REFERENCES

Integral. 2022. Quality Assurance Project Plan. P-Site Characterization Work Plan: Corning Refractories Plant, NYSDEC Project ID 851048, 1 Front Street, Corning, New York. April 2022.

NYSDEC. 2010. DER-10, Technical Guidance for Site Investigation and Remediation. New York State Department of Environmental Conservation, Division of Environmental Remediation. Updated May 3, 2010.

NYSDEC. 2022. Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) under NYSDEC's Part 375 Remedial Programs. New York State Department of Environmental Conservation. November 2022.

USEPA. 2020a. National functional guidelines for inorganic Superfund methods data review (using USEPA Region 2 SOP modifications). US EPA 540-R-20-006. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation, Washington, DC.

USEPA. 2020b. National functional guidelines for Superfund organic methods data review (using USEPA Region 2 SOP modifications). US EPA 540-R-20-005. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation, Washington, DC.

Tables

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB1	SB1	SB1	SB1	SB1
				Sample Identification	SB1 (0-0.5)	SB1 (0.5-1)	SB1 (1-2)	SB1 (15-16)	SB1 (15-16)
				Laboratory ID	480-200156-2	480-200156-3	480-200156-4	480-200156-5	480-200156-6
				Sample Date	2022-07-26 04:07:00	2022-07-26 04:07:00	2022-07-26 04:07:00	2022-07-26 04:07:00	2022-07-26 04:07:00
Metals (µg/kg)									
Arsenic	7440382	16,000	16,000		7,400	7,900	6,800	8,900	8,900
Lead	7439921	3,900,000	1,000,000		186,000	17,800	33,700	8,500	8,500
Cadmium	7440439	60,000	9,300		11,600	470	1,300	130 *J*	130 *J*
Aluminum	7429905				8,980,000	9,170,000	8,530,000	7,070,000	7,070,000
Antimony	7440360				3,900 *J*	1,400 *J*	1,100 *J*	800 *J*	800 *J*
Barium	7440393	10,000,000	400,000		137,000	125,000	117,000	82,300	82,300
Beryllium	7440417	2,700,000	590,000		420	470	440	260	260
Calcium	7440702				6,080,000	1,960,000	1,810,000	1,340,000	1,340,000
Chromium	7440473				15,200	11,300	13,300	11,500	11,500
Cobalt	7440484				9,600	8,300	8,000	7,400	7,400
Copper	7440508	10,000,000	270,000		21,400	10,600	9,900	19,800	19,800
Iron	7439896				20,000,000	18,600,000	17,000,000	20,500,000	20,500,000
Magnesium	7439954				4,080,000	3,110,000	2,840,000	2,370,000	2,370,000
Manganese	7439965	10,000,000	10,000,000		559,000	585,000	535,000	682,000	682,000
Mercury	7439976	5,700	2,800		220	42	25	5 *U*	5 *U*
Nickel	7440020	10,000,000	310,000		23,100	18,700	17,400	17,500	17,500
Potassium	7440097				870,000	1,030,000	967,000	341,000	341,000
Selenium	7782492	6,800,000	1,500,000		1,100 *U*	640 *U*	720 *U*	450 *U*	450 *U*
Silver	7440224	6,800,000	1,500,000		520 *J*	230 *U*	240 *U*	220 *U*	220 *U*
Sodium	7440235				172,000 *J*	123,000 *J*	135,000 *J*	112,000 *J*	112,000 *J*
Thallium	7440280				400 *U*	350 *U*	360 *U*	340 *U*	340 *U*
Vanadium	7440622				14,000	13,100	11,900	11,600	11,600
Zinc	7440666	10,000,000	10,000,000		297,000	66,400	95,600	56,600	56,600
Polycyclic Aromatic Hydrocarbons (µg/kg)									
2-Methylnaphthalene	91576				37 *U*	41 *U*	38 *U*	37 *U*	37 *U*
Acenaphthene	83329	1,000,000	500,000		28 *U*	30 *U*	28 *U*	27 *U*	27 *U*
Acenaphthylene	208968	1,000,000	500,000		24 *U*	27 *U*	24 *U*	24 *U*	24 *U*
Anthracene	120127	1,000,000	500,000		46 *U*	51 *U*	47 *U*	45 *U*	45 *U*
Benzo[a]anthracene	56553	11,000	5,600		19 *U*	20 *U*	19 *U*	18 *U*	18 *U*
Benzo[a]pyrene	50328	1,100	1,000		28 *U*	30 *U*	28 *U*	27 *U*	27 *U*
Benzo[b]fluoranthene	205992	11,000	5,600		30 *U*	33 *U*	30 *U*	29 *U*	29 *U*
Benzo[g,h,i]perylene	191242	1,000,000	500,000		20 *U*	22 *U*	20 *U*	19 *U*	19 *U*
Benzo[k]fluoranthene	207089	110,000	56,000		24 *U*	27 *U*	24 *U*	24 *U*	24 *U*
Chrysene	218019	110,000	56,000		42 *U*	46 *U*	42 *U*	41 *U*	41 *U*
Dibenzo[a,h]anthracene	53703	1,100	560		33 *U*	36 *U*	33 *U*	32 *U*	32 *U*
Dibenzofuran	132649	1,000,000	350,000		22 *U*	24 *U*	22 *U*	22 *U*	22 *U*
Fluoranthene	206440	1,000,000	500,000		20 *U*	22 *U*	20 *U*	19 *U*	19 *U*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB1	SB1	SB1	SB1	SB1
				Sample Identification	SB1 (0-0.5)	SB1 (0.5-1)	SB1 (1-2)	SB1 (15-16)	SB1 (15-16)
				Laboratory ID	480-200156-2	480-200156-3	480-200156-4	480-200156-5	480-200156-6
				Sample Date	2022-07-26 04:07:00	2022-07-26 04:07:00	2022-07-26 04:07:00	2022-07-26 04:07:00	2022-07-26 04:07:00
Fluorene	86737	1,000,000	500,000		22 *U*	24 *U*	22 *U*	22 *U*	22 *U*
Indeno[1,2,3-cd]pyrene	193395	11,000	5,600		23 *U*	25 *U*	23 *U*	23 *U*	23 *U*
Naphthalene	91203	1,000,000	500,000		24 *U*	27 *U*	24 *U*	24 *U*	24 *U*
Phenanthrene	85018	1,000,000	500,000		28 *U*	30 *U*	28 *U*	27 *U*	27 *U*
Pyrene	129000	1,000,000	500,000		22 *U*	24 *U*	22 *U*	22 *U*	22 *U*
Per- and Polyfluoroalkyl Substances (µg/kg)									
6:2 fluorotelomer sulfonate	27619972								
8:2 fluorotelomer sulfonate	39108344								
2-(N-ethyl-perfluorooctane sulfonamido) acetate									
Perfluorobutyric acid	375224								
2-(N-methyl-perfluorooctane sulfonamido) acetic acid									
Perfluorooctanoic acid	335671	600,000	500,000						
Perfluorooctane sulfonic acid	1763231	440,000	440,000						
Perfluorobutane Sulfonic Acid	375735								
Perfluorodecanoic Acid	335762								
Perfluorododecanoic Acid	307551								
Perfluorodecanesulfonic acid	335773								
Perfluoroheptanoic Acid	375859								
Perfluoroheptanesulfonic acid	375928								
Perfluorohexanoic Acid	307244								
Perfluorohexane Sulfonic Acid	355464								
Perfluorononanoic Acid	375951								
Perfluorooctane sulfonamide	754916								
Perfluoropentanoic Acid	2706903								
Perfluorotetradecanoic Acid	376067								
Perfluorotridecanoic Acid	72629948								
Perfluoroundecanoic Acid	2058948								
Semivolatile Organic Compounds (µg/kg)									
Atrazine	1912249				65 *U*	71 *U*	66 *U*	64 *U*	64 *U*
Carbazole	86748				22 *U*	24 *U*	22 *U*	22 *U*	22 *U*
2,4,5-Trichlorophenol	95954				51 *U*	55 *U*	51 *U*	50 *U*	50 *U*
2,4,6-Trichlorophenol	88062				37 *U*	41 *U*	38 *U*	37 *U*	37 *U*
2,4-Dichlorophenol	120832				20 *U*	22 *U*	20 *U*	19 *U*	19 *U*
2-Chlorophenol	95578				34 *U*	37 *U*	34 *U*	34 *U*	34 *U*
Pentachlorophenol	87865	55,000	6,700		190 *U*	200 *U*	190 *U*	180 *U*	180 *U*
1,1'-Biphenyl	92524				28 *U*	30 *U*	28 *U*	27 *U*	27 *U*
2,2'-oxybis(1-Chloropropane)	108601				37 *U*	41 *U*	38 *U*	37 *U*	37 *U*
2,4-Dimethylphenol	105679				45 *U*	49 *U*	46 *U*	44 *U*	44 *U*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB1	SB1	SB1	SB1	SB1
				Sample Identification	SB1 (0-0.5)	SB1 (0.5-1)	SB1 (1-2)	SB1 (15-16)	SB1 (15-16)
				Laboratory ID	480-200156-2	480-200156-3	480-200156-4	480-200156-5	480-200156-6
				Sample Date	2022-07-26 04:07:00	2022-07-26 04:07:00	2022-07-26 04:07:00	2022-07-26 04:07:00	2022-07-26 04:07:00
2,4-Dinitrophenol	51285				860 *U*	950 *U*	870 *U*	850 *U*	850 *U*
2,4-Dinitrotoluene	121142				39 *U*	42 *U*	39 *U*	38 *U*	38 *U*
2,6-Dinitrotoluene	606202				22 *U*	24 *U*	22 *U*	22 *U*	22 *U*
2-Chloronaphthalene	91587				31 *U*	34 *U*	31 *U*	30 *U*	30 *U*
2-Methylphenol	95487	1,000,000	500,000		22 *U*	24 *U*	22 *U*	22 *U*	22 *U*
2-Nitroaniline	88744				28 *U*	30 *U*	28 *U*	27 *U*	27 *U*
2-Nitrophenol	88755				53 *U*	58 *U*	53 *U*	52 *U*	52 *U*
3,3'-Dichlorobenzidine	91941				220 *U*	240 *U*	220 *U*	220 *U*	220 *U*
3-Nitroaniline	99092				52 *U*	57 *U*	52 *U*	51 *U*	51 *U*
4,6-Dinitro-2-methylphenol	534521				190 *U*	200 *U*	190 *U*	180 *U*	180 *U*
4-Bromophenyl-phenylether	101553				26 *U*	29 *U*	27 *U*	26 *U*	26 *U*
4-Chloro-3-methylphenol	59507				46 *U*	51 *U*	47 *U*	45 *U*	45 *U*
4-Chloroaniline	106478				46 *U*	51 *U*	47 *U*	45 *U*	45 *U*
4-Chlorophenyl-phenyl ether	7005723				23 *U*	25 *U*	23 *U*	23 *U*	23 *U*
4-Methylphenol	106445	1,000,000	500,000		22 *U*	24 *U*	22 *U*	22 *U*	22 *U*
4-Nitroaniline	100016				98 *U*	110 *U*	99 *U*	96 *U*	96 *U*
4-Nitrophenol	100027				130 *U*	140 *U*	130 *U*	130 *U*	130 *U*
Acetophenone	98862				25 *U*	28 *U*	26 *U*	25 *U*	25 *U*
Benzaldehyde	100527				150 *U*	160 *U*	150 *U*	150 *U*	150 *U*
Bis(2-chloroethyl)ether	111444				24 *U*	27 *U*	24 *U*	24 *U*	24 *U*
bis(2-Chloroethoxy)methane	111911				40 *U*	43 *U*	40 *U*	39 *U*	39 *U*
bis(2-Ethylhexyl)phthalate	117817				84 *J*	70 *U*	64 *U*	63 *U*	63 *U*
Benzyl n-butyl phthalate	85687				31 *U*	34 *U*	31 *U*	30 *U*	30 *U*
Caprolactam	105602				56 *U*	61 *U*	57 *U*	55 *U*	55 *U*
Diethyl phthalate	84662				24 *U*	27 *U*	24 *U*	24 *U*	24 *U*
Dimethyl phthalate	131113				22 *U*	24 *U*	22 *U*	22 *U*	22 *U*
Di-n-butyl phthalate	84742				32 *U*	35 *U*	32 *U*	31 *U*	31 *U*
Di-n-octylphthalate	117840				22 *U*	24 *U*	22 *U*	22 *U*	22 *U*
Hexachloroethane	67721				24 *U*	27 *U*	24 *U*	24 *U*	24 *U*
Hexachlorobenzene	118741	12,000	6,000		25 *U*	28 *U*	26 *U*	25 *U*	25 *U*
Hexachlorobutadiene	87683				28 *U*	30 *U*	28 *U*	27 *U*	27 *U*
Hexachlorocyclopentadiene	77474				25 *U*	28 *U*	26 *U*	25 *U*	25 *U*
Isophorone	78591				40 *U*	43 *U*	40 *U*	39 *U*	39 *U*
Nitrobenzene	98953				21 *U*	23 *U*	21 *U*	21 *U*	21 *U*
N-Nitrosodi-n-propylamine	621647				32 *U*	35 *U*	32 *U*	31 *U*	31 *U*
N-Nitrosodiphenylamine	86306				150 *U*	170 *U*	150 *U*	150 *U*	150 *U*
Phenol	108952	1,000,000	500,000		29 *U*	31 *U*	29 *U*	28 *U*	28 *U*
1,4-Dioxane	123911	250,000	130,000						

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB1	SB1	SB1	SB1	SB1
				Sample Identification	SB1 (0-0.5)	SB1 (0.5-1)	SB1 (1-2)	SB1 (15-16)	SB1 (15-16)
				Laboratory ID	480-200156-2	480-200156-3	480-200156-4	480-200156-5	480-200156-6
				Sample Date	2022-07-26 04:07:00	2022-07-26 04:07:00	2022-07-26 04:07:00	2022-07-26 04:07:00	2022-07-26 04:07:00
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	630206				0.57 *U*	0.44 *U*	0.39 *U*	0.54 *U*	0.54 *U*
1,1,1-Trichloroethane	71556	1,000,000	500,000		0.41 *U*	0.32 *U*	0.29 *U*	0.39 *U*	0.39 *U*
1,1,2,2-Tetrachloroethane	79345				0.92 *U*	0.71 *U*	0.64 *U*	0.87 *U*	0.87 *U*
1,1,2-Trichloroethane	79005				0.74 *U*	0.57 *U*	0.51 *U*	0.70 *U*	0.70 *U*
1,1-Dichloroethane	75343	480,000	240,000		0.69 *U*	0.53 *U*	0.48 *U*	0.66 *U*	0.66 *U*
1,1-Dichloroethene	75354	1,000,000	500,000		0.70 *U*	0.53 *U*	0.48 *U*	0.66 *U*	0.66 *U*
1,2,3-Trimethylbenzene	526738				1.20 *U*	0.89 *U*	0.80 *U*	1.10 *U*	1.10 *U*
1,2,4-Trimethylbenzene	95636	380,000	190,000		1.10 *U*	0.84 *U*	0.75 *U*	1.00 *U*	1.00 *U*
1,2,4-Trichlorobenzene	120821				0.35 *U*	0.27 *U*	0.24 *U*	0.33 *U*	0.33 *U*
1,2-Dichlorobenzene	95501	1,000,000	500,000		0.44 *U*	0.34 *U*	0.31 *U*	0.42 *U*	0.42 *U*
1,3-Dichlorobenzene	541731	560,000	280,000		0.29 *U*	0.22 *U*	0.20 *U*	0.28 *U*	0.28 *U*
1,4-Dichlorobenzene	106467	250,000	130,000		0.80 *U*	0.61 *U*	0.55 *U*	0.75 *U*	0.75 *U*
1,2-Dibromo-3-chloropropane	96128				2.80 *U*	2.20 *U*	2.00 *U*	2.70 *U*	2.70 *U*
1,2-Dibromoethane	106934				0.73 *U*	0.56 *U*	0.50 *U*	0.69 *U*	0.69 *U*
1,2-Dichloroethane	107062	60,000	30,000		0.29 *U*	0.22 *U*	0.20 *U*	0.27 *U*	0.27 *U*
1,2-Dichloropropane	78875				2.80 *U*	2.20 *U*	2.00 *U*	2.70 *U*	2.70 *U*
1,3,5-Trimethylbenzene	108678	380,000	190,000		0.37 *U*	0.28 *U*	0.25 *U*	0.35 *U*	0.35 *U*
2-Hexanone	591786				2.8 *U*	2.2 *U*	2.0 *U*	2.7 *U*	2.70 *U*
4-Methyl-2-pentanone	108101				1.9 *U*	1.4 *U*	1.3 *U*	1.8 *U*	1.80 *U*
Acetone	67641	1,000,000	500,000		4.8 *U*	3.7 *U*	3.3 *U*	11 *J*	11.00 *J*
Benzene	71432	89,000	44,000		0.28 *U*	0.21 *U*	0.19 *U*	0.52 *J*	0.52 *J*
Bromodichloromethane	75274				0.76 *U*	0.58 *U*	0.53 *U*	0.72 *U*	0.72 *U*
Bromomethane	74839				0.51 *U*	0.39 *U*	0.35 *U*	0.48 *U*	0.48 *U*
Bromoform	75252				2.80 *U*	2.20 *U*	2.00 *U*	2.70 *U*	2.70 *U*
Carbon disulfide	75150				2.80 *U*	2.20 *U*	2.00 *U*	2.70 *U*	2.70 *U*
Carbon Tetrachloride	56235	44,000	22,000		0.55 *U*	0.42 *U*	0.38 *U*	0.52 *U*	0.52 *U*
Chloroform	67663	700,000	350,000		0.35 *U*	0.27 *U*	0.24 *U*	0.33 *U*	0.33 *U*
cis-1,2-Dichloroethene	156592	1,000,000	500,000		0.73 *U*	0.56 *U*	0.50 *U*	0.69 *U*	0.69 *U*
cis-1,3-Dichloropropene	10061015				0.82 *U*	0.63 *U*	0.57 *U*	0.78 *U*	0.78 *U*
Chlorobenzene	108907	1,000,000	500,000		0.75 *U*	0.58 *U*	0.52 *U*	0.71 *U*	0.71 *U*
Chloroethane	75003				1.30 *U*	0.99 *U*	0.89 *U*	1.20 *U*	1.20 *U*
Chloromethane	74873				0.34 *U*	0.26 *U*	0.24 *U*	0.33 *U*	0.33 *U*
Cyclohexane	110827				0.80 *U*	0.61 *U*	0.55 *U*	0.75 *U*	0.75 *U*
Dibromochloromethane	124481				0.73 *U*	0.56 *U*	0.50 *U*	0.69 *U*	0.69 *U*
Dichlorodifluoromethane	75718				0.47 *U*	0.36 *U*	0.32 *U*	0.45 *U*	0.45 *U*
Ethylbenzene	100414	780,000	390,000		0.39 *U*	0.30 *U*	0.27 *U*	0.37 *U*	0.37 *U*
Isopropylbenzene	98828				0.86 *U*	0.66 *U*	0.59 *U*	0.81 *U*	0.81 *U*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB1	SB1	SB1	SB1	SB1
				Sample Identification	SB1 (0-0.5)	SB1 (0.5-1)	SB1 (1-2)	SB1 (15-16)	SB1 (15-16)
				Laboratory ID	480-200156-2	480-200156-3	480-200156-4	480-200156-5	480-200156-6
				Sample Date	2022-07-26 04:07:00	2022-07-26 04:07:00	2022-07-26 04:07:00	2022-07-26 04:07:00	2022-07-26 04:07:00
2-Butanone	78933	1,000,000	500,000		2.10 *U*	1.60 *U*	1.40 *U*	4.20 *J*	4.20 *J*
m,p-Xylene	179601231				0.95 *U*	0.73 *U*	0.66 *U*	0.91 *U*	0.91 *U*
Methyl Acetate	79209				3.4 *U*	2.6 *U*	2.4 *U*	3.3 *U*	3.3 *U*
Methylcyclohexane	108872				0.86 *U*	0.66 *U*	0.60 *U*	0.82 *U*	0.82 *U*
Methylene Chloride	75092	1,000,000	500,000		2.60 *U*	2.00 *U*	1.80 *U*	2.50 *U*	2.50 *U*
Methyl tert-butyl ether	1634044	1,000,000	500,000		0.56 *U*	0.43 *U*	0.39 *U*	0.53 *U*	0.53 *U*
n-Butylbenzene	104518	1,000,000	500,000		0.49 *U*	0.38 *U*	0.34 *U*	0.47 *U*	0.47 *U*
n-Propylbenzene	103651	1,000,000	500,000		0.45 *U*	0.35 *U*	0.31 *U*	0.43 *U*	0.43 *U*
o-Xylene	95476				0.74 *U*	0.57 *U*	0.51 *U*	0.70 *U*	0.70 *U*
sec-Butylbenzene	135988	1,000,000	500,000		0.49 *U*	0.38 *U*	0.34 *U*	0.47 *U*	0.47 *U*
Styrene	100425				0.28 *U*	0.22 *U*	0.20 *U*	0.27 *U*	0.27 *U*
tert-Butylbenzene	98066	1,000,000	500,000		0.59 *U*	0.45 *U*	0.41 *U*	0.56 *U*	0.56 *U*
Toluene	108883	1,000,000	500,000		0.43 *U*	0.35 *J*	0.30 *U*	0.79 *J*	0.79 *J*
Tetrachloroethane	127184	300,000	150,000		0.76 *U*	0.59 *U*	0.53 *U*	0.72 *U*	0.72 *U*
trans-1,2-Dichloroethene	156605	1,000,000	500,000		0.59 *U*	0.45 *U*	0.41 *U*	0.56 *U*	0.56 *U*
trans-1,3-Dichloropropene	10061026				2.50 *U*	1.90 *U*	1.70 *U*	2.40 *U*	2.40 *U*
Trichloroethene	79016	400,000	200,000		1.30 *U*	0.96 *U*	0.86 *U*	1.2 *U*	1.20 *U*
Trichlorotrifluoroethane	76131				1.30 *U*	0.99 *U*	0.90 *U*	1.2 *U*	1.20 *U*
Trichlorofluoromethane	75694				0.54 *U*	0.41 *U*	0.37 *U*	0.51 *U*	0.51 *U*
Vinyl Chloride	75014	27,000	13,000		0.69 *U*	0.53 *U*	0.48 *U*	0.66 *U*	0.66 *U*
Xylenes	1330207	1,000,000	500,000		0.95 *U*	0.73 *U*	0.66 *U*	0.91 *U*	0.91 *U*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB2	SB2	SB2	SB2	SB2
				Sample Identification	SB2 (0-0.5)	SB2 (0-0.5)	SB2 (0.5-1)	SB2 (0.5-1)	SB2 (1-2)
				Laboratory ID	480-201707-1	480-204989-3	480-201707-2	480-204989-4	480-201707-3
				Sample Date	2022-09-14 12:09:00	2022-12-21 12:12:00	2022-09-14 12:09:00	2022-12-21 12:12:00	2022-09-14 12:09:00
Metals (µg/kg)									
Arsenic	7440382	16,000	16,000		14,500	7,200	8,300	9,200	9,600
Lead	7439921	3,900,000	1,000,000		146,000	26,500	49,200	78,700	70,300
Cadmium	7440439	60,000	9,300		550	200 *J*	94 *J*	210 *J*	280
Aluminum	7429905				5,090,000	10,700,000	5,000,000	13,000,000	9,150,000
Antimony	7440360				1,200 *J*	500 *U*	530 *J*	450 *U*	960 *J*
Barium	7440393	10,000,000	400,000		76,700	87,500	54,700	63,800	94,900
Beryllium	7440417	2,700,000	590,000		890	540	1,100	570	950
Calcium	7440702				7,690,000	3,270,000	1,290,000	8,990,000	1,970,000
Chromium	7440473				16,500	17,300 *J-*	14,800	17,300 *J-*	17,500
Cobalt	7440484				5,900	8,500	5,500	10,000	8,200
Copper	7440508	10,000,000	270,000		50,900	19,500	47,000	34,500	46,600
Iron	7439896				31,000,000	19,700,000 *J+*	17,000,000	27,600,000 *J+*	32,000,000
Magnesium	7439954				1,050,000	3,450,000	571,000	7,540,000	1,470,000
Manganese	7439965	10,000,000	10,000,000		182,000	508,000	161,000	441,000	377,000
Mercury	7439976	5,700	2,800		66 *J-*	30	37	22	50
Nickel	7440020	10,000,000	310,000		14,200	21,300	20,400	28,000	50,400
Potassium	7440097				1,220,000	1,920,000	839,000	1,830,000	1,650,000
Selenium	7782492	6,800,000	1,500,000		1,800 *J*	1,300 *J*	1,100 *J*	730 *J*	620 *J*
Silver	7440224	6,800,000	1,500,000		250 *U*	640 *J*	260 *U*	1,000	250 *J*
Sodium	7440235				472,000	60,700 *J*	169,000 *J*	85,500 *J*	181,000
Thallium	7440280				1,300 *J*	370 *U*	1,400 *J*	340 *U*	910 *J*
Vanadium	7440622				24,900	16,100	29,000	19,700	27,700
Zinc	7440666	10,000,000	10,000,000		34,000	77,700	20,300	103,000	68,600
Polycyclic Aromatic Hydrocarbons (µg/kg)									
2-Methylnaphthalene	91576				45 *UJ*	210 *U*	42 *U*	190 *U*	40 *U*
Acenaphthene	83329	1,000,000	500,000		33 *UJ*	150 *U*	31 *U*	140 *U*	30 *U*
Acenaphthylene	208968	1,000,000	500,000		44 *J-*	130 *U*	27 *U*	120 *U*	26 *U*
Anthracene	120127	1,000,000	500,000		55 *UJ*	260 *U*	52 *U*	230 *U*	50 *U*
Benzo[a]anthracene	56553	11,000	5,600		200 *J-*	140 *J*	69 *J*	93 *U*	100 *J*
Benzo[a]pyrene	50328	1,100	1,000		230 *J-*	150 *J*	82 *J*	140 *U*	120 *J*
Benzo[b]fluoranthene	205992	11,000	5,600		340 *J-*	170 *U*	120 *J*	150 *U*	180 *J*
Benzo[g,h,i]perylene	191242	1,000,000	500,000		160 *J-*	120 *J*	72 *J*	99 *U*	86 *J*
Benzo[k]fluoranthene	207089	110,000	56,000		110 *J-*	130 *U*	37 *J*	120 *U*	56 *J*
Chrysene	218019	110,000	56,000		390 *J-*	230 *U*	170 *J*	210 *U*	180 *J*
Dibenzo[a,h]anthracene	53703	1,100	560		46 *J-*	180 *U*	37 *U*	160 *U*	35 *U*
Dibenzofuran	132649	1,000,000	350,000		26 *UJ*	120 *U*	25 *U*	110 *U*	24 *U*
Fluoranthene	206440	1,000,000	500,000		400 *J-*	240 *J*	120 *J*	120 *J*	180 *J*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB2	SB2	SB2	SB2	SB2
				Sample Identification	SB2 (0-0.5)	SB2 (0-0.5)	SB2 (0.5-1)	SB2 (0.5-1)	SB2 (1-2)
				Laboratory ID	480-201707-1	480-204989-3	480-201707-2	480-204989-4	480-201707-3
				Sample Date	2022-09-14 12:09:00	2022-12-21 12:12:00	2022-09-14 12:09:00	2022-12-21 12:12:00	2022-09-14 12:09:00
Fluorene	86737	1,000,000	500,000		26 *UJ*	120 *U*	25 *U*	110 *U*	24 *U*
Indeno[1,2,3-cd]pyrene	193395	11,000	5,600		180 *J-*	130 *U*	65 *J*	120 *U*	91 *J*
Naphthalene	91203	1,000,000	500,000		29 *UJ*	130 *U*	27 *U*	120 *U*	26 *U*
Phenanthrene	85018	1,000,000	500,000		380 *J-*	150 *U*	120 *J*	140 *U*	150 *J*
Pyrene	129000	1,000,000	500,000		360 *J-*	200 *J*	110 *J*	110 *U*	160 *J*
Per- and Polyfluoroalkyl Substances (µg/kg)									
6:2 fluorotelomer sulfonate	27619972								0.066 *U*
8:2 fluorotelomer sulfonate	39108344								0.043 *U*
2-(N-ethyl-perfluorooctane sulfonamido) acetate									0.097 *U*
Perfluorobutyric acid	375224								0.380 *U*
2-(N-methyl-perfluorooctane sulfonamido) acetic acid									0.130 *U*
Perfluorooctanoic acid	335671	600,000	500,000						0.160 *NJ*
Perfluorooctane sulfonic acid	1763231	440,000	440,000						0.130 *U*
Perfluorobutane Sulfonic Acid	375735								0.038 *U*
Perfluorodecanoic Acid	335762								0.033 *U*
Perfluorododecanoic Acid	307551								0.029 *U*
Perfluorodecanesulfonic acid	335773								0.022 *U*
Perfluoroheptanoic Acid	375859								0.045 *U*
Perfluoroheptanesulfonic acid	375928								0.027 *U*
Perfluorohexanoic Acid	307244								0.054 *U*
Perfluorohexane Sulfonic Acid	355464								0.048 *U*
Perfluorononanoic Acid	375951								0.040 *U*
Perfluorooctane sulfonamide	754916								0.040 *U*
Perfluoropentanoic Acid	2706903								0.064 *U*
Perfluorotetradecanoic Acid	376067								0.030 *U*
Perfluorotridecanoic Acid	72629948								0.029 *U*
Perfluoroundecanoic Acid	2058948								0.031 *U*
Semivolatile Organic Compounds (µg/kg)									
Atrazine	1912249				78 *UJ*	360 *U*	73 *U*	320 *U*	70 *U*
Carbazole	86748				31 *J-*	120 *U*	25 *U*	110 *U*	24 *U*
2,4,5-Trichlorophenol	95954				60 *U*	280 *U*	57 *U*	250 *U*	54 *U*
2,4,6-Trichlorophenol	88062				45 *U*	210 *U*	42 *U*	190 *U*	40 *U*
2,4-Dichlorophenol	120832				24 *U*	110 *U*	22 *U*	99 *U*	21 *U*
2-Chlorophenol	95578				41 *U*	190 *U*	38 *U*	170 *U*	37 *U*
Pentachlorophenol	87865	55,000	6,700		220 *U*	1,000 *U*	210 *U*	930 *U*	200 *U*
1,1'-Biphenyl	92524				33 *UJ*	150 *U*	31 *U*	140 *U*	30 *U*
2,2'-oxybis(1-Chloropropane)	108601				45 *UJ*	210 *U*	42 *U*	190 *U*	40 *U*
2,4-Dimethylphenol	105679				54 *U*	250 *U*	51 *U*	220 *U*	48 *U*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB2	SB2	SB2	SB2	SB2
				Sample Identification	SB2 (0-0.5)	SB2 (0-0.5)	SB2 (0.5-1)	SB2 (0.5-1)	SB2 (1-2)
				Laboratory ID	480-201707-1	480-204989-3	480-201707-2	480-204989-4	480-201707-3
				Sample Date	2022-09-14 12:09:00	2022-12-21 12:12:00	2022-09-14 12:09:00	2022-12-21 12:12:00	2022-09-14 12:09:00
2,4-Dinitrophenol	51285				1,000 *U*	4,800 *U*	970 *U*	4,300 *U*	930 *U*
2,4-Dinitrotoluene	121142				46 *UJ*	210 *U*	43 *U*	190 *U*	41 *U*
2,6-Dinitrotoluene	606202				26 *UJ*	120 *U*	25 *U*	110 *U*	24 *U*
2-Chloronaphthalene	91587				37 *UJ*	170 *U*	35 *U*	150 *U*	33 *U*
2-Methylphenol	95487	1,000,000	500,000		26 *U*	120 *U*	25 *U*	110 *U*	24 *U*
2-Nitroaniline	88744				33 *UJ*	150 *U*	31 *U*	140 *U*	30 *U*
2-Nitrophenol	88755				63 *U*	290 *U*	59 *U*	260 *U*	57 *U*
3,3'-Dichlorobenzidine	91941				260 *UJ*	1,200 *U*	250 *U*	1,100 *U*	240 *U*
3-Nitroaniline	99092				62 *UJ*	290 *U*	58 *U*	260 *U*	56 *U*
4,6-Dinitro-2-methylphenol	534521				220 *U*	1,000 *U*	210 *U*	930 *U*	200 *U*
4-Bromophenyl-phenylether	101553				32 *UJ*	150 *U*	30 *U*	130 *U*	28 *U*
4-Chloro-3-methylphenol	59507				55 *U*	260 *U*	52 *U*	230 *U*	50 *U*
4-Chloroaniline	106478				55 *UJ*	260 *U*	52 *U*	230 *U*	50 *U*
4-Chlorophenyl-phenyl ether	7005723				28 *UJ*	130 *U*	26 *U*	120 *U*	25 *U*
4-Methylphenol	106445	1,000,000	500,000		26 *U*	120 *U*	25 *U*	110 *U*	24 *U*
4-Nitroaniline	100016				120 *UJ*	550 *U*	110 *U*	490 *U*	110 *U*
4-Nitrophenol	100027				160 *U*	730 *U*	150 *U*	650 *U*	140 *U*
Acetophenone	98862				30 *UJ*	140 *U*	28 *U*	130 *U*	27 *U*
Benzaldehyde	100527				180 *UJ*	830 *U*	170 *U*	740 *U*	160 *U*
Bis(2-chloroethyl)ether	111444				29 *UJ*	130 *U*	27 *U*	120 *U*	26 *U*
bis(2-Chloroethoxy)methane	111911				47 *UJ*	220 *U*	45 *U*	200 *U*	43 *U*
bis(2-Ethylhexyl)phthalate	117817				120 *J-*	360 *U*	72 *U*	320 *U*	69 *U*
Benzyl n-butyl phthalate	85687				65 *J-*	250 *J*	35 *U*	150 *U*	33 *U*
Caprolactam	105602				140 *J-*	310 *U*	63 *U*	280 *U*	60 *U*
Diethyl phthalate	84662				94 *UJ*	130 *U*	27 *U*	120 *U*	26 *U*
Dimethyl phthalate	131113				26 *UJ*	120 *U*	25 *U*	110 *U*	24 *U*
Di-n-butyl phthalate	84742				38 *UJ*	180 *U*	36 *U*	160 *U*	34 *U*
Di-n-octylphthalate	117840				26 *UJ*	120 *U*	25 *U*	110 *U*	24 *U*
Hexachloroethane	67721				29 *UJ*	130 *U*	27 *U*	120 *U*	26 *U*
Hexachlorobenzene	118741	12,000	6,000		30 *UJ*	140 *U*	28 *U*	130 *U*	27 *U*
Hexachlorobutadiene	87683				33 *UJ*	150 *U*	31 *U*	140 *U*	30 *U*
Hexachlorocyclopentadiene	77474				30 *UJ*	140 *U*	28 *U*	130 *U*	27 *U*
Isophorone	78591				47 *UJ*	220 *U*	45 *U*	200 *U*	43 *U*
Nitrobenzene	98953				25 *UJ*	120 *U*	24 *U*	100 *U*	22 *U*
N-Nitrosodi-n-propylamine	621647				38 *UJ*	180 *U*	36 *U*	160 *U*	34 *U*
N-Nitrosodiphenylamine	86306				180 *UJ*	850 *U*	170 *U*	760 *U*	160 *U*
Phenol	108952	1,000,000	500,000		34 *U*	160 *U*	32 *U*	140 *U*	31 *U*
1,4-Dioxane	123911	250,000	130,000						65 *U*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB2	SB2	SB2	SB2	SB2
				Sample Identification	SB2 (0-0.5)	SB2 (0-0.5)	SB2 (0.5-1)	SB2 (0.5-1)	SB2 (1-2)
				Laboratory ID	480-201707-1	480-204989-3	480-201707-2	480-204989-4	480-201707-3
				Sample Date	2022-09-14 12:09:00	2022-12-21 12:12:00	2022-09-14 12:09:00	2022-12-21 12:12:00	2022-09-14 12:09:00
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	630206				0.78 *UJ*	0.65 *U*	1.40 *U*	0.66 *U*	0.67 *U*
1,1,1-Trichloroethane	71556	1,000,000	500,000		0.56 *UJ*	0.48 *U*	0.98 *U*	0.48 *U*	0.48 *U*
1,1,2,2-Tetrachloroethane	79345				1.30 *UJ*	1.10 *U*	2.20 *U*	1.10 *U*	1.10 *U*
1,1,2-Trichloroethane	79005				1.00 *UJ*	0.85 *U*	1.80 *U*	0.85 *U*	0.87 *U*
1,1-Dichloroethane	75343	480,000	240,000		0.95 *UJ*	0.80 *U*	1.70 *U*	0.80 *U*	0.81 *U*
1,1-Dichloroethene	75354	1,000,000	500,000		0.95 *UJ*	0.80 *U*	1.70 *UJ*	0.80 *U*	0.82 *UJ*
1,2,3-Trimethylbenzene	526738				1.60 *UJ*	1.30 *U*	2.80 *U*	1.30 *U*	1.40 *U*
1,2,4-Trimethylbenzene	95636	380,000	190,000		1.50 *UJ*	1.30 *U*	2.60 *U*	1.30 *U*	1.30 *U*
1,2,4-Trichlorobenzene	120821				0.47 *UJ*	0.40 *U*	0.82 *U*	0.40 *U*	0.41 *U*
1,2-Dichlorobenzene	95501	1,000,000	500,000		0.61 *UJ*	0.51 *U*	1.10 *U*	0.51 *U*	0.52 *U*
1,3-Dichlorobenzene	541731	560,000	280,000		0.40 *UJ*	0.34 *U*	0.70 *U*	0.34 *U*	0.34 *U*
1,4-Dichlorobenzene	106467	250,000	130,000		1.10 *UJ*	0.92 *U*	1.90 *U*	0.92 *U*	0.93 *U*
1,2-Dibromo-3-chloropropane	96128				3.90 *UJ*	3.30 *U*	6.80 *U*	3.30 *U*	3.30 *U*
1,2-Dibromoethane	106934				1.00 *UJ*	0.84 *U*	1.70 *U*	0.84 *U*	0.86 *U*
1,2-Dichloroethane	107062	60,000	30,000		0.39 *UJ*	0.33 *U*	0.68 *U*	0.33 *U*	0.33 *U*
1,2-Dichloropropane	78875				3.90 *UJ*	3.30 *U*	6.80 *U*	3.30 *U*	3.30 *U*
1,3,5-Trimethylbenzene	108678	380,000	190,000		0.50 *UJ*	0.42 *U*	0.87 *U*	0.42 *U*	0.43 *U*
2-Hexanone	591786				3.90 *UJ*	3.30 *U*	6.80 *U*	3.30 *U*	3.30 *U*
4-Methyl-2-pentanone	108101				2.50 *UJ*	2.10 *U*	4.40 *U*	2.20 *U*	2.20 *U*
Acetone	67641	1,000,000	500,000		15.00 *J*	5.50 *U*	11 *U*	5.50 *U*	540
Benzene	71432	89,000	44,000		0.38 *UJ*	0.32 *U*	0.66 *U*	0.32 *U*	0.33 *U*
Bromodichloromethane	75274				1.00 *UJ*	0.88 *U*	1.80 *U*	0.88 *U*	0.89 *U*
Bromomethane	74839				0.70 *UJ*	0.59 *U*	1.20 *U*	0.59 *U*	0.60 *U*
Bromoform	75252				3.90 *UJ*	3.30 *U*	6.80 *U*	3.30 *U*	3.30 *U*
Carbon disulfide	75150				3.90 *UJ*	3.30 *U*	6.80 *U*	3.30 *U*	3.30 *U*
Carbon Tetrachloride	56235	44,000	22,000		0.75 *UJ*	0.63 *U*	1.30 *UJ*	0.63 *U*	0.65 *UJ*
Chloroform	67663	700,000	350,000		0.48 *UJ*	0.55 *U*	0.84 *U*	0.56 *U*	0.41 *U*
cis-1,2-Dichloroethene	156592	1,000,000	500,000		0.99 *UJ*	0.84 *U*	1.70 *U*	0.84 *U*	0.85 *U*
cis-1,3-Dichloropropene	10061015				1.10 *UJ*	0.94 *U*	1.90 *U*	0.94 *U*	0.96 *U*
Chlorobenzene	108907	1,000,000	500,000		1.00 *UJ*	0.86 *U*	1.80 *U*	0.87 *U*	0.88 *U*
Chloroethane	75003				1.80 *UJ*	1.50 *U*	3.10 *U*	1.50 *U*	1.50 *U*
Chloromethane	74873				0.47 *UJ*	0.40 *U*	0.82 *U*	0.40 *U*	0.40 *U*
Cyclohexane	110827				1.10 *UJ*	0.92 *U*	1.90 *UJ*	0.92 *U*	0.93 *UJ*
Dibromochloromethane	124481				0.99 *UJ*	0.84 *U*	1.70 *U*	0.84 *U*	0.85 *U*
Dichlorodifluoromethane	75718				0.64 *UJ*	0.54 *U*	1.10 *U*	0.54 *U*	0.55 *U*
Ethylbenzene	100414	780,000	390,000		0.54 *UJ*	0.73 *J*	0.93 *U*	0.45 *U*	0.75 *J*
Isopropylbenzene	98828				1.20 *UJ*	0.99 *U*	2.00 *U*	0.99 *U*	1.00 *U*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB2	SB2	SB2	SB2	SB2
				Sample Identification	SB2 (0-0.5)	SB2 (0-0.5)	SB2 (0.5-1)	SB2 (0.5-1)	SB2 (1-2)
				Laboratory ID	480-201707-1	480-204989-3	480-201707-2	480-204989-4	480-201707-3
				Sample Date	2022-09-14 12:09:00	2022-12-21 12:12:00	2022-09-14 12:09:00	2022-12-21 12:12:00	2022-09-14 12:09:00
2-Butanone	78933	1,000,000	500,000		2.80 *UJ*	2.40 *U*	5.00 *U*	2.40 *U*	92
m,p-Xylene	179601231				1.30 *UJ*	1.80 *J*	2.30 *U*	1.10 *U*	1.10 *U*
Methyl Acetate	79209				4.7 *UJ*	4.0 *U*	8.2 *U*	4.0 *U*	4.0 *U*
Methylcyclohexane	108872				1.20 *UJ*	1.00 *U*	2.10 *UJ*	1.00 *U*	1.00 *UJ*
Methylene Chloride	75092	1,000,000	500,000		3.60 *UJ*	3.00 *U*	6.20 *U*	3.00 *U*	3.10 *U*
Methyl tert-butyl ether	1634044	1,000,000	500,000		0.76 *UJ*	0.64 *U*	1.30 *U*	0.64 *U*	0.66 *U*
n-Butylbenzene	104518	1,000,000	500,000		0.68 *UJ*	0.57 *U*	1.20 *U*	0.57 *U*	0.68 *J*
n-Propylbenzene	103651	1,000,000	500,000		0.62 *UJ*	0.52 *U*	1.10 *U*	0.52 *U*	1.10 *J*
o-Xylene	95476				1.00 *UJ*	0.86 *U*	1.80 *U*	0.86 *U*	0.87 *U*
sec-Butylbenzene	135988	1,000,000	500,000		0.68 *UJ*	0.57 *U*	1.20 *U*	0.57 *U*	0.58 *U*
Styrene	100425				0.39 *UJ*	0.33 *U*	0.68 *U*	0.33 *U*	0.33 *U*
tert-Butylbenzene	98066	1,000,000	500,000		0.81 *UJ*	0.68 *U*	1.40 *U*	0.68 *U*	0.69 *U*
Toluene	108883	1,000,000	500,000		0.59 *UJ*	0.49 *U*	1.00 *U*	0.50 *U*	0.87 *J*
Tetrachloroethane	127184	300,000	150,000		1.00 *UJ*	2.90 *U*	1.80 *U*	2.10 *U*	0.90 *U*
trans-1,2-Dichloroethene	156605	1,000,000	500,000		0.80 *UJ*	0.68 *U*	1.40 *U*	0.68 *U*	0.69 *U*
trans-1,3-Dichloropropene	10061026				3.40 *UJ*	2.90 *U*	6.00 *U*	2.90 *U*	2.90 *U*
Trichloroethene	79016	400,000	200,000		1.70 *UJ*	1.40 *U*	3.00 *U*	1.40 *U*	1.50 *U*
Trichlorotrifluoroethane	76131				1.80 *UJ*	1.50 *U*	3.10 *U*	1.50 *U*	1.50 *U*
Trichlorofluoromethane	75694				0.74 *UJ*	0.62 *U*	1.30 *U*	0.62 *U*	0.63 *U*
Vinyl Chloride	75014	27,000	13,000		0.95 *UJ*	0.80 *U*	1.70 *U*	0.80 *U*	0.81 *U*
Xylenes	1330207	1,000,000	500,000		1.30 *UJ*	1.80 *J*	2.30 *U*	1.10 *U*	1.10 *U*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB2	SB2	SB2	SB2	SB2
				Sample Identification	SB2 (1-2)	SB2 (1-2)	SB2 (1-2)	SB2 (13.5-15.5)	SB2 (20.4-22.4)
				Laboratory ID	480-201707-5	480-204989-5	480-204989-7	480-201707-6	480-204989-6
				Sample Date	2022-09-14 12:09:00	2022-12-21 12:12:00	2022-12-21 12:12:00	2022-09-14 12:09:00	2022-12-21 12:12:00
Metals (µg/kg)									
Arsenic	7440382	16,000	16,000		9,100	14,200 J	10,000 J	5,300	12,300
Lead	7439921	3,900,000	1,000,000		78,000	105,000 J	1,010,000 J	18,400	9,200
Cadmium	7440439	60,000	9,300		250	790 J	270 J	140 J	59 J
Aluminum	7429905				8,530,000	8,640,000 J	8,800,000 J	8,030,000	7,590,000
Antimony	7440360				790 J	4,100 J	410 UJ	520 J	460 U
Barium	7440393	10,000,000	400,000		115,000	79,800 J	94,500 J	66,400	135,000
Beryllium	7440417	2,700,000	590,000		760	500	440	420	400
Calcium	7440702				3,900,000	2,730,000 J	1,920,000 J	929,000	1,210,000
Chromium	7440473				17,000	16,200 J-	18,500 J-	11,300	9,500 J-
Cobalt	7440484				7,900	7,800	7,300	6,400	7,500
Copper	7440508	10,000,000	270,000		43,400	60,600 J	23,900 J	14,800	16,700
Iron	7439896				29,100,000	84,900,000 J	26,400,000 J	20,900,000	22,200,000 J+
Magnesium	7439954				1,530,000	2,570,000 J+	2,770,000 J+	1,800,000	2,160,000
Manganese	7439965	10,000,000	10,000,000		344,000	610,000 J+	367,000 J+	359,000	1,190,000
Mercury	7439976	5,700	2,800		65	53	61	26	6.0 J
Nickel	7440020	10,000,000	310,000		42,100	23,200 J	20,600 J	39,600	17,100
Potassium	7440097				1,580,000	1,380,000 J	1,260,000 J	1,480,000	1,240,000
Selenium	7782492	6,800,000	1,500,000		560 J	1,900 J	880 J	480 U	740 J
Silver	7440224	6,800,000	1,500,000		230 U	420 U	1,100	240 U	840
Sodium	7440235				156,000 J	92,800 J	68,900 J	53,100 J	102,000 J
Thallium	7440280				940 J	320 U	310 U	360 U	340 U
Vanadium	7440622				26,500	28,700 J	19,100 J	17,300	13,800
Zinc	7440666	10,000,000	10,000,000		61,900	89,400 J	98,400 J	37,600	60,000
Polycyclic Aromatic Hydrocarbons (µg/kg)									
2-Methylnaphthalene	91576				39 U	3,700 U	3,500 U	37 U	37 U
Acenaphthene	83329	1,000,000	500,000		29 U	2,700 U	2,600 U	27 U	27 U
Acenaphthylene	208968	1,000,000	500,000		25 U	2,400 U	2,300 U	24 U	24 U
Anthracene	120127	1,000,000	500,000		49 U	4,600 U	4,300 U	46 U	46 U
Benzo[a]anthracene	56553	11,000	5,600		190 J+	1,800 U	3,800 J	19 U	19 U
Benzo[a]pyrene	50328	1,100	1,000		240 J+	2,700 U	4,400 J	27 U	27 U
Benzo[b]fluoranthene	205992	11,000	5,600		300 J+	2,900 U	5,400 J	30 U	30 U
Benzo[g,h,i]perylene	191242	1,000,000	500,000		150 J+	2,000 U	3,600 J	20 U	20 U
Benzo[k]fluoranthene	207089	110,000	56,000		120 J+	2,400 U	2,500 J	24 U	24 U
Chrysene	218019	110,000	56,000		280 J+	4,100 U	4,900 J	42 U	42 U
Dibenzo[a,h]anthracene	53703	1,100	560		40 J+	3,300 U	3,100 U	33 U	33 U
Dibenzofuran	132649	1,000,000	350,000		23 U	2,200 U	2,100 U	22 U	22 U
Fluoranthene	206440	1,000,000	500,000		410 J+	3,300 J	8,100 J	20 U	20 U

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB2	SB2	SB2	SB2	SB2
				Sample Identification	SB2 (1-2)	SB2 (1-2)	SB2 (1-2)	SB2 (13.5-15.5)	SB2 (20.4-22.4)
				Laboratory ID	480-201707-5	480-204989-5	480-204989-7	480-201707-6	480-204989-6
				Sample Date	2022-09-14 12:09:00	2022-12-21 12:12:00	2022-12-21 12:12:00	2022-09-14 12:09:00	2022-12-21 12:12:00
Fluorene	86737	1,000,000	500,000		23 *U*	2,200 *U*	2,100 *U*	22 *U*	22 *U*
Indeno[1,2,3-cd]pyrene	193395	11,000	5,600		180 *J+*	2,300 *U*	3,100 *J*	23 *U*	23 *U*
Naphthalene	91203	1,000,000	500,000		25 *U*	2,400 *U*	2,300 *U*	24 *U*	24 *U*
Phenanthrene	85018	1,000,000	500,000		280 *J+*	2,700 *U*	3,100 *J*	27 *U*	27 *U*
Pyrene	129000	1,000,000	500,000		350 *J+*	2,800 *J*	5,900 *J*	22 *U*	22 *U*
Per- and Polyfluoroalkyl Substances (µg/kg)									
6:2 fluorotelomer sulfonate	27619972				0.066 *U*	0.062 *U*	0.058 *U*		
8:2 fluorotelomer sulfonate	39108344				0.043 *U*	0.040 *U*	0.037 *U*		
2-(N-ethyl-perfluorooctane sulfonamido) acetate					0.096 *U*	0.090 *U*	0.084 *U*		
Perfluorobutyric acid	375224				0.380 *U*	0.360 *U*	0.330 *U*		
2-(N-methyl-perfluorooctane sulfonamido) acetic acid					0.130 *U*	0.120 *U*	0.110 *U*		
Perfluorooctanoic acid	335671	600,000	500,000		0.098 *NJ*	0.070 *J*	0.076 *NJ*		
Perfluorooctane sulfonic acid	1763231	440,000	440,000		0.130 *U*	0.200 *J*	0.240		
Perfluorobutane Sulfonic Acid	375735				0.038 *U*	0.036 *U*	0.033 *U*		
Perfluorodecanoic Acid	335762				0.033 *U*	0.030 *U*	0.028 *U*		
Perfluorododecanoic Acid	307551				0.029 *U*	0.027 *U*	0.025 *U*		
Perfluorodecanesulfonic acid	335773				0.022 *U*	0.021 *U*	0.019 *U*		
Perfluoroheptanoic Acid	375859				0.045 *U*	0.042 *U*	0.039 *U*		
Perfluoroheptanesulfonic acid	375928				0.027 *U*	0.025 *U*	0.023 *U*		
Perfluorohexanoic Acid	307244				0.053 *U*	0.050 *U*	0.046 *U*		
Perfluorohexane Sulfonic Acid	355464				0.048 *U*	0.044 *U*	0.041 *U*		
Perfluorononanoic Acid	375951				0.040 *U*	0.051 *J*	0.048 *J*		
Perfluorooctane sulfonamide	754916				0.040 *U*	0.037 *U*	0.034 *U*		
Perfluoropentanoic Acid	2706903				0.064 *U*	0.060 *U*	0.060 *J*		
Perfluorotetradecanoic Acid	376067				0.030 *U*	0.028 *U*	0.026 *U*		
Perfluorotridecanoic Acid	72629948				0.029 *U*	0.027 *U*	0.025 *U*		
Perfluoroundecanoic Acid	2058948				0.031 *U*	0.029 *U*	0.027 *U*		
Semivolatile Organic Compounds (µg/kg)									
Atrazine	1912249				68 *U*	6,400 *U*	6,100 *U*	65 *U*	65 *U*
Carbazole	86748				30 *J+*	2,200 *U*	2,100 *U*	22 *U*	22 *U*
2,4,5-Trichlorophenol	95954				53 *U*	5,000 *U*	4,800 *U*	50 *U*	50 *U*
2,4,6-Trichlorophenol	88062				39 *U*	3,700 *U*	3,500 *U*	37 *U*	37 *U*
2,4-Dichlorophenol	120832				21 *U*	2,000 *U*	1,900 *U*	20 *U*	20 *U*
2-Chlorophenol	95578				36 *U*	3,400 *U*	3,200 *U*	34 *U*	34 *U*
Pentachlorophenol	87865	55,000	6,700		200 *U*	18,000 *U*	18,000 *U*	190 *U*	190 *U*
1,1'-Biphenyl	92524				29 *U*	2,700 *U*	2,600 *U*	27 *U*	27 *U*
2,2'-oxybis(1-Chloropropane)	108601				39 *U*	3,700 *U*	3,500 *U*	37 *U*	37 *U*
2,4-Dimethylphenol	105679				47 *U*	4,500 *U*	4,200 *U*	45 *U*	45 *U*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB2	SB2	SB2	SB2	SB2
				Sample Identification	SB2 (1-2)	SB2 (1-2)	SB2 (1-2)	SB2 (13.5-15.5)	SB2 (20.4-22.4)
				Laboratory ID	480-201707-5	480-204989-5	480-204989-7	480-201707-6	480-204989-6
				Sample Date	2022-09-14 12:09:00	2022-12-21 12:12:00	2022-12-21 12:12:00	2022-09-14 12:09:00	2022-12-21 12:12:00
2,4-Dinitrophenol	51285				910 *U*	85,000 *U*	81,000 *U*	860 *U*	860 *U*
2,4-Dinitrotoluene	121142				41 *U*	3,800 *U*	3,600 *U*	38 *U*	38 *U*
2,6-Dinitrotoluene	606202				23 *U*	2,200 *U*	2,100 *U*	22 *U*	22 *U*
2-Chloronaphthalene	91587				32 *U*	3,000 *U*	2,900 *U*	31 *U*	31 *U*
2-Methylphenol	95487	1,000,000	500,000		23 *U*	2,200 *U*	2,100 *U*	22 *U*	22 *U*
2-Nitroaniline	88744				29 *U*	2,700 *U*	2,600 *U*	27 *U*	27 *U*
2-Nitrophenol	88755				56 *U*	5,200 *U*	5,000 *U*	53 *U*	53 *U*
3,3'-Dichlorobenzidine	91941				230 *U*	22,000 *U*	21,000 *U*	220 *U*	220 *U*
3-Nitroaniline	99092				54 *U*	5,100 *U*	4,900 *U*	51 *U*	51 *U*
4,6-Dinitro-2-methylphenol	534521				200 *U*	18,000 *U*	18,000 *U*	190 *U*	190 *U*
4-Bromophenyl-phenylether	101553				28 *U*	2,600 *U*	2,500 *U*	26 *U*	26 *U*
4-Chloro-3-methylphenol	59507				49 *U*	4,600 *U*	4,300 *U*	46 *U*	46 *U*
4-Chloroaniline	106478				49 *U*	4,600 *U*	4,300 *U*	46 *U*	46 *U*
4-Chlorophenyl-phenyl ether	7005723				24 *U*	2,300 *U*	2,200 *U*	23 *U*	23 *U*
4-Methylphenol	106445	1,000,000	500,000		23 *U*	2,200 *U*	2,100 *U*	22 *U*	22 *U*
4-Nitroaniline	100016				100 *U*	9,700 *U*	9,200 *U*	97 *U*	98 *U*
4-Nitrophenol	100027				140 *U*	13,000 *U*	12,000 *U*	130 *U*	130 *U*
Acetophenone	98862				27 *U*	2,500 *U*	2,400 *U*	25 *U*	25 *U*
Benzaldehyde	100527				160 *U*	15,000 *U*	14,000 *U*	150 *U*	150 *U*
Bis(2-chloroethyl)ether	111444				25 *U*	2,400 *U*	2,300 *U*	24 *U*	24 *U*
bis(2-Chloroethoxy)methane	111911				42 *U*	3,900 *U*	3,700 *U*	39 *U*	39 *U*
bis(2-Ethylhexyl)phthalate	117817				67 *U*	6,300 *U*	6,000 *U*	63 *U*	110 *J*
Benzyl n-butyl phthalate	85687				32 *J+*	3,000 *U*	2,900 *U*	31 *U*	31 *U*
Caprolactam	105602				59 *U*	5,500 *U*	5,300 *U*	56 *U*	56 *U*
Diethyl phthalate	84662				190 *UJ*	2,400 *U*	2,300 *U*	51 *U*	24 *U*
Dimethyl phthalate	131113				23 *U*	2,200 *U*	2,100 *U*	22 *U*	22 *U*
Di-n-butyl phthalate	84742				34 *U*	3,200 *U*	3,000 *U*	32 *U*	32 *U*
Di-n-octylphthalate	117840				23 *U*	2,200 *U*	2,100 *U*	22 *U*	22 *U*
Hexachloroethane	67721				25 *U*	2,400 *U*	2,300 *U*	24 *U*	24 *U*
Hexachlorobenzene	118741	12,000	6,000		27 *U*	2,500 *U*	2,400 *U*	25 *U*	25 *U*
Hexachlorobutadiene	87683				29 *U*	2,700 *U*	2,600 *U*	27 *U*	27 *U*
Hexachlorocyclopentadiene	77474				27 *U*	2,500 *U*	2,400 *U*	25 *U*	25 *U*
Isophorone	78591				42 *U*	3,900 *U*	3,700 *U*	39 *U*	39 *U*
Nitrobenzene	98953				22 *U*	2,100 *U*	2,000 *U*	21 *U*	21 *U*
N-Nitrosodi-n-propylamine	621647				34 *U*	3,200 *U*	3,000 *U*	32 *U*	32 *U*
N-Nitrosodiphenylamine	86306				160 *U*	15,000 *U*	14,000 *U*	150 *U*	150 *U*
Phenol	108952	1,000,000	500,000		30 *U*	2,800 *U*	2,700 *U*	28 *U*	28 *U*
1,4-Dioxane	123911	250,000	130,000		64 *U*	6,000 *U*	5,700 *U*		

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB2	SB2	SB2	SB2	SB2
				Sample Identification	SB2 (1-2)	SB2 (1-2)	SB2 (1-2)	SB2 (13.5-15.5)	SB2 (20.4-22.4)
				Laboratory ID	480-201707-5	480-204989-5	480-204989-7	480-201707-6	480-204989-6
				Sample Date	2022-09-14 12:09:00	2022-12-21 12:12:00	2022-12-21 12:12:00	2022-09-14 12:09:00	2022-12-21 12:12:00
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	630206				0.61 *U*	0.45 *U*	0.58 *U*	0.54 *U*	0.53 *U*
1,1,1-Trichloroethane	71556	1,000,000	500,000		0.44 *U*	0.33 *U*	0.42 *U*	0.39 *U*	0.39 *U*
1,1,2,2-Tetrachloroethane	79345				0.99 *U*	0.73 *U*	0.94 *UJ*	0.88 *U*	0.87 *U*
1,1,2-Trichloroethane	79005				0.80 *U*	0.58 *U*	0.75 *U*	0.70 *U*	0.69 *U*
1,1-Dichloroethane	75343	480,000	240,000		0.75 *U*	0.55 *U*	0.70 *U*	0.66 *U*	0.65 *U*
1,1-Dichloroethene	75354	1,000,000	500,000		0.75 *UJ*	0.55 *U*	0.71 *U*	0.66 *UJ*	0.65 *U*
1,2,3-Trimethylbenzene	526738				1.20 *U*	0.92 *U*	1.20 *U*	1.10 *U*	1.10 *U*
1,2,4-Trimethylbenzene	95636	380,000	190,000		1.20 *U*	0.86 *U*	1.10 *UJ*	1.00 *U*	1.00 *U*
1,2,4-Trichlorobenzene	120821				0.37 *U*	0.27 *UJ*	0.35 *UJ*	0.33 *U*	0.32 *U*
1,2-Dichlorobenzene	95501	1,000,000	500,000		0.48 *U*	0.35 *U*	0.45 *UJ*	0.42 *U*	0.42 *U*
1,3-Dichlorobenzene	541731	560,000	280,000		0.31 *U*	0.23 *U*	0.30 *UJ*	0.28 *U*	0.27 *U*
1,4-Dichlorobenzene	106467	250,000	130,000		0.86 *U*	0.63 *U*	0.81 *UJ*	0.76 *U*	0.75 *U*
1,2-Dibromo-3-chloropropane	96128				3.10 *U*	2.20 *U*	2.90 *UJ*	2.70 *U*	2.70 *U*
1,2-Dibromoethane	106934				0.79 *U*	0.58 *U*	0.74 *U*	0.69 *U*	0.69 *U*
1,2-Dichloroethane	107062	60,000	30,000		0.31 *U*	0.23 *U*	0.29 *U*	0.27 *U*	0.27 *U*
1,2-Dichloropropane	78875				3.10 *U*	2.20 *U*	2.90 *U*	2.70 *U*	2.70 *U*
1,3,5-Trimethylbenzene	108678	380,000	190,000		0.39 *U*	0.29 *U*	0.37 *UJ*	0.35 *U*	0.34 *U*
2-Hexanone	591786				3.10 *U*	2.20 *U*	2.90 *U*	2.70 *U*	2.70 *U*
4-Methyl-2-pentanone	108101				2.00 *U*	1.50 *U*	1.90 *U*	1.80 *U*	1.80 *U*
Acetone	67641	1,000,000	500,000		28 *J*	3.80 *U*	5.90 *J*	10 *J*	20 *J*
Benzene	71432	89,000	44,000		0.30 *U*	0.22 *U*	0.28 *U*	0.26 *U*	0.26 *U*
Bromodichloromethane	75274				0.82 *U*	0.60 *U*	0.77 *U*	0.72 *U*	0.72 *U*
Bromomethane	74839				0.55 *U*	0.40 *U*	0.52 *U*	0.49 *U*	0.48 *U*
Bromoform	75252				3.10 *U*	2.20 *UJ*	2.90 *UJ*	2.70 *U*	2.70 *U*
Carbon disulfide	75150				3.40 *J*	2.20 *U*	2.90 *U*	2.70 *U*	2.70 *U*
Carbon Tetrachloride	56235	44,000	22,000		0.59 *UJ*	0.43 *U*	0.56 *U*	0.52 *UJ*	0.52 *U*
Chloroform	67663	700,000	350,000		0.38 *U*	0.37 *U*	0.57 *U*	0.33 *U*	0.43 *U*
cis-1,2-Dichloroethene	156592	1,000,000	500,000		0.78 *U*	0.57 *U*	0.74 *U*	0.69 *U*	0.68 *U*
cis-1,3-Dichloropropene	10061015				0.88 *U*	0.65 *U*	0.83 *U*	0.78 *U*	0.77 *U*
Chlorobenzene	108907	1,000,000	500,000		0.81 *U*	0.59 *U*	0.76 *U*	0.71 *U*	0.71 *U*
Chloroethane	75003				1.40 *U*	1.00 *U*	1.30 *U*	1.20 *U*	1.20 *U*
Chloromethane	74873				0.37 *U*	0.27 *U*	0.35 *U*	0.33 *U*	0.32 *U*
Cyclohexane	110827				0.86 *UJ*	0.63 *U*	0.81 *U*	0.76 *UJ*	0.75 *U*
Dibromochloromethane	124481				0.78 *U*	0.57 *U*	0.74 *U*	0.69 *U*	0.68 *U*
Dichlorodifluoromethane	75718				0.51 *U*	0.37 *U*	0.48 *U*	0.45 *U*	0.44 *U*
Ethylbenzene	100414	780,000	390,000		1.00 *J*	0.31 *U*	0.40 *U*	0.37 *U*	0.37 *U*
Isopropylbenzene	98828				0.92 *U*	0.68 *U*	0.87 *UJ*	0.82 *U*	0.81 *U*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB2	SB2	SB2	SB2	SB2
				Sample Identification	SB2 (1-2)	SB2 (1-2)	SB2 (1-2)	SB2 (13.5-15.5)	SB2 (20.4-22.4)
				Laboratory ID	480-201707-5	480-204989-5	480-204989-7	480-201707-6	480-204989-6
				Sample Date	2022-09-14 12:09:00	2022-12-21 12:12:00	2022-12-21 12:12:00	2022-09-14 12:09:00	2022-12-21 12:12:00
2-Butanone	78933	1,000,000	500,000		17 *J*	1.60 *U*	2.10 *U*	4.30 *J*	6.90 *J*
m,p-Xylene	179601231				1.00 *U*	0.75 *U*	0.97 *U*	0.91 *U*	0.90 *U*
Methyl Acetate	79209				3.7 *U*	2.7 *U*	3.5 *U*	3.3 *U*	3.2 *U*
Methylcyclohexane	108872				1.60 *J*	0.68 *U*	0.88 *U*	0.82 *UJ*	0.81 *U*
Methylene Chloride	75092	1,000,000	500,000		2.80 *U*	2.10 *U*	2.70 *U*	2.50 *U*	2.50 *U*
Methyl tert-butyl ether	1634044	1,000,000	500,000		0.60 *U*	0.44 *U*	0.57 *U*	0.53 *U*	0.52 *U*
n-Butylbenzene	104518	1,000,000	500,000		0.53 *U*	0.39 *U*	0.50 *UJ*	0.47 *U*	0.46 *U*
n-Propylbenzene	103651	1,000,000	500,000		0.87 *J*	0.36 *U*	0.46 *UJ*	0.43 *U*	0.43 *U*
o-Xylene	95476				0.80 *U*	0.59 *U*	0.75 *U*	0.71 *U*	0.70 *U*
sec-Butylbenzene	135988	1,000,000	500,000		0.53 *U*	0.39 *U*	0.50 *UJ*	0.47 *U*	0.46 *U*
Styrene	100425				0.31 *U*	0.22 *U*	0.29 *U*	0.27 *U*	0.27 *U*
tert-Butylbenzene	98066	1,000,000	500,000		0.64 *U*	0.47 *U*	0.60 *UJ*	0.56 *U*	0.56 *U*
Toluene	108883	1,000,000	500,000		1.20 *J*	0.34 *U*	0.44 *U*	0.41 *U*	0.40 *U*
Tetrachloroethane	127184	300,000	150,000		0.82 *U*	1.70 *U*	3.00 *U*	0.73 *U*	1.80 *U*
trans-1,2-Dichloroethene	156605	1,000,000	500,000		0.63 *U*	0.46 *U*	0.60 *U*	0.56 *U*	0.55 *U*
trans-1,3-Dichloropropene	10061026				2.70 *U*	2.00 *U*	2.50 *U*	2.40 *U*	2.40 *U*
Trichloroethene	79016	400,000	200,000		1.30 *U*	0.99 *U*	1.30 *U*	1.20 *U*	1.20 *U*
Trichlorotrifluoroethane	76131				1.40 *U*	1.00 *U*	1.30 *U*	1.20 *U*	1.20 *U*
Trichlorofluoromethane	75694				0.58 *U*	0.42 *U*	0.55 *U*	0.51 *U*	0.51 *U*
Vinyl Chloride	75014	27,000	13,000		0.75 *U*	0.55 *U*	0.70 *U*	0.66 *U*	0.65 *U*
Xylenes	1330207	1,000,000	500,000		1.00 *U*	0.75 *U*	0.97 *U*	0.91 *U*	0.90 *U*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB3	SB4	SB4	SB4	SB5
				Sample Identification	SB3 (23-25)	SB4 (0-0.5)	SB4 (0.5-1)	SB4 (1-2)	SB5 (0-0.5)
				Laboratory ID	480-205124-1	480-201707-10	480-201707-11	480-201712-1	480-200130-1
				Sample Date	2023-01-03 02:01:00	2022-09-15 09:09:00	2022-09-15 09:09:00	2022-09-15 09:09:00	2022-07-25 03:07:00
Metals (µg/kg)									
Arsenic	7440382	16,000	16,000		7,800	22,100	12,900	21,700	13,000
Lead	7439921	3,900,000	1,000,000		7,600	697,000	318,000	9,670,000	80,900
Cadmium	7440439	60,000	9,300		32 *U*	2,500	590	4,300	290
Aluminum	7429905				8,310,000	6,350,000	8,880,000	8,180,000	5,360,000
Antimony	7440360				430 *U*	3,500 *J*	1,300 *J*	4,200 *J*	2,200 *J-*
Barium	7440393	10,000,000	400,000		77,600	62,400	65,600	172,000	62,300
Beryllium	7440417	2,700,000	590,000		320	380	410	420	420
Calcium	7440702				898,000	5,960,000	2,190,000	10,400,000	2,640,000
Chromium	7440473				11,400	13,800	12,700	18,600	12,200
Cobalt	7440484				6,100	8,200	7,000	4,600	7,300
Copper	7440508	10,000,000	270,000		23,200	43,000	22,300	70,600	56,000
Iron	7439896				21,900,000	34,100,000	27,300,000	21,700,000	23,900,000
Magnesium	7439954				2,420,000	1,550,000	1,830,000	1,900,000	1,400,000
Manganese	7439965	10,000,000	10,000,000		332,000	349,000	468,000	301,000	530,000
Mercury	7439976	5,700	2,800		5.2 *J*	120	190	790	120
Nickel	7440020	10,000,000	310,000		17,300	17,700	15,000	13,600	15,000
Potassium	7440097				1,130,000	1,470,000	1,760,000	1,420,000	407,000
Selenium	7782492	6,800,000	1,500,000		830 *J*	840 *J*	430 *U*	450 *U*	1,000 *U*
Silver	7440224	6,800,000	1,500,000		520 *J*	210 *U*	210 *U*	280 *J*	220 *J*
Sodium	7440235				46,800 *J*	345,000	245,000	491,000	48,600 *J*
Thallium	7440280				320 *U*	680 *J*	720 *J*	1,100 *J*	330 *U*
Vanadium	7440622				11,400	18,400	18,400	17,100	16,600
Zinc	7440666	10,000,000	10,000,000		41,600	135,000	66,400	223,000	61,000
Polycyclic Aromatic Hydrocarbons (µg/kg)									
2-Methylnaphthalene	91576				37 *U*	180 *U*	190 *U*	180 *U*	61 *J*
Acenaphthene	83329	1,000,000	500,000		27 *U*	130 *U*	140 *U*	140 *U*	28 *U*
Acenaphthylene	208968	1,000,000	500,000		24 *U*	380 *J*	230 *J*	250 *J+*	130 *J*
Anthracene	120127	1,000,000	500,000		46 *U*	270 *J*	230 *U*	230 *U*	71 *J*
Benzo[a]anthracene	56553	11,000	5,600		18 *U*	2,800	1,800	2,200 *J+*	370
Benzo[a]pyrene	50328	1,100	1,000		27 *U*	3,700	2,400	3,600 *J+*	350
Benzo[b]fluoranthene	205992	11,000	5,600		29 *U*	5,200	3,500	4,700 *J+*	600
Benzo[g,h,i]perylene	191242	1,000,000	500,000		20 *U*	2,200	1,400	1,800 *J+*	260
Benzo[k]fluoranthene	207089	110,000	56,000		24 *U*	2,400	1,400	2,000 *J+*	240
Chrysene	218019	110,000	56,000		41 *U*	2,500	1,700	2,000 *J+*	550
Dibenzo[a,h]anthracene	53703	1,100	560		33 *U*	670 *J*	350 *J*	470 *J+*	120 *J*
Dibenzofuran	132649	1,000,000	350,000		22 *U*	130 *J*	110 *U*	110 *U*	43 *J*
Fluoranthene	206440	1,000,000	500,000		20 *U*	3,000	2,700	2,200 *J+*	550

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB3	SB4	SB4	SB4	SB5
				Sample Identification	SB3 (23-25)	SB4 (0-0.5)	SB4 (0.5-1)	SB4 (1-2)	SB5 (0-0.5)
				Laboratory ID	480-205124-1	480-201707-10	480-201707-11	480-201712-1	480-200130-1
				Sample Date	2023-01-03 02:01:00	2022-09-15 09:09:00	2022-09-15 09:09:00	2022-09-15 09:09:00	2022-07-25 03:07:00
Fluorene	86737	1,000,000	500,000		22 *U*	110 *U*	110 *U*	110 *U*	23 *U*
Indeno[1,2,3-cd]pyrene	193395	11,000	5,600		23 *U*	3,400	2,100	2,900 *J+*	300
Naphthalene	91203	1,000,000	500,000		24 *U*	120 *U*	120 *U*	120 *U*	59 *J*
Phenanthrene	85018	1,000,000	500,000		27 *U*	1,200	700 *J*	470 *J+*	230
Pyrene	129000	1,000,000	500,000		22 *U*	2,100	1,800	2,800 *J+*	470
Per- and Polyfluoroalkyl Substances (µg/kg)									
6:2 fluorotelomer sulfonate	27619972								
8:2 fluorotelomer sulfonate	39108344								
2-(N-ethyl-perfluorooctane sulfonamido) acetate									
Perfluorobutyric acid	375224								
2-(N-methyl-perfluorooctane sulfonamido) acetic acid									
Perfluorooctanoic acid	335671	600,000	500,000						
Perfluorooctane sulfonic acid	1763231	440,000	440,000						
Perfluorobutane Sulfonic Acid	375735								
Perfluorodecanoic Acid	335762								
Perfluorododecanoic Acid	307551								
Perfluorodecanesulfonic acid	335773								
Perfluoroheptanoic Acid	375859								
Perfluoroheptanesulfonic acid	375928								
Perfluorohexanoic Acid	307244								
Perfluorohexane Sulfonic Acid	355464								
Perfluorononanoic Acid	375951								
Perfluorooctane sulfonamide	754916								
Perfluoropentanoic Acid	2706903								
Perfluorotetradecanoic Acid	376067								
Perfluorotridecanoic Acid	72629948								
Perfluoroundecanoic Acid	2058948								
Semivolatile Organic Compounds (µg/kg)									
Atrazine	1912249				64 *U*	310 *U*	320 *U*	320 *U*	67 *U*
Carbazole	86748				22 *U*	130 *J*	110 *U*	110 *U*	31 *J*
2,4,5-Trichlorophenol	95954				50 *U*	240 *U*	250 *U*	250 *U*	52 *U*
2,4,6-Trichlorophenol	88062				37 *U*	180 *U*	190 *U*	180 *U*	39 *U*
2,4-Dichlorophenol	120832				20 *U*	95 *U*	99 *U*	98 *U*	20 *U*
2-Chlorophenol	95578				34 *U*	160 *U*	170 *U*	170 *U*	35 *U*
Pentachlorophenol	87865	55,000	6,700		180 *U*	900 *U*	940 *U*	920 *U*	190 *U*
1,1'-Biphenyl	92524				27 *U*	130 *U*	140 *U*	140 *U*	28 *U*
2,2'-oxybis(1-Chloropropane)	108601				37 *U*	180 *U*	190 *U*	180 *U*	39 *U*
2,4-Dimethylphenol	105679				44 *U*	220 *U*	230 *U*	220 *U*	46 *U*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB3	SB4	SB4	SB4	SB5
				Sample Identification	SB3 (23-25)	SB4 (0-0.5)	SB4 (0.5-1)	SB4 (1-2)	SB5 (0-0.5)
				Laboratory ID	480-205124-1	480-201707-10	480-201707-11	480-201712-1	480-200130-1
				Sample Date	2023-01-03 02:01:00	2022-09-15 09:09:00	2022-09-15 09:09:00	2022-09-15 09:09:00	2022-07-25 03:07:00
2,4-Dinitrophenol	51285				850 *U*	4,100 *U*	4,300 *U*	4,300 *U*	890 *U*
2,4-Dinitrotoluene	121142				38 *U*	180 *U*	190 *U*	190 *U*	40 *U*
2,6-Dinitrotoluene	606202				22 *U*	110 *U*	110 *U*	110 *U*	23 *U*
2-Chloronaphthalene	91587				30 *U*	150 *U*	150 *U*	150 *U*	32 *U*
2-Methylphenol	95487	1,000,000	500,000		22 *U*	110 *U*	110 *U*	110 *U*	23 *U*
2-Nitroaniline	88744				27 *U*	130 *U*	140 *U*	140 *U*	28 *U*
2-Nitrophenol	88755				52 *U*	250 *U*	260 *U*	260 *U*	54 *U*
3,3'-Dichlorobenzidine	91941				220 *U*	1,100 *U*	1,100 *U*	1,100 *U*	230 *U*
3-Nitroaniline	99092				51 *U*	250 *U*	260 *U*	260 *U*	53 *U*
4,6-Dinitro-2-methylphenol	534521				180 *U*	900 *U*	940 *U*	920 *U*	190 *U*
4-Bromophenyl-phenylether	101553				26 *U*	130 *U*	130 *U*	130 *U*	27 *U*
4-Chloro-3-methylphenol	59507				46 *U*	220 *U*	230 *U*	230 *U*	48 *U*
4-Chloroaniline	106478				46 *U*	220 *U*	230 *U*	230 *U*	48 *U*
4-Chlorophenyl-phenyl ether	7005723				23 *U*	110 *U*	120 *U*	110 *U*	24 *U*
4-Methylphenol	106445	1,000,000	500,000		22 *U*	110 *U*	110 *U*	110 *U*	23 *U*
4-Nitroaniline	100016				96 *U*	470 *U*	490 *U*	480 *U*	100 *U*
4-Nitrophenol	100027				130 *U*	630 *U*	660 *U*	650 *U*	130 *U*
Acetophenone	98862				25 *U*	120 *U*	130 *U*	120 *U*	26 *U*
Benzaldehyde	100527				150 *U*	710 *U*	740 *U*	730 *U*	150 *U*
Bis(2-chloroethyl)ether	111444				24 *U*	120 *U*	120 *U*	120 *U*	25 *U*
bis(2-Chloroethoxy)methane	111911				39 *U*	190 *U*	200 *U*	200 *U*	41 *U*
bis(2-Ethylhexyl)phthalate	117817				63 *U*	310 *U*	320 *U*	310 *U*	66 *U*
Benzyl n-butyl phthalate	85687				30 *U*	150 *U*	150 *U*	150 *U*	32 *U*
Caprolactam	105602				55 *U*	270 *U*	280 *U*	280 *U*	58 *U*
Diethyl phthalate	84662				24 *U*	120 *U*	120 *U*	130 *UJ*	25 *U*
Dimethyl phthalate	131113				22 *U*	110 *U*	110 *U*	110 *U*	23 *U*
Di-n-butyl phthalate	84742				31 *U*	150 *U*	160 *U*	160 *U*	33 *U*
Di-n-octylphthalate	117840				22 *U*	110 *U*	110 *U*	110 *U*	23 *U*
Hexachloroethane	67721				24 *U*	120 *U*	120 *U*	120 *U*	25 *U*
Hexachlorobenzene	118741	12,000	6,000		25 *U*	120 *U*	130 *U*	120 *U*	26 *U*
Hexachlorobutadiene	87683				27 *U*	130 *U*	140 *U*	140 *U*	28 *U*
Hexachlorocyclopentadiene	77474				25 *U*	120 *U*	130 *U*	120 *U*	26 *U*
Isophorone	78591				39 *U*	190 *U*	200 *U*	200 *U*	41 *U*
Nitrobenzene	98953				21 *U*	100 *U*	100 *U*	100 *U*	22 *U*
N-Nitrosodi-n-propylamine	621647				31 *U*	150 *U*	160 *U*	160 *U*	33 *U*
N-Nitrosodiphenylamine	86306				150 *U*	730 *U*	760 *U*	750 *U*	160 *U*
Phenol	108952	1,000,000	500,000		28 *U*	140 *U*	140 *U*	140 *U*	29 *U*
1,4-Dioxane	123911	250,000	130,000						

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB3	SB4	SB4	SB4	SB5
				Sample Identification	SB3 (23-25)	SB4 (0-0.5)	SB4 (0.5-1)	SB4 (1-2)	SB5 (0-0.5)
				Laboratory ID	480-205124-1	480-201707-10	480-201707-11	480-201712-1	480-200130-1
				Sample Date	2023-01-03 02:01:00	2022-09-15 09:09:00	2022-09-15 09:09:00	2022-09-15 09:09:00	2022-07-25 03:07:00
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	630206				0.42 *UJ*	0.89 *U*	0.53 *U*	0.53 *U*	0.60 *UJ*
1,1,1-Trichloroethane	71556	1,000,000	500,000		0.30 *U*	0.64 *U*	0.39 *U*	0.38 *U*	0.44 *U*
1,1,2,2-Tetrachloroethane	79345				0.68 *U*	1.40 *U*	0.86 *U*	0.85 *U*	*R*
1,1,2-Trichloroethane	79005				0.54 *U*	1.20 *U*	0.69 *U*	0.68 *U*	0.78 *UJ*
1,1-Dichloroethane	75343	480,000	240,000		0.51 *U*	1.10 *U*	0.65 *U*	0.64 *U*	0.73 *U*
1,1-Dichloroethene	75354	1,000,000	500,000		0.51 *U*	1.10 *UJ*	0.65 *UJ*	0.64 *UJ*	0.74 *U*
1,2,3-Trimethylbenzene	526738				0.85 *U*	1.80 *U*	1.10 *U*	1.10 *U*	1.20 *U*
1,2,4-Trimethylbenzene	95636	380,000	190,000		0.80 *U*	1.70 *U*	1.00 *U*	1.00 *U*	*R*
1,2,4-Trichlorobenzene	120821				0.25 *U*	0.54 *U*	0.32 *U*	0.32 *U*	*R*
1,2-Dichlorobenzene	95501	1,000,000	500,000		0.33 *U*	0.69 *U*	0.41 *U*	0.41 *U*	*R*
1,3-Dichlorobenzene	541731	560,000	280,000		0.21 *U*	0.46 *U*	0.27 *U*	0.27 *U*	*R*
1,4-Dichlorobenzene	106467	250,000	130,000		0.58 *U*	1.20 *U*	0.74 *U*	0.74 *U*	*R*
1,2-Dibromo-3-chloropropane	96128				2.10 *U*	4.40 *U*	2.70 *U*	2.60 *U*	*R*
1,2-Dibromoethane	106934				0.54 *U*	1.10 *U*	0.68 *U*	0.67 *U*	0.77 *UJ*
1,2-Dichloroethane	107062	60,000	30,000		0.21 *U*	0.45 *U*	0.27 *U*	0.26 *U*	0.30 *U*
1,2-Dichloropropane	78875				2.10 *U*	4.40 *U*	2.70 *U*	2.60 *U*	3.00 *U*
1,3,5-Trimethylbenzene	108678	380,000	190,000		0.27 *U*	0.57 *U*	0.34 *U*	0.34 *U*	*R*
2-Hexanone	591786				2.10 *U*	4.40 *U*	2.70 *U*	2.60 *U*	3.00 *UJ*
4-Methyl-2-pentanone	108101				1.40 *U*	2.90 *U*	1.70 *U*	1.70 *U*	2.00 *UJ*
Acetone	67641	1,000,000	500,000		3.60 *J*	7.50 *U*	4.50 *U*	4.40 *U*	5.10 *U*
Benzene	71432	89,000	44,000		0.20 *U*	0.43 *U*	0.26 *U*	0.26 *U*	0.30 *U*
Bromodichloromethane	75274				0.56 *U*	1.20 *U*	0.71 *U*	0.70 *U*	0.81 *U*
Bromomethane	74839				0.38 *U*	0.80 *U*	0.48 *U*	0.47 *U*	0.54 *U*
Bromoform	75252				2.10 *UJ*	4.40 *U*	2.70 *U*	2.60 *U*	3.00 *UJ*
Carbon disulfide	75150				2.10 *U*	4.40 *U*	2.70 *U*	2.60 *U*	3.00 *U*
Carbon Tetrachloride	56235	44,000	22,000		0.40 *U*	0.86 *UJ*	0.51 *UJ*	0.51 *UJ*	0.58 *U*
Chloroform	67663	700,000	350,000		0.31 *U*	0.55 *U*	0.33 *U*	0.32 *U*	0.37 *U*
cis-1,2-Dichloroethene	156592	1,000,000	500,000		0.53 *U*	1.10 *U*	0.68 *U*	0.67 *U*	0.77 *U*
cis-1,3-Dichloropropene	10061015				0.60 *U*	1.30 *U*	0.76 *U*	0.76 *U*	0.87 *U*
Chlorobenzene	108907	1,000,000	500,000		0.55 *U*	1.20 *U*	0.70 *U*	0.69 *U*	0.79 *UJ*
Chloroethane	75003				0.94 *U*	2.00 *U*	1.20 *U*	1.20 *U*	1.40 *U*
Chloromethane	74873				0.25 *U*	0.54 *U*	0.32 *U*	0.32 *U*	0.36 *U*
Cyclohexane	110827				0.58 *U*	1.20 *UJ*	0.74 *UJ*	0.74 *UJ*	0.84 *U*
Dibromochloromethane	124481				0.53 *UJ*	1.10 *U*	0.68 *U*	0.67 *U*	0.77 *UJ*
Dichlorodifluoromethane	75718				0.34 *U*	0.73 *U*	0.44 *U*	0.43 *U*	0.50 *U*
Ethylbenzene	100414	780,000	390,000		0.29 *U*	0.61 *U*	0.37 *U*	0.36 *U*	0.42 *UJ*
Isopropylbenzene	98828				0.63 *U*	1.30 *U*	0.80 *U*	0.79 *U*	*R*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB3	SB4	SB4	SB4	SB5
				Sample Identification	SB3 (23-25)	SB4 (0-0.5)	SB4 (0.5-1)	SB4 (1-2)	SB5 (0-0.5)
				Laboratory ID	480-205124-1	480-201707-10	480-201707-11	480-201712-1	480-200130-1
				Sample Date	2023-01-03 02:01:00	2022-09-15 09:09:00	2022-09-15 09:09:00	2022-09-15 09:09:00	2022-07-25 03:07:00
2-Butanone	78933	1,000,000	500,000		1.50 *U*	3.20 *U*	1.90 *U*	1.90 *U*	2.20 *U*
m,p-Xylene	179601231				0.70 *U*	1.50 *U*	0.89 *U*	0.88 *U*	1.00 *UJ*
Methyl Acetate	79209				2.5 *U*	5.4 *U*	3.2 *U*	3.2 *U*	3.6 *U*
Methylcyclohexane	108872				0.63 *U*	1.30 *UJ*	0.81 *UJ*	0.80 *UJ*	0.92 *U*
Methylene Chloride	75092	1,000,000	500,000		1.90 *U*	4.10 *U*	2.40 *U*	2.40 *U*	2.80 *U*
Methyl tert-butyl ether	1634044	1,000,000	500,000		0.41 *U*	0.87 *U*	0.52 *U*	0.52 *U*	0.59 *U*
n-Butylbenzene	104518	1,000,000	500,000		0.36 *U*	0.77 *U*	0.46 *U*	0.46 *U*	*R*
n-Propylbenzene	103651	1,000,000	500,000		0.33 *U*	0.71 *U*	0.42 *U*	0.42 *U*	*R*
o-Xylene	95476				0.55 *U*	1.20 *U*	0.69 *U*	0.69 *U*	0.79 *UJ*
sec-Butylbenzene	135988	1,000,000	500,000		0.36 *U*	0.77 *U*	0.46 *U*	0.46 *U*	*R*
Styrene	100425				0.21 *U*	0.44 *U*	0.27 *U*	0.26 *U*	0.30 *UJ*
tert-Butylbenzene	98066	1,000,000	500,000		0.43 *U*	0.92 *U*	0.55 *U*	0.55 *U*	*R*
Toluene	108883	1,000,000	500,000		0.32 *U*	0.67 *U*	0.40 *U*	0.40 *U*	0.46 *UJ*
Tetrachloroethane	127184	300,000	150,000		0.56 *U*	1.20 *U*	0.71 *U*	0.70 *U*	0.81 *UJ*
trans-1,2-Dichloroethene	156605	1,000,000	500,000		0.43 *U*	0.92 *U*	0.55 *U*	0.54 *U*	0.62 *U*
trans-1,3-Dichloropropene	10061026				1.80 *U*	3.90 *U*	2.30 *U*	2.30 *U*	2.60 *UJ*
Trichloroethene	79016	400,000	200,000		0.92 *U*	2.00 *U*	1.20 *U*	1.20 *U*	1.30 *U*
Trichlorotrifluoroethane	76131				0.95 *U*	2.00 *U*	1.20 *U*	1.20 *U*	1.40 *U*
Trichlorofluoromethane	75694				0.39 *U*	0.84 *U*	0.50 *U*	0.50 *U*	0.57 *U*
Vinyl Chloride	75014	27,000	13,000		0.51 *U*	1.10 *U*	0.65 *U*	0.64 *U*	0.73 *U*
Xylenes	1330207	1,000,000	500,000		0.70 *U*	1.50 *U*	0.89 *U*	0.88 *U*	1.00 *U*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB5	SB5	SB5	SB6	SB6
				Sample Identification	SB5 (0.5-1)	SB5 (1-2)	SB5 (13-15)	SB6 (0-0.5)	SB6 (0-0.5)
				Laboratory ID	480-200130-2	480-200130-3	480-200130-4	480-200248-1	480-200248-17
				Sample Date	2022-07-25 03:07:00	2022-07-25 03:07:00	2022-07-25 03:07:00	2022-07-29 08:07:00	2022-07-29 08:07:00
Metals (µg/kg)									
Arsenic	7440382	16,000	16,000		26,900	1,400 *J*	9,000	10,600	10,300
Lead	7439921	3,900,000	1,000,000		169,000	8,900	23,500	121,000	100,000
Cadmium	7440439	60,000	9,300		1,000	34 *J*	160 *J+*	400	250
Aluminum	7429905				7,340,000	1,440,000	11,800,000	9,040,000	8,240,000
Antimony	7440360				1,300 *J-*	450 *UJ*	870 *J-*	3,300 *J*	2,500 *J*
Barium	7440393	10,000,000	400,000		61,400	15,900	110,000	210,000	198,000
Beryllium	7440417	2,700,000	590,000		430	290	640	590	520
Calcium	7440702				5,320,000	839,000	1,890,000	2,590,000	2,470,000
Chromium	7440473				12,400	4,600	14,800	13,600	13,400
Cobalt	7440484				8,100	2,900	11,300	8,800	8,500
Copper	7440508	10,000,000	270,000		34,600	48,900	16,300	44,000	43,000
Iron	7439896				23,700,000	4,330,000	26,000,000	20,000,000	19,000,000
Magnesium	7439954				2,680,000	140,000	3,420,000	2,370,000	2,230,000
Manganese	7439965	10,000,000	10,000,000		296,000	42,700	661,000	416,000	404,000
Mercury	7439976	5,700	2,800		220	51	100	190	180
Nickel	7440020	10,000,000	310,000		17,500	8,100	24,100	19,200	18,800
Potassium	7440097				466,000	164,000	832,000	1,310,000	1,360,000
Selenium	7782492	6,800,000	1,500,000		650 *U*	920 *U*	520 *U*	650 *J*	1,600 *J*
Silver	7440224	6,800,000	1,500,000		210 *U*	230 *U*	260 *U*	240 *U*	230 *U*
Sodium	7440235				56,500 *J*	25,500 *J*	40,200 *J*	49,800 *J*	30,000 *J*
Thallium	7440280				310 *U*	340 *U*	390 *U*	360 *U*	340 *U*
Vanadium	7440622				14,500	7,600	16,800	17,300	16,300
Zinc	7440666	10,000,000	10,000,000		88,700	4,300	66,500	138,000	134,000
Polycyclic Aromatic Hydrocarbons (µg/kg)									
2-Methylnaphthalene	91576				690 *U*	37 *U*	43 *U*	190 *U*	180 *U*
Acenaphthene	83329	1,000,000	500,000		510 *U*	27 *U*	32 *U*	150 *J*	140 *U*
Acenaphthylene	208968	1,000,000	500,000		450 *U*	24 *U*	28 *U*	870 *J*	750 *J*
Anthracene	120127	1,000,000	500,000		860 *U*	45 *U*	54 *U*	890 *J*	570 *J*
Benzo[a]anthracene	56553	11,000	5,600		350 *U*	18 *U*	22 *U*	2,700	2,100
Benzo[a]pyrene	50328	1,100	1,000		660 *J*	27 *U*	32 *U*	2,500	2,200
Benzo[b]fluoranthene	205992	11,000	5,600		990 *J*	29 *U*	35 *U*	3,100	2,400
Benzo[g,h,i]perylene	191242	1,000,000	500,000		590 *J*	19 *U*	23 *U*	1,700	1,000
Benzo[k]fluoranthene	207089	110,000	56,000		570 *J*	24 *U*	28 *U*	1,200	1,300
Chrysene	218019	110,000	56,000		770 *U*	41 *U*	49 *U*	2,500	2,300
Dibenzo[a,h]anthracene	53703	1,100	560		610 *U*	32 *U*	38 *U*	640 *J*	380 *J*
Dibenzofuran	132649	1,000,000	350,000		410 *U*	22 *U*	26 *U*	270 *J*	110 *U*
Fluoranthene	206440	1,000,000	500,000		850 *J*	19 *U*	23 *U*	4,900	4,000

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB5	SB5	SB5	SB6	SB6
				Sample Identification	SB5 (0.5-1)	SB5 (1-2)	SB5 (13-15)	SB6 (0-0.5)	SB6 (0-0.5)
				Laboratory ID	480-200130-2	480-200130-3	480-200130-4	480-200248-1	480-200248-17
				Sample Date	2022-07-25 03:07:00	2022-07-25 03:07:00	2022-07-25 03:07:00	2022-07-29 08:07:00	2022-07-29 08:07:00
Fluorene	86737	1,000,000	500,000		410 *U*	22 *U*	26 *U*	630 *J*	130 *J*
Indeno[1,2,3-cd]pyrene	193395	11,000	5,600		600 *J*	23 *U*	27 *U*	1,700	1,100
Naphthalene	91203	1,000,000	500,000		450 *U*	24 *U*	28 *U*	120 *U*	120 *U*
Phenanthrene	85018	1,000,000	500,000		510 *U*	27 *U*	32 *U*	3,600	1,300
Pyrene	129000	1,000,000	500,000		740 *J*	22 *U*	26 *U*	4,400	3,300
Per- and Polyfluoroalkyl Substances (µg/kg)									
6:2 fluorotelomer sulfonate	27619972							0.064 *U*	0.063 *U*
8:2 fluorotelomer sulfonate	39108344							0.041 *U*	0.041 *U*
2-(N-ethyl-perfluorooctane sulfonamido) acetate								0.093 *U*	0.092 *U*
Perfluorobutyric acid	375224							0.370 *U*	0.370 *U*
2-(N-methyl-perfluorooctane sulfonamido) acetic acid								0.120 *U*	0.120 *U*
Perfluorooctanoic acid	335671	600,000	500,000					0.097 *J*	0.100 *J*
Perfluorooctane sulfonic acid	1763231	440,000	440,000					0.210 *NJ*	0.250 *UJ*
Perfluorobutane Sulfonic Acid	375735							0.037 *U*	0.037 *U*
Perfluorodecanoic Acid	335762							0.043 *J*	0.042 *J*
Perfluorododecanoic Acid	307551							0.028 *U*	0.028 *U*
Perfluorodecanesulfonic acid	335773							0.021 *U*	0.021 *U*
Perfluoroheptanoic Acid	375859							0.046 *J*	0.052 *J*
Perfluoroheptanesulfonic acid	375928							0.026 *U*	0.025 *U*
Perfluorohexanoic Acid	307244							0.130 *NJ*	0.100 *UJ*
Perfluorohexane Sulfonic Acid	355464							0.046 *U*	0.045 *U*
Perfluorononanoic Acid	375951							0.072 *J*	0.080 *J*
Perfluorooctane sulfonamide	754916							0.038 *U*	0.038 *U*
Perfluoropentanoic Acid	2706903							0.061 *U*	0.061 *U*
Perfluorotetradecanoic Acid	376067							0.029 *U*	0.029 *U*
Perfluorotridecanoic Acid	72629948							0.028 *U*	0.028 *U*
Perfluoroundecanoic Acid	2058948							0.039 *J*	0.045 *J*
Semivolatile Organic Compounds (µg/kg)									
Atrazine	1912249				1,200 *U*	64 *U*	75 *U*	330 *U*	320 *U*
Carbazole	86748				410 *U*	22 *U*	26 *U*	140 *J*	110 *U*
2,4,5-Trichlorophenol	95954				940 *U*	50 *U*	59 *U*	260 *U*	250 *U*
2,4,6-Trichlorophenol	88062				690 *U*	37 *U*	43 *U*	190 *U*	180 *U*
2,4-Dichlorophenol	120832				370 *U*	19 *U*	23 *U*	100 *U*	98 *U*
2-Chlorophenol	95578				630 *U*	33 *U*	40 *U*	170 *U*	170 *U*
Pentachlorophenol	87865	55,000	6,700		3,500 *U*	180 *U*	220 *U*	940 *U*	920 *U*
1,1'-Biphenyl	92524				510 *U*	27 *U*	32 *U*	140 *U*	140 *U*
2,2'-oxybis(1-Chloropropane)	108601				690 *U*	37 *U*	43 *U*	190 *U*	180 *U*
2,4-Dimethylphenol	105679				840 *U*	44 *U*	52 *U*	230 *U*	220 *U*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB5	SB5	SB5	SB6	SB6
				Sample Identification	SB5 (0.5-1)	SB5 (1-2)	SB5 (13-15)	SB6 (0-0.5)	SB6 (0-0.5)
				Laboratory ID	480-200130-2	480-200130-3	480-200130-4	480-200248-1	480-200248-17
				Sample Date	2022-07-25 03:07:00	2022-07-25 03:07:00	2022-07-25 03:07:00	2022-07-29 08:07:00	2022-07-29 08:07:00
2,4-Dinitrophenol	51285				16,000 *U*	850 *U*	1,000 *U*	4,400 *U*	4,300 *U*
2,4-Dinitrotoluene	121142				710 *U*	38 *U*	45 *U*	190 *U*	190 *U*
2,6-Dinitrotoluene	606202				410 *U*	22 *U*	26 *U*	110 *U*	110 *U*
2-Chloronaphthalene	91587				570 *U*	30 *U*	36 *U*	160 *U*	150 *U*
2-Methylphenol	95487	1,000,000	500,000		410 *U*	22 *U*	26 *U*	110 *U*	110 *U*
2-Nitroaniline	88744				510 *U*	27 *U*	32 *U*	140 *U*	140 *U*
2-Nitrophenol	88755				980 *U*	52 *U*	61 *U*	270 *U*	260 *U*
3,3'-Dichlorobenzidine	91941				4,100 *U*	220 *U*	260 *U*	1,100 *U*	1,100 *U*
3-Nitroaniline	99092				960 *U*	51 *U*	60 *U*	260 *U*	260 *U*
4,6-Dinitro-2-methylphenol	534521				3,500 *U*	180 *U*	220 *U*	940 *U*	920 *U*
4-Bromophenyl-phenylether	101553				490 *U*	26 *U*	31 *U*	130 *U*	130 *U*
4-Chloro-3-methylphenol	59507				860 *U*	45 *U*	54 *U*	230 *U*	230 *U*
4-Chloroaniline	106478				860 *U*	45 *U*	54 *U*	230 *U*	230 *U*
4-Chlorophenyl-phenyl ether	7005723				430 *U*	23 *U*	27 *U*	120 *U*	110 *U*
4-Methylphenol	106445	1,000,000	500,000		410 *U*	22 *U*	26 *U*	110 *U*	110 *U*
4-Nitroaniline	100016				1,800 *U*	96 *U*	110 *U*	490 *U*	480 *U*
4-Nitrophenol	100027				2,400 *U*	130 *U*	150 *U*	660 *U*	650 *U*
Acetophenone	98862				470 *U*	25 *U*	29 *U*	130 *U*	130 *U*
Benzaldehyde	100527				2,800 *U*	150 *U*	170 *U*	750 *U*	730 *U*
Bis(2-chloroethyl)ether	111444				450 *U*	24 *U*	28 *U*	120 *U*	120 *U*
bis(2-Chloroethoxy)methane	111911				730 *U*	39 *U*	46 *U*	200 *U*	200 *U*
bis(2-Ethylhexyl)phthalate	117817				1,200 *U*	63 *U*	74 *U*	320 *U*	320 *U*
Benzyl n-butyl phthalate	85687				570 *U*	30 *U*	36 *U*	160 *U*	150 *U*
Caprolactam	105602				1,000 *U*	55 *U*	65 *U*	280 *U*	280 *U*
Diethyl phthalate	84662				450 *U*	24 *U*	28 *U*	120 *U*	120 *U*
Dimethyl phthalate	131113				410 *U*	22 *U*	26 *U*	110 *U*	110 *U*
Di-n-butyl phthalate	84742				590 *U*	31 *U*	37 *U*	160 *U*	170 *J*
Di-n-octylphthalate	117840				410 *U*	22 *U*	26 *U*	110 *U*	110 *U*
Hexachloroethane	67721				450 *U*	24 *U*	28 *U*	120 *U*	120 *U*
Hexachlorobenzene	118741	12,000	6,000		470 *U*	25 *U*	29 *U*	130 *U*	130 *U*
Hexachlorobutadiene	87683				510 *U*	27 *U*	32 *U*	140 *U*	140 *U*
Hexachlorocyclopentadiene	77474				470 *U*	25 *U*	29 *U*	130 *U*	130 *U*
Isophorone	78591				730 *U*	39 *U*	46 *U*	200 *U*	200 *U*
Nitrobenzene	98953				390 *U*	21 *U*	24 *U*	110 *U*	100 *U*
N-Nitrosodi-n-propylamine	621647				590 *U*	31 *U*	37 *U*	160 *U*	160 *U*
N-Nitrosodiphenylamine	86306				2,800 *U*	150 *U*	180 *U*	770 *U*	750 *U*
Phenol	108952	1,000,000	500,000		530 *U*	28 *U*	33 *U*	140 *U*	140 *U*
1,4-Dioxane	123911	250,000	130,000					310 *U*	300 *U*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB5	SB5	SB5	SB6	SB6
				Sample Identification	SB5 (0.5-1)	SB5 (1-2)	SB5 (13-15)	SB6 (0-0.5)	SB6 (0-0.5)
				Laboratory ID	480-200130-2	480-200130-3	480-200130-4	480-200248-1	480-200248-17
				Sample Date	2022-07-25 03:07:00	2022-07-25 03:07:00	2022-07-25 03:07:00	2022-07-29 08:07:00	2022-07-29 08:07:00
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	630206				0.50 *UJ*	0.54 *UJ*	0.50 *U*	0.75 *UJ*	0.60 *UJ*
1,1,1-Trichloroethane	71556	1,000,000	500,000		0.44 *J+*	1.90 *J+*	0.65 *J+*	0.54 *UJ*	0.44 *UJ*
1,1,2,2-Tetrachloroethane	79345				*R*	*R*	0.81 *U*	1.20 *UJ*	0.97 *UJ*
1,1,2-Trichloroethane	79005				0.65 *UJ*	0.71 *UJ*	0.65 *U*	0.97 *UJ*	0.78 *UJ*
1,1-Dichloroethane	75343	480,000	240,000		0.61 *U*	0.66 *U*	0.61 *U*	0.91 *UJ*	0.73 *UJ*
1,1-Dichloroethene	75354	1,000,000	500,000		0.61 *U*	0.67 *U*	0.61 *U*	0.91 *UJ*	0.74 *UJ*
1,2,3-Trimethylbenzene	526738				1.00 *U*	1.10 *U*	1.00 *U*	1.50 *UJ*	1.20 *UJ*
1,2,4-Trimethylbenzene	95636	380,000	190,000		*R*	*R*	0.96 *U*	1.40 *UJ*	1.20 *UJ*
1,2,4-Trichlorobenzene	120821				*R*	*R*	0.30 *U*	0.45 *UJ*	0.37 *UJ*
1,2-Dichlorobenzene	95501	1,000,000	500,000		*R*	*R*	0.39 *U*	0.58 *UJ*	0.47 *UJ*
1,3-Dichlorobenzene	541731	560,000	280,000		*R*	*R*	0.26 *U*	0.38 *UJ*	0.31 *UJ*
1,4-Dichlorobenzene	106467	250,000	130,000		*R*	*R*	0.70 *U*	1.00 *UJ*	0.84 *UJ*
1,2-Dibromo-3-chloropropane	96128				*R*	*R*	2.50 *U*	3.70 *UJ*	3.00 *UJ*
1,2-Dibromoethane	106934				0.64 *UJ*	0.70 *UJ*	0.64 *U*	0.96 *UJ*	0.77 *UJ*
1,2-Dichloroethane	107062	60,000	30,000		0.25 *U*	0.27 *U*	0.25 *U*	0.37 *UJ*	0.30 *UJ*
1,2-Dichloropropane	78875				2.50 *U*	2.70 *U*	2.50 *U*	3.70 *UJ*	3.00 *UJ*
1,3,5-Trimethylbenzene	108678	380,000	190,000		*R*	*R*	0.32 *U*	0.48 *UJ*	0.39 *UJ*
2-Hexanone	591786				2.50 *UJ*	2.70 *UJ*	2.50 *U*	3.70 *UJ*	3.00 *UJ*
4-Methyl-2-pentanone	108101				1.60 *UJ*	1.80 *UJ*	1.60 *U*	2.40 *UJ*	2.00 *UJ*
Acetone	67641	1,000,000	500,000		4.20 *U*	4.60 *U*	4.20 *U*	6.30 *UJ*	5.10 *UJ*
Benzene	71432	89,000	44,000		0.24 *U*	0.44 *J+*	0.24 *U*	0.37 *UJ*	0.29 *UJ*
Bromodichloromethane	75274				0.67 *U*	0.73 *U*	0.67 *U*	1.00 *UJ*	0.80 *UJ*
Bromomethane	74839				0.45 *U*	0.49 *U*	0.45 *U*	0.67 *UJ*	0.54 *UJ*
Bromoform	75252				2.50 *UJ*	2.70 *UJ*	2.50 *U*	3.70 *UJ*	3.00 *UJ*
Carbon disulfide	75150				2.50 *U*	2.70 *U*	2.50 *U*	3.70 *UJ*	3.00 *UJ*
Carbon Tetrachloride	56235	44,000	22,000		0.48 *U*	0.53 *U*	0.48 *U*	0.72 *UJ*	0.58 *UJ*
Chloroform	67663	700,000	350,000		0.31 *U*	0.34 *U*	0.31 *U*	0.46 *UJ*	0.37 *UJ*
cis-1,2-Dichloroethene	156592	1,000,000	500,000		0.64 *U*	0.70 *U*	0.64 *U*	0.96 *UJ*	0.77 *UJ*
cis-1,3-Dichloropropene	10061015				0.72 *U*	0.78 *U*	0.72 *U*	1.10 *UJ*	0.87 *UJ*
Chlorobenzene	108907	1,000,000	500,000		0.66 *UJ*	0.72 *UJ*	0.66 *U*	0.99 *UJ*	0.79 *UJ*
Chloroethane	75003				1.10 *U*	1.20 *U*	1.10 *U*	1.70 *UJ*	1.40 *UJ*
Chloromethane	74873				0.30 *U*	0.33 *U*	0.30 *U*	0.45 *UJ*	0.36 *UJ*
Cyclohexane	110827				0.70 *U*	0.76 *U*	0.70 *U*	1.00 *UJ*	0.84 *UJ*
Dibromochloromethane	124481				0.64 *UJ*	0.70 *UJ*	0.64 *U*	0.96 *UJ*	0.77 *UJ*
Dichlorodifluoromethane	75718				0.41 *U*	0.45 *U*	0.41 *U*	0.62 *UJ*	0.50 *UJ*
Ethylbenzene	100414	780,000	390,000		0.34 *UJ*	0.38 *UJ*	0.34 *U*	0.51 *UJ*	0.41 *UJ*
Isopropylbenzene	98828				*R*	*R*	0.75 *U*	1.10 *UJ*	0.91 *UJ*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB5	SB5	SB5	SB6	SB6
				Sample Identification	SB5 (0.5-1)	SB5 (1-2)	SB5 (13-15)	SB6 (0-0.5)	SB6 (0-0.5)
				Laboratory ID	480-200130-2	480-200130-3	480-200130-4	480-200248-1	480-200248-17
				Sample Date	2022-07-25 03:07:00	2022-07-25 03:07:00	2022-07-25 03:07:00	2022-07-29 08:07:00	2022-07-29 08:07:00
2-Butanone	78933	1,000,000	500,000		1.80 *U*	2.00 *U*	1.80 *U*	2.70 *UJ*	2.20 *UJ*
m,p-Xylene	179601231				0.84 *UJ*	0.92 *UJ*	0.84 *U*	1.30 *UJ*	1.00 *UJ*
Methyl Acetate	79209				3.0 *U*	3.3 *U*	3.0 *U*	4.5 *UJ*	3.6 *UJ*
Methylcyclohexane	108872				0.76 *U*	0.83 *U*	0.76 *U*	1.10 *UJ*	0.91 *UJ*
Methylene Chloride	75092	1,000,000	500,000		2.30 *U*	2.50 *U*	2.30 *U*	3.40 *UJ*	2.80 *UJ*
Methyl tert-butyl ether	1634044	1,000,000	500,000		0.49 *U*	0.54 *U*	0.49 *U*	0.73 *UJ*	0.59 *UJ*
n-Butylbenzene	104518	1,000,000	500,000		*R*	*R*	0.43 *U*	0.65 *UJ*	0.52 *UJ*
n-Propylbenzene	103651	1,000,000	500,000		*R*	*R*	0.40 *U*	0.60 *UJ*	0.48 *UJ*
o-Xylene	95476				0.65 *UJ*	0.71 *UJ*	0.65 *U*	0.97 *UJ*	0.78 *UJ*
sec-Butylbenzene	135988	1,000,000	500,000		*R*	*R*	0.43 *U*	0.65 *UJ*	0.52 *UJ*
Styrene	100425				0.25 *UJ*	0.27 *UJ*	0.25 *U*	0.37 *UJ*	0.30 *UJ*
tert-Butylbenzene	98066	1,000,000	500,000		*R*	*R*	0.52 *U*	0.78 *UJ*	0.62 *UJ*
Toluene	108883	1,000,000	500,000		0.38 *UJ*	0.63 *J*	0.38 *U*	0.61 *J*	0.45 *UJ*
Tetrachloroethane	127184	300,000	150,000		0.67 *UJ*	0.73 *UJ*	0.67 *U*	1.00 *UJ*	0.81 *UJ*
trans-1,2-Dichloroethene	156605	1,000,000	500,000		0.51 *U*	0.56 *U*	0.51 *U*	0.77 *UJ*	0.62 *UJ*
trans-1,3-Dichloropropene	10061026				2.20 *UJ*	2.40 *UJ*	2.20 *U*	3.30 *UJ*	2.60 *UJ*
Trichloroethene	79016	400,000	200,000		1.10 *U*	1.20 *U*	1.10 *U*	1.60 *UJ*	1.30 *UJ*
Trichlorotrifluoroethane	76131				1.10 *U*	1.20 *U*	1.10 *U*	1.70 *UJ*	1.40 *UJ*
Trichlorofluoromethane	75694				0.47 *U*	0.52 *U*	0.47 *U*	0.71 *UJ*	0.57 *UJ*
Vinyl Chloride	75014	27,000	13,000		0.61 *U*	0.66 *U*	0.61 *U*	0.91 *UJ*	0.73 *UJ*
Xylenes	1330207	1,000,000	500,000		0.84 *U*	0.92 *U*	0.84 *U*	1.30 *UJ*	1.00 *UJ*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB6	SB6	SB6	SS1	SS1
				Sample Identification	SB6 (0.5-1)	SB6 (1-2)	SB6 (13-15)	SS1 (0-2)	SS1 (0-6)
				Laboratory ID	480-200248-2	480-200248-18	480-200248-3	480-201563-1	480-201563-2
				Sample Date	2022-07-29 08:07:00	2022-07-29 08:07:00	2022-07-29 08:07:00	2022-09-12 04:09:00	2022-09-12 12:09:00
Metals (µg/kg)									
Arsenic	7440382	16,000	16,000		18,300	17,600	7,700	9,900	12,500
Lead	7439921	3,900,000	1,000,000		273,000	2,370,000	18,200	88,400	118,000
Cadmium	7440439	60,000	9,300		740	740	190 J+	750	1,000 J+
Aluminum	7429905				7,650,000	6,570,000 J	15,500,000	9,000,000 J	9,160,000
Antimony	7440360				5,400 J	4,900 J-	1,100 J	2,300 J-	2,200 J
Barium	7440393	10,000,000	400,000		426,000	445,000 J-	147,000	86,900 J+	91,700
Beryllium	7440417	2,700,000	590,000		740	700	780	460	480
Calcium	7440702				4,930,000	4,560,000 J+	1,490,000	2,810,000	3,380,000
Chromium	7440473				15,500	13,200	18,400	14,200	15,600
Cobalt	7440484				9,000	8,300 J+	13,700	7,000	7,800
Copper	7440508	10,000,000	270,000		93,800	79,700 J+	17,200	20,500	27,200
Iron	7439896				21,100,000	19,400,000 J-	24,300,000	23,100,000	30,000,000
Magnesium	7439954				2,300,000	1,910,000	3,850,000	2,220,000 J+	2,470,000
Manganese	7439965	10,000,000	10,000,000		344,000	291,000 J-	566,000	427,000	553,000
Mercury	7439976	5,700	2,800		320	440 J-	35	85	99
Nickel	7440020	10,000,000	310,000		21,100	18,400 J+	30,000	16,200	26,900
Potassium	7440097				1,080,000	1,030,000 J+	2,120,000	1,740,000 J+	1,640,000
Selenium	7782492	6,800,000	1,500,000		2,100 J	2,800 J	520 U	1,000 J	920 J+
Silver	7440224	6,800,000	1,500,000		230 U	220 U	260 U	250 U	250 U
Sodium	7440235				92,500 J	71,200 J	82,800 J	58,600 J	67,200 J
Thallium	7440280				340 U	330 U	390 U	370 U	380 U
Vanadium	7440622				22,300	22,600	22,000	15,800	19,300
Zinc	7440666	10,000,000	10,000,000		281,000	333,000 J-	76,500	119,000	135,000
Polycyclic Aromatic Hydrocarbons (µg/kg)									
2-Methylnaphthalene	91576				480 J-	370 U	45 U	200 U	410 U
Acenaphthene	83329	1,000,000	500,000		270 UJ	280 U	65 J	150 U	310 U
Acenaphthylene	208968	1,000,000	500,000		1,400 J-	3,000 J-	29 U	130 U	270 U
Anthracene	120127	1,000,000	500,000		17,000 J-	1,700 J	55 U	250 U	510 U
Benzo[a]anthracene	56553	11,000	5,600		6,500 J-	8,200	89 J	340 J	260 J
Benzo[a]pyrene	50328	1,100	1,000		5,000 J-	8,900 J	98 J	540 J	440 J
Benzo[b]fluoranthene	205992	11,000	5,600		6,100 J-	10,000 J	60 J	870 J	710 J
Benzo[g,h,i]perylene	191242	1,000,000	500,000		3,500 J-	6,300 J-	50 J	380 J	320 J
Benzo[k]fluoranthene	207089	110,000	56,000		2,400 J-	4,100	29 U	350 J	280 J
Chrysene	218019	110,000	56,000		6,500 J-	7,500 J-	92 J	730 J	590 J
Dibenzo[a,h]anthracene	53703	1,100	560		900 J-	2,100 J	39 U	180 U	370 U
Dibenzofuran	132649	1,000,000	350,000		220 UJ	280 J	26 U	120 U	240 U
Fluoranthene	206440	1,000,000	500,000		11,000 J-	13,000	130 J	1,500	1,200 J

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB6	SB6	SB6	SS1	SS1
				Sample Identification	SB6 (0.5-1)	SB6 (1-2)	SB6 (13-15)	SS1 (0-2)	SS1 (0-6)
				Laboratory ID	480-200248-2	480-200248-18	480-200248-3	480-201563-1	480-201563-2
				Sample Date	2022-07-29 08:07:00	2022-07-29 08:07:00	2022-07-29 08:07:00	2022-09-12 04:09:00	2022-09-12 12:09:00
Fluorene	86737	1,000,000	500,000		1,200 *J-*	570 *J*	49 *J*	120 *U*	240 *U*
Indeno[1,2,3-cd]pyrene	193395	11,000	5,600		3,200 *J-*	5,800 *J*	45 *J*	470 *J*	320 *J*
Naphthalene	91203	1,000,000	500,000		290 *UJ*	240 *U*	29 *U*	130 *U*	270 *U*
Phenanthrene	85018	1,000,000	500,000		8,200 *J-*	5,000 *J*	160 *J*	960 *J*	700 *J*
Pyrene	129000	1,000,000	500,000		14,000 *J-*	12,000	210 *J*	1,100	860 *J*
Per- and Polyfluoroalkyl Substances (µg/kg)									
6:2 fluorotelomer sulfonate	27619972				0.062 *U*	0.062 *U*	0.077 *U*	0.068 *U*	
8:2 fluorotelomer sulfonate	39108344				0.040 *U*	0.040 *U*	0.050 *U*	0.044 *U*	
2-(N-ethyl-perfluorooctane sulfonamido) acetate					0.090 *U*	0.091 *U*	0.110 *U*	0.110 *J*	
Perfluorobutyric acid	375224				0.360 *U*	0.360 *U*	0.440 *U*	0.390 *U*	
2-(N-methyl-perfluorooctane sulfonamido) acetic acid					0.120 *U*	0.120 *U*	0.150 *U*	0.130 *U*	
Perfluorooctanoic acid	335671	600,000	500,000		0.130 *J*	0.140 *J*	0.078 *U*	0.280	
Perfluorooctane sulfonic acid	1763231	440,000	440,000		0.410	0.500	0.150 *U*	1.000	
Perfluorobutane Sulfonic Acid	375735				0.036 *U*	0.037 *U*	0.044 *U*	0.039 *U*	
Perfluorodecanoic Acid	335762				0.030 *U*	0.031 *U*	0.038 *U*	0.120 *J*	
Perfluorododecanoic Acid	307551				0.027 *U*	0.027 *U*	0.034 *U*	0.052 *U*	
Perfluorodecanesulfonic acid	335773				0.021 *U*	0.021 *U*	0.026 *U*	0.048 *U*	
Perfluoroheptanoic Acid	375859				0.045 *U*	0.043 *U*	0.052 *U*	0.074 *U*	
Perfluoroheptanesulfonic acid	375928				0.025 *U*	0.025 *U*	0.031 *U*	0.027 *U*	
Perfluorohexanoic Acid	307244				0.066 *U*	0.053 *U*	0.062 *U*	0.140 *UJ*	
Perfluorohexane Sulfonic Acid	355464				0.100 *UJ*	0.045 *U*	0.055 *U*	0.049 *U*	
Perfluorononanoic Acid	375951				0.050 *J*	0.037 *U*	0.046 *U*	0.150 *J*	
Perfluorooctane sulfonamide	754916				0.037 *U*	0.037 *U*	0.046 *U*	0.040 *U*	
Perfluoropentanoic Acid	2706903				0.060 *U*	0.060 *U*	0.074 *U*	0.068 *U*	
Perfluorotetradecanoic Acid	376067				0.028 *U*	0.028 *U*	0.035 *U*	0.031 *U*	
Perfluorotridecanoic Acid	72629948				0.027 *U*	0.027 *U*	0.034 *U*	0.031 *U*	
Perfluoroundecanoic Acid	2058948				0.029 *U*	0.029 *U*	0.036 *U*	0.079 *J*	
Semivolatile Organic Compounds (µg/kg)									
Atrazine	1912249				640 *UJ*	650 *U*	77 *U*	350 *U*	720 *U*
Carbazole	86748				250 *J-*	310 *J*	26 *U*	120 *U*	240 *U*
2,4,5-Trichlorophenol	95954				500 *U*	510 *U*	60 *U*	270 *U*	560 *U*
2,4,6-Trichlorophenol	88062				370 *U*	370 *U*	45 *U*	200 *U*	410 *U*
2,4-Dichlorophenol	120832				190 *U*	200 *U*	24 *U*	110 *U*	220 *U*
2-Chlorophenol	95578				340 *U*	340 *U*	41 *U*	180 *U*	380 *U*
Pentachlorophenol	87865	55,000	6,700		1,800 *U*	1,900 *U*	220 *U*	1,000 *U*	2,100 *U*
1,1'-Biphenyl	92524				270 *UJ*	280 *U*	33 *U*	150 *U*	310 *U*
2,2'-oxybis(1-Chloropropane)	108601				370 *UJ*	370 *U*	45 *U*	200 *U*	410 *U*
2,4-Dimethylphenol	105679				440 *U*	450 *U*	54 *U*	240 *U*	500 *U*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB6	SB6	SB6	SS1	SS1
				Sample Identification	SB6 (0.5-1)	SB6 (1-2)	SB6 (13-15)	SS1 (0-2)	SS1 (0-6)
				Laboratory ID	480-200248-2	480-200248-18	480-200248-3	480-201563-1	480-201563-2
				Sample Date	2022-07-29 08:07:00	2022-07-29 08:07:00	2022-07-29 08:07:00	2022-09-12 04:09:00	2022-09-12 12:09:00
2,4-Dinitrophenol	51285				8,500 *U*	*R*	1,000 *U*	4,700 *U*	9,600 *U*
2,4-Dinitrotoluene	121142				380 *UJ*	390 *U*	46 *U*	210 *U*	430 *U*
2,6-Dinitrotoluene	606202				220 *UJ*	220 *U*	26 *U*	120 *U*	240 *U*
2-Chloronaphthalene	91587				300 *UJ*	310 *U*	37 *U*	170 *U*	340 *U*
2-Methylphenol	95487	1,000,000	500,000		220 *U*	220 *U*	26 *U*	120 *U*	240 *U*
2-Nitroaniline	88744				270 *UJ*	280 *U*	33 *U*	150 *U*	310 *U*
2-Nitrophenol	88755				520 *U*	530 *U*	63 *U*	280 *U*	590 *U*
3,3'-Dichlorobenzidine	91941				2,200 *UJ*	2,200 *U*	260 *U*	1,200 *U*	2,400 *U*
3-Nitroaniline	99092				510 *UJ*	520 *U*	62 *U*	280 *U*	570 *U*
4,6-Dinitro-2-methylphenol	534521				1,800 *U*	1,900 *U*	220 *U*	1,000 *U*	2,100 *U*
4-Bromophenyl-phenylether	101553				260 *UJ*	260 *U*	31 *U*	140 *U*	290 *U*
4-Chloro-3-methylphenol	59507				450 *U*	460 *U*	55 *U*	250 *U*	510 *U*
4-Chloroaniline	106478				450 *UJ*	460 *U*	55 *U*	250 *U*	510 *U*
4-Chlorophenyl-phenyl ether	7005723				230 *UJ*	230 *U*	28 *U*	120 *U*	260 *U*
4-Methylphenol	106445	1,000,000	500,000		220 *U*	220 *U*	26 *U*	120 *U*	240 *U*
4-Nitroaniline	100016				960 *UJ*	980 *U*	120 *U*	530 *U*	1,100 *U*
4-Nitrophenol	100027				1,300 *U*	1,300 *U*	160 *U*	710 *U*	1,500 *U*
Acetophenone	98862				250 *UJ*	250 *U*	30 *U*	140 *U*	280 *U*
Benzaldehyde	100527				1,500 *UJ*	1,500 *U*	180 *U*	800 *U*	1,600 *U*
Bis(2-chloroethyl)ether	111444				240 *UJ*	240 *U*	29 *U*	130 *U*	270 *U*
bis(2-Chloroethoxy)methane	111911				390 *UJ*	400 *U*	47 *U*	210 *U*	440 *U*
bis(2-Ethylhexyl)phthalate	117817				630 *UJ*	640 *U*	76 *U*	340 *U*	710 *U*
Benzyl n-butyl phthalate	85687				300 *UJ*	310 *U*	37 *U*	170 *U*	340 *U*
Caprolactam	105602				550 *UJ*	560 *U*	67 *U*	300 *U*	620 *U*
Diethyl phthalate	84662				240 *UJ*	240 *U*	29 *U*	180 *U*	270 *U*
Dimethyl phthalate	131113				220 *UJ*	220 *U*	26 *U*	120 *U*	240 *U*
Di-n-butyl phthalate	84742				310 *UJ*	320 *U*	38 *U*	170 *U*	350 *U*
Di-n-octylphthalate	117840				220 *UJ*	220 *U*	26 *U*	120 *U*	240 *U*
Hexachloroethane	67721				240 *UJ*	240 *U*	29 *U*	130 *U*	270 *U*
Hexachlorobenzene	118741	12,000	6,000		250 *UJ*	250 *U*	30 *U*	140 *U*	280 *U*
Hexachlorobutadiene	87683				270 *UJ*	280 *U*	33 *U*	150 *U*	310 *U*
Hexachlorocyclopentadiene	77474				250 *UJ*	*R*	30 *U*	140 *U*	280 *U*
Isophorone	78591				390 *UJ*	400 *U*	47 *U*	210 *U*	440 *U*
Nitrobenzene	98953				210 *UJ*	210 *U*	25 *U*	110 *U*	230 *U*
N-Nitrosodi-n-propylamine	621647				310 *UJ*	320 *U*	38 *U*	170 *U*	350 *U*
N-Nitrosodiphenylamine	86306				1,500 *UJ*	1,500 *U*	180 *U*	820 *U*	1,700 *U*
Phenol	108952	1,000,000	500,000		280 *U*	290 *U*	34 *U*	150 *U*	320 *U*
1,4-Dioxane	123911	250,000	130,000		600 *UJ*	*R*	72 *U*	330 *U*	

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB6	SB6	SB6	SS1	SS1
				Sample Identification	SB6 (0.5-1)	SB6 (1-2)	SB6 (13-15)	SS1 (0-2)	SS1 (0-6)
				Laboratory ID	480-200248-2	480-200248-18	480-200248-3	480-201563-1	480-201563-2
				Sample Date	2022-07-29 08:07:00	2022-07-29 08:07:00	2022-07-29 08:07:00	2022-09-12 04:09:00	2022-09-12 12:09:00
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	630206				0.70 *UJ*	0.78 *UJ*	0.51 *U*	0.45 *U*	0.55 *U*
1,1,1-Trichloroethane	71556	1,000,000	500,000		0.51 *UJ*	0.56 *UJ*	0.37 *U*	0.33 *U*	0.40 *U*
1,1,2,2-Tetrachloroethane	79345				*R*	*R*	0.83 *U*	0.73 *UJ*	0.89 *UJ*
1,1,2-Trichloroethane	79005				0.91 *UJ*	1.00 *UJ*	0.66 *U*	0.58 *U*	0.71 *U*
1,1-Dichloroethane	75343	480,000	240,000		0.85 *UJ*	0.95 *UJ*	0.62 *U*	0.55 *U*	0.67 *U*
1,1-Dichloroethene	75354	1,000,000	500,000		0.85 *UJ*	0.95 *UJ*	0.63 *U*	0.55 *UJ*	0.67 *UJ*
1,2,3-Trimethylbenzene	526738				1.40 *UJ*	1.60 *UJ*	1.00 *U*	0.91 *U*	1.10 *U*
1,2,4-Trimethylbenzene	95636	380,000	190,000		*R*	*R*	0.98 *U*	0.86 *UJ*	1.10 *UJ*
1,2,4-Trichlorobenzene	120821				*R*	*R*	0.31 *U*	0.27 *UJ*	0.33 *UJ*
1,2-Dichlorobenzene	95501	1,000,000	500,000		*R*	*R*	0.40 *U*	0.35 *UJ*	0.43 *UJ*
1,3-Dichlorobenzene	541731	560,000	280,000		*R*	*R*	0.26 *U*	0.23 *UJ*	0.28 *UJ*
1,4-Dichlorobenzene	106467	250,000	130,000		*R*	*R*	0.72 *U*	0.63 *UJ*	0.77 *UJ*
1,2-Dibromo-3-chloropropane	96128				*R*	*R*	2.60 *U*	2.20 *UJ*	2.70 *UJ*
1,2-Dibromoethane	106934				0.89 *UJ*	1.00 *UJ*	0.66 *U*	0.57 *U*	0.70 *U*
1,2-Dichloroethane	107062	60,000	30,000		0.35 *UJ*	0.39 *UJ*	0.26 *U*	0.22 *U*	0.27 *U*
1,2-Dichloropropane	78875				3.50 *UJ*	3.90 *UJ*	2.60 *U*	2.20 *U*	2.70 *U*
1,3,5-Trimethylbenzene	108678	380,000	190,000		*R*	*R*	0.33 *U*	0.29 *UJ*	0.35 *UJ*
2-Hexanone	591786				3.50 *UJ*	3.90 *UJ*	2.60 *U*	2.20 *U*	2.70 *U*
4-Methyl-2-pentanone	108101				2.30 *UJ*	2.60 *UJ*	1.70 *U*	1.50 *U*	1.80 *U*
Acetone	67641	1,000,000	500,000		5.90 *UJ*	6.50 *UJ*	94	3.80 *U*	4.60 *U*
Benzene	71432	89,000	44,000		0.34 *UJ*	0.38 *UJ*	0.25 *U*	0.22 *U*	0.27 *U*
Bromodichloromethane	75274				0.93 *UJ*	1.00 *UJ*	0.68 *U*	0.60 *U*	0.73 *U*
Bromomethane	74839				0.63 *UJ*	0.70 *UJ*	0.46 *U*	0.40 *U*	0.49 *U*
Bromoform	75252				3.50 *UJ*	3.90 *UJ*	2.60 *U*	2.20 *U*	2.70 *U*
Carbon disulfide	75150				3.50 *UJ*	3.90 *UJ*	2.60 *U*	2.20 *U*	2.70 *U*
Carbon Tetrachloride	56235	44,000	22,000		0.67 *UJ*	0.75 *UJ*	0.49 *U*	0.43 *UJ*	0.53 *UJ*
Chloroform	67663	700,000	350,000		0.43 *UJ*	0.48 *UJ*	0.32 *U*	0.28 *UJ*	0.34 *U*
cis-1,2-Dichloroethene	156592	1,000,000	500,000		0.89 *UJ*	1.00 *UJ*	0.65 *U*	0.57 *U*	0.70 *U*
cis-1,3-Dichloropropene	10061015				1.00 *UJ*	1.10 *UJ*	0.74 *U*	0.64 *U*	0.79 *U*
Chlorobenzene	108907	1,000,000	500,000		0.92 *UJ*	1.00 *UJ*	0.67 *U*	0.59 *U*	0.72 *U*
Chloroethane	75003				1.60 *UJ*	1.80 *UJ*	1.20 *U*	1.00 *U*	1.20 *U*
Chloromethane	74873				0.42 *UJ*	0.47 *UJ*	0.31 *U*	0.27 *U*	0.33 *U*
Cyclohexane	110827				0.98 *UJ*	1.10 *UJ*	0.72 *U*	0.63 *UJ*	0.77 *UJ*
Dibromochloromethane	124481				0.89 *UJ*	1.00 *UJ*	0.65 *U*	0.57 *U*	0.70 *U*
Dichlorodifluoromethane	75718				0.58 *UJ*	0.64 *UJ*	0.42 *U*	0.37 *U*	0.45 *U*
Ethylbenzene	100414	780,000	390,000		0.48 *UJ*	0.54 *UJ*	0.35 *U*	0.31 *U*	0.38 *U*
Isopropylbenzene	98828				*R*	*R*	0.77 *U*	0.68 *UJ*	0.83 *UJ*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SB6	SB6	SB6	SS1	SS1
				Sample Identification	SB6 (0.5-1)	SB6 (1-2)	SB6 (13-15)	SS1 (0-2)	SS1 (0-6)
				Laboratory ID	480-200248-2	480-200248-18	480-200248-3	480-201563-1	480-201563-2
				Sample Date	2022-07-29 08:07:00	2022-07-29 08:07:00	2022-07-29 08:07:00	2022-09-12 04:09:00	2022-09-12 12:09:00
2-Butanone	78933	1,000,000	500,000		2.60 *UJ*	2.80 *UJ*	20 *J*	1.60 *U*	2.00 *U*
m,p-Xylene	179601231				1.20 *UJ*	1.30 *UJ*	0.86 *U*	0.75 *U*	0.92 *U*
Methyl Acetate	79209				4.2 *UJ*	4.7 *UJ*	3.5 *J*	2.7 *U*	3.3 *U*
Methylcyclohexane	108872				1.10 *UJ*	1.20 *UJ*	0.78 *U*	0.68 *UJ*	0.83 *UJ*
Methylene Chloride	75092	1,000,000	500,000		3.20 *UJ*	3.60 *UJ*	2.40 *U*	2.10 *U*	2.50 *U*
Methyl tert-butyl ether	1634044	1,000,000	500,000		0.68 *UJ*	0.76 *UJ*	0.50 *U*	0.44 *U*	0.54 *U*
n-Butylbenzene	104518	1,000,000	500,000		*R*	*R*	0.44 *U*	0.39 *UJ*	0.48 *UJ*
n-Propylbenzene	103651	1,000,000	500,000		*R*	*R*	0.41 *U*	0.36 *UJ*	0.44 *UJ*
o-Xylene	95476				0.91 *UJ*	1.00 *UJ*	0.67 *U*	0.58 *U*	0.72 *U*
sec-Butylbenzene	135988	1,000,000	500,000		*R*	*R*	0.44 *U*	0.39 *UJ*	0.48 *UJ*
Styrene	100425				0.35 *UJ*	0.39 *UJ*	0.26 *U*	0.22 *U*	0.27 *U*
tert-Butylbenzene	98066	1,000,000	500,000		*R*	*R*	0.53 *U*	0.47 *UJ*	0.57 *UJ*
Toluene	108883	1,000,000	500,000		0.53 *UJ*	0.59 *UJ*	0.39 *U*	0.34 *U*	0.41 *U*
Tetrachloroethane	127184	300,000	150,000		0.94 *UJ*	1.00 *UJ*	0.69 *U*	0.60 *U*	0.74 *U*
trans-1,2-Dichloroethene	156605	1,000,000	500,000		0.72 *UJ*	0.80 *UJ*	0.53 *U*	0.46 *U*	0.57 *U*
trans-1,3-Dichloropropene	10061026				3.10 *UJ*	3.40 *UJ*	2.20 *U*	2.00 *U*	2.40 *U*
Trichloroethene	79016	400,000	200,000		1.50 *UJ*	1.70 *UJ*	1.10 *U*	0.99 *U*	1.20 *U*
Trichlorotrifluoroethane	76131				1.60 *UJ*	1.80 *UJ*	1.20 *U*	1.00 *U*	1.20 *U*
Trichlorofluoromethane	75694				0.66 *UJ*	0.74 *UJ*	0.48 *U*	0.42 *U*	0.52 *U*
Vinyl Chloride	75014	27,000	13,000		0.85 *UJ*	0.95 *UJ*	0.62 *U*	0.55 *U*	0.67 *U*
Xylenes	1330207	1,000,000	500,000		1.20 *UJ*	1.30 *UJ*	0.86 *U*	0.75 *U*	0.92 *U*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS1	SS1	SS1	SS2
				Sample Identification	SS1 (12-24)	SS1 (12-24)	SS1 (6-12)	SS2 (0-2)
				Laboratory ID	480-201563-4	480-201563-5	480-201563-3	480-201615-1
				Sample Date	2022-09-12 12:09:00	2022-09-12 12:09:00	2022-09-12 12:09:00	2022-09-13 11:09:00
Metals (µg/kg)								
Arsenic	7440382	16,000	16,000		12,200	12,900	18,500	9,300
Lead	7439921	3,900,000	1,000,000		77,400	82,200	134,000	116,000
Cadmium	7440439	60,000	9,300		660 *J+*	720 *J+*	1,200	330
Aluminum	7429905				4,890,000	6,850,000	9,580,000	11,500,000
Antimony	7440360				7,300 *J*	10,000 *J*	2,200 *J*	2,000 *J-*
Barium	7440393	10,000,000	400,000		50,800	70,300	149,000	103,000 *J+*
Beryllium	7440417	2,700,000	590,000		360	440	570	540
Calcium	7440702				2,160,000	2,130,000	13,200,000	3,870,000 *J+*
Chromium	7440473				19,000	20,200	15,300	15,200 *J+*
Cobalt	7440484				12,000	14,100	7,400	8,300
Copper	7440508	10,000,000	270,000		59,300	70,500	26,800	21,300
Iron	7439896				113,000,000	145,000,000	27,900,000	21,900,000 *J+*
Magnesium	7439954				851,000	1,050,000	6,650,000	2,800,000 *J*
Manganese	7439965	10,000,000	10,000,000		790,000	885,000	536,000	513,000 *J+*
Mercury	7439976	5,700	2,800		57	49	140	55
Nickel	7440020	10,000,000	310,000		20,700 *J*	29,500 *J*	16,900	19,200
Potassium	7440097				797,000	1,230,000	1,440,000	2,200,000 *J+*
Selenium	7782492	6,800,000	1,500,000		680 *J+*	990 *J+*	1,100 *J+*	1,100 *J*
Silver	7440224	6,800,000	1,500,000		230 *U*	220 *U*	230 *U*	280 *U*
Sodium	7440235				101,000 *J*	93,200 *J*	81,800 *J*	73,000 *J*
Thallium	7440280				340 *U*	330 *U*	340 *U*	420 *U*
Vanadium	7440622				33,400	41,400	18,700	19,000
Zinc	7440666	10,000,000	10,000,000		45,900	49,600	103,000	98,900 *J*
Polycyclic Aromatic Hydrocarbons (µg/kg)								
2-Methylnaphthalene	91576				37 *U*	37 *U*	190 *U*	930 *U*
Acenaphthene	83329	1,000,000	500,000		27 *U*	28 *U*	140 *U*	680 *U*
Acenaphthylene	208968	1,000,000	500,000		24 *U*	24 *U*	120 *U*	920 *J*
Anthracene	120127	1,000,000	500,000		46 *U*	46 *U*	230 *U*	1,100 *U*
Benzo[a]anthracene	56553	11,000	5,600		62 *J*	73 *J*	220 *J*	1,200 *J*
Benzo[a]pyrene	50328	1,100	1,000		72 *J*	91 *J*	340 *J*	1,900 *J*
Benzo[b]fluoranthene	205992	11,000	5,600		130 *J*	150 *J*	540 *J*	1,700 *J*
Benzo[g,h,i]perylene	191242	1,000,000	500,000		51 *J*	59 *J*	240 *J*	1,300 *J*
Benzo[k]fluoranthene	207089	110,000	56,000		43 *J*	57 *J*	210 *J*	620 *J*
Chrysene	218019	110,000	56,000		96 *J*	130 *J*	440 *J*	1,200 *J*
Dibenzo[a,h]anthracene	53703	1,100	560		33 *U*	33 *U*	160 *U*	820 *U*
Dibenzofuran	132649	1,000,000	350,000		22 *U*	22 *U*	110 *U*	550 *U*
Fluoranthene	206440	1,000,000	500,000		180	220	890 *J*	1,300 *J*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS1	SS1	SS1	SS2
				Sample Identification	SS1 (12-24)	SS1 (12-24)	SS1 (6-12)	SS2 (0-2)
				Laboratory ID	480-201563-4	480-201563-5	480-201563-3	480-201615-1
				Sample Date	2022-09-12 12:09:00	2022-09-12 12:09:00	2022-09-12 12:09:00	2022-09-13 11:09:00
Fluorene	86737	1,000,000	500,000		22 *U*	22 *U*	110 *U*	550 *U*
Indeno[1,2,3-cd]pyrene	193395	11,000	5,600		60 *J*	72 *J*	290 *J*	1,100 *J*
Naphthalene	91203	1,000,000	500,000		24 *U*	24 *U*	120 *U*	600 *U*
Phenanthrene	85018	1,000,000	500,000		130 *J*	170 *J*	670 *J*	680 *U*
Pyrene	129000	1,000,000	500,000		140 *J*	180 *J*	680 *J*	1,900 *J*
Per- and Polyfluoroalkyl Substances (µg/kg)								
6:2 fluorotelomer sulfonate	27619972				0.062 *U*	0.061 *U*	0.063 *U*	
8:2 fluorotelomer sulfonate	39108344				0.040 *U*	0.040 *U*	0.041 *U*	
2-(N-ethyl-perfluorooctane sulfonamido) acetate					0.090 *U*	0.089 *U*	0.110 *J*	
Perfluorobutyric acid	375224				0.360 *U*	0.360 *U*	0.360 *U*	
2-(N-methyl-perfluorooctane sulfonamido) acetic acid					0.120 *U*	0.120 *U*	0.120 *U*	
Perfluorooctanoic acid	335671	600,000	500,000		0.180 *J*	0.330	0.260	
Perfluorooctane sulfonic acid	1763231	440,000	440,000		0.280	0.490	0.820	
Perfluorobutane Sulfonic Acid	375735				0.036 *U*	0.036 *U*	0.036 *U*	
Perfluorodecanoic Acid	335762				0.030 *U*	0.030 *U*	0.080 *J*	
Perfluorododecanoic Acid	307551				0.027 *U*	0.027 *U*	0.039 *U*	
Perfluorodecanesulfonic acid	335773				0.021 *U*	0.020 *U*	0.037 *U*	
Perfluoroheptanoic Acid	375859				0.042 *J*	0.071 *J*	0.066 *U*	
Perfluoroheptanesulfonic acid	375928				0.025 *U*	0.025 *U*	0.025 *U*	
Perfluorohexanoic Acid	307244				0.050 *U*	0.050 *U*	0.077 *U*	
Perfluorohexane Sulfonic Acid	355464				0.044 *U*	0.055 *J*	0.045 *U*	
Perfluorononanoic Acid	375951				0.037 *U*	0.037 *U*	0.110 *J*	
Perfluorooctane sulfonamide	754916				0.037 *U*	0.037 *U*	0.037 *U*	
Perfluoropentanoic Acid	2706903				0.059 *U*	0.059 *U*	0.085 *U*	
Perfluorotetradecanoic Acid	376067				0.028 *U*	0.028 *U*	0.029 *U*	
Perfluorotridecanoic Acid	72629948				0.027 *U*	0.027 *U*	0.027 *U*	
Perfluoroundecanoic Acid	2058948				0.029 *U*	0.029 *U*	0.052 *J*	
Semivolatile Organic Compounds (µg/kg)								
Atrazine	1912249				64 *U*	65 *U*	320 *U*	1,600 *U*
Carbazole	86748				22 *U*	22 *U*	110 *U*	550 *U*
2,4,5-Trichlorophenol	95954				50 *U*	51 *U*	250 *U*	1,300 *U*
2,4,6-Trichlorophenol	88062				37 *U*	37 *U*	190 *U*	930 *U*
2,4-Dichlorophenol	120832				20 *U*	20 *U*	99 *U*	490 *U*
2-Chlorophenol	95578				34 *U*	34 *U*	170 *U*	850 *U*
Pentachlorophenol	87865	55,000	6,700		180 *U*	190 *U*	930 *U*	4,700 *U*
1,1'-Biphenyl	92524				27 *U*	28 *U*	140 *U*	680 *U*
2,2'-oxybis(1-Chloropropane)	108601				37 *U*	37 *U*	190 *U*	930 *U*
2,4-Dimethylphenol	105679				44 *U*	45 *U*	230 *U*	1,100 *U*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS1	SS1	SS1	SS2
				Sample Identification	SS1 (12-24)	SS1 (12-24)	SS1 (6-12)	SS2 (0-2)
				Laboratory ID	480-201563-4	480-201563-5	480-201563-3	480-201615-1
				Sample Date	2022-09-12 12:09:00	2022-09-12 12:09:00	2022-09-12 12:09:00	2022-09-13 11:09:00
2,4-Dinitrophenol	51285				850 *U*	860 *U*	4,300 *U*	*R*
2,4-Dinitrotoluene	121142				38 *U*	39 *U*	190 *U*	960 *U*
2,6-Dinitrotoluene	606202				22 *U*	22 *U*	110 *U*	550 *U*
2-Chloronaphthalene	91587				30 *U*	31 *U*	150 *U*	770 *U*
2-Methylphenol	95487	1,000,000	500,000		22 *U*	22 *U*	110 *U*	550 *U*
2-Nitroaniline	88744				27 *U*	28 *U*	140 *U*	680 *U*
2-Nitrophenol	88755				52 *U*	53 *U*	260 *U*	1,300 *U*
3,3'-Dichlorobenzidine	91941				220 *U*	220 *U*	1,100 *U*	*R*
3-Nitroaniline	99092				51 *U*	52 *U*	260 *U*	1,300 *U*
4,6-Dinitro-2-methylphenol	534521				180 *U*	190 *U*	930 *U*	4,700 *U*
4-Bromophenyl-phenylether	101553				26 *U*	26 *U*	130 *U*	660 *U*
4-Chloro-3-methylphenol	59507				46 *U*	46 *U*	230 *U*	1,100 *U*
4-Chloroaniline	106478				46 *U*	46 *U*	230 *U*	1,100 *U*
4-Chlorophenyl-phenyl ether	7005723				23 *U*	23 *U*	120 *U*	570 *U*
4-Methylphenol	106445	1,000,000	500,000		22 *U*	22 *U*	110 *U*	550 *U*
4-Nitroaniline	100016				96 *U*	98 *U*	490 *U*	2,400 *U*
4-Nitrophenol	100027				130 *U*	130 *U*	650 *U*	3,300 *U*
Acetophenone	98862				25 *U*	25 *U*	130 *U*	630 *U*
Benzaldehyde	100527				150 *U*	150 *U*	740 *U*	*R*
Bis(2-chloroethyl)ether	111444				24 *U*	24 *U*	120 *U*	600 *UJ*
bis(2-Chloroethoxy)methane	111911				39 *U*	40 *U*	200 *U*	990 *U*
bis(2-Ethylhexyl)phthalate	117817				63 *U*	64 *U*	320 *U*	1,600 *U*
Benzyl n-butyl phthalate	85687				32 *J*	32 *J*	150 *U*	770 *U*
Caprolactam	105602				55 *U*	56 *U*	280 *U*	1,400 *U*
Diethyl phthalate	84662				110 *U*	89 *U*	130 *U*	740 *UJ*
Dimethyl phthalate	131113				22 *U*	22 *U*	110 *U*	550 *U*
Di-n-butyl phthalate	84742				31 *U*	32 *U*	160 *U*	790 *U*
Di-n-octylphthalate	117840				22 *U*	22 *U*	110 *U*	550 *U*
Hexachloroethane	67721				24 *U*	24 *U*	120 *U*	600 *U*
Hexachlorobenzene	118741	12,000	6,000		25 *U*	25 *U*	130 *U*	630 *U*
Hexachlorobutadiene	87683				27 *U*	28 *U*	140 *U*	680 *U*
Hexachlorocyclopentadiene	77474				25 *U*	25 *U*	130 *U*	630 *U*
Isophorone	78591				39 *U*	40 *U*	200 *U*	990 *U*
Nitrobenzene	98953				21 *U*	21 *U*	100 *U*	520 *U*
N-Nitrosodi-n-propylamine	621647				31 *U*	32 *U*	160 *U*	790 *U*
N-Nitrosodiphenylamine	86306				150 *U*	150 *U*	760 *U*	*R*
Phenol	108952	1,000,000	500,000		28 *U*	29 *U*	140 *U*	710 *U*
1,4-Dioxane	123911	250,000	130,000		60 *U*	61 *U*	300 *U*	

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS1	SS1	SS1	SS2
				Sample Identification	SS1 (12-24)	SS1 (12-24)	SS1 (6-12)	SS2 (0-2)
				Laboratory ID	480-201563-4	480-201563-5	480-201563-3	480-201615-1
				Sample Date	2022-09-12 12:09:00	2022-09-12 12:09:00	2022-09-12 12:09:00	2022-09-13 11:09:00
Volatiles (µg/kg)								
1,1,1,2-Tetrachloroethane	630206				0.52 *U*	0.51 *U*	0.47 *U*	0.63 *U*
1,1,1-Trichloroethane	71556	1,000,000	500,000		0.38 *U*	0.37 *U*	0.34 *U*	0.46 *U*
1,1,2,2-Tetrachloroethane	79345				0.85 *U*	0.82 *UJ*	0.77 *UJ*	1.00 *UJ*
1,1,2-Trichloroethane	79005				0.68 *U*	0.66 *U*	0.62 *U*	0.82 *U*
1,1-Dichloroethane	75343	480,000	240,000		0.64 *U*	0.62 *U*	0.58 *U*	0.77 *U*
1,1-Dichloroethene	75354	1,000,000	500,000		0.64 *UJ*	0.62 *UJ*	0.58 *UJ*	0.78 *UJ*
1,2,3-Trimethylbenzene	526738				1.10 *U*	1.00 *U*	0.97 *U*	1.30 *U*
1,2,4-Trimethylbenzene	95636	380,000	190,000		1.00 *U*	0.97 *UJ*	0.91 *UJ*	1.20 *UJ*
1,2,4-Trichlorobenzene	120821				0.32 *U*	0.31 *UJ*	0.29 *UJ*	0.39 *UJ*
1,2-Dichlorobenzene	95501	1,000,000	500,000		0.41 *U*	0.40 *UJ*	0.37 *UJ*	0.50 *UJ*
1,3-Dichlorobenzene	541731	560,000	280,000		0.27 *U*	0.26 *UJ*	0.24 *UJ*	0.33 *UJ*
1,4-Dichlorobenzene	106467	250,000	130,000		0.73 *U*	0.71 *UJ*	0.66 *UJ*	0.89 *UJ*
1,2-Dibromo-3-chloropropane	96128				2.60 *U*	2.50 *UJ*	2.40 *UJ*	3.20 *UJ*
1,2-Dibromoethane	106934				0.67 *U*	0.65 *U*	0.61 *U*	0.81 *UJ*
1,2-Dichloroethane	107062	60,000	30,000		0.26 *U*	0.25 *U*	0.24 *U*	0.32 *U*
1,2-Dichloropropane	78875				2.60 *U*	2.50 *U*	2.40 *U*	3.20 *U*
1,3,5-Trimethylbenzene	108678	380,000	190,000		0.34 *U*	0.33 *UJ*	0.31 *UJ*	0.41 *UJ*
2-Hexanone	591786				2.60 *U*	2.50 *U*	2.40 *U*	3.20 *UJ*
4-Methyl-2-pentanone	108101				1.70 *U*	1.70 *U*	1.60 *U*	2.10 *U*
Acetone	67641	1,000,000	500,000		4.40 *U*	4.30 *U*	4.00 *U*	5.30 *UJ*
Benzene	71432	89,000	44,000		0.26 *U*	0.25 *U*	0.23 *U*	0.31 *U*
Bromodichloromethane	75274				0.70 *U*	0.68 *U*	0.64 *U*	0.85 *UJ*
Bromomethane	74839				0.47 *U*	0.46 *U*	0.43 *U*	0.57 *U*
Bromoform	75252				2.60 *U*	2.50 *U*	2.40 *U*	3.20 *UJ*
Carbon disulfide	75150				2.60 *U*	2.50 *U*	2.40 *U*	3.20 *U*
Carbon Tetrachloride	56235	44,000	22,000		0.51 *UJ*	0.49 *UJ*	0.46 *UJ*	0.61 *UJ*
Chloroform	67663	700,000	350,000		0.33 *U*	0.33 *UJ*	0.30 *UJ*	0.45 *UJ*
cis-1,2-Dichloroethene	156592	1,000,000	500,000		0.67 *U*	0.65 *U*	0.61 *U*	0.81 *U*
cis-1,3-Dichloropropene	10061015				0.76 *U*	0.73 *U*	0.68 *U*	0.91 *UJ*
Chlorobenzene	108907	1,000,000	500,000		0.69 *U*	0.67 *U*	0.63 *U*	0.84 *U*
Chloroethane	75003				1.20 *U*	1.10 *U*	1.10 *U*	1.40 *U*
Chloromethane	74873				0.32 *U*	0.31 *U*	0.29 *U*	0.38 *U*
Cyclohexane	110827				0.73 *UJ*	0.71 *UJ*	0.66 *UJ*	0.89 *UJ*
Dibromochloromethane	124481				0.67 *U*	0.65 *U*	0.61 *U*	0.81 *U*
Dichlorodifluoromethane	75718				0.43 *U*	0.42 *U*	0.39 *U*	0.52 *U*
Ethylbenzene	100414	780,000	390,000		0.36 *U*	0.35 *U*	0.33 *U*	0.44 *U*
Isopropylbenzene	98828				0.79 *U*	0.77 *UJ*	0.71 *UJ*	0.96 *UJ*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS1	SS1	SS1	SS2
				Sample Identification	SS1 (12-24)	SS1 (12-24)	SS1 (6-12)	SS2 (0-2)
				Laboratory ID	480-201563-4	480-201563-5	480-201563-3	480-201615-1
				Sample Date	2022-09-12 12:09:00	2022-09-12 12:09:00	2022-09-12 12:09:00	2022-09-13 11:09:00
2-Butanone	78933	1,000,000	500,000		1.90 *U*	1.90 *U*	1.70 *U*	2.30 *UJ*
m,p-Xylene	179601231				0.88 *U*	0.85 *U*	0.80 *U*	1.10 *U*
Methyl Acetate	79209				3.2 *U*	3.1 *U*	2.9 *U*	3.8 *U*
Methylcyclohexane	108872				0.80 *UJ*	0.77 *UJ*	0.72 *UJ*	0.96 *UJ*
Methylene Chloride	75092	1,000,000	500,000		2.40 *U*	2.30 *U*	2.20 *U*	2.90 *U*
Methyl tert-butyl ether	1634044	1,000,000	500,000		0.51 *U*	0.50 *U*	0.47 *U*	0.62 *U*
n-Butylbenzene	104518	1,000,000	500,000		0.46 *U*	0.44 *UJ*	0.41 *UJ*	0.55 *UJ*
n-Propylbenzene	103651	1,000,000	500,000		0.42 *U*	0.41 *UJ*	0.38 *UJ*	0.51 *UJ*
o-Xylene	95476				0.68 *U*	0.66 *U*	0.62 *U*	0.83 *U*
sec-Butylbenzene	135988	1,000,000	500,000		0.46 *U*	0.44 *UJ*	0.41 *UJ*	0.55 *UJ*
Styrene	100425				0.26 *U*	0.25 *U*	0.24 *U*	0.32 *UJ*
tert-Butylbenzene	98066	1,000,000	500,000		0.55 *U*	0.53 *UJ*	0.49 *UJ*	0.66 *UJ*
Toluene	108883	1,000,000	500,000		0.40 *U*	0.38 *U*	0.36 *U*	0.48 *U*
Tetrachloroethane	127184	300,000	150,000		0.70 *U*	0.68 *U*	0.64 *U*	0.85 *U*
trans-1,2-Dichloroethene	156605	1,000,000	500,000		0.54 *U*	0.52 *U*	0.49 *U*	0.65 *U*
trans-1,3-Dichloropropene	10061026				2.30 *U*	2.20 *U*	2.10 *U*	2.80 *UJ*
Trichloroethene	79016	400,000	200,000		1.20 *U*	1.10 *U*	1.00 *U*	1.40 *U*
Trichlorotrifluoroethane	76131				1.20 *U*	1.20 *U*	1.10 *U*	1.40 *U*
Trichlorofluoromethane	75694				0.50 *U*	0.48 *U*	0.45 *U*	0.60 *U*
Vinyl Chloride	75014	27,000	13,000		0.64 *U*	0.62 *U*	0.58 *U*	0.77 *U*
Xylenes	1330207	1,000,000	500,000		0.88 *U*	0.85 *U*	0.80 *U*	1.10 *U*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS2	SS2	SS2	SS3	SS3
				Sample Identification	SS2 (0-6)	SS2 (12-24)	SS2 (6-12)	SS3 (0-2)	SS3 (0-6)
				Laboratory ID	480-201615-2	480-201615-4	480-201615-3	480-201615-5	480-201615-6
				Sample Date	2022-09-13 10:09:00	2022-09-13 10:09:00	2022-09-13 10:09:00	2022-09-13 11:09:00	2022-09-13 12:09:00
Metals (µg/kg)									
Arsenic	7440382	16,000	16,000		7,400	14,100	9,300	7,000	9,700
Lead	7439921	3,900,000	1,000,000		54,300	492,000	47,900	42,700	65,300
Cadmium	7440439	60,000	9,300		260	400	190 *U*	170 *U*	240 *U*
Aluminum	7429905				11,400,000	11,100,000	12,600,000	8,960,000	8,720,000
Antimony	7440360				1,100 *J*	1,700 *J*	1,500 *J-*	1,000 *J*	1,400 *J*
Barium	7440393	10,000,000	400,000		107,000	113,000	129,000 *J+*	70,300	84,200
Beryllium	7440417	2,700,000	590,000		540	540	550	460	500
Calcium	7440702				2,620,000	15,700,000	4,060,000 *J+*	1,970,000	3,080,000
Chromium	7440473				13,700 *J+*	13,000 *J+*	15,000 *J+*	11,100 *J+*	13,400 *J+*
Cobalt	7440484				8,500	9,000	11,000	6,900	7,600
Copper	7440508	10,000,000	270,000		18,700	28,700	31,800	20,700	34,500
Iron	7439896				20,000,000	21,400,000	26,500,000	17,200,000	20,300,000
Magnesium	7439954				2,780,000 *J*	3,090,000 *J*	3,920,000 *J*	2,060,000 *J*	2,200,000 *J*
Manganese	7439965	10,000,000	10,000,000		467,000	343,000	406,000	357,000	407,000
Mercury	7439976	5,700	2,800		66	110	26	48	73
Nickel	7440020	10,000,000	310,000		19,400	20,500	26,200	15,400	16,200
Potassium	7440097				2,040,000	1,620,000	1,700,000 *J+*	1,630,000	1,520,000
Selenium	7782492	6,800,000	1,500,000		630 *J*	460 *U*	700 *J*	530 *U*	1,200 *J*
Silver	7440224	6,800,000	1,500,000		240 *U*	230 *U*	210 *U*	270 *U*	250 *U*
Sodium	7440235				54,200 *J*	109,000 *J*	63,300 *J*	40,000 *J*	55,900 *J*
Thallium	7440280				360 *U*	350 *U*	320 *U*	400 *U*	380 *U*
Vanadium	7440622				17,800	18,600	18,900	13,800	16,800
Zinc	7440666	10,000,000	10,000,000		72,500	74,100	76,700 *J*	59,400	62,800
Polycyclic Aromatic Hydrocarbons (µg/kg)									
2-Methylnaphthalene	91576				210 *U*	37 *U*	180 *U*	220 *U*	210 *U*
Acenaphthene	83329	1,000,000	500,000		150 *U*	27 *U*	130 *U*	160 *U*	160 *U*
Acenaphthylene	208968	1,000,000	500,000		150 *J+*	24 *U*	230 *J*	140 *U*	140 *U*
Anthracene	120127	1,000,000	500,000		260 *U*	46 *U*	230 *U*	270 *U*	260 *U*
Benzo[a]anthracene	56553	11,000	5,600		1,000	120 *J*	610 *J*	180 *J*	250 *J*
Benzo[a]pyrene	50328	1,100	1,000		1,200	150 *J*	770 *J*	220 *J*	270 *J*
Benzo[b]fluoranthene	205992	11,000	5,600		1,300	180	800 *J*	310 *J*	380 *J*
Benzo[g,h,i]perylene	191242	1,000,000	500,000		750 *J+*	100 *J*	550 *J*	150 *J*	180 *J*
Benzo[k]fluoranthene	207089	110,000	56,000		520 *J+*	78 *J*	290 *J*	140 *U*	150 *J*
Chrysene	218019	110,000	56,000		1,100	140 *J*	650 *J*	250 *U*	270 *J*
Dibenzo[a,h]anthracene	53703	1,100	560		180 *J+*	33 *U*	160 *U*	200 *U*	190 *U*
Dibenzofuran	132649	1,000,000	350,000		120 *U*	22 *U*	110 *U*	130 *U*	130 *U*
Fluoranthene	206440	1,000,000	500,000		1,900	240	920	350 *J*	430 *J*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS2	SS2	SS2	SS3	SS3
				Sample Identification	SS2 (0-6)	SS2 (12-24)	SS2 (6-12)	SS3 (0-2)	SS3 (0-6)
				Laboratory ID	480-201615-2	480-201615-4	480-201615-3	480-201615-5	480-201615-6
				Sample Date	2022-09-13 10:09:00	2022-09-13 10:09:00	2022-09-13 10:09:00	2022-09-13 11:09:00	2022-09-13 12:09:00
Fluorene	86737	1,000,000	500,000		120 *U*	22 *U*	110 *U*	130 *U*	130 *U*
Indeno[1,2,3-cd]pyrene	193395	11,000	5,600		850 *J+*	120 *J*	550 *J*	160 *J*	200 *J*
Naphthalene	91203	1,000,000	500,000		140 *U*	24 *U*	120 *U*	140 *U*	140 *U*
Phenanthrene	85018	1,000,000	500,000		920 *J+*	83 *J*	290 *J*	160 *U*	170 *J*
Pyrene	129000	1,000,000	500,000		1,700	200	1,000	280 *J*	400 *J*
Per- and Polyfluoroalkyl Substances (µg/kg)									
6:2 fluorotelomer sulfonate	27619972								
8:2 fluorotelomer sulfonate	39108344								
2-(N-ethyl-perfluorooctane sulfonamido) acetate									
Perfluorobutyric acid	375224								
2-(N-methyl-perfluorooctane sulfonamido) acetic acid									
Perfluorooctanoic acid	335671	600,000	500,000						
Perfluorooctane sulfonic acid	1763231	440,000	440,000						
Perfluorobutane Sulfonic Acid	375735								
Perfluorodecanoic Acid	335762								
Perfluorododecanoic Acid	307551								
Perfluorodecanesulfonic acid	335773								
Perfluoroheptanoic Acid	375859								
Perfluoroheptanesulfonic acid	375928								
Perfluorohexanoic Acid	307244								
Perfluorohexane Sulfonic Acid	355464								
Perfluorononanoic Acid	375951								
Perfluorooctane sulfonamide	754916								
Perfluoropentanoic Acid	2706903								
Perfluorotetradecanoic Acid	376067								
Perfluorotridecanoic Acid	72629948								
Perfluoroundecanoic Acid	2058948								
Semivolatile Organic Compounds (µg/kg)									
Atrazine	1912249				360 *U*	64 *U*	320 *U*	380 *U*	370 *U*
Carbazole	86748				120 *J+*	22 *U*	110 *U*	130 *U*	130 *U*
2,4,5-Trichlorophenol	95954				280 *U*	50 *U*	250 *U*	300 *U*	290 *U*
2,4,6-Trichlorophenol	88062				210 *U*	37 *U*	180 *U*	220 *U*	210 *U*
2,4-Dichlorophenol	120832				110 *U*	20 *U*	97 *U*	120 *U*	110 *U*
2-Chlorophenol	95578				190 *U*	34 *U*	170 *U*	200 *U*	200 *U*
Pentachlorophenol	87865	55,000	6,700		1,000 *U*	180 *U*	920 *U*	1,100 *U*	1,100 *U*
1,1'-Biphenyl	92524				150 *U*	27 *U*	130 *U*	160 *U*	160 *U*
2,2'-oxybis(1-Chloropropane)	108601				210 *U*	37 *U*	180 *U*	220 *U*	210 *U*
2,4-Dimethylphenol	105679				250 *U*	45 *U*	220 *U*	270 *U*	260 *U*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS2	SS2	SS2	SS3	SS3
				Sample Identification	SS2 (0-6)	SS2 (12-24)	SS2 (6-12)	SS3 (0-2)	SS3 (0-6)
				Laboratory ID	480-201615-2	480-201615-4	480-201615-3	480-201615-5	480-201615-6
				Sample Date	2022-09-13 10:09:00	2022-09-13 10:09:00	2022-09-13 10:09:00	2022-09-13 11:09:00	2022-09-13 12:09:00
2,4-Dinitrophenol	51285				4,800 *U*	850 *U*	*R*	5,100 *U*	4,900 *U*
2,4-Dinitrotoluene	121142				220 *U*	38 *U*	190 *U*	230 *U*	220 *U*
2,6-Dinitrotoluene	606202				120 *U*	22 *U*	110 *U*	130 *U*	130 *U*
2-Chloronaphthalene	91587				170 *U*	30 *U*	150 *U*	180 *U*	180 *U*
2-Methylphenol	95487	1,000,000	500,000		120 *U*	22 *U*	110 *U*	130 *U*	130 *U*
2-Nitroaniline	88744				150 *U*	27 *U*	130 *U*	160 *U*	160 *U*
2-Nitrophenol	88755				300 *U*	52 *U*	260 *U*	310 *U*	300 *U*
3,3'-Dichlorobenzidine	91941				1,200 *U*	220 *U*	1,100 *U*	1,300 *U*	1,300 *U*
3-Nitroaniline	99092				290 *U*	51 *U*	250 *U*	310 *U*	300 *U*
4,6-Dinitro-2-methylphenol	534521				1,000 *U*	180 *U*	920 *U*	1,100 *U*	1,100 *U*
4-Bromophenyl-phenylether	101553				150 *U*	26 *U*	130 *U*	160 *U*	150 *U*
4-Chloro-3-methylphenol	59507				260 *U*	46 *U*	230 *U*	270 *U*	260 *U*
4-Chloroaniline	106478				260 *U*	46 *U*	230 *U*	270 *U*	260 *U*
4-Chlorophenyl-phenyl ether	7005723				130 *U*	23 *U*	110 *U*	140 *U*	130 *U*
4-Methylphenol	106445	1,000,000	500,000		120 *U*	22 *U*	110 *U*	130 *U*	130 *U*
4-Nitroaniline	100016				550 *U*	97 *U*	480 *U*	580 *U*	560 *U*
4-Nitrophenol	100027				730 *U*	130 *U*	640 *U*	780 *U*	750 *U*
Acetophenone	98862				140 *U*	25 *U*	120 *U*	150 *U*	140 *U*
Benzaldehyde	100527				830 *U*	150 *U*	730 *U*	880 *U*	850 *U*
Bis(2-chloroethyl)ether	111444				140 *U*	24 *U*	120 *U*	140 *U*	140 *U*
bis(2-Chloroethoxy)methane	111911				220 *U*	39 *U*	190 *U*	230 *U*	230 *U*
bis(2-Ethylhexyl)phthalate	117817				360 *U*	63 *U*	310 *U*	380 *U*	360 *U*
Benzyl n-butyl phthalate	85687				170 *U*	30 *U*	150 *U*	180 *U*	180 *U*
Caprolactam	105602				310 *U*	55 *U*	270 *U*	330 *U*	320 *U*
Diethyl phthalate	84662				760 *UJ*	240 *U*	760 *UJ*	710 *U*	820 *U*
Dimethyl phthalate	131113				120 *U*	22 *U*	110 *U*	130 *U*	130 *U*
Di-n-butyl phthalate	84742				180 *U*	31 *U*	160 *U*	190 *U*	180 *U*
Di-n-octylphthalate	117840				120 *U*	22 *U*	110 *U*	130 *U*	130 *U*
Hexachloroethane	67721				140 *U*	24 *U*	120 *U*	140 *U*	140 *U*
Hexachlorobenzene	118741	12,000	6,000		140 *U*	25 *U*	120 *U*	150 *U*	140 *U*
Hexachlorobutadiene	87683				150 *U*	27 *U*	130 *U*	160 *U*	160 *U*
Hexachlorocyclopentadiene	77474				140 *U*	25 *UJ*	120 *U*	150 *U*	140 *U*
Isophorone	78591				220 *U*	39 *U*	190 *U*	230 *U*	230 *U*
Nitrobenzene	98953				120 *U*	21 *U*	100 *U*	120 *U*	120 *U*
N-Nitrosodi-n-propylamine	621647				180 *U*	31 *U*	160 *U*	190 *U*	180 *U*
N-Nitrosodiphenylamine	86306				850 *U*	150 *U*	740 *U*	900 *U*	870 *U*
Phenol	108952	1,000,000	500,000		160 *U*	28 *U*	140 *U*	170 *U*	160 *U*
1,4-Dioxane	123911	250,000	130,000						

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS2	SS2	SS2	SS3	SS3
				Sample Identification	SS2 (0-6)	SS2 (12-24)	SS2 (6-12)	SS3 (0-2)	SS3 (0-6)
				Laboratory ID	480-201615-2	480-201615-4	480-201615-3	480-201615-5	480-201615-6
				Sample Date	2022-09-13 10:09:00	2022-09-13 10:09:00	2022-09-13 10:09:00	2022-09-13 11:09:00	2022-09-13 12:09:00
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	630206				0.46 *U*	0.24 *U*	0.54 *U*	0.66 *U*	0.52 *UJ*
1,1,1-Trichloroethane	71556	1,000,000	500,000		0.34 *U*	0.18 *U*	0.39 *U*	0.48 *U*	0.38 *UJ*
1,1,2,2-Tetrachloroethane	79345				0.75 *U*	0.39 *U*	0.88 *U*	1.10 *UJ*	0.85 *UJ*
1,1,2-Trichloroethane	79005				0.60 *U*	0.32 *U*	0.71 *U*	0.86 *U*	0.68 *UJ*
1,1-Dichloroethane	75343	480,000	240,000		0.57 *U*	0.30 *U*	0.66 *U*	0.81 *U*	0.64 *UJ*
1,1-Dichloroethene	75354	1,000,000	500,000		0.57 *UJ*	0.30 *UJ*	0.66 *UJ*	0.81 *UJ*	0.64 *UJ*
1,2,3-Trimethylbenzene	526738				0.95 *U*	0.50 *U*	1.10 *U*	1.40 *U*	1.10 *UJ*
1,2,4-Trimethylbenzene	95636	380,000	190,000		0.89 *U*	0.47 *U*	1.00 *U*	1.30 *UJ*	1.00 *UJ*
1,2,4-Trichlorobenzene	120821				0.28 *U*	0.15 *U*	0.33 *UJ*	0.40 *UJ*	0.32 *UJ*
1,2-Dichlorobenzene	95501	1,000,000	500,000		0.36 *U*	0.19 *U*	0.42 *U*	0.52 *UJ*	0.41 *UJ*
1,3-Dichlorobenzene	541731	560,000	280,000		0.24 *U*	0.13 *U*	0.28 *U*	0.34 *UJ*	0.27 *UJ*
1,4-Dichlorobenzene	106467	250,000	130,000		0.65 *U*	0.34 *U*	0.76 *U*	0.93 *UJ*	0.73 *UJ*
1,2-Dibromo-3-chloropropane	96128				2.30 *U*	1.20 *U*	2.70 *U*	3.30 *UJ*	2.60 *UJ*
1,2-Dibromoethane	106934				0.59 *U*	0.31 *U*	0.70 *U*	0.85 *U*	0.67 *UJ*
1,2-Dichloroethane	107062	60,000	30,000		0.23 *U*	0.12 *U*	0.27 *U*	0.33 *U*	0.26 *UJ*
1,2-Dichloropropane	78875				2.30 *U*	1.20 *U*	2.70 *U*	3.30 *U*	2.60 *UJ*
1,3,5-Trimethylbenzene	108678	380,000	190,000		0.30 *U*	0.16 *U*	0.35 *U*	0.43 *UJ*	0.34 *UJ*
2-Hexanone	591786				2.30 *U*	1.20 *U*	2.70 *U*	3.30 *U*	2.60 *UJ*
4-Methyl-2-pentanone	108101				1.50 *U*	0.80 *U*	1.80 *U*	2.20 *U*	1.70 *UJ*
Acetone	67641	1,000,000	500,000		9.40 *J*	2.00 *U*	4.60 *U*	5.60 *U*	5.10 *J*
Benzene	71432	89,000	44,000		0.23 *U*	0.12 *U*	0.27 *U*	0.33 *U*	0.26 *UJ*
Bromodichloromethane	75274				0.62 *U*	0.33 *U*	0.73 *U*	0.89 *U*	0.70 *UJ*
Bromomethane	74839				0.42 *U*	0.22 *U*	0.49 *U*	0.60 *U*	0.47 *UJ*
Bromoform	75252				2.30 *U*	1.20 *U*	2.70 *U*	3.30 *U*	2.60 *UJ*
Carbon disulfide	75150				2.30 *U*	1.20 *U*	2.70 *U*	3.30 *U*	2.60 *UJ*
Carbon Tetrachloride	56235	44,000	22,000		0.45 *UJ*	0.24 *UJ*	0.53 *UJ*	0.64 *UJ*	0.51 *UJ*
Chloroform	67663	700,000	350,000		0.29 *U*	0.15 *U*	0.34 *U*	0.48 *UJ*	0.44 *UJ*
cis-1,2-Dichloroethene	156592	1,000,000	500,000		0.59 *U*	0.31 *U*	0.70 *U*	0.85 *U*	0.67 *UJ*
cis-1,3-Dichloropropene	10061015				0.67 *U*	0.35 *U*	0.78 *UJ*	0.96 *U*	0.75 *UJ*
Chlorobenzene	108907	1,000,000	500,000		0.61 *U*	0.32 *U*	0.72 *U*	0.88 *U*	0.69 *UJ*
Chloroethane	75003				1.00 *U*	0.55 *U*	1.20 *U*	1.50 *U*	1.20 *UJ*
Chloromethane	74873				0.28 *U*	0.15 *U*	0.33 *U*	0.40 *U*	0.32 *UJ*
Cyclohexane	110827				0.65 *UJ*	0.34 *UJ*	0.76 *UJ*	0.93 *UJ*	0.73 *UJ*
Dibromochloromethane	124481				0.59 *U*	0.31 *U*	0.70 *U*	0.85 *U*	0.67 *UJ*
Dichlorodifluoromethane	75718				0.38 *U*	0.20 *U*	0.45 *U*	0.55 *U*	0.43 *UJ*
Ethylbenzene	100414	780,000	390,000		0.32 *U*	0.17 *U*	0.37 *U*	0.46 *U*	0.36 *UJ*
Isopropylbenzene	98828				0.70 *U*	0.37 *U*	0.82 *U*	1.00 *UJ*	0.79 *UJ*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS2	SS2	SS2	SS3	SS3
				Sample Identification	SS2 (0-6)	SS2 (12-24)	SS2 (6-12)	SS3 (0-2)	SS3 (0-6)
				Laboratory ID	480-201615-2	480-201615-4	480-201615-3	480-201615-5	480-201615-6
				Sample Date	2022-09-13 10:09:00	2022-09-13 10:09:00	2022-09-13 10:09:00	2022-09-13 11:09:00	2022-09-13 12:09:00
2-Butanone	78933	1,000,000	500,000		2.40 *J*	0.89 *U*	2.00 *UJ*	2.40 *U*	1.90 *UJ*
m,p-Xylene	179601231				0.78 *U*	0.41 *U*	0.91 *U*	1.10 *U*	0.88 *UJ*
Methyl Acetate	79209				2.8 *U*	1.5 *U*	3.3 *U*	4.0 *U*	3.2 *UJ*
Methylcyclohexane	108872				0.70 *UJ*	0.37 *UJ*	0.83 *UJ*	1.00 *UJ*	0.80 *UJ*
Methylene Chloride	75092	1,000,000	500,000		2.10 *U*	1.10 *U*	2.50 *U*	3.10 *U*	2.40 *UJ*
Methyl tert-butyl ether	1634044	1,000,000	500,000		0.46 *U*	0.24 *U*	0.53 *U*	0.65 *U*	0.51 *UJ*
n-Butylbenzene	104518	1,000,000	500,000		0.40 *U*	0.21 *U*	0.47 *U*	0.58 *UJ*	0.46 *UJ*
n-Propylbenzene	103651	1,000,000	500,000		0.37 *U*	0.19 *U*	0.43 *U*	0.53 *UJ*	0.42 *UJ*
o-Xylene	95476				0.61 *U*	0.32 *U*	0.71 *U*	0.87 *U*	0.68 *UJ*
sec-Butylbenzene	135988	1,000,000	500,000		0.40 *U*	0.21 *U*	0.47 *U*	0.58 *UJ*	0.46 *UJ*
Styrene	100425				0.23 *U*	0.12 *U*	0.27 *U*	0.33 *U*	0.26 *UJ*
tert-Butylbenzene	98066	1,000,000	500,000		0.48 *U*	0.25 *U*	0.56 *U*	0.69 *UJ*	0.54 *UJ*
Toluene	108883	1,000,000	500,000		0.35 *U*	0.18 *U*	0.44 *J*	0.50 *U*	0.40 *UJ*
Tetrachloroethane	127184	300,000	150,000		0.62 *U*	0.33 *U*	0.73 *U*	0.89 *U*	0.70 *UJ*
trans-1,2-Dichloroethene	156605	1,000,000	500,000		0.48 *U*	0.25 *U*	0.56 *U*	0.68 *U*	0.54 *UJ*
trans-1,3-Dichloropropene	10061026				2.00 *U*	1.10 *U*	2.40 *U*	2.90 *U*	2.30 *UJ*
Trichloroethene	79016	400,000	200,000		1.00 *U*	0.54 *U*	1.20 *U*	1.50 *U*	1.20 *UJ*
Trichlorotrifluoroethane	76131				1.10 *U*	0.55 *U*	1.20 *U*	1.50 *U*	1.20 *UJ*
Trichlorofluoromethane	75694				0.44 *U*	0.23 *U*	0.51 *U*	0.63 *U*	0.50 *UJ*
Vinyl Chloride	75014	27,000	13,000		0.57 *U*	0.30 *U*	0.66 *U*	0.81 *U*	0.64 *UJ*
Xylenes	1330207	1,000,000	500,000		0.78 *U*	0.41 *U*	0.91 *U*	1.10 *U*	0.88 *UJ*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS3	SS3	SS3	SS4	SS4
				Sample Identification	SS3 (12-24)	SS3 (12-24)	SS3 (6-12)	SS4 (0-2)	SS4 (0-6)
				Laboratory ID	480-201615-8	480-201615-9	480-201615-7	480-201615-10	480-201615-11
				Sample Date	2022-09-13 12:09:00	2022-09-13 12:09:00	2022-09-13 12:09:00	2022-09-13 11:09:00	2022-09-13 09:09:00
Metals (µg/kg)									
Arsenic	7440382	16,000	16,000		13,800	16,200	8,800	10,700	10,400
Lead	7439921	3,900,000	1,000,000		251,000	301,000	93,400	52,600	50,300
Cadmium	7440439	60,000	9,300		1,400	1,200	390	160 *U*	160 *U*
Aluminum	7429905				6,450,000	7,370,000	7,160,000	10,400,000	9,760,000
Antimony	7440360				2,300 *J*	3,100 *J*	1,200 *J*	940 *J*	1,300 *J*
Barium	7440393	10,000,000	400,000		70,000	74,500	57,100	90,800	80,800
Beryllium	7440417	2,700,000	590,000		400	450	360	560	520
Calcium	7440702				18,000,000	18,600,000	10,100,000	2,030,000	1,990,000
Chromium	7440473				12,300 *J+*	13,700 *J+*	14,600 *J+*	12,900 *J+*	12,000 *J+*
Cobalt	7440484				5,200	6,400	13,700	8,100	8,000
Copper	7440508	10,000,000	270,000		25,300	29,300	91,400	30,900	31,000
Iron	7439896				26,700,000	32,300,000	16,700,000	20,300,000	20,000,000
Magnesium	7439954				2,800,000 *J*	3,240,000 *J*	3,450,000 *J*	2,250,000 *J*	2,200,000 *J*
Manganese	7439965	10,000,000	10,000,000		504,000	565,000	499,000	446,000	402,000
Mercury	7439976	5,700	2,800		180	220	61	71	76
Nickel	7440020	10,000,000	310,000		13,000	15,300	13,900	17,700	17,500
Potassium	7440097				1,010,000	1,240,000	1,150,000	1,870,000	1,600,000
Selenium	7782492	6,800,000	1,500,000		840 *J*	940 *J*	760 *J*	930 *J*	890 *J*
Silver	7440224	6,800,000	1,500,000		220 *U*	240 *U*	7,200	260 *U*	240 *U*
Sodium	7440235				140,000 *J*	173,000	95,600 *J*	49,400 *J*	43,700 *J*
Thallium	7440280				330 *U*	360 *U*	340 *U*	400 *U*	350 *U*
Vanadium	7440622				17,300	20,300	14,900	17,100	15,800
Zinc	7440666	10,000,000	10,000,000		126,000	131,000	73,100	67,000	62,400
Polycyclic Aromatic Hydrocarbons (µg/kg)									
2-Methylnaphthalene	91576				380 *U*	380 *U*	180 *U*	210 *U*	200 *U*
Acenaphthene	83329	1,000,000	500,000		280 *U*	280 *U*	140 *U*	160 *U*	150 *U*
Acenaphthylene	208968	1,000,000	500,000		240 *U*	250 *J*	120 *U*	140 *U*	130 *U*
Anthracene	120127	1,000,000	500,000		710 *J*	680 *J*	230 *U*	260 *U*	250 *U*
Benzo[a]anthracene	56553	11,000	5,600		3,900	4,000	270 *J*	160 *J*	190 *J*
Benzo[a]pyrene	50328	1,100	1,000		3,400	3,800	350 *J*	200 *J*	200 *J*
Benzo[b]fluoranthene	205992	11,000	5,600		4,800	5,200	470 *J*	320 *J*	290 *J*
Benzo[g,h,i]perylene	191242	1,000,000	500,000		1,600 *J*	1,800 *J*	230 *J*	130 *J*	120 *J*
Benzo[k]fluoranthene	207089	110,000	56,000		1,900	2,000	170 *J*	140 *U*	130 *U*
Chrysene	218019	110,000	56,000		3,400	3,200	330 *J*	240 *U*	220 *U*
Dibenzo[a,h]anthracene	53703	1,100	560		490 *J*	530 *J*	160 *U*	190 *U*	180 *U*
Dibenzofuran	132649	1,000,000	350,000		220 *U*	230 *U*	110 *U*	130 *U*	120 *U*
Fluoranthene	206440	1,000,000	500,000		5,100	6,000	560 *J*	320 *J*	380 *J*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS3	SS3	SS3	SS4	SS4
				Sample Identification	SS3 (12-24)	SS3 (12-24)	SS3 (6-12)	SS4 (0-2)	SS4 (0-6)
				Laboratory ID	480-201615-8	480-201615-9	480-201615-7	480-201615-10	480-201615-11
				Sample Date	2022-09-13 12:09:00	2022-09-13 12:09:00	2022-09-13 12:09:00	2022-09-13 11:09:00	2022-09-13 09:09:00
Fluorene	86737	1,000,000	500,000		220 *U*	230 *U*	110 *U*	130 *U*	120 *U*
Indeno[1,2,3-cd]pyrene	193395	11,000	5,600		2,300	2,600	250 *J*	140 *J*	130 *J*
Naphthalene	91203	1,000,000	500,000		240 *U*	250 *U*	120 *U*	140 *U*	130 *U*
Phenanthrene	85018	1,000,000	500,000		2,200	2,100	230 *J*	160 *U*	180 *J*
Pyrene	129000	1,000,000	500,000		4,100	4,700	480 *J*	260 *J*	310 *J*
Per- and Polyfluoroalkyl Substances (µg/kg)									
6:2 fluorotelomer sulfonate	27619972								
8:2 fluorotelomer sulfonate	39108344								
2-(N-ethyl-perfluorooctane sulfonamido) acetate									
Perfluorobutyric acid	375224								
2-(N-methyl-perfluorooctane sulfonamido) acetic acid									
Perfluorooctanoic acid	335671	600,000	500,000						
Perfluorooctane sulfonic acid	1763231	440,000	440,000						
Perfluorobutane Sulfonic Acid	375735								
Perfluorodecanoic Acid	335762								
Perfluorododecanoic Acid	307551								
Perfluorodecanesulfonic acid	335773								
Perfluoroheptanoic Acid	375859								
Perfluoroheptanesulfonic acid	375928								
Perfluorohexanoic Acid	307244								
Perfluorohexane Sulfonic Acid	355464								
Perfluorononanoic Acid	375951								
Perfluorooctane sulfonamide	754916								
Perfluoropentanoic Acid	2706903								
Perfluorotetradecanoic Acid	376067								
Perfluorotridecanoic Acid	72629948								
Perfluoroundecanoic Acid	2058948								
Semivolatile Organic Compounds (µg/kg)									
Atrazine	1912249				650 *U*	670 *U*	320 *U*	370 *U*	350 *U*
Carbazole	86748				450 *J*	420 *J*	110 *U*	130 *U*	120 *U*
2,4,5-Trichlorophenol	95954				510 *U*	520 *U*	250 *U*	290 *U*	270 *U*
2,4,6-Trichlorophenol	88062				380 *U*	380 *U*	180 *U*	210 *U*	200 *U*
2,4-Dichlorophenol	120832				200 *U*	200 *U*	97 *U*	110 *U*	110 *U*
2-Chlorophenol	95578				340 *U*	350 *U*	170 *U*	190 *U*	180 *U*
Pentachlorophenol	87865	55,000	6,700		1,900 *U*	1,900 *U*	920 *U*	1,100 *U*	1,000 *U*
1,1'-Biphenyl	92524				280 *U*	280 *U*	140 *U*	160 *U*	150 *U*
2,2'-oxybis(1-Chloropropane)	108601				380 *U*	380 *U*	180 *U*	210 *U*	200 *U*
2,4-Dimethylphenol	105679				450 *U*	460 *U*	220 *U*	260 *U*	240 *U*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS3	SS3	SS3	SS4	SS4
				Sample Identification	SS3 (12-24)	SS3 (12-24)	SS3 (6-12)	SS4 (0-2)	SS4 (0-6)
				Laboratory ID	480-201615-8	480-201615-9	480-201615-7	480-201615-10	480-201615-11
				Sample Date	2022-09-13 12:09:00	2022-09-13 12:09:00	2022-09-13 12:09:00	2022-09-13 11:09:00	2022-09-13 09:09:00
2,4-Dinitrophenol	51285				8,700 *U*	8,900 *U*	4,200 *U*	4,900 *U*	4,600 *U*
2,4-Dinitrotoluene	121142				390 *U*	400 *U*	190 *U*	220 *U*	210 *U*
2,6-Dinitrotoluene	606202				220 *U*	230 *U*	110 *U*	130 *U*	120 *U*
2-Chloronaphthalene	91587				310 *U*	320 *U*	150 *U*	180 *U*	170 *U*
2-Methylphenol	95487	1,000,000	500,000		220 *U*	230 *U*	110 *U*	130 *U*	120 *U*
2-Nitroaniline	88744				280 *U*	280 *U*	140 *U*	160 *U*	150 *U*
2-Nitrophenol	88755				530 *U*	540 *U*	260 *U*	300 *U*	280 *U*
3,3'-Dichlorobenzidine	91941				2,200 *U*	2,300 *U*	1,100 *U*	1,300 *U*	1,200 *U*
3-Nitroaniline	99092				520 *U*	530 *U*	250 *U*	290 *U*	280 *U*
4,6-Dinitro-2-methylphenol	534521				1,900 *U*	1,900 *U*	920 *U*	1,100 *U*	1,000 *U*
4-Bromophenyl-phenylether	101553				270 *U*	270 *U*	130 *U*	150 *U*	140 *U*
4-Chloro-3-methylphenol	59507				460 *U*	480 *U*	230 *U*	260 *U*	250 *U*
4-Chloroaniline	106478				460 *U*	480 *U*	230 *U*	260 *U*	250 *U*
4-Chlorophenyl-phenyl ether	7005723				230 *U*	240 *U*	110 *U*	130 *U*	120 *U*
4-Methylphenol	106445	1,000,000	500,000		240 *J*	230 *U*	110 *U*	130 *U*	120 *U*
4-Nitroaniline	100016				980 *U*	1,000 *U*	480 *U*	560 *U*	530 *U*
4-Nitrophenol	100027				1,300 *U*	1,300 *U*	640 *U*	750 *U*	700 *U*
Acetophenone	98862				250 *U*	260 *U*	120 *U*	140 *U*	140 *U*
Benzaldehyde	100527				1,500 *U*	1,500 *U*	730 *U*	850 *U*	800 *U*
Bis(2-chloroethyl)ether	111444				240 *U*	250 *U*	120 *U*	140 *U*	130 *U*
bis(2-Chloroethoxy)methane	111911				400 *U*	410 *U*	190 *U*	230 *U*	210 *U*
bis(2-Ethylhexyl)phthalate	117817				640 *U*	660 *U*	1,500	360 *U*	340 *U*
Benzyl n-butyl phthalate	85687				310 *U*	320 *U*	150 *J*	180 *U*	170 *U*
Caprolactam	105602				560 *U*	580 *U*	280 *U*	320 *U*	300 *U*
Diethyl phthalate	84662				540 *U*	700 *U*	450 *U*	720 *U*	740 *U*
Dimethyl phthalate	131113				220 *U*	230 *U*	110 *U*	130 *U*	120 *U*
Di-n-butyl phthalate	84742				320 *U*	330 *U*	160 *U*	180 *U*	170 *U*
Di-n-octylphthalate	117840				220 *U*	230 *U*	110 *U*	130 *U*	120 *U*
Hexachloroethane	67721				240 *U*	250 *U*	120 *U*	140 *U*	130 *U*
Hexachlorobenzene	118741	12,000	6,000		250 *U*	260 *U*	120 *U*	140 *U*	140 *U*
Hexachlorobutadiene	87683				280 *U*	280 *U*	140 *U*	160 *U*	150 *U*
Hexachlorocyclopentadiene	77474				250 *U*	260 *U*	120 *U*	140 *U*	140 *U*
Isophorone	78591				400 *U*	410 *U*	190 *U*	230 *U*	210 *U*
Nitrobenzene	98953				210 *U*	210 *U*	100 *U*	120 *U*	110 *U*
N-Nitrosodi-n-propylamine	621647				320 *U*	330 *U*	160 *U*	180 *U*	170 *U*
N-Nitrosodiphenylamine	86306				1,500 *U*	1,600 *U*	750 *U*	860 *U*	810 *U*
Phenol	108952	1,000,000	500,000		290 *U*	290 *U*	140 *U*	160 *U*	150 *U*
1,4-Dioxane	123911	250,000	130,000						

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS3	SS3	SS3	SS4	SS4
				Sample Identification	SS3 (12-24)	SS3 (12-24)	SS3 (6-12)	SS4 (0-2)	SS4 (0-6)
				Laboratory ID	480-201615-8	480-201615-9	480-201615-7	480-201615-10	480-201615-11
				Sample Date	2022-09-13 12:09:00	2022-09-13 12:09:00	2022-09-13 12:09:00	2022-09-13 11:09:00	2022-09-13 09:09:00
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	630206				0.64 *UJ*	0.56 *UJ*	0.50 *UJ*	0.83 *U*	0.54 *UJ*
1,1,1-Trichloroethane	71556	1,000,000	500,000		0.47 *UJ*	0.41 *UJ*	0.36 *UJ*	0.60 *U*	0.39 *UJ*
1,1,2,2-Tetrachloroethane	79345				*R*	*R*	0.81 *UJ*	*R*	0.87 *UJ*
1,1,2-Trichloroethane	79005				0.83 *UJ*	0.73 *UJ*	0.65 *UJ*	1.10 *U*	0.70 *UJ*
1,1-Dichloroethane	75343	480,000	240,000		0.78 *UJ*	0.68 *UJ*	0.61 *UJ*	1.00 *U*	0.66 *UJ*
1,1-Dichloroethene	75354	1,000,000	500,000		0.79 *UJ*	0.69 *UJ*	0.61 *UJ*	1.00 *UJ*	0.66 *UJ*
1,2,3-Trimethylbenzene	526738				1.30 *UJ*	1.10 *UJ*	1.00 *UJ*	1.70 *U*	1.10 *UJ*
1,2,4-Trimethylbenzene	95636	380,000	190,000		*R*	*R*	0.95 *UJ*	*R*	1.00 *UJ*
1,2,4-Trichlorobenzene	120821				*R*	*R*	0.30 *UJ*	*R*	0.33 *UJ*
1,2-Dichlorobenzene	95501	1,000,000	500,000		*R*	*R*	0.39 *UJ*	*R*	0.42 *UJ*
1,3-Dichlorobenzene	541731	560,000	280,000		*R*	*R*	0.26 *UJ*	*R*	0.28 *UJ*
1,4-Dichlorobenzene	106467	250,000	130,000		*R*	*R*	0.70 *UJ*	*R*	0.75 *UJ*
1,2-Dibromo-3-chloropropane	96128				*R*	*R*	2.50 *UJ*	*R*	2.70 *UJ*
1,2-Dibromoethane	106934				0.82 *UJ*	0.72 *UJ*	0.64 *UJ*	1.10 *U*	0.69 *UJ*
1,2-Dichloroethane	107062	60,000	30,000		0.32 *UJ*	0.28 *UJ*	0.25 *UJ*	0.42 *U*	0.27 *UJ*
1,2-Dichloropropane	78875				3.20 *UJ*	2.80 *UJ*	2.50 *UJ*	4.20 *U*	2.70 *UJ*
1,3,5-Trimethylbenzene	108678	380,000	190,000		*R*	*R*	0.32 *UJ*	*R*	0.35 *UJ*
2-Hexanone	591786				3.20 *UJ*	2.80 *UJ*	2.50 *UJ*	4.20 *U*	2.70 *UJ*
4-Methyl-2-pentanone	108101				2.10 *UJ*	1.80 *UJ*	1.60 *UJ*	2.70 *U*	1.80 *UJ*
Acetone	67641	1,000,000	500,000		19 *J*	13 *J*	23 *J*	7.00 *U*	4.50 *UJ*
Benzene	71432	89,000	44,000		0.95 *J*	0.27 *UJ*	0.24 *UJ*	0.41 *U*	0.26 *UJ*
Bromodichloromethane	75274				0.86 *UJ*	0.75 *UJ*	0.67 *UJ*	1.10 *U*	0.72 *UJ*
Bromomethane	74839				0.58 *UJ*	0.50 *UJ*	0.45 *UJ*	0.75 *U*	0.48 *UJ*
Bromoform	75252				3.20 *UJ*	2.80 *UJ*	2.50 *UJ*	4.20 *U*	2.70 *UJ*
Carbon disulfide	75150				3.20 *UJ*	2.80 *UJ*	2.50 *UJ*	4.20 *U*	2.70 *UJ*
Carbon Tetrachloride	56235	44,000	22,000		0.62 *UJ*	0.54 *UJ*	0.48 *UJ*	0.80 *UJ*	0.52 *UJ*
Chloroform	67663	700,000	350,000		0.40 *UJ*	0.47 *UJ*	0.37 *UJ*	0.56 *UJ*	0.37 *UJ*
cis-1,2-Dichloroethene	156592	1,000,000	500,000		0.82 *UJ*	0.72 *UJ*	0.64 *UJ*	1.10 *U*	0.69 *UJ*
cis-1,3-Dichloropropene	10061015				0.92 *UJ*	0.81 *UJ*	0.72 *UJ*	1.20 *U*	0.78 *UJ*
Chlorobenzene	108907	1,000,000	500,000		0.85 *UJ*	0.74 *UJ*	0.66 *UJ*	1.10 *U*	0.71 *UJ*
Chloroethane	75003				1.50 *UJ*	1.30 *UJ*	1.10 *UJ*	1.90 *U*	1.20 *UJ*
Chloromethane	74873				0.39 *UJ*	0.34 *UJ*	0.30 *UJ*	0.50 *U*	0.33 *UJ*
Cyclohexane	110827				1.10 *J*	0.78 *UJ*	0.70 *UJ*	1.20 *UJ*	0.75 *UJ*
Dibromochloromethane	124481				0.82 *UJ*	0.72 *UJ*	0.64 *UJ*	1.10 *U*	0.69 *UJ*
Dichlorodifluoromethane	75718				0.53 *UJ*	0.46 *UJ*	0.41 *UJ*	0.69 *U*	0.45 *UJ*
Ethylbenzene	100414	780,000	390,000		0.44 *UJ*	0.39 *UJ*	0.34 *UJ*	0.57 *U*	0.37 *UJ*
Isopropylbenzene	98828				*R*	*R*	0.75 *UJ*	*R*	0.81 *UJ*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS3	SS3	SS3	SS4	SS4
				Sample Identification	SS3 (12-24)	SS3 (12-24)	SS3 (6-12)	SS4 (0-2)	SS4 (0-6)
				Laboratory ID	480-201615-8	480-201615-9	480-201615-7	480-201615-10	480-201615-11
				Sample Date	2022-09-13 12:09:00	2022-09-13 12:09:00	2022-09-13 12:09:00	2022-09-13 11:09:00	2022-09-13 09:09:00
2-Butanone	78933	1,000,000	500,000		4.60 *J*	2.10 *UJ*	4.20 *J*	3.00 *U*	2.00 *UJ*
m,p-Xylene	179601231				1.10 *UJ*	0.94 *UJ*	0.84 *UJ*	1.40 *U*	0.91 *UJ*
Methyl Acetate	79209				3.9 *UJ*	3.4 *UJ*	3.0 *UJ*	5.0 *U*	3.3 *UJ*
Methylcyclohexane	108872				0.98 *UJ*	1.00 *J*	0.76 *UJ*	1.30 *UJ*	0.82 *UJ*
Methylene Chloride	75092	1,000,000	500,000		3.00 *UJ*	2.60 *UJ*	2.30 *UJ*	3.80 *U*	2.50 *UJ*
Methyl tert-butyl ether	1634044	1,000,000	500,000		0.63 *UJ*	0.55 *UJ*	0.49 *UJ*	0.82 *U*	0.53 *UJ*
n-Butylbenzene	104518	1,000,000	500,000		*R*	*R*	0.43 *UJ*	*R*	0.47 *UJ*
n-Propylbenzene	103651	1,000,000	500,000		*R*	*R*	0.40 *UJ*	*R*	0.43 *UJ*
o-Xylene	95476				0.84 *UJ*	0.73 *UJ*	0.65 *UJ*	1.10 *U*	0.70 *UJ*
sec-Butylbenzene	135988	1,000,000	500,000		*R*	*R*	0.43 *UJ*	*R*	0.47 *UJ*
Styrene	100425				0.32 *UJ*	0.28 *UJ*	0.25 *UJ*	0.42 *U*	0.27 *UJ*
tert-Butylbenzene	98066	1,000,000	500,000		*R*	*R*	0.52 *UJ*	*R*	0.56 *UJ*
Toluene	108883	1,000,000	500,000		1.80 *J*	0.42 *UJ*	0.38 *UJ*	0.63 *U*	0.41 *UJ*
Tetrachloroethane	127184	300,000	150,000		0.86 *UJ*	0.75 *UJ*	0.67 *UJ*	1.10 *U*	0.72 *UJ*
trans-1,2-Dichloroethene	156605	1,000,000	500,000		0.66 *UJ*	0.58 *UJ*	0.51 *UJ*	0.86 *U*	0.56 *UJ*
trans-1,3-Dichloropropene	10061026				2.80 *UJ*	2.50 *UJ*	2.20 *UJ*	3.70 *U*	2.40 *UJ*
Trichloroethene	79016	400,000	200,000		1.40 *UJ*	1.20 *UJ*	1.10 *UJ*	1.80 *U*	1.20 *UJ*
Trichlorotrifluoroethane	76131				1.50 *UJ*	1.30 *UJ*	1.10 *UJ*	1.90 *U*	1.20 *UJ*
Trichlorofluoromethane	75694				0.61 *UJ*	0.53 *UJ*	0.47 *UJ*	0.79 *U*	0.51 *UJ*
Vinyl Chloride	75014	27,000	13,000		0.78 *UJ*	0.68 *UJ*	0.61 *UJ*	1.00 *U*	0.66 *UJ*
Xylenes	1330207	1,000,000	500,000		1.10 *UJ*	0.94 *UJ*	0.84 *UJ*	1.40 *U*	0.91 *UJ*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS4	SS4	SS5	SS5	SS5
				Sample Identification	SS4 (12-24)	SS4 (6-12)	SS5 (0-2)	SS5 (0-6)	SS5 (12-24)
				Laboratory ID	480-201615-13	480-201615-12	480-200248-7	480-200248-8	480-200248-10
				Sample Date	2022-09-13 09:09:00	2022-09-13 09:09:00	2022-07-29 01:07:00	2022-07-29 01:07:00	2022-07-29 01:07:00
Metals (µg/kg)									
Arsenic	7440382	16,000	16,000		27,700	20,000	3,300	7,500	6,200
Lead	7439921	3,900,000	1,000,000		99,300	94,900	26,900	37,500	17,000
Cadmium	7440439	60,000	9,300		320	230 *U*	260	120 *J*	31 *U*
Aluminum	7429905				9,310,000	9,800,000	9,330,000	12,100,000	9,840,000
Antimony	7440360				2,300 *J*	2,300 *J*	820 *J*	660 *J*	610 *J*
Barium	7440393	10,000,000	400,000		84,000	84,800	102,000	154,000	56,100
Beryllium	7440417	2,700,000	590,000		620	630	360	480	420
Calcium	7440702				9,230,000	5,060,000	2,200,000	1,970,000	19,800,000
Chromium	7440473				15,200 *J+*	15,500 *J+*	10,600	14,300	13,800
Cobalt	7440484				8,900	9,500	23,300	21,300	9,200
Copper	7440508	10,000,000	270,000		67,900	68,200	334,000	153,000	26,600
Iron	7439896				23,000,000	27,400,000	11,700,000	17,400,000	22,000,000
Magnesium	7439954				4,430,000 *J*	2,740,000 *J*	1,780,000	2,510,000	5,780,000
Manganese	7439965	10,000,000	10,000,000		472,000	323,000	314,000	437,000	490,000
Mercury	7439976	5,700	2,800		67	130	59	90	14 *J*
Nickel	7440020	10,000,000	310,000		21,100	22,000	14,000	18,900	23,500
Potassium	7440097				1,600,000	1,220,000	1,070,000	1,490,000	1,280,000
Selenium	7782492	6,800,000	1,500,000		1,300 *J*	2,100 *J*	470 *U*	460 *U*	410 *U*
Silver	7440224	6,800,000	1,500,000		240 *U*	240 *U*	10,200	2,700	210 *U*
Sodium	7440235				81,500 *J*	69,600 *J*	113,000 *J*	52,900 *J*	48,800 *J*
Thallium	7440280				360 *U*	360 *U*	350 *U*	340 *U*	310 *U*
Vanadium	7440622				19,400	24,200	12,500	18,800	16,900
Zinc	7440666	10,000,000	10,000,000		83,400	73,800	69,200	98,200	67,100
Polycyclic Aromatic Hydrocarbons (µg/kg)									
2-Methylnaphthalene	91576				190 *U*	190 *U*	180 *U*	56 *J*	35 *U*
Acenaphthene	83329	1,000,000	500,000		140 *U*	140 *U*	140 *U*	27 *U*	26 *U*
Acenaphthylene	208968	1,000,000	500,000		190 *J*	160 *J*	250 *J*	450	23 *U*
Anthracene	120127	1,000,000	500,000		240 *U*	240 *U*	230 *U*	180	43 *U*
Benzo[a]anthracene	56553	11,000	5,600		490 *J*	660 *J*	550 *J*	920	18 *U*
Benzo[a]pyrene	50328	1,100	1,000		480 *J*	630 *J*	390 *J*	650	26 *U*
Benzo[b]fluoranthene	205992	11,000	5,600		810 *J*	920 *J*	890 *J*	1,200	28 *U*
Benzo[g,h,i]perylene	191242	1,000,000	500,000		310 *J*	360 *J*	480 *J*	600	19 *U*
Benzo[k]fluoranthene	207089	110,000	56,000		320 *J*	370 *J*	120 *U*	520	23 *U*
Chrysene	218019	110,000	56,000		590 *J*	690 *J*	680 *J*	1,100	39 *U*
Dibenzo[a,h]anthracene	53703	1,100	560		170 *U*	170 *U*	170 *J*	200	31 *U*
Dibenzofuran	132649	1,000,000	350,000		110 *U*	110 *U*	110 *U*	22 *U*	21 *U*
Fluoranthene	206440	1,000,000	500,000		830 *J*	1,200	770 *J*	1,200	19 *U*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS4	SS4	SS5	SS5	SS5
				Sample Identification	SS4 (12-24)	SS4 (6-12)	SS5 (0-2)	SS5 (0-6)	SS5 (12-24)
				Laboratory ID	480-201615-13	480-201615-12	480-200248-7	480-200248-8	480-200248-10
				Sample Date	2022-09-13 09:09:00	2022-09-13 09:09:00	2022-07-29 01:07:00	2022-07-29 01:07:00	2022-07-29 01:07:00
Fluorene	86737	1,000,000	500,000		110 *U*	110 *U*	110 *U*	48 *J*	21 *U*
Indeno[1,2,3-cd]pyrene	193395	11,000	5,600		390 *J*	450 *J*	470 *J*	590	22 *U*
Naphthalene	91203	1,000,000	500,000		130 *U*	130 *U*	120 *U*	70 *U*	23 *U*
Phenanthrene	85018	1,000,000	500,000		370 *J*	360 *J*	140 *U*	380	26 *U*
Pyrene	129000	1,000,000	500,000		690 *J*	960 *J*	1,300	1,900	21 *U*
Per- and Polyfluoroalkyl Substances (µg/kg)									
6:2 fluorotelomer sulfonate	27619972								
8:2 fluorotelomer sulfonate	39108344								
2-(N-ethyl-perfluorooctane sulfonamido) acetate									
Perfluorobutyric acid	375224								
2-(N-methyl-perfluorooctane sulfonamido) acetic acid									
Perfluorooctanoic acid	335671	600,000	500,000						
Perfluorooctane sulfonic acid	1763231	440,000	440,000						
Perfluorobutane Sulfonic Acid	375735								
Perfluorodecanoic Acid	335762								
Perfluorododecanoic Acid	307551								
Perfluorodecanesulfonic acid	335773								
Perfluoroheptanoic Acid	375859								
Perfluoroheptanesulfonic acid	375928								
Perfluorohexanoic Acid	307244								
Perfluorohexane Sulfonic Acid	355464								
Perfluorononanoic Acid	375951								
Perfluorooctane sulfonamide	754916								
Perfluoropentanoic Acid	2706903								
Perfluorotetradecanoic Acid	376067								
Perfluorotridecanoic Acid	72629948								
Perfluoroundecanoic Acid	2058948								
Semivolatile Organic Compounds (µg/kg)									
Atrazine	1912249				340 *U*	340 *U*	320 *U*	64 *U*	61 *U*
Carbazole	86748				110 *U*	110 *U*	110 *U*	22 *U*	21 *U*
2,4,5-Trichlorophenol	95954				260 *U*	260 *U*	250 *U*	50 *U*	47 *U*
2,4,6-Trichlorophenol	88062				190 *U*	190 *U*	180 *U*	37 *U*	35 *U*
2,4-Dichlorophenol	120832				100 *U*	100 *U*	97 *U*	19 *U*	19 *U*
2-Chlorophenol	95578				180 *U*	180 *U*	170 *U*	34 *U*	32 *U*
Pentachlorophenol	87865	55,000	6,700		970 *U*	970 *U*	920 *U*	180 *U*	180 *U*
1,1'-Biphenyl	92524				140 *U*	140 *U*	140 *U*	27 *U*	26 *U*
2,2'-oxybis(1-Chloropropane)	108601				190 *U*	190 *U*	180 *U*	37 *U*	35 *U*
2,4-Dimethylphenol	105679				230 *U*	230 *U*	220 *U*	44 *U*	42 *U*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS4	SS4	SS5	SS5	SS5
				Sample Identification	SS4 (12-24)	SS4 (6-12)	SS5 (0-2)	SS5 (0-6)	SS5 (12-24)
				Laboratory ID	480-201615-13	480-201615-12	480-200248-7	480-200248-8	480-200248-10
				Sample Date	2022-09-13 09:09:00	2022-09-13 09:09:00	2022-07-29 01:07:00	2022-07-29 01:07:00	2022-07-29 01:07:00
2,4-Dinitrophenol	51285				4,500 *U*	4,500 *U*	4,200 *U*	850 *U*	810 *U*
2,4-Dinitrotoluene	121142				200 *U*	200 *U*	190 *U*	38 *U*	36 *U*
2,6-Dinitrotoluene	606202				110 *U*	110 *U*	110 *U*	22 *U*	21 *U*
2-Chloronaphthalene	91587				160 *U*	160 *U*	150 *U*	30 *U*	29 *U*
2-Methylphenol	95487	1,000,000	500,000		110 *U*	110 *U*	110 *U*	22 *U*	21 *U*
2-Nitroaniline	88744				140 *U*	140 *U*	140 *U*	27 *U*	26 *U*
2-Nitrophenol	88755				270 *U*	270 *U*	260 *U*	52 *U*	49 *U*
3,3'-Dichlorobenzidine	91941				1,100 *U*	1,100 *U*	1,100 *U*	220 *U*	210 *U*
3-Nitroaniline	99092				270 *U*	270 *U*	250 *U*	51 *U*	48 *U*
4,6-Dinitro-2-methylphenol	534521				970 *U*	970 *U*	920 *U*	180 *U*	180 *U*
4-Bromophenyl-phenylether	101553				140 *U*	140 *U*	130 *U*	26 *U*	25 *U*
4-Chloro-3-methylphenol	59507				240 *U*	240 *U*	230 *U*	45 *U*	43 *U*
4-Chloroaniline	106478				240 *U*	240 *U*	230 *U*	45 *U*	43 *U*
4-Chlorophenyl-phenyl ether	7005723				120 *U*	120 *U*	110 *U*	23 *U*	22 *U*
4-Methylphenol	106445	1,000,000	500,000		110 *U*	110 *U*	110 *U*	22 *U*	21 *U*
4-Nitroaniline	100016				510 *U*	510 *U*	480 *U*	96 *U*	92 *U*
4-Nitrophenol	100027				680 *U*	680 *U*	640 *U*	130 *U*	120 *U*
Acetophenone	98862				130 *U*	130 *U*	120 *U*	25 *U*	24 *U*
Benzaldehyde	100527				770 *U*	770 *U*	730 *U*	150 *U*	140 *U*
Bis(2-chloroethyl)ether	111444				130 *U*	130 *U*	120 *U*	24 *U*	23 *U*
bis(2-Chloroethoxy)methane	111911				210 *U*	210 *U*	190 *U*	39 *U*	37 *U*
bis(2-Ethylhexyl)phthalate	117817				330 *U*	330 *U*	310 *U*	63 *U*	60 *U*
Benzyl n-butyl phthalate	85687				160 *U*	160 *U*	150 *U*	410	29 *U*
Caprolactam	105602				290 *U*	290 *U*	280 *U*	55 *U*	53 *U*
Diethyl phthalate	84662				240 *U*	730 *U*	120 *U*	24 *U*	23 *U*
Dimethyl phthalate	131113				110 *U*	110 *U*	110 *U*	22 *U*	21 *U*
Di-n-butyl phthalate	84742				170 *U*	170 *U*	160 *U*	31 *U*	30 *U*
Di-n-octylphthalate	117840				110 *U*	110 *U*	110 *U*	22 *U*	21 *U*
Hexachloroethane	67721				130 *U*	130 *U*	120 *U*	24 *U*	23 *U*
Hexachlorobenzene	118741	12,000	6,000		130 *U*	130 *U*	120 *U*	25 *U*	24 *U*
Hexachlorobutadiene	87683				140 *U*	140 *U*	140 *U*	27 *U*	26 *U*
Hexachlorocyclopentadiene	77474				130 *U*	130 *U*	120 *U*	25 *U*	24 *U*
Isophorone	78591				210 *U*	210 *U*	190 *U*	39 *U*	37 *U*
Nitrobenzene	98953				110 *U*	110 *U*	100 *U*	21 *U*	20 *U*
N-Nitrosodi-n-propylamine	621647				170 *U*	170 *U*	160 *U*	31 *U*	30 *U*
N-Nitrosodiphenylamine	86306				790 *U*	790 *U*	750 *U*	150 *U*	140 *U*
Phenol	108952	1,000,000	500,000		150 *U*	150 *U*	140 *U*	28 *U*	27 *U*
1,4-Dioxane	123911	250,000	130,000						

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS4	SS4	SS5	SS5	SS5
				Sample Identification	SS4 (12-24)	SS4 (6-12)	SS5 (0-2)	SS5 (0-6)	SS5 (12-24)
				Laboratory ID	480-201615-13	480-201615-12	480-200248-7	480-200248-8	480-200248-10
				Sample Date	2022-09-13 09:09:00	2022-09-13 09:09:00	2022-07-29 01:07:00	2022-07-29 01:07:00	2022-07-29 01:07:00
Volatiles (µg/kg)									
1,1,1,2-Tetrachloroethane	630206				0.64 *UJ*	0.61 *UJ*	0.85 *U*	0.64 *U*	0.43 *UJ*
1,1,1-Trichloroethane	71556	1,000,000	500,000		0.47 *UJ*	0.44 *UJ*	0.62 *U*	0.47 *U*	0.31 *UJ*
1,1,2,2-Tetrachloroethane	79345				*R*	*R*	1.40 *UJ*	1.00 *U*	0.69 *UJ*
1,1,2-Trichloroethane	79005				0.84 *UJ*	0.80 *UJ*	1.10 *U*	0.83 *U*	0.56 *UJ*
1,1-Dichloroethane	75343	480,000	240,000		0.78 *UJ*	0.75 *UJ*	1.00 *U*	0.78 *U*	0.52 *UJ*
1,1-Dichloroethene	75354	1,000,000	500,000		0.79 *UJ*	0.75 *UJ*	1.00 *U*	0.78 *U*	0.52 *UJ*
1,2,3-Trimethylbenzene	526738				1.30 *UJ*	1.20 *UJ*	1.70 *U*	1.30 *U*	0.87 *UJ*
1,2,4-Trimethylbenzene	95636	380,000	190,000		*R*	*R*	1.60 *UJ*	1.20 *U*	0.82 *UJ*
1,2,4-Trichlorobenzene	120821				*R*	*R*	0.52 *UJ*	0.39 *U*	0.26 *UJ*
1,2-Dichlorobenzene	95501	1,000,000	500,000		*R*	*R*	0.66 *UJ*	0.50 *U*	0.33 *UJ*
1,3-Dichlorobenzene	541731	560,000	280,000		*R*	*R*	0.44 *UJ*	0.33 *U*	0.22 *UJ*
1,4-Dichlorobenzene	106467	250,000	130,000		*R*	*R*	1.2 *UJ*	0.90 *U*	0.60 *UJ*
1,2-Dibromo-3-chloropropane	96128				*R*	*R*	4.20 *UJ*	3.20 *U*	2.10 *UJ*
1,2-Dibromoethane	106934				0.83 *UJ*	0.79 *UJ*	1.10 *U*	0.82 *U*	0.55 *UJ*
1,2-Dichloroethane	107062	60,000	30,000		0.32 *UJ*	0.31 *UJ*	0.43 *U*	0.32 *U*	0.21 *UJ*
1,2-Dichloropropane	78875				3.20 *UJ*	3.10 *UJ*	4.20 *U*	3.20 *U*	2.10 *UJ*
1,3,5-Trimethylbenzene	108678	380,000	190,000		*R*	*R*	0.55 *UJ*	0.41 *U*	0.28 *UJ*
2-Hexanone	591786				3.20 *UJ*	3.10 *UJ*	4.20 *U*	3.20 *U*	2.10 *UJ*
4-Methyl-2-pentanone	108101				2.10 *UJ*	2.00 *UJ*	2.80 *U*	2.10 *U*	1.40 *UJ*
Acetone	67641	1,000,000	500,000		5.40 *UJ*	5.20 *UJ*	16 *J*	5.40 *U*	20 *J*
Benzene	71432	89,000	44,000		0.31 *UJ*	0.30 *UJ*	0.42 *U*	0.31 *U*	0.21 *UJ*
Bromodichloromethane	75274				0.86 *UJ*	0.82 *UJ*	1.10 *U*	0.86 *U*	0.57 *UJ*
Bromomethane	74839				0.58 *UJ*	0.55 *UJ*	0.76 *U*	0.58 *U*	0.38 *UJ*
Bromoform	75252				3.20 *UJ*	3.10 *UJ*	4.20 *U*	3.20 *U*	2.10 *UJ*
Carbon disulfide	75150				3.20 *UJ*	3.10 *UJ*	4.20 *U*	3.20 *U*	2.10 *UJ*
Carbon Tetrachloride	56235	44,000	22,000		0.62 *UJ*	0.59 *UJ*	0.82 *U*	0.62 *U*	0.41 *UJ*
Chloroform	67663	700,000	350,000		0.59 *UJ*	0.50 *UJ*	0.52 *U*	0.40 *U*	0.26 *UJ*
cis-1,2-Dichloroethene	156592	1,000,000	500,000		0.82 *UJ*	0.78 *UJ*	1.10 *U*	0.82 *U*	0.55 *UJ*
cis-1,3-Dichloropropene	10061015				0.93 *UJ*	0.88 *UJ*	1.20 *U*	0.92 *U*	0.62 *UJ*
Chlorobenzene	108907	1,000,000	500,000		0.85 *UJ*	0.81 *UJ*	1.10 *U*	0.85 *U*	0.56 *UJ*
Chloroethane	75003				1.50 *UJ*	1.40 *UJ*	1.90 *U*	1.40 *U*	0.97 *UJ*
Chloromethane	74873				0.39 *UJ*	0.37 *UJ*	0.51 *U*	0.39 *U*	0.26 *UJ*
Cyclohexane	110827				0.90 *UJ*	0.86 *UJ*	1.20 *U*	0.90 *U*	0.60 *UJ*
Dibromochloromethane	124481				0.82 *UJ*	0.78 *UJ*	1.10 *U*	0.82 *U*	0.55 *UJ*
Dichlorodifluoromethane	75718				0.53 *UJ*	0.51 *UJ*	0.70 *U*	0.53 *U*	0.35 *UJ*
Ethylbenzene	100414	780,000	390,000		0.44 *UJ*	0.42 *UJ*	0.59 *U*	0.44 *U*	0.29 *UJ*
Isopropylbenzene	98828				*R*	*R*	1.30 *UJ*	0.97 *U*	0.64 *UJ*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS4	SS4	SS5	SS5	SS5
				Sample Identification	SS4 (12-24)	SS4 (6-12)	SS5 (0-2)	SS5 (0-6)	SS5 (12-24)
				Laboratory ID	480-201615-13	480-201615-12	480-200248-7	480-200248-8	480-200248-10
				Sample Date	2022-09-13 09:09:00	2022-09-13 09:09:00	2022-07-29 01:07:00	2022-07-29 01:07:00	2022-07-29 01:07:00
2-Butanone	78933	1,000,000	500,000		2.40 *UJ*	2.20 *UJ*	3.10 *U*	2.30 *U*	1.60 *UJ*
m,p-Xylene	179601231				1.10 *UJ*	1.00 *UJ*	1.40 *U*	1.10 *U*	0.72 *UJ*
Methyl Acetate	79209				3.9 *UJ*	3.7 *UJ*	5.1 *U*	3.9 *U*	2.6 *UJ*
Methylcyclohexane	108872				0.98 *UJ*	0.93 *UJ*	1.30 *U*	0.97 *U*	0.65 *UJ*
Methylene Chloride	75092	1,000,000	500,000		3.00 *UJ*	2.80 *UJ*	3.90 *U*	2.90 *U*	2.00 *UJ*
Methyl tert-butyl ether	1634044	1,000,000	500,000		0.63 *UJ*	0.60 *UJ*	0.83 *U*	0.63 *U*	0.42 *UJ*
n-Butylbenzene	104518	1,000,000	500,000		*R*	*R*	0.74 *UJ*	0.56 *U*	0.37 *UJ*
n-Propylbenzene	103651	1,000,000	500,000		*R*	*R*	0.68 *UJ*	0.51 *U*	0.34 *UJ*
o-Xylene	95476				0.84 *UJ*	0.80 *UJ*	1.10 *U*	0.84 *U*	0.56 *UJ*
sec-Butylbenzene	135988	1,000,000	500,000		*R*	*R*	0.74 *UJ*	0.56 *U*	0.37 *UJ*
Styrene	100425				0.32 *UJ*	0.31 *UJ*	0.42 *U*	0.32 *U*	0.21 *UJ*
tert-Butylbenzene	98066	1,000,000	500,000		*R*	*R*	0.88 *UJ*	0.67 *U*	0.44 *UJ*
Toluene	108883	1,000,000	500,000		0.49 *UJ*	0.46 *UJ*	0.64 *U*	0.48 *U*	0.32 *UJ*
Tetrachloroethane	127184	300,000	150,000		0.86 *UJ*	0.82 *UJ*	1.10 *U*	0.86 *U*	0.57 *UJ*
trans-1,2-Dichloroethene	156605	1,000,000	500,000		0.66 *UJ*	0.63 *UJ*	0.88 *U*	0.66 *U*	0.44 *UJ*
trans-1,3-Dichloropropene	10061026				2.80 *UJ*	2.70 *UJ*	3.70 *U*	2.80 *U*	1.90 *UJ*
Trichloroethene	79016	400,000	200,000		1.40 *UJ*	1.30 *UJ*	1.90 *U*	1.40 *U*	0.94 *UJ*
Trichlorotrifluoroethane	76131				1.50 *UJ*	1.40 *UJ*	1.90 *U*	1.50 *U*	0.97 *UJ*
Trichlorofluoromethane	75694				0.61 *UJ*	0.58 *UJ*	0.80 *U*	0.61 *U*	0.40 *UJ*
Vinyl Chloride	75014	27,000	13,000		0.78 *UJ*	0.75 *UJ*	1.00 *U*	0.78 *U*	0.52 *UJ*
Xylenes	1330207	1,000,000	500,000		1.10 *UJ*	1.00 *UJ*	1.40 *U*	1.10 *U*	0.72 *UJ*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS5	SS5	SS6	SS6
				Sample Identification	SS5 (12-24)	SS5 (6-12)	SS6 (0-2)	SS6 (0-6)
				Laboratory ID	480-200248-6	480-200248-9	480-200248-13	480-200248-14
				Sample Date	2022-07-29 01:07:00	2022-07-29 01:07:00	2022-07-29 02:07:00	2022-07-29 02:07:00
Metals (µg/kg)								
Arsenic	7440382	16,000	16,000		5,900	7,200	24,100	15,700
Lead	7439921	3,900,000	1,000,000		22,800	38,100	90,900	656,000
Cadmium	7440439	60,000	9,300		140 *J*	33 *UJ*	97 *J-*	34 *UJ*
Aluminum	7429905				9,360,000	10,500,000	8,210,000	6,930,000
Antimony	7440360				1,000 *J*	1,200 *J*	1,300 *J*	1,600 *J*
Barium	7440393	10,000,000	400,000		49,700	106,000	92,800	70,500
Beryllium	7440417	2,700,000	590,000		410	480	490	460
Calcium	7440702				17,300,000	7,570,000	1,830,000	1,480,000
Chromium	7440473				13,900	18,000	13,100	14,200
Cobalt	7440484				8,200	9,600	8,400	7,000
Copper	7440508	10,000,000	270,000		28,300	62,500	47,800	83,800
Iron	7439896				25,100,000	28,100,000	24,500,000	44,500,000
Magnesium	7439954				5,390,000	3,400,000	2,090,000	1,250,000
Manganese	7439965	10,000,000	10,000,000		528,000	805,000	478,000	415,000
Mercury	7439976	5,700	2,800		52	61	67	73
Nickel	7440020	10,000,000	310,000		20,600	21,100	18,900	14,600
Potassium	7440097				1,070,000	1,310,000	1,420,000	1,210,000
Selenium	7782492	6,800,000	1,500,000		390 *U*	950 *J*	1,200 *J*	2,300 *J*
Silver	7440224	6,800,000	1,500,000		200 *U*	220 *U*	210 *U*	230 *U*
Sodium	7440235				66,400 *J*	60,200 *J*	26,200 *J*	39,700 *J*
Thallium	7440280				300 *U*	330 *U*	310 *U*	340 *U*
Vanadium	7440622				18,500	25,200	15,400	18,800
Zinc	7440666	10,000,000	10,000,000		65,400	67,800	65,600	50,400
Polycyclic Aromatic Hydrocarbons (µg/kg)								
2-Methylnaphthalene	91576				35 *U*	180 *U*	36 *U*	37 *U*
Acenaphthene	83329	1,000,000	500,000		26 *U*	130 *U*	26 *U*	27 *U*
Acenaphthylene	208968	1,000,000	500,000		23 *U*	340 *J*	130 *J*	69 *J*
Anthracene	120127	1,000,000	500,000		43 *U*	220 *U*	110 *J*	63 *J*
Benzo[a]anthracene	56553	11,000	5,600		17 *U*	980	410	220
Benzo[a]pyrene	50328	1,100	1,000		26 *U*	590 *J*	440	230
Benzo[b]fluoranthene	205992	11,000	5,600		28 *U*	1,200	710	340
Benzo[g,h,i]perylene	191242	1,000,000	500,000		18 *U*	670 *J*	380	200
Benzo[k]fluoranthene	207089	110,000	56,000		23 *U*	490 *J*	220	120 *J*
Chrysene	218019	110,000	56,000		39 *U*	1,100	570	330
Dibenzo[a,h]anthracene	53703	1,100	560		31 *U*	170 *J*	96 *J*	54 *J*
Dibenzofuran	132649	1,000,000	350,000		21 *U*	100 *U*	34 *J*	22 *U*
Fluoranthene	206440	1,000,000	500,000		18 *U*	1,300	720	360

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS5	SS5	SS6	SS6
				Sample Identification	SS5 (12-24)	SS5 (6-12)	SS6 (0-2)	SS6 (0-6)
				Laboratory ID	480-200248-6	480-200248-9	480-200248-13	480-200248-14
				Sample Date	2022-07-29 01:07:00	2022-07-29 01:07:00	2022-07-29 02:07:00	2022-07-29 02:07:00
Fluorene	86737	1,000,000	500,000		21 *U*	100 *U*	21 *U*	22 *U*
Indeno[1,2,3-cd]pyrene	193395	11,000	5,600		22 *U*	580 *J*	340	180 *J*
Naphthalene	91203	1,000,000	500,000		23 *U*	110 *U*	45 *U*	30 *U*
Phenanthrene	85018	1,000,000	500,000		26 *U*	520 *J*	320	210
Pyrene	129000	1,000,000	500,000		21 *U*	2,200	780	410
Per- and Polyfluoroalkyl Substances (µg/kg)								
6:2 fluorotelomer sulfonate	27619972							
8:2 fluorotelomer sulfonate	39108344							
2-(N-ethyl-perfluorooctane sulfonamido) acetate								
Perfluorobutyric acid	375224							
2-(N-methyl-perfluorooctane sulfonamido) acetic acid								
Perfluorooctanoic acid	335671	600,000	500,000					
Perfluorooctane sulfonic acid	1763231	440,000	440,000					
Perfluorobutane Sulfonic Acid	375735							
Perfluorodecanoic Acid	335762							
Perfluorododecanoic Acid	307551							
Perfluorodecanesulfonic acid	335773							
Perfluoroheptanoic Acid	375859							
Perfluoroheptanesulfonic acid	375928							
Perfluorohexanoic Acid	307244							
Perfluorohexane Sulfonic Acid	355464							
Perfluorononanoic Acid	375951							
Perfluorooctane sulfonamide	754916							
Perfluoropentanoic Acid	2706903							
Perfluorotetradecanoic Acid	376067							
Perfluorotridecanoic Acid	72629948							
Perfluoroundecanoic Acid	2058948							
Semivolatile Organic Compounds (µg/kg)								
Atrazine	1912249				60 *U*	310 *U*	62 *U*	65 *U*
Carbazole	86748				21 *U*	100 *U*	35 *J*	22 *U*
2,4,5-Trichlorophenol	95954				47 *U*	240 *U*	48 *U*	50 *U*
2,4,6-Trichlorophenol	88062				35 *U*	180 *U*	36 *U*	37 *U*
2,4-Dichlorophenol	120832				18 *U*	94 *U*	19 *U*	20 *U*
2-Chlorophenol	95578				32 *U*	160 *U*	32 *U*	34 *U*
Pentachlorophenol	87865	55,000	6,700		170 *U*	890 *U*	180 *U*	190 *U*
1,1'-Biphenyl	92524				26 *U*	130 *U*	26 *U*	27 *U*
2,2'-oxybis(1-Chloropropane)	108601				35 *U*	180 *U*	36 *U*	37 *U*
2,4-Dimethylphenol	105679				42 *U*	210 *U*	43 *U*	45 *U*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS5	SS5	SS6	SS6
				Sample Identification	SS5 (12-24)	SS5 (6-12)	SS6 (0-2)	SS6 (0-6)
				Laboratory ID	480-200248-6	480-200248-9	480-200248-13	480-200248-14
				Sample Date	2022-07-29 01:07:00	2022-07-29 01:07:00	2022-07-29 02:07:00	2022-07-29 02:07:00
2,4-Dinitrophenol	51285				800 *U*	4,100 *U*	820 *U*	860 *U*
2,4-Dinitrotoluene	121142				36 *U*	180 *U*	37 *U*	38 *U*
2,6-Dinitrotoluene	606202				21 *U*	100 *U*	21 *U*	22 *U*
2-Chloronaphthalene	91587				29 *U*	150 *U*	29 *U*	31 *U*
2-Methylphenol	95487	1,000,000	500,000		21 *U*	100 *U*	21 *U*	22 *U*
2-Nitroaniline	88744				26 *U*	130 *U*	26 *U*	27 *U*
2-Nitrophenol	88755				49 *U*	250 *U*	50 *U*	53 *U*
3,3'-Dichlorobenzidine	91941				210 *U*	1,000 *U*	210 *U*	220 *U*
3-Nitroaniline	99092				48 *U*	240 *U*	49 *U*	51 *U*
4,6-Dinitro-2-methylphenol	534521				170 *U*	890 *U*	180 *U*	190 *U*
4-Bromophenyl-phenylether	101553				25 *U*	130 *U*	25 *U*	26 *U*
4-Chloro-3-methylphenol	59507				43 *U*	220 *U*	44 *U*	46 *U*
4-Chloroaniline	106478				43 *U*	220 *U*	44 *U*	46 *U*
4-Chlorophenyl-phenyl ether	7005723				22 *U*	110 *U*	22 *U*	23 *U*
4-Methylphenol	106445	1,000,000	500,000		21 *U*	100 *U*	21 *U*	22 *U*
4-Nitroaniline	100016				91 *U*	460 *U*	93 *U*	97 *U*
4-Nitrophenol	100027				120 *U*	620 *U*	120 *U*	130 *U*
Acetophenone	98862				24 *U*	120 *U*	24 *U*	25 *U*
Benzaldehyde	100527				140 *U*	700 *U*	140 *U*	150 *U*
Bis(2-chloroethyl)ether	111444				23 *U*	110 *U*	23 *U*	24 *U*
bis(2-Chloroethoxy)methane	111911				37 *U*	190 *U*	38 *U*	39 *U*
bis(2-Ethylhexyl)phthalate	117817				59 *U*	300 *U*	61 *U*	64 *U*
Benzyl n-butyl phthalate	85687				29 *U*	150 *U*	29 *U*	31 *U*
Caprolactam	105602				52 *U*	270 *U*	53 *U*	56 *U*
Diethyl phthalate	84662				23 *U*	110 *U*	23 *U*	24 *U*
Dimethyl phthalate	131113				21 *U*	100 *U*	21 *U*	22 *U*
Di-n-butyl phthalate	84742				30 *U*	150 *U*	30 *U*	32 *U*
Di-n-octylphthalate	117840				21 *U*	100 *U*	21 *U*	22 *U*
Hexachloroethane	67721				23 *U*	110 *U*	23 *U*	24 *U*
Hexachlorobenzene	118741	12,000	6,000		24 *U*	120 *U*	24 *U*	25 *U*
Hexachlorobutadiene	87683				26 *U*	130 *U*	26 *U*	27 *U*
Hexachlorocyclopentadiene	77474				24 *U*	120 *U*	24 *U*	25 *U*
Isophorone	78591				37 *U*	190 *U*	38 *U*	39 *U*
Nitrobenzene	98953				19 *U*	99 *U*	20 *U*	21 *U*
N-Nitrosodi-n-propylamine	621647				30 *U*	150 *U*	30 *U*	32 *U*
N-Nitrosodiphenylamine	86306				140 *U*	720 *U*	140 *U*	150 *U*
Phenol	108952	1,000,000	500,000		27 *U*	140 *U*	27 *U*	28 *U*
1,4-Dioxane	123911	250,000	130,000					

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS5	SS5	SS6	SS6
				Sample Identification	SS5 (12-24)	SS5 (6-12)	SS6 (0-2)	SS6 (0-6)
				Laboratory ID	480-200248-6	480-200248-9	480-200248-13	480-200248-14
				Sample Date	2022-07-29 01:07:00	2022-07-29 01:07:00	2022-07-29 02:07:00	2022-07-29 02:07:00
Volatiles (µg/kg)								
1,1,1,2-Tetrachloroethane	630206				0.45 *U*	0.52 *U*	0.58 *UJ*	0.68 *UJ*
1,1,1-Trichloroethane	71556	1,000,000	500,000		0.33 *U*	0.38 *U*	0.42 *UJ*	0.49 *UJ*
1,1,2,2-Tetrachloroethane	79345				0.73 *U*	0.85 *U*	0.94 *UJ*	1.10 *UJ*
1,1,2-Trichloroethane	79005				0.58 *U*	0.68 *U*	0.76 *UJ*	0.88 *UJ*
1,1-Dichloroethane	75343	480,000	240,000		0.55 *U*	0.64 *U*	0.71 *UJ*	0.83 *UJ*
1,1-Dichloroethene	75354	1,000,000	500,000		0.55 *U*	0.64 *U*	0.71 *UJ*	0.83 *UJ*
1,2,3-Trimethylbenzene	526738				0.92 *U*	1.10 *U*	1.20 *UJ*	1.40 *UJ*
1,2,4-Trimethylbenzene	95636	380,000	190,000		0.86 *U*	1.00 *U*	1.10 *UJ*	1.30 *UJ*
1,2,4-Trichlorobenzene	120821				0.27 *U*	0.32 *U*	0.35 *UJ*	0.41 *UJ*
1,2-Dichlorobenzene	95501	1,000,000	500,000		0.35 *U*	0.41 *U*	0.46 *UJ*	0.53 *UJ*
1,3-Dichlorobenzene	541731	560,000	280,000		0.23 *U*	0.27 *U*	0.30 *UJ*	0.35 *UJ*
1,4-Dichlorobenzene	106467	250,000	130,000		0.63 *U*	0.73 *U*	0.82 *UJ*	0.95 *UJ*
1,2-Dibromo-3-chloropropane	96128				2.20 *U*	2.60 *U*	2.90 *UJ*	3.40 *UJ*
1,2-Dibromoethane	106934				0.58 *U*	0.67 *U*	0.75 *UJ*	0.87 *UJ*
1,2-Dichloroethane	107062	60,000	30,000		0.23 *U*	0.26 *U*	0.29 *UJ*	0.34 *UJ*
1,2-Dichloropropane	78875				2.20 *U*	2.60 *U*	2.90 *UJ*	3.40 *UJ*
1,3,5-Trimethylbenzene	108678	380,000	190,000		0.29 *U*	0.34 *U*	0.38 *UJ*	0.44 *UJ*
2-Hexanone	591786				2.20 *U*	2.60 *U*	2.90 *UJ*	3.40 *UJ*
4-Methyl-2-pentanone	108101				1.50 *U*	1.70 *U*	1.90 *UJ*	2.20 *UJ*
Acetone	67641	1,000,000	500,000		9.00 *J*	4.40 *U*	6.80 *J*	5.70 *UJ*
Benzene	71432	89,000	44,000		0.22 *U*	0.26 *U*	0.29 *UJ*	0.33 *UJ*
Bromodichloromethane	75274				0.60 *U*	0.70 *U*	0.78 *UJ*	0.91 *UJ*
Bromomethane	74839				0.40 *U*	0.47 *U*	0.52 *UJ*	0.61 *UJ*
Bromoform	75252				2.20 *U*	2.60 *U*	2.90 *UJ*	3.40 *UJ*
Carbon disulfide	75150				2.20 *U*	2.60 *U*	2.90 *UJ*	3.40 *UJ*
Carbon Tetrachloride	56235	44,000	22,000		0.43 *U*	0.51 *U*	0.56 *UJ*	0.66 *UJ*
Chloroform	67663	700,000	350,000		0.28 *U*	0.32 *U*	0.36 *UJ*	0.42 *UJ*
cis-1,2-Dichloroethene	156592	1,000,000	500,000		0.57 *U*	0.67 *U*	0.75 *UJ*	0.87 *UJ*
cis-1,3-Dichloropropene	10061015				0.65 *U*	0.75 *U*	0.84 *UJ*	0.98 *UJ*
Chlorobenzene	108907	1,000,000	500,000		0.59 *U*	0.69 *U*	0.77 *UJ*	0.90 *UJ*
Chloroethane	75003				1.00 *U*	1.20 *U*	1.30 *UJ*	1.50 *UJ*
Chloromethane	74873				0.27 *U*	0.32 *U*	0.35 *UJ*	0.41 *UJ*
Cyclohexane	110827				0.63 *U*	0.73 *U*	0.82 *UJ*	0.95 *UJ*
Dibromochloromethane	124481				0.57 *U*	0.67 *U*	0.75 *UJ*	0.87 *UJ*
Dichlorodifluoromethane	75718				0.37 *U*	0.43 *U*	0.48 *UJ*	0.56 *UJ*
Ethylbenzene	100414	780,000	390,000		0.31 *U*	0.36 *U*	0.40 *UJ*	0.47 *UJ*
Isopropylbenzene	98828				0.68 *U*	0.79 *U*	0.88 *UJ*	1.00 *UJ*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS5	SS5	SS6	SS6
				Sample Identification	SS5 (12-24)	SS5 (6-12)	SS6 (0-2)	SS6 (0-6)
				Laboratory ID	480-200248-6	480-200248-9	480-200248-13	480-200248-14
				Sample Date	2022-07-29 01:07:00	2022-07-29 01:07:00	2022-07-29 02:07:00	2022-07-29 02:07:00
2-Butanone	78933	1,000,000	500,000		1.60 *U*	1.90 *U*	2.10 *UJ*	2.50 *UJ*
m,p-Xylene	179601231				0.75 *U*	0.88 *U*	0.98 *UJ*	1.10 *UJ*
Methyl Acetate	79209				2.7 *U*	3.2 *U*	3.5 *UJ*	4.1 *UJ*
Methylcyclohexane	108872				0.68 *U*	0.79 *U*	0.89 *UJ*	1.00 *UJ*
Methylene Chloride	75092	1,000,000	500,000		2.10 *J*	2.40 *U*	2.70 *UJ*	3.10 *UJ*
Methyl tert-butyl ether	1634044	1,000,000	500,000		0.44 *U*	0.51 *U*	0.57 *UJ*	0.67 *UJ*
n-Butylbenzene	104518	1,000,000	500,000		0.39 *U*	0.45 *U*	0.51 *UJ*	0.59 *UJ*
n-Propylbenzene	103651	1,000,000	500,000		0.36 *U*	0.42 *U*	0.47 *UJ*	0.54 *UJ*
o-Xylene	95476				0.59 *U*	0.68 *U*	0.76 *UJ*	0.89 *UJ*
sec-Butylbenzene	135988	1,000,000	500,000		0.39 *U*	0.45 *U*	0.51 *UJ*	0.59 *UJ*
Styrene	100425				0.22 *U*	0.26 *U*	0.29 *UJ*	0.34 *UJ*
tert-Butylbenzene	98066	1,000,000	500,000		0.47 *U*	0.54 *U*	0.61 *UJ*	0.71 *UJ*
Toluene	108883	1,000,000	500,000		0.34 *U*	0.39 *U*	0.44 *UJ*	0.51 *UJ*
Tetrachloroethane	127184	300,000	150,000		0.60 *U*	0.70 *U*	0.78 *UJ*	0.91 *UJ*
trans-1,2-Dichloroethene	156605	1,000,000	500,000		0.46 *U*	0.54 *U*	0.60 *UJ*	0.70 *UJ*
trans-1,3-Dichloropropene	10061026				2.00 *U*	2.30 *U*	2.60 *UJ*	3.00 *UJ*
Trichloroethene	79016	400,000	200,000		0.99 *U*	1.10 *U*	1.30 *UJ*	1.50 *UJ*
Trichlorotrifluoroethane	76131				1.00 *U*	1.20 *U*	1.30 *UJ*	1.60 *UJ*
Trichlorofluoromethane	75694				0.42 *U*	0.49 *U*	0.55 *UJ*	0.64 *UJ*
Vinyl Chloride	75014	27,000	13,000		0.55 *U*	0.64 *U*	0.71 *UJ*	0.83 *UJ*
Xylenes	1330207	1,000,000	500,000		0.75 *U*	0.88 *U*	0.98 *UJ*	1.10 *UJ*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS6	SS6	SS7	SS7
				Sample Identification	SS6 (12-24)	SS6 (6-12)	SS7 (0-2)	SS7 (0-6)
				Laboratory ID	480-200248-16	480-200248-15	480-200156-11	480-200156-8
				Sample Date	2022-07-29 02:07:00	2022-07-29 02:07:00	2022-07-27 04:07:00	2022-07-27 05:07:00
Metals (µg/kg)								
Arsenic	7440382	16,000	16,000		3,400	6,600	10,000	10,700
Lead	7439921	3,900,000	1,000,000		74,400	84,000	42,800	51,500
Cadmium	7440439	60,000	9,300		380	330	37 *U*	210 *J+*
Aluminum	7429905				5,410,000	6,350,000	8,790,000	8,700,000
Antimony	7440360				10,200 *J*	7,400 *J*	910 *J*	1,400 *J-*
Barium	7440393	10,000,000	400,000		22,600	38,000	95,700	77,800
Beryllium	7440417	2,700,000	590,000		230	330	490	400
Calcium	7440702				572,000	833,000	2,060,000	2,820,000
Chromium	7440473				24,500	16,300	11,600	11,900
Cobalt	7440484				7,300	7,200	7,900	8,700
Copper	7440508	10,000,000	270,000		36,800	67,900	28,300	38,900
Iron	7439896				137,000,000	95,800,000	18,100,000	22,800,000
Magnesium	7439954				825,000	981,000	2,380,000	2,760,000
Manganese	7439965	10,000,000	10,000,000		1,950,000	874,000	415,000	407,000
Mercury	7439976	5,700	2,800		16 *J*	29	64	81
Nickel	7440020	10,000,000	310,000		11,300 *J*	12,300	17,300	20,400
Potassium	7440097				554,000	847,000	1,480,000 *J+*	508,000
Selenium	7782492	6,800,000	1,500,000		1,100 *J*	1,100 *J*	760 *J*	450 *U*
Silver	7440224	6,800,000	1,500,000		210 *U*	210 *U*	240 *U*	220 *U*
Sodium	7440235				56,400 *J*	50,900 *J*	48,500 *U*	33,300 *J*
Thallium	7440280				310 *U*	320 *U*	370 *U*	340 *U*
Vanadium	7440622				40,300	27,700	14,700	14,600
Zinc	7440666	10,000,000	10,000,000		41,400	43,300	61,000	69,500
Polycyclic Aromatic Hydrocarbons (µg/kg)								
2-Methylnaphthalene	91576				35 *U*	35 *U*	39 *U*	36 *U*
Acenaphthene	83329	1,000,000	500,000		26 *U*	26 *U*	29 *U*	27 *U*
Acenaphthylene	208968	1,000,000	500,000		23 *U*	23 *U*	71 *J*	79 *J*
Anthracene	120127	1,000,000	500,000		43 *U*	44 *U*	49 *U*	48 *J*
Benzo[a]anthracene	56553	11,000	5,600		18 *U*	56 *J*	180 *J*	280
Benzo[a]pyrene	50328	1,100	1,000		26 *U*	45 *J*	190 *J*	240
Benzo[b]fluoranthene	205992	11,000	5,600		52 *J*	78 *J*	320	450
Benzo[g,h,i]perylene	191242	1,000,000	500,000		19 *U*	34 *J*	150 *J*	210
Benzo[k]fluoranthene	207089	110,000	56,000		23 *U*	38 *J*	130 *J*	170 *J*
Chrysene	218019	110,000	56,000		39 *U*	66 *J*	250	350
Dibenzo[a,h]anthracene	53703	1,100	560		31 *U*	31 *U*	51 *J*	71 *J*
Dibenzofuran	132649	1,000,000	350,000		21 *U*	21 *U*	23 *U*	26 *J*
Fluoranthene	206440	1,000,000	500,000		19 *U*	120 *J*	290	500

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS6	SS6	SS7	SS7
				Sample Identification	SS6 (12-24)	SS6 (6-12)	SS7 (0-2)	SS7 (0-6)
				Laboratory ID	480-200248-16	480-200248-15	480-200156-11	480-200156-8
				Sample Date	2022-07-29 02:07:00	2022-07-29 02:07:00	2022-07-27 04:07:00	2022-07-27 05:07:00
Fluorene	86737	1,000,000	500,000		21 *U*	21 *U*	23 *U*	21 *U*
Indeno[1,2,3-cd]pyrene	193395	11,000	5,600		22 *U*	27 *J*	140 *J*	210
Naphthalene	91203	1,000,000	500,000		23 *U*	23 *U*	26 *U*	34 *U*
Phenanthrene	85018	1,000,000	500,000		26 *U*	56 *J*	120 *J*	160 *J*
Pyrene	129000	1,000,000	500,000		21 *U*	96 *J*	250	410
Per- and Polyfluoroalkyl Substances (µg/kg)								
6:2 fluorotelomer sulfonate	27619972						0.064 *UJ*	0.060 *UJ*
8:2 fluorotelomer sulfonate	39108344						0.042 *UJ*	0.039 *UJ*
2-(N-ethyl-perfluorooctane sulfonamido) acetate							0.094 *UJ*	0.087 *UJ*
Perfluorobutyric acid	375224						0.370 *UJ*	0.350 *UJ*
2-(N-methyl-perfluorooctane sulfonamido) acetic acid							0.120 *UJ*	0.120 *UJ*
Perfluorooctanoic acid	335671	600,000	500,000				0.065 *UJ*	0.092 *J*
Perfluorooctane sulfonic acid	1763231	440,000	440,000				0.120 *UJ*	0.120 *NJ*
Perfluorobutane Sulfonic Acid	375735						0.037 *UJ*	0.035 *UJ*
Perfluorodecanoic Acid	335762						0.039 *NJ*	0.043 *J*
Perfluorododecanoic Acid	307551						0.028 *UJ*	0.026 *J*
Perfluorodecanesulfonic acid	335773						0.036 *J*	0.021 *J*
Perfluoroheptanoic Acid	375859						0.044 *UJ*	0.053 *J*
Perfluoroheptanesulfonic acid	375928						0.068 *J*	0.075 *J*
Perfluorohexanoic Acid	307244						0.130 *NJ*	0.150 *NJ*
Perfluorohexane Sulfonic Acid	355464						0.046 *UJ*	0.043 *UJ*
Perfluorononanoic Acid	375951						0.063 *J*	0.078 *J*
Perfluorooctane sulfonamide	754916						0.038 *UJ*	0.036 *UJ*
Perfluoropentanoic Acid	2706903						0.062 *UJ*	0.058 *UJ*
Perfluorotetradecanoic Acid	376067						0.029 *UJ*	0.027 *UJ*
Perfluorotridecanoic Acid	72629948						0.028 *UJ*	0.026 *J*
Perfluoroundecanoic Acid	2058948						0.042 *J*	0.051 *J*
Semivolatile Organic Compounds (µg/kg)								
Atrazine	1912249				61 *U*	61 *U*	69 *U*	63 *U*
Carbazole	86748				21 *U*	21 *U*	23 *U*	21 *U*
2,4,5-Trichlorophenol	95954				48 *U*	48 *U*	53 *U*	49 *U*
2,4,6-Trichlorophenol	88062				35 *U*	35 *U*	39 *U*	36 *U*
2,4-Dichlorophenol	120832				19 *U*	19 *U*	21 *U*	19 *U*
2-Chlorophenol	95578				32 *U*	32 *U*	36 *U*	33 *U*
Pentachlorophenol	87865	55,000	6,700		180 *U*	180 *U*	200 *U*	180 *U*
1,1'-Biphenyl	92524				26 *U*	26 *U*	29 *U*	27 *U*
2,2'-oxybis(1-Chloropropane)	108601				35 *U*	35 *U*	39 *U*	36 *U*
2,4-Dimethylphenol	105679				42 *U*	42 *U*	48 *U*	44 *U*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS6	SS6	SS7	SS7
				Sample Identification	SS6 (12-24)	SS6 (6-12)	SS7 (0-2)	SS7 (0-6)
				Laboratory ID	480-200248-16	480-200248-15	480-200156-11	480-200156-8
				Sample Date	2022-07-29 02:07:00	2022-07-29 02:07:00	2022-07-27 04:07:00	2022-07-27 05:07:00
2,4-Dinitrophenol	51285				810 *U*	810 *U*	910 *U*	840 *U*
2,4-Dinitrotoluene	121142				36 *U*	36 *U*	41 *U*	38 *U*
2,6-Dinitrotoluene	606202				21 *U*	21 *U*	23 *U*	21 *U*
2-Chloronaphthalene	91587				29 *U*	29 *U*	33 *U*	30 *U*
2-Methylphenol	95487	1,000,000	500,000		21 *U*	21 *U*	23 *U*	21 *U*
2-Nitroaniline	88744				26 *U*	26 *U*	29 *U*	27 *U*
2-Nitrophenol	88755				50 *U*	50 *U*	56 *U*	52 *U*
3,3'-Dichlorobenzidine	91941				210 *U*	210 *U*	230 *U*	210 *U*
3-Nitroaniline	99092				49 *U*	49 *U*	55 *U*	50 *U*
4,6-Dinitro-2-methylphenol	534521				180 *U*	180 *U*	200 *U*	180 *U*
4-Bromophenyl-phenylether	101553				25 *U*	25 *U*	28 *U*	26 *U*
4-Chloro-3-methylphenol	59507				43 *U*	44 *U*	49 *U*	45 *U*
4-Chloroaniline	106478				43 *U*	44 *U*	49 *U*	45 *U*
4-Chlorophenyl-phenyl ether	7005723				22 *U*	22 *U*	24 *U*	23 *U*
4-Methylphenol	106445	1,000,000	500,000		21 *U*	21 *U*	23 *U*	21 *U*
4-Nitroaniline	100016				92 *U*	92 *U*	100 *U*	96 *U*
4-Nitrophenol	100027				120 *U*	120 *U*	140 *U*	130 *U*
Acetophenone	98862				24 *U*	24 *U*	27 *U*	25 *U*
Benzaldehyde	100527				140 *U*	140 *U*	160 *U*	140 *U*
Bis(2-chloroethyl)ether	111444				23 *U*	23 *U*	26 *U*	24 *U*
bis(2-Chloroethoxy)methane	111911				37 *U*	37 *U*	42 *U*	39 *U*
bis(2-Ethylhexyl)phthalate	117817				60 *U*	60 *U*	67 *U*	62 *U*
Benzyl n-butyl phthalate	85687				29 *U*	29 *U*	33 *U*	30 *U*
Caprolactam	105602				53 *U*	53 *U*	59 *U*	55 *U*
Diethyl phthalate	84662				23 *U*	23 *U*	26 *U*	24 *U*
Dimethyl phthalate	131113				21 *U*	21 *U*	23 *U*	21 *U*
Di-n-butyl phthalate	84742				30 *U*	30 *U*	34 *U*	31 *U*
Di-n-octylphthalate	117840				21 *U*	21 *U*	23 *U*	21 *U*
Hexachloroethane	67721				23 *U*	23 *U*	26 *U*	24 *U*
Hexachlorobenzene	118741	12,000	6,000		24 *U*	24 *U*	27 *U*	25 *U*
Hexachlorobutadiene	87683				26 *U*	26 *U*	29 *U*	27 *U*
Hexachlorocyclopentadiene	77474				24 *U*	24 *U*	27 *U*	25 *U*
Isophorone	78591				37 *U*	37 *U*	42 *U*	39 *U*
Nitrobenzene	98953				20 *U*	20 *U*	22 *U*	20 *U*
N-Nitrosodi-n-propylamine	621647				30 *U*	30 *U*	34 *U*	31 *U*
N-Nitrosodiphenylamine	86306				140 *U*	140 *U*	160 *U*	150 *U*
Phenol	108952	1,000,000	500,000		27 *U*	27 *U*	30 *U*	28 *U*
1,4-Dioxane	123911	250,000	130,000				64 *U*	59 *U*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS6	SS6	SS7	SS7
				Sample Identification	SS6 (12-24)	SS6 (6-12)	SS7 (0-2)	SS7 (0-6)
				Laboratory ID	480-200248-16	480-200248-15	480-200156-11	480-200156-8
				Sample Date	2022-07-29 02:07:00	2022-07-29 02:07:00	2022-07-27 04:07:00	2022-07-27 05:07:00
Volatiles (µg/kg)								
1,1,1,2-Tetrachloroethane	630206				0.49 *UJ*	0.51 *UJ*	0.86 *U*	0.59 *UJ*
1,1,1-Trichloroethane	71556	1,000,000	500,000		0.35 *UJ*	0.37 *UJ*	0.62 *U*	0.43 *UJ*
1,1,2,2-Tetrachloroethane	79345				0.79 *UJ*	0.83 *UJ*	1.40 *UJ*	0.95 *UJ*
1,1,2-Trichloroethane	79005				0.63 *UJ*	0.66 *UJ*	1.10 *U*	0.76 *UJ*
1,1-Dichloroethane	75343	480,000	240,000		0.59 *UJ*	0.62 *UJ*	1.00 *U*	0.72 *UJ*
1,1-Dichloroethene	75354	1,000,000	500,000		0.59 *UJ*	0.62 *UJ*	1.00 *U*	0.72 *UJ*
1,2,3-Trimethylbenzene	526738				0.99 *UJ*	1.00 *UJ*	1.70 *U*	1.20 *UJ*
1,2,4-Trimethylbenzene	95636	380,000	190,000		0.93 *UJ*	0.98 *UJ*	1.60 *UJ*	1.10 *UJ*
1,2,4-Trichlorobenzene	120821				0.30 *UJ*	0.31 *UJ*	0.52 *UJ*	0.36 *UJ*
1,2-Dichlorobenzene	95501	1,000,000	500,000		0.38 *UJ*	0.40 *UJ*	0.67 *UJ*	0.46 *UJ*
1,3-Dichlorobenzene	541731	560,000	280,000		0.25 *UJ*	0.26 *UJ*	0.44 *UJ*	0.30 *UJ*
1,4-Dichlorobenzene	106467	250,000	130,000		0.68 *UJ*	0.71 *UJ*	1.20 *UJ*	0.82 *UJ*
1,2-Dibromo-3-chloropropane	96128				2.40 *UJ*	2.50 *UJ*	4.30 *UJ*	2.90 *UJ*
1,2-Dibromoethane	106934				0.62 *UJ*	0.65 *UJ*	1.10 *U*	0.75 *UJ*
1,2-Dichloroethane	107062	60,000	30,000		0.24 *UJ*	0.26 *UJ*	0.43 *U*	0.29 *UJ*
1,2-Dichloropropane	78875				2.40 *UJ*	2.50 *UJ*	4.30 *U*	2.90 *UJ*
1,3,5-Trimethylbenzene	108678	380,000	190,000		0.31 *UJ*	0.33 *UJ*	0.55 *UJ*	0.38 *UJ*
2-Hexanone	591786				2.40 *UJ*	2.50 *UJ*	4.30 *U*	2.90 *UJ*
4-Methyl-2-pentanone	108101				1.60 *UJ*	1.70 *UJ*	2.80 *U*	1.90 *UJ*
Acetone	67641	1,000,000	500,000		23 *J*	7.70 *J*	7.20 *U*	4.90 *UJ*
Benzene	71432	89,000	44,000		0.26 *J*	0.25 *UJ*	0.42 *U*	0.29 *UJ*
Bromodichloromethane	75274				0.65 *UJ*	0.68 *UJ*	1.10 *U*	0.79 *UJ*
Bromomethane	74839				0.44 *UJ*	0.46 *UJ*	0.77 *U*	0.53 *UJ*
Bromoform	75252				2.40 *UJ*	2.50 *UJ*	4.30 *U*	2.90 *UJ*
Carbon disulfide	75150				2.40 *UJ*	2.50 *UJ*	4.30 *U*	2.90 *UJ*
Carbon Tetrachloride	56235	44,000	22,000		0.47 *UJ*	0.49 *UJ*	0.83 *U*	0.57 *UJ*
Chloroform	67663	700,000	350,000		0.30 *UJ*	0.31 *UJ*	0.53 *U*	0.36 *UJ*
cis-1,2-Dichloroethene	156592	1,000,000	500,000		0.62 *UJ*	0.65 *UJ*	1.10 *U*	0.75 *UJ*
cis-1,3-Dichloropropene	10061015				0.70 *UJ*	0.73 *UJ*	1.20 *U*	0.84 *UJ*
Chlorobenzene	108907	1,000,000	500,000		0.64 *UJ*	0.67 *UJ*	1.10 *U*	0.77 *UJ*
Chloroethane	75003				1.10 *UJ*	1.20 *UJ*	1.90 *U*	1.30 *UJ*
Chloromethane	74873				0.29 *UJ*	0.31 *UJ*	0.52 *U*	0.35 *UJ*
Cyclohexane	110827				0.68 *UJ*	0.71 *UJ*	1.20 *U*	0.82 *UJ*
Dibromochloromethane	124481				0.62 *UJ*	0.65 *UJ*	1.10 *U*	0.75 *UJ*
Dichlorodifluoromethane	75718				0.40 *UJ*	0.42 *UJ*	0.71 *U*	0.48 *UJ*
Ethylbenzene	100414	780,000	390,000		0.33 *UJ*	0.35 *UJ*	0.59 *U*	0.40 *UJ*
Isopropylbenzene	98828				0.73 *UJ*	0.77 *UJ*	1.30 *UJ*	0.88 *UJ*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS6	SS6	SS7	SS7
				Sample Identification	SS6 (12-24)	SS6 (6-12)	SS7 (0-2)	SS7 (0-6)
				Laboratory ID	480-200248-16	480-200248-15	480-200156-11	480-200156-8
				Sample Date	2022-07-29 02:07:00	2022-07-29 02:07:00	2022-07-27 04:07:00	2022-07-27 05:07:00
2-Butanone	78933	1,000,000	500,000		5.50 *J*	2.90 *J*	3.10 *U*	2.10 *UJ*
m,p-Xylene	179601231				0.82 *UJ*	0.86 *UJ*	1.40 *U*	0.99 *UJ*
Methyl Acetate	79209				2.9 *UJ*	3.1 *UJ*	5.2 *U*	3.5 *UJ*
Methylcyclohexane	108872				0.74 *UJ*	0.77 *UJ*	1.30 *U*	0.89 *UJ*
Methylene Chloride	75092	1,000,000	500,000		2.20 *UJ*	12.00 *J*	3.90 *U*	2.70 *UJ*
Methyl tert-butyl ether	1634044	1,000,000	500,000		0.48 *UJ*	0.50 *UJ*	0.84 *U*	0.58 *UJ*
n-Butylbenzene	104518	1,000,000	500,000		0.42 *UJ*	0.44 *UJ*	0.75 *UJ*	0.51 *UJ*
n-Propylbenzene	103651	1,000,000	500,000		0.39 *UJ*	0.41 *UJ*	0.69 *UJ*	0.47 *UJ*
o-Xylene	95476				0.63 *UJ*	0.66 *UJ*	1.10 *U*	0.77 *UJ*
sec-Butylbenzene	135988	1,000,000	500,000		0.42 *UJ*	0.44 *UJ*	0.75 *UJ*	0.51 *UJ*
Styrene	100425				0.24 *UJ*	0.25 *UJ*	0.43 *U*	0.29 *UJ*
tert-Butylbenzene	98066	1,000,000	500,000		0.50 *UJ*	0.53 *UJ*	0.89 *UJ*	0.61 *UJ*
Toluene	108883	1,000,000	500,000		0.37 *UJ*	0.38 *UJ*	0.65 *U*	0.44 *UJ*
Tetrachloroethane	127184	300,000	150,000		0.65 *UJ*	0.68 *UJ*	1.10 *U*	0.79 *UJ*
trans-1,2-Dichloroethene	156605	1,000,000	500,000		0.50 *UJ*	0.53 *UJ*	0.88 *U*	0.61 *UJ*
trans-1,3-Dichloropropene	10061026				2.10 *UJ*	2.20 *UJ*	3.80 *U*	2.60 *UJ*
Trichloroethene	79016	400,000	200,000		1.10 *UJ*	1.10 *UJ*	1.90 *U*	1.30 *UJ*
Trichlorotrifluoroethane	76131				1.10 *UJ*	1.20 *UJ*	2.00 *U*	1.30 *UJ*
Trichlorofluoromethane	75694				0.46 *UJ*	0.48 *UJ*	0.81 *U*	0.55 *UJ*
Vinyl Chloride	75014	27,000	13,000		0.59 *UJ*	0.62 *UJ*	1.00 *U*	0.72 *UJ*
Xylenes	1330207	1,000,000	500,000		0.82 *UJ*	0.86 *UJ*	1.40 *U*	0.99 *UJ*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS7		SS7	
				Sample Identification	SS7 (12-24)		SS7 (6-12)	
				Laboratory ID	480-200156-10		480-200156-9	
				Sample Date	2022-07-27 05:07:00		2022-07-27 05:07:00	
Metals (µg/kg)								
Arsenic	7440382	16,000	16,000		16,300		14,600	
Lead	7439921	3,900,000	1,000,000		299,000		140,000	
Cadmium	7440439	60,000	9,300		750		510	
Aluminum	7429905				8,610,000		8,520,000	
Antimony	7440360				1,000	*J-*	1,200	*J-*
Barium	7440393	10,000,000	400,000		88,200		107,000	
Beryllium	7440417	2,700,000	590,000		480		440	
Calcium	7440702				13,700,000		13,100,000	
Chromium	7440473				13,100		13,700	
Cobalt	7440484				8,700		9,200	
Copper	7440508	10,000,000	270,000		40,800		45,700	
Iron	7439896				21,600,000		23,900,000	
Magnesium	7439954				3,940,000		6,700,000	
Manganese	7439965	10,000,000	10,000,000		436,000		531,000	
Mercury	7439976	5,700	2,800		260		140	
Nickel	7440020	10,000,000	310,000		20,200		20,400	
Potassium	7440097				1,040,000		521,000	
Selenium	7782492	6,800,000	1,500,000		740	*U*	410	*U*
Silver	7440224	6,800,000	1,500,000		210	*U*	210	*U*
Sodium	7440235				87,500	*J*	50,700	*J*
Thallium	7440280				320	*U*	310	*U*
Vanadium	7440622				19,700		16,600	
Zinc	7440666	10,000,000	10,000,000		104,000		86,500	
Polycyclic Aromatic Hydrocarbons (µg/kg)								
2-Methylnaphthalene	91576				360	*U*	170	*U*
Acenaphthene	83329	1,000,000	500,000		260	*U*	130	*U*
Acenaphthylene	208968	1,000,000	500,000		420	*J*	120	*J*
Anthracene	120127	1,000,000	500,000		800	*J*	220	*U*
Benzo[a]anthracene	56553	11,000	5,600		1,900		430	*J*
Benzo[a]pyrene	50328	1,100	1,000		1,900		490	*J*
Benzo[b]fluoranthene	205992	11,000	5,600		2,600		730	*J*
Benzo[g,h,i]perylene	191242	1,000,000	500,000		1,400	*J*	410	*J*
Benzo[k]fluoranthene	207089	110,000	56,000		1,100	*J*	250	*J*
Chrysene	218019	110,000	56,000		2,000		480	*J*
Dibenzo[a,h]anthracene	53703	1,100	560		430	*J*	160	*J*
Dibenzofuran	132649	1,000,000	350,000		210	*U*	100	*U*
Fluoranthene	206440	1,000,000	500,000		4,400		730	*J*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS7	SS7
				Sample Identification	SS7 (12-24)	SS7 (6-12)
				Laboratory ID	480-200156-10	480-200156-9
				Sample Date	2022-07-27 05:07:00	2022-07-27 05:07:00
Fluorene	86737	1,000,000	500,000		290 *J*	100 *U*
Indeno[1,2,3-cd]pyrene	193395	11,000	5,600		1,500 *J*	420 *J*
Naphthalene	91203	1,000,000	500,000		230 *U*	110 *U*
Phenanthrene	85018	1,000,000	500,000		2,900	290 *J*
Pyrene	129000	1,000,000	500,000		3,400	630 *J*
Per- and Polyfluoroalkyl Substances (µg/kg)						
6:2 fluorotelomer sulfonate	27619972				0.061 *UJ*	0.058 *UJ*
8:2 fluorotelomer sulfonate	39108344				0.039 *UJ*	0.038 *UJ*
2-(N-ethyl-perfluorooctane sulfonamido) acetate					0.088 *UJ*	0.085 *UJ*
Perfluorobutyric acid	375224				0.350 *UJ*	0.340 *UJ*
2-(N-methyl-perfluorooctane sulfonamido) acetic acid					0.120 *UJ*	0.110 *UJ*
Perfluorooctanoic acid	335671	600,000	500,000		0.062 *UJ*	0.060 *J*
Perfluorooctane sulfonic acid	1763231	440,000	440,000		0.230 *J*	0.120 *J*
Perfluorobutane Sulfonic Acid	375735				0.035 *UJ*	0.034 *UJ*
Perfluorodecanoic Acid	335762				0.030 *UJ*	0.029 *UJ*
Perfluorododecanoic Acid	307551				0.027 *UJ*	0.026 *UJ*
Perfluorodecanesulfonic acid	335773				0.072 *J*	0.022 *J*
Perfluoroheptanoic Acid	375859				0.042 *UJ*	0.040 *UJ*
Perfluoroheptanesulfonic acid	375928				0.024 *UJ*	0.024 *UJ*
Perfluorohexanoic Acid	307244				0.049 *UJ*	0.047 *UJ*
Perfluorohexane Sulfonic Acid	355464				0.044 *UJ*	0.042 *UJ*
Perfluorononanoic Acid	375951				0.036 *UJ*	0.035 *UJ*
Perfluorooctane sulfonamide	754916				0.036 *UJ*	0.035 *UJ*
Perfluoropentanoic Acid	2706903				0.059 *UJ*	0.056 *UJ*
Perfluorotetradecanoic Acid	376067				0.028 *UJ*	0.027 *UJ*
Perfluorotridecanoic Acid	72629948				0.027 *UJ*	0.026 *UJ*
Perfluoroundecanoic Acid	2058948				0.029 *UJ*	0.028 *UJ*
Semivolatile Organic Compounds (µg/kg)						
Atrazine	1912249				620 *U*	300 *U*
Carbazole	86748				370 *J*	100 *U*
2,4,5-Trichlorophenol	95954				480 *U*	240 *U*
2,4,6-Trichlorophenol	88062				360 *U*	170 *U*
2,4-Dichlorophenol	120832				190 *U*	92 *U*
2-Chlorophenol	95578				330 *U*	160 *U*
Pentachlorophenol	87865	55,000	6,700		1,800 *U*	870 *U*
1,1'-Biphenyl	92524				260 *U*	130 *U*
2,2'-oxybis(1-Chloropropane)	108601				360 *U*	170 *U*
2,4-Dimethylphenol	105679				430 *U*	210 *U*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS7	SS7
				Sample Identification	SS7 (12-24)	SS7 (6-12)
				Laboratory ID	480-200156-10	480-200156-9
				Sample Date	2022-07-27 05:07:00	2022-07-27 05:07:00
2,4-Dinitrophenol	51285				8,200 *U*	4,000 *U*
2,4-Dinitrotoluene	121142				370 *U*	180 *U*
2,6-Dinitrotoluene	606202				210 *U*	100 *U*
2-Chloronaphthalene	91587				290 *U*	140 *U*
2-Methylphenol	95487	1,000,000	500,000		210 *U*	100 *U*
2-Nitroaniline	88744				260 *U*	130 *U*
2-Nitrophenol	88755				500 *U*	250 *U*
3,3'-Dichlorobenzidine	91941				2,100 *U*	1,000 *U*
3-Nitroaniline	99092				490 *U*	240 *U*
4,6-Dinitro-2-methylphenol	534521				1,800 *U*	870 *U*
4-Bromophenyl-phenylether	101553				250 *U*	120 *U*
4-Chloro-3-methylphenol	59507				440 *U*	220 *U*
4-Chloroaniline	106478				440 *U*	220 *U*
4-Chlorophenyl-phenyl ether	7005723				220 *U*	110 *U*
4-Methylphenol	106445	1,000,000	500,000		210 *U*	100 *U*
4-Nitroaniline	100016				930 *U*	460 *U*
4-Nitrophenol	100027				1,200 *U*	610 *U*
Acetophenone	98862				240 *U*	120 *U*
Benzaldehyde	100527				1,400 *U*	690 *U*
Bis(2-chloroethyl)ether	111444				230 *U*	110 *U*
bis(2-Chloroethoxy)methane	111911				380 *U*	180 *U*
bis(2-Ethylhexyl)phthalate	117817				610 *U*	300 *U*
Benzyl n-butyl phthalate	85687				290 *U*	140 *U*
Caprolactam	105602				540 *U*	260 *U*
Diethyl phthalate	84662				230 *U*	110 *U*
Dimethyl phthalate	131113				210 *U*	100 *U*
Di-n-butyl phthalate	84742				300 *U*	150 *U*
Di-n-octylphthalate	117840				210 *U*	100 *U*
Hexachloroethane	67721				230 *U*	110 *U*
Hexachlorobenzene	118741	12,000	6,000		240 *U*	120 *U*
Hexachlorobutadiene	87683				260 *U*	130 *U*
Hexachlorocyclopentadiene	77474				240 *U*	120 *U*
Isophorone	78591				380 *U*	180 *U*
Nitrobenzene	98953				200 *U*	97 *U*
N-Nitrosodi-n-propylamine	621647				300 *U*	150 *U*
N-Nitrosodiphenylamine	86306				1,400 *U*	710 *U*
Phenol	108952	1,000,000	500,000		270 *U*	130 *U*
1,4-Dioxane	123911	250,000	130,000		580 *U*	280 *U*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS7	SS7
				Sample Identification	SS7 (12-24)	SS7 (6-12)
				Laboratory ID	480-200156-10	480-200156-9
				Sample Date	2022-07-27 05:07:00	2022-07-27 05:07:00
Volatiles (µg/kg)						
1,1,1,2-Tetrachloroethane	630206				0.55 *UJ*	0.55 *UJ*
1,1,1-Trichloroethane	71556	1,000,000	500,000		0.40 *UJ*	0.40 *UJ*
1,1,2,2-Tetrachloroethane	79345				*R*	0.89 *UJ*
1,1,2-Trichloroethane	79005				0.72 *UJ*	0.71 *UJ*
1,1-Dichloroethane	75343	480,000	240,000		0.67 *UJ*	0.67 *UJ*
1,1-Dichloroethene	75354	1,000,000	500,000		0.67 *UJ*	0.67 *UJ*
1,2,3-Trimethylbenzene	526738				1.10 *UJ*	1.10 *UJ*
1,2,4-Trimethylbenzene	95636	380,000	190,000		*R*	1.10 *UJ*
1,2,4-Trichlorobenzene	120821				*R*	0.33 *UJ*
1,2-Dichlorobenzene	95501	1,000,000	500,000		*R*	0.43 *UJ*
1,3-Dichlorobenzene	541731	560,000	280,000		*R*	0.28 *UJ*
1,4-Dichlorobenzene	106467	250,000	130,000		*R*	0.77 *UJ*
1,2-Dibromo-3-chloropropane	96128				*R*	2.70 *UJ*
1,2-Dibromoethane	106934				0.71 *UJ*	0.70 *UJ*
1,2-Dichloroethane	107062	60,000	30,000		0.28 *UJ*	0.28 *UJ*
1,2-Dichloropropane	78875				2.80 *UJ*	2.70 *UJ*
1,3,5-Trimethylbenzene	108678	380,000	190,000		*R*	0.35 *UJ*
2-Hexanone	591786				2.80 *UJ*	2.70 *UJ*
4-Methyl-2-pentanone	108101				1.80 *UJ*	1.80 *UJ*
Acetone	67641	1,000,000	500,000		7.90 *J*	4.60 *UJ*
Benzene	71432	89,000	44,000		0.27 *UJ*	0.27 *UJ*
Bromodichloromethane	75274				0.74 *UJ*	0.73 *UJ*
Bromomethane	74839				0.50 *UJ*	0.49 *UJ*
Bromoform	75252				2.80 *UJ*	2.70 *UJ*
Carbon disulfide	75150				2.80 *UJ*	2.70 *UJ*
Carbon Tetrachloride	56235	44,000	22,000		0.53 *UJ*	0.53 *UJ*
Chloroform	67663	700,000	350,000		0.34 *UJ*	0.34 *UJ*
cis-1,2-Dichloroethene	156592	1,000,000	500,000		0.70 *UJ*	0.70 *UJ*
cis-1,3-Dichloropropene	10061015				0.79 *UJ*	0.79 *UJ*
Chlorobenzene	108907	1,000,000	500,000		0.73 *UJ*	0.72 *UJ*
Chloroethane	75003				1.20 *UJ*	1.20 *UJ*
Chloromethane	74873				0.33 *UJ*	0.33 *UJ*
Cyclohexane	110827				0.77 *UJ*	0.77 *UJ*
Dibromochloromethane	124481				0.70 *UJ*	0.70 *UJ*
Dichlorodifluoromethane	75718				0.45 *UJ*	0.45 *UJ*
Ethylbenzene	100414	780,000	390,000		0.38 *UJ*	0.38 *UJ*
Isopropylbenzene	98828				*R*	0.83 *UJ*

Table 2-1. Corning Refractories Plant P-Site, Validated Analytical Results—Soil

Analyte	CAS Number	NYSDEC SCOS 2006 Industrial Soil	NYSDEC SCOS 2006 Commercial Soil	Sample Location	SS7	SS7
				Sample Identification	SS7 (12-24)	SS7 (6-12)
				Laboratory ID	480-200156-10	480-200156-9
				Sample Date	2022-07-27 05:07:00	2022-07-27 05:07:00
2-Butanone	78933	1,000,000	500,000		2.00 *UJ*	2.00 *UJ*
m,p-Xylene	179601231				0.92 *UJ*	0.92 *UJ*
Methyl Acetate	79209				4.7 *J*	3.3 *UJ*
Methylcyclohexane	108872				0.84 *UJ*	0.83 *UJ*
Methylene Chloride	75092	1,000,000	500,000		2.50 *UJ*	2.50 *UJ*
Methyl tert-butyl ether	1634044	1,000,000	500,000		0.54 *UJ*	0.54 *UJ*
n-Butylbenzene	104518	1,000,000	500,000		*R*	0.48 *UJ*
n-Propylbenzene	103651	1,000,000	500,000		*R*	0.44 *UJ*
o-Xylene	95476				0.72 *UJ*	0.72 *UJ*
sec-Butylbenzene	135988	1,000,000	500,000		*R*	0.48 *UJ*
Styrene	100425				0.28 *UJ*	0.27 *UJ*
tert-Butylbenzene	98066	1,000,000	500,000		*R*	0.57 *UJ*
Toluene	108883	1,000,000	500,000		0.42 *UJ*	0.41 *UJ*
Tetrachloroethane	127184	300,000	150,000		0.74 *UJ*	0.74 *UJ*
trans-1,2-Dichloroethene	156605	1,000,000	500,000		0.57 *UJ*	0.57 *UJ*
trans-1,3-Dichloropropene	10061026				2.40 *UJ*	2.40 *UJ*
Trichloroethene	79016	400,000	200,000		1.20 *UJ*	1.20 *UJ*
Trichlorotrifluoroethane	76131				1.30 *UJ*	1.20 *UJ*
Trichlorofluoromethane	75694				0.52 *UJ*	0.52 *UJ*
Vinyl Chloride	75014	27,000	13,000		0.67 *UJ*	0.67 *UJ*
Xylenes	1330207	1,000,000	500,000		0.92 *UJ*	0.92 *UJ*

Notes:

Underlined = Exceeds NYSDEC SCOS 2006 Industrial Soil

Dark gray shading = Exceeds NYSDEC SCOS 2006 Commercial Soil

CAS = Chemical Abstract Service

NYSDEC = New York State Department of Environmental Conservation

Qualifiers:

J = The associated numerical value is an estimated quantity.The associated numerical value is an estimated quantity.

J+ = The result is an estimated quantity, but the result may be biased high.

NJ = The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value is the estimated concentration in the sample.

R = Rejected. The data are unusable.

U = The material was analyzed for, but was not detected.

UJ = The material was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

Table 2-2. Corning Refractories Plant P-Site, Validated Analytical Results—Groundwater

Analyte	CAS Number	NYSDEC WQA 1998 Class GA	Sample Location	MW1	MW1	MW1	MW2	MW2	MW3	MW5	MW5
			Sample Identification	MW1-100522	MW1-100522	MW1-013123	MW2-013123	MW2-013123	MW3-013123	MW5-013123	MW5-100522
			Laboratory ID	480-202448-3	480-202448-5	480-205868-5	480-205868-1	480-205868-2	480-205868-3	480-205868-4	480-202448-4
			Sample Date	10/5/2022	10/5/2022	1/31/2023	1/31/2023	1/31/2023	1/31/2023	1/31/2023	10/5/2022
Dissolved Metals (µg/L)											
Aluminum	7429905			60 *U*	60 *U*	60 *U*	60 *U*	60 *U*	60 *U*	60 *U*	60 *U*
Antimony	7440360			6.8 *U*	6.8 *U*	6.8 *U*	6.8 *U*	6.8 *U*	6.8 *U*	6.8 *U*	6.8 *U*
Arsenic	7440382			5.6 *U*	5.6 *U*	5.6 *U*	5.6 *U*	5.6 *U*	5.6 *U*	5.6 *U*	5.6 *U*
Barium	7440393			88	87	150	98	97	140	87	130
Beryllium	7440417			0.3 *U*	0.3 *U*	0.3 *U*	0.3 *U*	0.3 *U*	0.3 *U*	0.3 *U*	0.3 *U*
Cadmium	7440439			0.5 *U*	0.5 *U*	0.5 *U*	0.5 *U*	0.5 *U*	0.5 *U*	0.5 *U*	0.5 *U*
Calcium	7440702			41,000	40,800	61,500	80,300	80,400	57,500	99,100	143,000
Chromium	7440473			1 *U*	1 *U*	1 *U*	1 *U*	1 *U*	1 *U*	1 *U*	1 *U*
Cobalt	7440484			0.63 *U*	0.63 *U*	0.63 *U*	0.63 *U*	0.63 *U*	0.63 *U*	0.63 *U*	1.1 *J*
Copper	7440508			1.7 *U*	2.1 *U*	1.6 *U*	1.6 *U*	1.6 *U*	1.6 *U*	1.9 *J*	3.6 *U*
Iron	7439896			19 *U*	19 *U*	19 *U*	19 *J*	19 *U*	19 *U*	46 *J*	390
Lead	7439921			3 *U*	3 *U*	3 *U*	3 *U*	3 *U*	3 *U*	5.4 *J*	3 *U*
Magnesium	7439954			7,000	7,200	9,500	15,600	15,500	11,200	13,400	14,400
Manganese	7439965			440	450	360	140	130	46	890	4,700
Mercury	7439976			0.043 *U*	0.043 *U*	0.043 *U*	0.043 *U*	0.043 *U*	0.043 *U*	0.043 *U*	0.043 *U*
Nickel	7440020			1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*	1.6 *J*	2.5 *J*
Potassium	7440097			3,000	3,100	4,200	3,500	3,400	3,700	5,400	5,500
Selenium	7782492			8.7 *U*	8.7 *U*	8.7 *U*	8.7 *U*	8.7 *U*	8.7 *U*	9.3 *J*	8.7 *U*
Silver	7440224			1.7 *U*	1.7 *U*	1.7 *U*	1.7 *U*	1.7 *U*	1.7 *U*	1.7 *U*	1.7 *U*
Sodium	7440235			124,000	123,000	139,000	52,000	52,000	84,900	35,500	54,900
Thallium	7440280			10 *U*	10 *U*	10 *U*	10 *U*	10 *U*	10 *U*	10 *U*	10 *U*
Vanadium	7440622			1.5 *U*	1.5 *U*	1.5 *U*	1.5 *U*	1.5 *U*	1.5 *U*	1.5 *U*	1.5 *U*
Zinc	7440666			1.5 *U*	1.6 *J*	2.5 *J*	1.5 *U*	4.9 *J*	1.5 *J*	2.9 *J*	6.5 *J*
Total Metals (µg/L)											
Aluminum	7429905			200	60 *U*	60 *U*	120 *J*	60 *U*	60 *U*	60 *U*	410
Antimony	7440360	3		6.8 *U*	6.8 *U*	6.8 *U*	6.8 *U*	6.8 *U*	6.8 *U*	6.8 *U*	6.8 *U*
Arsenic	7440382	25		5.6 *U*	5.6 *U*	5.6 *U*	5.6 *U*	5.6 *U*	5.6 *U*	5.6 *U*	5.6 *U*
Barium	7440393	1,000		110	97	140	96	96	140	84	150
Beryllium	7440417	3		0.3 *U*	0.3 *U*	0.3 *U*	0.3 *U*	0.3 *U*	0.3 *U*	0.3 *U*	0.3 *U*
Cadmium	7440439	5		0.5 *U*	0.5 *U*	0.5 *U*	0.5 *U*	0.5 *U*	0.5 *U*	0.5 *U*	0.5 *U*
Calcium	7440702			47,900	41,500	58,700	79,000	77,900	56,700	94,200	149,000
Chromium	7440473	50		1 *U*	1 *U*	1 *J*	1 *U*	1 *U*	1 *U*	1 *U*	1 *U*
Cobalt	7440484			0.63 *U*	0.63 *U*	0.63 *U*	0.63 *U*	0.63 *U*	0.63 *U*	0.63 *U*	1.2 *J*
Copper	7440508	200		1.6 *U*	1.6 *U*	1.6 *U*	1.6 *U*	1.6 *U*	1.6 *U*	1.9 *J*	8.7 *J*
Iron	7439896			210	19 *U*	19 *U*	46 *J*	45 *J*	19 *J*	47 *J*	770
Lead	7439921	25		3.1 *J*	3 *U*	3 *U*	3 *U*	4.2 *J*	3 *U*	4.2 *J*	4.6 *J*
Magnesium	7439954	35,000		8,100	7,100	9,500	15,900	15,700	11,400	13,300	14,800
Manganese	7439965			560	450	360	140	150	55	870	4,700
Mercury	7439976	0.7		0.043 *U*	0.043 *U*	0.043 *U*	0.043 *U*	0.043 *U*	0.043 *U*	0.043 *U*	0.043 *U*
Nickel	7440020	100		1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*	1.3 *J*	2.5 *J*
Potassium	7440097			3,500	3,300	4,100	3,600	3,600	3,800	5,400	6,100
Selenium	7782492	10		8.7 *U*	8.7 *U*	8.7 *U*	8.7 *U*	8.7 *U*	8.7 *U*	8.8 *J*	8.7 *U*
Silver	7440224	50		1.7 *U*	1.7 *U*	1.7 *U*	1.7 *U*	1.7 *U*	1.7 *U*	1.7 *U*	1.7 *U*
Sodium	7440235	20,000		136,000	131,000	140,000	53,000	52,700	87,000	36,000	53,100
Thallium	7440280	0.5		10 *U*	10 *U*	10 *U*	10 *U*	10 *U*	10 *U*	10 *U*	10 *U*
Vanadium	7440622			1.5 *U*	1.5 *U*	1.5 *U*	1.5 *U*	1.5 *U*	1.5 *U*	1.5 *U*	1.5 *U*
Zinc	7440666	2,000		1.6 *J*	1.5 *U*	2.3 *J*	1.5 *U*	1.5 *U*	1.5 *J*	2.7 *J*	11
Polycyclic Aromatic Hydrocarbons (µg/L)											
2-Methylnaphthalene	91576			0.63 *U*	0.63 *U*	0.63 *U*	0.63 *U*	0.6 *U*	0.63 *U*	0.63 *U*	0.71 *U*
Acenaphthene	83329			0.43 *U*	0.43 *U*	0.43 *U*	0.43 *U*	0.41 *U*	0.43 *U*	0.44 *J*	0.49 *U*
Acenaphthylene	208968			0.4 *U*	0.4 *U*	0.4 *U*	0.4 *U*	0.38 *U*	0.4 *U*	0.4 *U*	0.45 *U*
Anthracene	120127	50		0.29 *U*	0.29 *U*	0.29 *U*	0.29 *U*	0.28 *U*	0.29 *U*	0.29 *U*	0.33 *U*
Benzo[a]anthracene	56553	0.002		0.38 *U*	0.38 *U*	0.38 *U*	0.38 *U*	0.36 *U*	0.38 *U*	0.38 *U*	0.43 *U*
Benzo[a]pyrene	50328			0.49 *U*	0.49 *U*	0.49 *U*	0.49 *U*	0.47 *U*	0.49 *U*	0.49 *U*	0.56 *U*
Benzo[b]fluoranthene	205992	0.002		0.35 *U*	0.35 *U*	0.35 *U*	0.35 *U*	0.34 *U*	0.35 *U*	0.35 *U*	0.4 *U*

Table 2-2. Corning Refractories Plant P-Site, Validated Analytical Results—Groundwater

Analyte	CAS Number	NYSDEC WQA 1998 Class GA	Sample Location	MW1	MW1	MW1	MW2	MW2	MW3	MW5	MW5
			Sample Identification	MW1-100522	MW1-100522	MW1-013123	MW2-013123	MW2-013123	MW3-013123	MW5-013123	MW5-100522
			Laboratory ID	480-202448-3	480-202448-5	480-205868-5	480-205868-1	480-205868-2	480-205868-3	480-205868-4	480-202448-4
			Sample Date	10/5/2022	10/5/2022	1/31/2023	1/31/2023	1/31/2023	1/31/2023	1/31/2023	10/5/2022
Benzo[g,h,i]perylene	191242			0.36 *U*	0.36 *U*	0.36 *U*	0.36 *U*	0.35 *U*	0.36 *U*	0.36 *U*	0.42 *U*
Benzo[k]fluoranthene	207089	0.002		0.76 *U*	0.76 *U*	0.76 *U*	0.76 *U*	0.73 *U*	0.76 *U*	0.76 *U*	0.87 *U*
Chrysene	218019	0.002		0.34 *U*	0.34 *U*	0.34 *U*	0.34 *U*	0.33 *U*	0.34 *U*	0.34 *U*	0.39 *U*
Dibenzofuran	132649			0.53 *U*	0.53 *U*	0.53 *U*	0.53 *U*	0.51 *U*	0.53 *U*	0.53 *U*	0.61 *U*
Dibenzo[a,h]anthracene	53703			0.44 *U*	0.44 *U*	0.44 *U*	0.44 *U*	0.42 *U*	0.44 *U*	0.44 *U*	0.5 *U*
Fluoranthene	206440	50		0.42 *U*	0.42 *U*	0.42 *U*	0.42 *U*	0.4 *U*	0.42 *U*	0.42 *U*	0.48 *U*
Fluorene	86737	50		0.38 *U*	0.38 *U*	0.38 *U*	0.38 *U*	0.36 *U*	0.38 *U*	0.38 *U*	0.43 *U*
Indeno[1,2,3-cd]pyrene	193395	0.002		0.49 *U*	0.49 *U*	0.49 *U*	0.49 *U*	0.47 *U*	0.49 *U*	0.49 *U*	0.56 *U*
Naphthalene	91203	10		0.79 *U*	0.79 *U*	0.79 *U*	0.79 *U*	0.76 *U*	0.79 *U*	0.79 *U*	0.9 *U*
Phenanthrene	85018	50		0.46 *U*	0.46 *U*	0.46 *U*	0.46 *U*	0.44 *U*	0.46 *U*	0.46 *U*	0.52 *U*
Pyrene	129000	50		0.35 *U*	0.35 *U*	0.35 *U*	0.35 *U*	0.34 *U*	0.35 *U*	0.35 *U*	0.4 *U*
Per- and Polyfluoroalkyl Substances (µg/L)											
6:2 fluorotelomer sulfonate	27619972			0.0012 *U*	0.0012 *U*		0.0023 *U*	0.0023 *U*			
8:2 fluorotelomer sulfonate	39108344			0.00069 *U*	0.00074 *U*		0.0023 *U*	0.0024 *U*			
2-(N-ethyl-perfluorooctane sulfonamido) acetate				0.0014 *U*	0.0015 *U*		0.00063 *UJ*	0.00065 *U*			
Perfluorobutyric acid	375224			0.0012 *J*	0.0013 *J*		0.0018 *U*	0.0019 *U*			
2-(N-methyl-perfluorooctane sulfonamido) acetic acid				0.0017 *U*	0.0018 *U*		0.0011 *U*	0.0011 *U*			
Perfluorooctanoic acid	335671			0.00068 *J*	0.00073 *U*		0.0007 *J+*	0.0006 *U*			
Perfluorooctane sulfonic acid	1763231			0.0022	0.002		0.00045 *U*	0.00047 *U*			
Perfluorobutane Sulfonic Acid	375735			0.00056 *U*	0.00059 *U*		0.00046 *J*	0.0003 *J*			
Perfluorodecanoic Acid	335762			0.00041 *U*	0.00044 *U*		0.00045 *U*	0.00047 *U*			
Perfluorododecanoic Acid	307551			0.00044 *U*	0.00047 *U*		0.00045 *U*	0.00047 *U*			
Perfluorodecanesulfonic acid	335773			0.00036 *U*	0.00038 *U*		0.00045 *U*	0.00047 *U*			
Perfluoroheptanoic Acid	375859			0.00048 *U*	0.00052 *U*		0.00047 *U*	0.00049 *U*			
Perfluoroheptanesulfonic acid	375928			0.00037 *U*	0.00039 *U*		0.00036 *U*	0.00037 *U*			
Perfluorohexanoic Acid	307244			0.00058 *U*	0.00062 *U*		0.00045 *U*	0.00047 *U*			
Perfluorohexane Sulfonic Acid	355464			0.00049 *U*	0.00053 *U*		0.00051 *U*	0.00053 *U*			
Perfluorononanoic Acid	375951			0.00044 *U*	0.00047 *U*		0.00045 *U*	0.00047 *U*			
Perfluorooctane sulfonamide	754916			0.00082 *U*	0.00088 *U*		0.00045 *U*	0.00047 *U*			
Perfluoropentanoic Acid	2706903			0.00061 *U*	0.00065 *U*		0.0009 *U*	0.00093 *U*			
Perfluorotetradecanoic Acid	376067			0.00057 *U*	0.00061 *U*		0.00045 *U*	0.00047 *U*			
Perfluorotridecanoic Acid	72629948			0.00043 *U*	0.00046 *U*		0.00045 *U*	0.00047 *U*			
Perfluoroundecanoic Acid	2058948			0.00049 *U*	0.00053 *U*		0.00045 *U*	0.00047 *U*			
11Cl-PF3OUdS (F-53B Minor)							0.0018 *U*	0.0019 *U*			
4:2 fluorotelomer sulfonate	757124724						0.0015 *U*	0.0016 *U*			
3H-perfluoro-3-[(3-methoxy-propoxy)propanoic acid]							0.0014 *U*	0.0014 *U*			
Perfluorononanesulfonic acid	109200628						0.00036 *U*	0.00037 *U*			
Perfluoropentanesulfonic acid	2706914						0.00045 *U*	0.00047 *U*			
3:3 FTCA	356025						0.0014 *U*	0.0014 *U*			
5:3 FTCA	914637493						0.009 *U*	0.0093 *U*			
7:3 FTCA	812704						0.009 *U*	0.0093 *U*			
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	756426581						0.0009 *U*	0.00093 *U*			
2-(N-ethylperfluoro-1-octanesulfonamido) ethanol	1691992						0.0045 *U*	0.0047 *U*			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	13252136						0.0018 *U*	0.0019 *U*			
N-methyl perfluoro-1-octanesulfonamide	31506328						0.00045 *U*	0.00047 *U*			
2-(N-methylperfluoro-1-octanesulfonamido) ethanol	24448097						0.0045 *U*	0.0047 *U*			
Nonafluoro-3,6-dioxaheptanoic acid	151772586						0.0009 *U*	0.00093 *U*			
Perfluorododecanesulfonic acid	79780395						0.00081 *U*	0.00084 *U*			
Perfluoroethylcyclohexane sulfonate	646833						0.00045 *U*	0.00047 *U*			
Perfluoro-4-methoxybutanoic acid	863090895						0.0009 *U*	0.00093 *U*			
Perfluoro-3-methoxypropanoic acid	377731						0.00045 *U*	0.00047 *U*			
N-ethylperfluoro-1-octanesulfonamide	4151502						0.00045 *U*	0.00047 *U*			
Semivolatile Organic Compounds (µg/L)											
Atrazine	1912249	7.5		0.48 *U*	0.48 *U*	0.48 *U*	0.48 *U*	0.46 *U*	0.48 *U*	0.48 *U*	0.55 *U*
Carbazole	86748			0.31 *U*	0.31 *U*	0.31 *U*	0.31 *U*	0.3 *U*	0.31 *U*	0.31 *U*	0.36 *U*
2,4,5-Trichlorophenol	95954			0.5 *U*	0.5 *U*	0.5 *U*	0.5 *U*	0.48 *U*	0.5 *U*	0.5 *U*	0.57 *U*

Table 2-2. Corning Refractories Plant P-Site, Validated Analytical Results—Groundwater

Analyte	CAS Number	NYSDEC WQA 1998 Class GA	Sample Location	MW1	MW1	MW1	MW2	MW2	MW3	MW5	MW5
			Sample Identification	MW1-100522	MW1-100522	MW1-013123	MW2-013123	MW2-013123	MW3-013123	MW5-013123	MW5-100522
			Laboratory ID	480-202448-3	480-202448-5	480-205868-5	480-205868-1	480-205868-2	480-205868-3	480-205868-4	480-202448-4
			Sample Date	10/5/2022	10/5/2022	1/31/2023	1/31/2023	1/31/2023	1/31/2023	1/31/2023	10/5/2022
2,4,6-Trichlorophenol	88062			0.64 *U*	0.64 *U*	0.64 *U*	0.64 *U*	0.61 *U*	0.64 *U*	0.64 *U*	0.73 *U*
2,4-Dichlorophenol	120832	5		0.53 *U*	0.53 *U*	0.53 *U*	0.53 *U*	0.51 *U*	0.53 *U*	0.53 *U*	0.61 *U*
2-Chlorophenol	95578			0.55 *U*	0.55 *U*	0.55 *U*	0.55 *U*	0.53 *U*	0.55 *U*	0.55 *U*	0.63 *U*
Pentachlorophenol	87865			2.3 *U*	2.3 *U*	2.3 *U*	2.3 *U*	2.2 *U*	2.3 *U*	2.3 *U*	2.6 *U*
1,1'-Biphenyl	92524	5		0.68 *U*	0.68 *U*	0.68 *U*	0.68 *U*	0.65 *U*	0.68 *U*	0.68 *U*	0.78 *U*
1,2,4-Trichlorobenzene	120821	5		0.41 *U*	0.41 *U*	0.41 *U*	0.41 *U*	0.41 *U*	0.41 *U*	0.41 *U*	0.41 *U*
1,2-Dichlorobenzene	95501	3		0.79 *U*	0.79 *U*	0.79 *U*	0.79 *U*	0.79 *U*	0.79 *U*	0.79 *U*	0.79 *U*
1,3-Dichlorobenzene	541731	3		0.78 *U*	0.78 *U*	0.78 *U*	0.78 *U*	0.78 *U*	0.78 *U*	0.78 *U*	0.78 *U*
1,4-Dichlorobenzene	106467	3		0.84 *U*	0.84 *U*	0.84 *U*	0.84 *U*	0.84 *U*	0.84 *U*	0.84 *U*	0.84 *U*
2,2'-oxybis(1-Chloropropane)	108601	5		0.54 *U*	0.54 *U*	0.54 *U*	0.54 *U*	0.52 *U*	0.54 *U*	0.54 *U*	0.62 *U*
2,4-Dimethylphenol	105679	50		0.52 *U*	0.52 *U*	0.52 *U*	0.52 *U*	0.5 *U*	0.52 *U*	0.52 *U*	0.6 *U*
2,4-Dinitrophenol	51285	10		2.3 *U*	2.3 *U*	2.3 *U*	2.3 *U*	2.2 *U*	2.3 *U*	2.3 *U*	2.6 *U*
2,4-Dinitrotoluene	121142	5		0.47 *U*	0.47 *U*	0.47 *U*	0.47 *U*	0.45 *U*	0.47 *U*	0.47 *U*	0.53 *U*
2,6-Dinitrotoluene	606202	5		0.42 *U*	0.42 *U*	0.42 *U*	0.42 *U*	0.4 *U*	0.42 *U*	0.42 *U*	0.48 *U*
2-Chloronaphthalene	91587			0.48 *U*	0.48 *U*	0.48 *U*	0.48 *U*	0.46 *U*	0.48 *U*	0.48 *U*	0.55 *U*
2-Methylphenol	95487			0.42 *U*	0.42 *U*	0.42 *U*	0.42 *U*	0.4 *U*	0.42 *U*	0.42 *U*	0.48 *U*
2-Nitroaniline	88744	5		0.44 *U*	0.44 *U*	0.44 *U*	0.44 *U*	0.42 *U*	0.44 *U*	0.44 *U*	0.5 *U*
2-Nitrophenol	88755			0.5 *U*	0.5 *U*	0.5 *U*	0.5 *U*	0.48 *U*	0.5 *U*	0.5 *U*	0.57 *U*
3,3'-Dichlorobenzidine	91941	5		0.42 *U*	0.42 *U*	0.42 *U*	0.42 *U*	0.4 *U*	0.42 *U*	0.42 *U*	0.48 *U*
3-Nitroaniline	99092	5		0.5 *U*	0.5 *U*	0.5 *U*	0.5 *U*	0.48 *U*	0.5 *U*	0.5 *U*	0.57 *U*
4,6-Dinitro-2-methylphenol	534521			2.3 *U*	2.3 *U*	2.3 *U*	2.3 *U*	2.2 *U*	2.3 *U*	2.3 *U*	2.6 *U*
4-Bromophenyl-phenylether	101553			0.47 *U*	0.47 *U*	0.47 *U*	0.47 *U*	0.45 *U*	0.47 *U*	0.47 *U*	0.54 *U*
4-Chloro-3-methylphenol	59507			0.47 *U*	0.47 *U*	0.47 *U*	0.47 *U*	0.45 *U*	0.47 *U*	0.47 *U*	0.54 *U*
4-Chloroaniline	106478	5		0.61 *U*	0.61 *U*	0.61 *U*	0.61 *U*	0.59 *U*	0.61 *U*	0.61 *U*	0.7 *U*
4-Chlorophenyl-phenyl ether	7005723			0.36 *U*	0.36 *U*	0.36 *U*	0.36 *U*	0.35 *U*	0.36 *U*	0.36 *U*	0.42 *U*
4-Methylphenol	106445			0.38 *U*	0.38 *U*	0.38 *U*	0.38 *U*	0.36 *U*	0.38 *U*	0.38 *U*	0.43 *U*
4-Nitroaniline	100016	5		0.26 *U*	0.26 *U*	0.26 *U*	0.26 *U*	0.25 *U*	0.26 *U*	0.26 *U*	0.3 *U*
4-Nitrophenol	100027			1.6 *U*	1.6 *U*	1.6 *U*	1.6 *U*	1.5 *U*	1.6 *U*	1.6 *U*	1.8 *U*
Acetophenone	98862			0.56 *U*	0.56 *U*	0.56 *U*	0.56 *U*	0.54 *U*	0.56 *U*	0.56 *U*	0.64 *U*
Benzaldehyde	100527			0.28 *U*	0.28 *U*	0.28 *U*	0.28 *U*	0.27 *U*	0.28 *U*	0.28 *U*	0.32 *U*
Bis(2-chloroethyl)ether	111444	1		0.42 *U*	0.42 *U*	0.42 *U*	0.42 *U*	0.4 *U*	0.42 *U*	0.42 *U*	0.48 *U*
Bis(2-chloroethoxy)methane	111911	5		0.36 *U*	0.36 *U*	0.36 *U*	0.36 *U*	0.35 *U*	0.36 *U*	0.36 *U*	0.42 *U*
Bis(2-ethylhexyl)phthalate	117817	5		2.3 *U*	2.3 *U*	2.3 *U*	2.3 *U*	2.2 *U*	2.3 *U*	2.3 *U*	2.6 *U*
Benzyl n-butyl phthalate	85687	50		1.0 *U*	1.0 *U*	1.0 *U*	1.0 *U*	1.0 *U*	1.0 *U*	1.0 *U*	1.2 *U*
Caprolactam	105602			2.3 *U*	2.3 *U*	2.3 *U*	2.3 *U*	2.2 *U*	2.3 *U*	2.3 *U*	2.6 *U*
Diethyl phthalate	84662	50		2.4 *U*	3.1 *U*	0.23 *U*	0.23 *U*	0.22 *U*	0.23 *U*	0.23 *U*	3.1 *U*
Dimethyl phthalate	131113	50		0.38 *U*	0.38 *U*	0.38 *U*	0.38 *U*	0.36 *U*	0.38 *U*	0.38 *U*	0.43 *U*
Di-n-butyl phthalate	84742	50		0.32 *U*	0.32 *U*	0.32 *U*	0.32 *U*	0.31 *U*	0.32 *U*	0.32 *U*	0.37 *U*
Di-n-octylphthalate	117840	50		0.49 *U*	0.49 *U*	0.49 *U*	0.49 *U*	0.47 *U*	0.49 *U*	0.49 *U*	0.56 *U*
Hexachloroethane	67721	5		0.61 *U*	0.61 *U*	0.61 *U*	0.61 *U*	0.59 *U*	0.61 *U*	0.61 *U*	0.7 *U*
Hexachlorobenzene	118741	0.04		0.53 *U*	0.53 *U*	0.53 *U*	0.53 *U*	0.51 *U*	0.53 *U*	0.53 *U*	0.61 *U*
Hexachlorobutadiene	87683	0.5		0.71 *U*	0.71 *U*	0.71 *U*	0.71 *U*	0.68 *U*	0.71 *U*	0.71 *U*	0.81 *U*
Hexachlorocyclopentadiene	77474	5		0.61 *U*	0.61 *UJ*	0.61 *U*	0.61 *U*	0.59 *U*	0.61 *U*	0.61 *U*	0.7 *U*
Isophorone	78591	50		0.45 *U*	0.45 *U*	0.45 *U*	0.45 *U*	0.43 *U*	0.45 *U*	0.45 *U*	0.51 *U*
Methyl Acetate	79209			1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*
Nitrobenzene	98953	0.4		0.3 *U*	0.3 *U*	0.3 *U*	0.3 *U*	0.29 *U*	0.3 *U*	0.3 *U*	0.35 *U*
N-Nitrosodi-n-propylamine	621647			0.56 *U*	0.56 *U*	0.56 *U*	0.56 *U*	0.54 *U*	0.56 *U*	0.56 *U*	0.64 *U*
N-Nitrosodiphenylamine	86306	50		0.53 *U*	0.53 *U*	0.53 *U*	0.53 *U*	0.51 *U*	0.53 *U*	0.53 *U*	0.61 *U*
Phenol	108952			0.41 *U*	0.41 *U*	0.41 *U*	0.41 *U*	0.39 *U*	0.41 *U*	0.41 *U*	0.46 *U*
1,4-Dioxane	123911			0.11 *U*	0.11 *U*		0.11 *U*	0.11 *U*			
Volatiles (µg/L)											
1,1,1,2-Tetrachloroethane	630206	5		0.35 *U*	0.35 *U*	0.35 *U*	0.35 *U*	0.35 *U*	0.35 *U*	0.35 *U*	0.35 *U*
1,1,1-Trichloroethane	71556	5		0.82 *U*	0.82 *U*	0.82 *U*	0.82 *U*	0.82 *U*	0.82 *U*	0.82 *U*	0.82 *U*
1,1,2,2-Tetrachloroethane	79345	5		0.21 *U*	0.21 *U*	0.21 *U*	0.21 *U*	0.21 *U*	0.21 *U*	0.21 *U*	0.21 *U*
1,1,2-Trichloroethane	79005	1		0.23 *U*	0.23 *U*	0.23 *U*	0.23 *U*	0.23 *U*	0.23 *U*	0.23 *U*	0.23 *U*
1,1-Dichloroethane	75343	5		0.38 *U*	0.38 *U*	0.38 *U*	0.38 *U*	0.38 *U*	0.38 *U*	0.55 *J*	0.6 *J*

Table 2-2. Corning Refractories Plant P-Site, Validated Analytical Results—Groundwater

Analyte	CAS Number	NYSDEC WQA 1998 Class GA	Sample Location	MW1	MW1	MW1	MW2	MW2	MW3	MW5	MW5
			Sample Identification	MW1-100522	MW1-100522	MW1-013123	MW2-013123	MW2-013123	MW3-013123	MW5-013123	MW5-100522
			Laboratory ID	480-202448-3	480-202448-5	480-205868-5	480-205868-1	480-205868-2	480-205868-3	480-205868-4	480-202448-4
			Sample Date	10/5/2022	10/5/2022	1/31/2023	1/31/2023	1/31/2023	1/31/2023	1/31/2023	10/5/2022
1,1-Dichloroethene	75354	5		0.29 *U*	0.29 *U*	0.29 *U*	0.29 *U*	0.29 *U*	0.29 *U*	0.29 *U*	0.29 *U*
1,2,3-Trimethylbenzene	526738	5		0.26 *U*	0.26 *U*	0.26 *U*	0.26 *U*	0.26 *U*	0.26 *U*	0.26 *U*	0.26 *U*
1,2,4-Trimethylbenzene	95636	5		0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*
1,2-Dibromo-3-chloropropane	96128	0.04		0.39 *U*	0.39 *U*	0.39 *U*	0.39 *U*	0.39 *U*	0.39 *U*	0.39 *U*	0.39 *U*
1,2-Dibromoethane	106934	0.0006		0.73 *U*	0.73 *U*	0.73 *U*	0.73 *U*	0.73 *U*	0.73 *U*	0.73 *U*	0.73 *U*
1,2-Dichloroethane	107062	0.6		0.21 *U*	0.21 *U*	0.21 *U*	0.21 *U*	0.21 *U*	0.21 *U*	0.21 *U*	0.21 *U*
1,2-Dichloropropane	78875	1		0.72 *U*	0.72 *U*	0.72 *U*	0.72 *U*	0.72 *U*	0.72 *U*	0.72 *U*	0.72 *U*
1,3,5-Trimethylbenzene	108678	5		0.77 *U*	0.77 *U*	0.77 *U*	0.77 *U*	0.77 *U*	0.77 *U*	0.77 *U*	0.77 *U*
2-Hexanone	591786	50		1.2 *U*	1.2 *U*	1.2 *U*	1.2 *U*	1.2 *U*	1.2 *U*	1.2 *U*	1.2 *U*
4-Methyl-2-pentanone	108101			2.1 *U*	2.1 *U*	2.1 *U*	2.1 *U*	2.1 *U*	2.1 *U*	2.1 *U*	2.1 *U*
Acetone	67641	50		3 *U*	3 *U*	3 *U*	3 *U*	3 *U*	3 *U*	3 *U*	3 *U*
Benzene	71432	1		0.41 *U*	0.41 *U*	0.41 *U*	0.41 *U*	0.41 *U*	0.41 *U*	3.1	0.41 *U*
Bromodichloromethane	75274	50		0.39 *U*	0.39 *U*	0.39 *U*	0.39 *U*	0.39 *U*	0.39 *U*	0.39 *U*	0.39 *U*
Bromomethane	74839	5		0.69 *U*	0.69 *U*	0.69 *U*	0.69 *U*	0.69 *U*	0.69 *U*	0.69 *U*	0.69 *U*
Bromoform	75252	50		0.26 *U*	0.26 *U*	0.26 *U*	0.26 *U*	0.26 *U*	0.26 *U*	0.26 *U*	0.26 *U*
Carbon disulfide	75150	60		0.19 *U*	0.19 *U*	0.19 *U*	0.19 *U*	0.19 *U*	0.19 *U*	0.19 *U*	0.19 *U*
Carbon Tetrachloride	56235	5		0.27 *U*	0.27 *U*	0.27 *U*	0.27 *U*	0.27 *U*	0.27 *U*	0.27 *U*	0.27 *U*
Chloroform	67663	7		0.34 *U*	0.34 *U*	0.34 *U*	0.34 *U*	0.34 *U*	0.34 *U*	0.34 *U*	0.34 *U*
cis-1,2-Dichloroethene	156592	5		0.81 *U*	0.81 *U*	0.81 *U*	0.81 *U*	0.81 *U*	0.81 *U*	0.81 *U*	0.81 *U*
cis-1,3-Dichloropropene	10061015			0.36 *U*	0.36 *U*	0.36 *U*	0.36 *U*	0.36 *U*	0.36 *U*	0.36 *U*	0.36 *U*
Chlorobenzene	108907	5		0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*
Chloroethane	75003	5		0.32 *U*	0.32 *U*	0.32 *U*	0.32 *U*	0.32 *U*	0.32 *U*	0.32 *U*	0.32 *U*
Chloromethane	74873	5		0.35 *U*	0.35 *U*	0.35 *U*	0.35 *U*	0.35 *U*	0.35 *U*	0.35 *U*	0.35 *U*
Cyclohexane	110827			0.18 *U*	0.18 *U*	0.18 *U*	0.18 *U*	0.18 *U*	0.18 *U*	0.18 *U*	0.18 *U*
Dibromochloromethane	124481	50		0.32 *U*	0.32 *U*	0.32 *U*	0.32 *U*	0.32 *U*	0.32 *U*	0.32 *U*	0.32 *U*
Dichlorodifluoromethane	75718	5		0.68 *U*	0.68 *U*	0.68 *U*	0.68 *U*	0.68 *U*	0.68 *U*	0.68 *U*	0.68 *U*
Ethylbenzene	100414	5		0.74 *U*	0.74 *U*	0.74 *U*	0.74 *U*	0.74 *U*	0.74 *U*	0.74 *U*	0.74 *U*
Isopropylbenzene	98828	5		0.79 *U*	0.79 *U*	0.79 *U*	0.79 *U*	0.79 *U*	0.79 *U*	0.79 *U*	0.79 *U*
2-Butanone	78933	50		1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*	1.3 *U*
m,p-Xylene	179601231			0.66 *U*	0.66 *U*	0.66 *U*	0.66 *U*	0.66 *U*	0.66 *U*	0.66 *U*	0.66 *U*
Methylcyclohexane	108872			0.16 *U*	0.16 *U*	0.16 *U*	0.16 *U*	0.16 *U*	0.16 *U*	0.16 *U*	0.16 *U*
Methylene Chloride	75092	5		0.44 *U*	0.44 *U*	0.44 *U*	0.44 *U*	0.44 *U*	0.44 *U*	0.44 *U*	0.44 *U*
Methyl tert-butyl ether	1634044	10		0.16 *U*	0.16 *U*	0.16 *U*	0.16 *U*	0.16 *U*	0.16 *U*	0.16 *U*	0.16 *U*
n-Butylbenzene	104518	5		0.64 *U*	0.64 *U*	0.64 *U*	0.64 *U*	0.64 *U*	0.64 *U*	0.64 *U*	0.64 *U*
n-Propylbenzene	103651	5		0.69 *U*	0.69 *U*	0.69 *U*	0.69 *U*	0.69 *U*	0.69 *U*	0.69 *U*	0.69 *U*
o-Xylene	95476	5		0.76 *U*	0.76 *U*	0.76 *U*	0.76 *U*	0.76 *U*	0.76 *U*	0.76 *U*	0.76 *U*
sec-Butylbenzene	135988	5		0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*	0.75 *U*
Styrene	100425	5		0.73 *U*	0.73 *U*	0.73 *U*	0.73 *U*	0.73 *U*	0.73 *U*	0.73 *U*	0.73 *U*
tert-Butylbenzene	98066	5		0.81 *U*	0.81 *U*	0.81 *U*	0.81 *U*	0.81 *U*	0.81 *U*	0.81 *U*	0.81 *U*
Toluene	108883	5		0.51 *U*	0.51 *U*	0.51 *U*	0.51 *U*	0.51 *U*	0.51 *U*	0.51 *U*	0.51 *U*
trans-1,2-Dichloroethene	156605	5		0.9 *U*	0.9 *U*	0.9 *U*	0.9 *U*	0.9 *U*	0.9 *U*	0.9 *U*	0.9 *U*
trans-1,3-Dichloropropene	10061026			0.37 *U*	0.37 *U*	0.37 *U*	0.37 *U*	0.37 *U*	0.37 *U*	0.37 *U*	0.37 *U*
Trichloroethene	79016	5		2.3	2.1	1.8	0.46 *U*	0.46 *U*	0.46 *U*	0.51 *J*	0.46 *U*
Trichlorotrifluoroethane	76131	5		0.31 *U*	0.31 *U*	0.31 *U*	0.31 *U*	0.31 *U*	0.31 *U*	0.31 *U*	0.31 *U*
Trichlorofluoromethane	75694	5		0.88 *U*	0.88 *U*	0.88 *U*	0.88 *U*	0.88 *U*	0.88 *U*	0.88 *U*	0.88 *U*
Vinyl Chloride	75014	2		0.9 *U*	0.9 *U*	0.9 *U*	0.9 *U*	0.9 *U*	0.9 *U*	0.9 *U*	0.9 *U*
Xylenes	1330207			0.66 *U*	0.66 *U*	0.66 *U*	0.66 *U*	0.66 *U*	0.66 *U*	0.66 *U*	0.66 *U*
Tetrachloroethene	127184	5		0.36 *U*	0.36 *U*	0.36 *U*	0.36 *U*	0.36 *U*	0.36 *U*	0.36 *U*	0.36 *U*

Notes:
Gray shading = Exceeds NYSDEC WSQ 1998 Class GA
CAS = Chemical Abstract Service
NYSDEC = New York State Department of Environmental Conservation
WSQ = water quality standard

Qualifiers:
J = The associated numerical value is an estimated quantity.The associated numerical value is an estimated quantity.
J+ = The result is an estimated quantity, but the result may be biased high.
U = The material was analyzed for, but was not detected.
UJ = The material was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

Appendix A

Data Validation Report

DATA VALIDATION REPORT

Refractories Plant P-Site
July 2022 to January 2023 Sampling

Prepared for
Corning Incorporated
Corning, NY 14831

Prepared by

31 West 34th Street
Suite 7196
New York, NY 10001

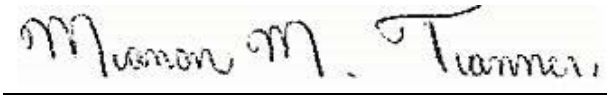
July 11, 2023

Affiliated with Integral Consulting Inc.

PREPARED BY:



Glenn Esler, Scientist



Manon Tanner-Dave, Project Scientist

CONTENTS

LIST OF TABLES ..... **iv**
ACRONYMS AND ABBREVIATIONS ..... **iv**
1 INTRODUCTION **1-1**
2 FINDINGS **2-1**
2.1 PARAMETERS REVIEWED 2-1
2.2 SAMPLE RECEIPT AND HOLDING TIMES 2-1
2.3 BLANKS 2-2
2.4 SURROGATE RECOVERY 2-3
2.5 LABORATORY CONTROL SAMPLES 2-5
2.6 MATRIX SPIKES AND MATRIX SPIKE DUPLICATES 2-7
2.7 REPLICATES 2-12
2.8 SERIAL DILUTIONS 2-13
2.9 METHOD REPORTING LIMITS AND METHODOLOGY 2-14
2.10 INSTRUMENT PERFORMANCE 2-15
2.11 INITIAL CALIBRATION 2-16
2.12 CONTINUING CALIBRATION 2-16
2.13 INTERNAL STANDARDS 2-20
2.14 INTERFERENCE CHECK 2-22
2.15 RECALCULATION CHECKS 2-23
3 OVERALL ASSESSMENT **3-1**
3.1 DATA QUALIFICATION 3-1
3.2 DATA USABILITY 3-1
4 REFERENCES **4-1**

LIST OF TABLES

Table 1-1. SDGs Reviewed and Number of Samples
Table 1-2. Analytical Parameters and Methods
Table 1-3. Definition of Data Qualifiers
Table 1-4. Definition of Data Validation Reason Codes
Table 2-1. QA/QC Parameters Reviewed
Table 3-1. Summary of Qualified Data Points by Reason
Table 3-2. Summary of Qualified Data

ACRONYMS AND ABBREVIATIONS

CCVL	low-level continuing calibration verification
EDD	electronic data deliverable
EPA	U.S. Environmental Protection Agency
ICSA	Interference Check Sample A
ICV	initial calibration verification
LCS	laboratory control sample
LCSD	laboratory control sample duplicate
MDL	method detection limit
MS/MSD	matrix spike and matrix spike duplicate
PDS	post-digestion spike
PFAS	per- and polyfluoroalkyl substances
QA/QC	quality assurance and quality control
QAPP	quality assurance project plan
RPD	relative percent difference
SDG	sample delivery group
SVOC	semivolatile organic compound
VOC	volatile organic compound

1 INTRODUCTION

This report presents the findings of the data validation of soil, groundwater, and associated quality control samples analyzed for 1,4-dioxane, total and dissolved metals, per- and polyfluoroalkyl substances (PFAS), semivolatile organic compounds (SVOCs), and volatile organic compounds (VOCs). The sample delivery groups (SDGs) reviewed are summarized in Table 1-1, and the laboratory parameters and analytical methods are listed in Table 1-2.

The samples received a 90 percent Stage 2B validation, which included a review of all laboratory summary forms of quality control and instrument performance data, and 10 percent received Stage 4 validation, which included a review of all laboratory summary forms of quality control and instrument performance data, instrument raw data, and recalculation of instrument and sample results. The data validation was based upon criteria described in the U.S. Environmental Protection Agency (EPA) functional guidelines for organic and inorganic data review (USEPA 2020a,b); EPA data review and validation guideline for PFAS (USEPA 2018); EPA Region II guidelines for data validation (USEPA 2010, 2014b, 2016a,b); *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) under NYSDEC's Part 375 Remedial Programs* (NYSDEC 2022); the quality assurance project plan (QAPP; Integral 2022); and the referenced analytical methods.

The quality assurance and quality control (QA/QC) parameters reviewed are discussed in Section 2. The electronic data deliverables (EDDs) were compared to the hard copy data packages, and 100 percent of the results were verified. Qualifiers resulting from the validation process were entered into the EDDs. A reason code indicating the reason for qualification was also entered into the EDDs. The definitions of the data qualifiers used are provided in Table 1-3, and descriptions of the reason codes used are provided in Table 1-4. For example, if a data point was estimated as the result of a matrix spike outlier biased high, the qualifier "J+" and the reason code "MS" were entered into the EDD, indicated as J+, MS in the discussion of findings in Section 2.

2 FINDINGS

The data validation findings are provided in this section.

2.1 PARAMETERS REVIEWED

The QA/QC parameters reviewed for each analytical parameter are discussed below and listed in Table 2-1.

2.2 SAMPLE RECEIPT AND HOLDING TIMES

Samples were received with complete chain-of-custody forms and in good condition. Sample receipt temperatures were recorded at ≤6°C, with the following exceptions.

Because of delays during shipping, the samples submitted with SDG 480-200156-1 for PFAS analysis were received outside of temperature criteria at 23.3°C. The associated PFAS results were qualified as estimated (J-/UJ, HT). Also because of delays during shipping, Sample FB_091222 submitted with SDG 480-201563-1 for PFAS analysis was received outside of temperature criteria at 10.9°C. The associated PFAS results were qualified as estimated (UJ, HT).

The laboratory received bottles for PFAS analysis of Samples FB_091422, ERB1_091422 and ERB2_091422 submitted with SDG 480-201707-1; however, PFAS analysis was not recorded on the associated chain-of-custody form. The laboratory logged in these samples for PFAS analysis.

All analyses were conducted within the holding times referenced in the methods or QAPP, with the following exceptions.

Sample FB_072922 submitted with SDG 480-200248-1 was reextracted for SVOCs 3 days beyond the 7-day method-recommended holding time. Naphthalene was the only analyte reported from this reextraction (see Section 2.9) and the result was qualified as estimated (J-,HT).

Samples FB_091422, ERB1_091422, ERB2_091422, and FB_091522 submitted with SDG 480-201707-1 were reextracted for SVOCs 2 or 3 days beyond the 7-day method-recommended holding time because of a recovery outlier in the associated laboratory control sample (LCS). The SVOC results for these samples were qualified as estimated (J-/UJ,HT).

2.3 BLANKS

Results from the laboratory method blanks, calibration blanks, field blanks, and equipment blanks were reported as less than the laboratory method detection limit with several exceptions.

Field blank results were applied to all soil samples collected during the associated sampling event using the highest concentration between the field blanks for evaluation. Equipment blanks were assigned to specific samples and any qualification was assigned accordingly.

Qualified samples based on blank results are described in the following table.

SDG	Sample(s)	Analyte(s)	Qualifiers Assigned
VOCs			
480-201563-1	SS1 (0-2), SS1 (6-12) SS1 (12-24), FDUP_091222	Chloroform	U, LB
480-201615-1	SS2 (0-2), SS3 (0-2) SS3 (0-6), SS3 (6-12) S3 (12-24), FDUP2_091322 SS4 (0-2), SS4 (0-6) SS4 (6-12), SS4 (12-24)	Chloroform	U, LB
480-204989-1	SB-2 (0-0.5), SB-2 (0.5-1) SB-2 (1-2), SB-2 (20.4-22.4) FDUP_122122	Chloroform and Tetrachloroethene	U, LB
480-205124-1	SB3 (23-25)	Chloroform	U,LB
Metals			
480-200114-1	FB_072622, ERB_072622 ERB2_072622	Manganese	U, LB
480-200130-1	SB5 (0-0.5), SB5 (0.5-1) SB5 (1-2)	Selenium	U, LB
480-200156-1	SB1 (0-0.5), SB1 (0.5-1) SB1 (1-2), SS7 (12-24)	Selenium	U, LB
	SB1 (15-16)	Sodium	U, LB
	SS7 (0-2)	Mercury	U, LB
480-200248-1	ERB_072822, FB_072922	Manganese	U, LB
480-201563-1	FB-091222	Potassium	U, LB
480-201615-1	SS2 (6-12), SS3 (0-2) SS3 (0-6), SS4 (0-2) SS4 (0-6), SS4 (6-12)	Cadmium	U, LB
480-201707-1	FB_091422	Lead	U, LB
480-202448-1	FB-100522, ERB-100522	Manganese	U, LB
	MW1-100522, MW5-100522 FDUP-100522	Dissolved Copper	U, LB

SDG	Sample(s)	Analyte(s)	Qualifiers Assigned
480-204989-1	FB_122122	Manganese and Nickel	U, LB
480-205868-1	FB_013123	Manganese	U, LB
SVOCs			
480-200156-1	SS7 (0-6)	Naphthalene	U, FB
480-200248-1	SB6 (0-0.5), SB6 (0.5-1) SS5 (0-6), SS5 (6-12) SS6 (0-2), SS6 (0-6)	Naphthalene	U, FB
580-201563-1	SS1 (0-2), SS1 (6-12) SS1 (12-24), FDUP_091222	Diethyl phthalate	U, LB
480-201615-1	FB_091322, SS2 (0-2) SS2 (0-6), SS2 (6-12) SS3 (0-2), SS3 (0-6), SS3 (6-12), SS3 (12-24) FDUP2_091322, SS4 (0-2), SS4 (0-6), SS4 (6-12), SS4 (12-24)	Diethyl phthalate	U, LB
	SS2 (12-24)	Butyl benzyl phthalate Diethyl phthalate	U, LB
480-201707-1	SB2 (0-0.5) FDUP_091422 SB2 (13.5-15.5), SB4 (1-2)	Diethyl phthalate	U, LB
480-202448-1	FB-100522, MW1-100522 MW5-100522, FDUP-100522 ERB-100522	Diethyl phthalate	U, LB
PFAS			
480-201563-1	SS1 (0-2)	PFDoA, PFTriA, PFDS	U, LB
	SS1 (12-24)	PFDoA, PFDS	U, LB

2.4 SURROGATE RECOVERY

Surrogates were added to all samples for organic analyses. All surrogate percent recoveries were within the laboratory control limits with the following exceptions.

SDG	Sample(s)	Surrogate(s)	Qualifiers Assigned
VOCs			
480-200130-1	SB5 (0.5-1), SB5 (1-2)	1,2-Dichloroethane-d4 Dibromofluoromethane Toluene-d8	J+, SSR all detected results
480-185463-1	SS7 (0-6), SS7 (6-12)	Toluene-d8 4-Bromofluorobenzene	UJ, SSR all results
	SS7 (12-24)	Toluene-d8 4-Bromofluorobenzene	J/UJ, SSR all results
480-200248-1	SB6 (0-0.5) SB6 (0.5-1)	Toluene-d8 4-Bromofluorobenzene	J/UJ, SSR all results
	SS6 (0-6) FDUP_072922	Toluene-d8	VOCs were not detected in the samples; no qualifiers were assigned because of potentially high analytical bias.
	SB6 (1-2)	Toluene-d8 4-Bromofluorobenzene	J/UJ, SSR all results
	SB6 (1-2)MS SB6 (1-2)MSD	Toluene-d8 4-Bromofluorobenzene	No qualifiers assigned to QC samples.
480-201563-1	SS1 (0-2) SS1 (12-24) FDUP_091222	Toluene-d8	J+, SSR detects
	SS1 (6-12)	Toluene-d8	VOCs were not detected in the samples; no qualifiers were assigned because of potentially high analytical bias.
480-201615-1	SS2 (0-2), SS3 (0-2) SS4 (0-2)	Toluene-d8	J+, SSR detected results
	SS3 (0-6), SS3 (6-12) SS4 (0-6), SS4 (6-12) SS4 (12-24)	Toluene-d8 4-Bromofluorobenzene	J/UJ, SSR all results
	SS3 (12-24) FDUP2_091322	1,2-Dichloroethane-d4 Toluene-d8 4-Bromofluorobenzene	J/UJ, SSR all results
480-201707-1	SB2 (0-0.5)	Toluene-d8 4-Bromofluorobenzene	J/UJ, SSR all results
SVOCs			
480-200248-1	SB6 (0.5-1)	p-Terphenyl-d14	J-/UJ, SSR all base/neutral SVOCs

SDG	Sample(s)	Surrogate(s)	Qualifiers Assigned
480-201615-1	SS2 (0-2)	2,4,6-Tribromophenol	All acid extractables were not detected and no qualifiers assigned because of the potentially high analytical bias.
	SS2 (0-6)	Nitrobenzene-d5	J+, SSR detected base neutral compound results.
480-201707-1	SB2 (0-0.5)	p-Terphenyl-d14	J-/UJ, SSR all base neutral compound results.
	FDUP_091422	2-Fluorobiphenyl 2,4,6-Tribromophenol p-Terphenyl-d14	J+, SSR all detected results
	SB2 (13.5-15.5)	2,4,6-Tribromophenol	No acid compounds were detected and no qualifiers assigned because of the potentially high analytical bias.
	SB4 (1-2)	p-Terphenyl-d14	J+, SSR all detected base neutral compound results.
480-204989-1	SB-2 (1-2), MS, MSD FDUP_122122	2-Fluorophenol Phenol-d5 Nitrobenzene-d5 2,4,6-Tribromophenol	These samples were analyzed at either 10-fold or 100-fold dilutions and no qualifiers were assigned.
	FB_122122	2-Fluorobiphenyl	No base neutral compounds were detected and no qualifiers assigned because of the potentially high analytical bias.
	LCSD 480-654335/3-A	2-Fluorobiphenyl	No qualifiers were assigned based on outlier in this quality control sample.
480-205124-1	LCS 480-655242/2-A LCSD 480-655242/3-A	2,4,6-Tribromophenol 2,4,6-Tribromophenol	No qualifiers were assigned based on outlier in these quality control samples.

2.5 LABORATORY CONTROL SAMPLES

The percent recoveries and relative percent difference (RPD) values of all LCSs and laboratory control sample duplicates (LCSDs) were within the laboratory control limits, with the following exceptions.

VOCs: The percent recovery values for bromoform and dibromochloromethane were greater than the laboratory control limits in LCS/LCSD 480-635335/1-A and for bromoform, carbon tetrachloride, and dibromochloromethane in LCS 480-635770/1-A submitted with SDG 480-200130-1. Because these analytes were not detected in the associated samples, no qualifiers were assigned on the basis of the potentially high analytical bias.

The percent recovery values for bromoform, dibromochloromethane, *tert*-butylbenzene, and tetrachloroethene were greater than the laboratory control limits in LCS 480-636092/1-A submitted with SDG 480-200156-1. Because these analytes were not detected in the associated samples, no qualifiers were assigned based on the potentially high analytical bias.

The percent recovery values for 2-butanone (MEK) were greater than the laboratory control limits in LCS/LCSD 480-654333/5 submitted with SDG 480-204989-1. Because these analytes were not detected in the associated samples, no qualifiers were assigned on the basis of the potentially high analytical bias.

The percent recovery values for acetone, bromoform, and carbon tetrachloride were greater than the laboratory control limits in LCS/LCSD 480-655113/5 submitted with SDG 480- 205124-1. Because these analytes were not detected in the associated samples, no qualifiers were assigned on the basis of the potentially high analytical bias.

SVOCs: The percent recovery values for 4-nitroaniline and carbazole were greater than the laboratory control limits in the LCS submitted with SDG 480-200156-1. Because these analytes were not detected in the associated samples, no qualifiers were assigned.

The percent recovery values for carbazole and naphthalene were greater than the laboratory control limits in the LCS/LCSD submitted with SDG 480-200248-1. In addition, the RPD values for acetophenone and naphthalene were greater than the laboratory control limits.

- Carbazole and acetophenone were not detected in the associated samples, and no qualifiers were assigned because of the potentially high analytical bias or imprecision.
- Naphthalene was not reported from the associated original extraction, and this result was previously qualified as do-not-report (see Section 2.9). Further qualification was not warranted.

The percent recovery values for carbazole and diethyl phthalate were greater than the laboratory control limits in one LCS submitted with SDG 480-201615-1.

- Carbazole was not detected in the associated sample, and no qualifiers were assigned because of the potentially high analytical bias.
- The diethyl phthalate result in Sample FB_091322 was qualified as estimated (J+, LCS).

The percent recovery value for carbazole was greater than the laboratory control limits in LCS 480-644800/2-A submitted with SDG 480-202448-1. Because this analyte was not detected in the associated samples, no qualifiers were assigned.

The percent recovery values for atrazine were greater than the laboratory control limits in LCS/LCSD 480-654335/2-A submitted with SDG 480-204989-1. In addition, the RPD value for 2,4,5-trichlorophenol was greater than the control limits. Because these analytes were not detected in the associated samples, no qualifiers were assigned.

The percent recovery values for several analytes were greater than the laboratory control limits in LCS\LCSD 480-655242/2-A submitted with SDG 480-205124-1. Because these analytes were not detected in the associated samples, no qualifiers were assigned on the basis of the potentially high analytical bias.

PFAS: The RPD value for PFTriA in the LCS/LCSD submitted with SDG 480-205124-1 was greater than the laboratory control limits. This analyte was not detected in the associated samples and no qualifiers were assigned on the basis of the observed imprecision.

2.6 MATRIX SPIKES AND MATRIX SPIKE DUPLICATES

The percent recoveries and RPDs of all matrix spikes and matrix spike duplicates (MS/MSDs) were within the laboratory control limits, with the following exceptions.

Metals: The percent recovery values for aluminum, antimony, barium, calcium, copper, iron, manganese, potassium, zinc, and mercury were outside the laboratory control limits in the MS/MSD submitted with SDG 480-200248-1. In addition, the aluminum, barium, cobalt, iron, manganese, nickel, and zinc recovery values in the associated post-digestion spike were outside the laboratory control limits.

- The detected aluminum, antimony, barium, iron, manganese, zinc, and mercury results for associated Sample SB6 (1-2) were qualified as estimated bias low (J-, MS).
- The detected aluminum, cobalt, copper, nickel, and potassium results for Sample SB6 (1-2) were qualified as estimated bias high (J+, MS).

The percent recovery values for aluminum, antimony, barium, calcium, iron, manganese, and potassium were outside the laboratory control limits in the MS/MSD submitted with SDG 480-201563-1. In addition, the aluminum, iron, and manganese recovery values in the associated post-digestion spike were outside the laboratory control limits.

- The detected aluminum, antimony, barium, and potassium results for associated Sample SS1(0-2) were qualified as estimated bias high (J+, MS).

- The detected aluminum results were also qualified as estimated bias low (J-, MS) based on the post-digestion spike (PDS) recovery.
- The iron and manganese concentrations in the unspiked sample were greater than 4 times the concentration of the spike added, and no qualifiers were assigned.

The percent recovery values for aluminum, antimony, barium, calcium, iron, lead, magnesium, manganese, and potassium were outside the laboratory control limits in the MS/MSD of Sample SS2 (0-2) submitted with SDG 480-201615-1. In addition, the zinc recovery value in the associated post-digestion spike was outside the laboratory control limits.

- The detected antimony, barium, calcium, magnesium, and potassium results for Sample SS2 (0-2) were qualified as estimated (J+, MS) bias high and the antimony results were qualified as estimated bias low (J-, MS).
- The detected zinc result in Sample SS2 (0-2) was qualified as estimated (J-, MS) bias low based on the PDS recovery.
- The aluminum, iron, and manganese concentrations in the unspiked sample were greater than 4 times the concentration of the spike added, and no qualifiers were assigned.

The aluminum, antimony, barium, calcium, iron, lead, magnesium, manganese, and potassium recovery values in the MS/MSD for Sample SS2 (6-12) submitted with SDG 480-201615-1 were outside the laboratory control limits. The RPD value for magnesium was greater than the laboratory control limits.

- The detected barium, calcium, magnesium, and potassium results for Sample SS2 (6-12) were qualified as estimated (J+, MS) bias high, and the antimony result was qualified as estimated bias low (J-, MS).
- The magnesium result for Sample SS2 (6-12) was qualified as estimated based on the observed imprecision (J, REP).
- The lead recovery value in the matrix spike was within control limits, the recovery value in the MSD was within 10 percentage points of the control limits, and no qualifiers were assigned.
- The aluminum, iron, and manganese concentrations in the unspiked sample were greater than 4 times the concentration of the spike added, and no qualifiers were assigned.

The percent recovery values for mercury were less than the laboratory control limits in the MS/MSD submitted with SDG 480-201707-1. The mercury result for Sample SB2 (0-0.5) was qualified as estimated, biased low (J-, MS).

The percent recovery values for aluminum, barium, calcium, copper, magnesium, manganese, potassium, zinc, antimony, iron, lead, and vanadium were outside the laboratory control limits in the MS/MSD of Sample SB-2 (1-2) submitted with SDG 480-204989-1. In addition, the RPD values for arsenic, barium, potassium, zinc, antimony, cadmium, iron, lead, nickel, silver, and vanadium were greater than the laboratory control limits. The aluminum, barium, lead, nickel, and zinc recovery value in the associated post-digestion spike was outside the laboratory control limits.

- The following qualifiers were assigned to Samples SB-2 (1-2) and FDUP_122122 based on the MS/MSD results:
  - J, MS: Aluminum
  - J-, MS: Calcium, Copper
  - J, MS, REP: Barium, Potassium, Zinc, Antimony, Lead, Nickel, Vanadium
  - J, REP: Arsenic, Cadmium.
- Because the magnesium matrix spike recovery value was within limits and the MSD recovery value was within 10 points of limits, no qualifiers were assigned.
- The iron and manganese concentrations in the unspiked sample were greater than 4 times the concentration of the spike added, and no qualifiers were assigned.
- Silver was not detected in the associated samples and no qualifiers were assigned on the basis of the observed imprecision.

The calcium, sodium, and dissolved calcium recovery values in the PDS submitted with SDG 480-205868-1 were less than the laboratory control limits. The concentrations for these analytes in the unspiked sample were greater than 4 times the concentration of the spike added, and no qualifiers were assigned.

VOCs: The percent recovery values for 13 VOCs were outside the laboratory control limits in the MS/MSD submitted with SDG 480-200248-1. In addition, the RPD values for 20 VOCs were greater than the laboratory control limits.

- The results for 26 VOCs for associated Sample SB6 (1-2) were qualified as estimated (UJ, MS).
- The 1,2,4-trichlorobenzene result for Sample SB6 (1-2) was qualified as rejected (R, MS) because the associated MS/MSD recovery values were less than 10 percent.
- Four VOCs were not qualified because the recovery bias was high and these VOCs were not detected for Sample SB6 (1-2).

The percent recovery values for 20 VOCs were outside the laboratory control limits in one of two MS/MSDs submitted with SDG 480-201615-1. In addition, the RPD values for two VOCs were greater than the laboratory control limits.

- The results for 11 VOCs for Sample SS2 (0-2) were qualified as estimated (UJ, MS).
- The recoveries for eight VOCs were within limits in the MS or MSD and within 10 percentage points of the limits in the associated MS or MSD, and no qualifiers were assigned.
- Isopropylbenzene was not qualified because the recovery bias was high and this VOC was not detected for Sample SS2 (0-2).
- All analytes with RPD values greater than the laboratory control limits were not detected in the unspiked sample, and no qualifiers were assigned on the basis of the potential imprecision.

The percent recovery values for 12 VOCs were outside the laboratory control limits in the second of two MS/MSDs submitted with SDG 480-201615-1. In addition, the RPD values for 32 VOCs were greater than the laboratory control limits.

- The results for three VOCs for Sample SS2 (6-12) were qualified as estimated (UJ, MS).
- The recoveries for eight VOCs were within limits in the MS or MSD and within 10 percentage points of the limits in the associated MS or MSD, and no qualifiers were assigned.
- No analytes with RPD values greater than the laboratory control limits were detected in the unspiked sample, and no qualifiers were assigned on the basis of the potential imprecision.

The percent recovery values for 11 VOCs were outside the laboratory control limits in the MS/MSD submitted with SDG 480-204989-1. In addition, the RPD value for methylcyclohexane was greater than the laboratory control limits.

- The nondetected results for 1,2,4-trichlorobenzene and bromoform in associated Samples SB-2 (1-2) and FDUP_122122 were qualified as estimated (UJ, MS).
- The recoveries for eight VOCs were within limits in the MS or MSD and within 10 percentage points of the limits in the associated MS or MSD, and no qualifiers were assigned.
- The recoveries for three VOCs were biased high and these analytes were not detected in the associated samples and no qualifiers were assigned on the basis of the potentially high analytical bias. Methylcyclohexane was not detected in the associated samples, and no qualifiers were assigned on the basis of the observed imprecision.

SVOCs: The percent recovery values for 27 SVOCs were less than the laboratory control limits in the MS/MSD submitted with SDG 480-200248-1. In addition, the percent recovery values for four SVOCs were greater than the laboratory control limits.

- The acenaphthylene, benzo[ghi]perylene, chrysene, and indeno[1,2,3-cd]pyrene results for Sample SB6 (1-2) were qualified as estimated (J-, MS).
- The 1,4-dioxane, 2,4-dinitrophenol, and hexachlorocyclopentadiene results for Sample SB6 (1-2) were qualified as rejected (R, MS) because the associated MS/MSD recovery values were less than 10 percent.
- Six SVOC results for Sample SB6 (1-2) were qualified as estimated (J, REP) because of MS/MSD imprecision.
- The remaining SVOCs were not qualified because the sample concentrations were greater than 4 times the spike concentration or the analytes were not detected in the parent sample.

The percent recovery values for 25 SVOCs were outside the laboratory control limits in one MS/MSD submitted with SDG 480-201615-1. In addition, the RPD values for the majority of SVOCs were greater than the laboratory control limits.

- The diethyl phthalate, bis(2-chloroethyl)ether, and fluoranthene results for Sample SS2 (0-2) were qualified as estimated (J/UJ, MS).
- The 2,4-dinitrophenol, 3,3′-dichlorobenzidine, benzaldehyde and N-nitrosodiphenylamine results for Sample SS2 (0-2) were qualified as rejected (R, MS) because the associated MS/MSD recovery values were less than 10 percent.
- Eight SVOC results for Sample SS2 (0-2) were qualified as estimated (J, REP) because of MS/MSD imprecision.

2,4-Dinitrophenol was not recovered in one MS/MSD submitted with SDG 480-201615-1. In addition, the RPD values for the majority of SVOCs were greater than the laboratory control limits.

- The 2,4-dinitrophenol results for Sample SS2 (6-12) were qualified as rejected (R, MS) because the associated MS/MSD recovery values were less than 10 percent.
- The diethyl phthalate result for Sample SS2 (6-12) was qualified as estimated (J, REP) because of MS/MSD imprecision.

The percent recovery values for carbazole were greater than the laboratory control limits in the MS/MSD submitted with SDG 480-202448-1. This analyte was not detected in the associated samples, and no qualifiers were assigned because of the potentially high analytical bias.

The percent recovery values for seven analytes were outside the laboratory control limits in the MS/MSD submitted with SDG 480-204989-1. In addition, the RPD values for benzo[ghi]perylene, benzo[k]fluoranthene, and phenanthrene were greater than the control limits.

- The MS/MSD was analyzed at 10-fold and 100-fold dilutions, and no qualifiers were assigned on the basis of recovery values.
- The detected benzo[ghi]perylene, benzo[k]fluoranthene, and phenanthrene results for Samples SB-2 (1-2) and FDUP_122122 were qualified as estimated (J, REP).

The RPD values for 38 analytes in the MS/MSD submitted with SDG 480-205124-1. These analytes were not detected in the associated sample, and no qualifiers were assigned on the basis of the observed imprecision.

The recovery value for bis(2-chloroethyl) ether in the MSD submitted with SDG 480-205868-1 was greater than the laboratory control limits. The recovery value was within the laboratory control limits in the matrix spike and within 10 percentage points of the limits in the MSD, and no qualifiers were assigned.

PFAS: The RPD value for 1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2) in the matrix spike submitted with SDG 480-205868-2 was greater than the control limits. This analyte was not detected in the associated samples, and no qualifiers were assigned on the basis of the observed imprecision.

2.7 REPLICATES

Eight sets of field duplicates were submitted:

Field Duplicate Identification	Associated Parent Sample
FDUP2_072922	SS5 (12-24)
FDUP_072922	SB6 (0-0.5)
FDUP_091222	SS1 (12-24
FDUP2_091322	SS3 (12-24)
FDUP_091422	SB2 (1-2)
FDUP-100522	MW1-100522
FDUP_122122	SB-2 (1-2)
FDUP-013123	MW2-013123

For this project, the target control limit for field duplicates is an RPD less than 50 percent. As noted in the QAPP (Integral 2022), data were not qualified as estimated if the target control limit was exceeded. The control limits were met for all analytes, with the exceptions noted below.

For the majority of the RPD outliers, the difference between the results was less than 2 times the reporting limit when at least one result was less than the reporting limit, indicating acceptable precision.

Samples with precision outliers are described in the following table and indicate potential sample inhomogeneity.

Field Duplicates	Analytes with Precision Outliers
SB6 (0-0.5) FDUP_072922	benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[ghi]perylene, benzo[k]fluoranthene, chrysene, fluoranthene, indeno[1,2,3-cd]pyrene, and pyrene
SB2 (1-2) FDUP_091422	2-butanone (MEK), acetone, and calcium
SS1 (12-24) FDUP_091222	PFOS
SB-2 (1-2) FDUP_122122	copper, cadmium, iron, and lead

The RPD values between laboratory duplicate analysis of mercury and percent moisture were within the laboratory-specified limits.

2.8 SERIAL DILUTIONS

The percent differences for all reported serial dilutions were evaluated against the control limit of 10 percent for values greater than 50 times the method detection limit (MDL). Detected results were estimated (J-ICPSD) when these control limits were not met. The following qualifiers were assigned based on the evaluation of the serial dilution samples.

SDG	Samples	Analytes	Qualifiers Assigned
480-200248-1	SB6 (1-2)	Cobalt, Nickel, Potassium	J+, ICPSD
480-201563-1	SS1 (0-2)	Barium, Magnesium	J+, ICPSD
480-201615-1	SS2 (0-2)	Barium, Calcium, Chromium, Iron, Magnesium, Manganese, Zinc	J+, ICPSD
480-204989-1	SB-2 (1-2) FDUP_122122	Aluminum, Barium, Calcium, Lead, Magnesium, Manganese, Zinc	J+, ICPSD

2.9 METHOD REPORTING LIMITS AND METHODOLOGY

The reporting limits specified in the QAPP (Integral 2022) were generally met for all analyses with the following exceptions.

- A number of reporting limits were slightly elevated because of the moisture content in the soils or volume used for extraction of waters.
- A number of samples for metals analyses were diluted at 2-, 5-, or 10-fold dilutions because of matrix interferences or analyte concentrations, and the reporting limits were elevated accordingly.
- A number of samples for SVOC analysis were diluted at 2-, 5-, 10-, 20-, or 100-fold dilutions because of associated sample extract viscosity, color, or appearance, and the reporting limits were elevated accordingly.

The laboratory did not include target analyte 1,2,3-trimethylbenzene in the LCSs and MS/MSDs and, therefore, accuracy and precision for these analytes could not be fully evaluated.

VOC internal standard and surrogate responses were outside of control limits for Samples SB5 (0-0.5), SB5 (0.5-1), and SB5 (1-2) submitted with SDG 480-200130-3, Samples SS7 (0-6), SS7 (6-12), SS7 (12-24), and SS7 (0-2) submitted with SDG 480-200156-11, Samples SB6 (1-2), SB6 (1-2)MS, SB6 (1-2)MSD, SB6 (0-0.5), SB6 (0.5-1), SS5 (0-2), SS6 (0-2), SS6 (0-6), and FDUP_072922 submitted with SDG 480-200248-1. The samples were reanalyzed and responses were outside control limits. The laboratory reanalyzed the samples and similar responses were observed. The laboratory submitted only the original analyses. See Sections 2.13 and 2.4 for effects on data quality.

The laboratory I-flagged PFAS results that did not meet transition mass ratio limits. These results were qualified as tentatively identified and estimated (NJ, EMPC).

The signal-to-noise ratio for the following samples and analytes were greater than the 10:1 method criteria for PFAS analysis. These detected results were qualified as not detected (U, Other).

SDG	Sample	Analyte
480-200248-1	SB6 (0.5-1)	PFHxA PFHpA PFHxS
	FDUP_072922	PFHxA PFOS
	SB6 (1-2)	PFHxA PFBS
480-201563-1	SS1 (0-2)	PFHxA

SDG	Sample	Analyte
	SS1 (6-12)	PFHxA, PFHpA, PFDoDA PFDS, PFPeA, PFTriA
	FDUP_091222	PFHxA, PFHpA, PFDoDA PFDS, PFPeA, PFTriA

The 1,4-dioxane results for Samples ERB_72722 and FB2_072722 submitted with SDG 480-200156-1 using Method 8270D were qualified as do-not-report (R-DNR). 1,4-Dioxane was also reported using Method 8270D SIM for these samples. Because the reporting limits were lower for the 8270D SIM method, these results were chosen as more appropriate to report.

The laboratory reextracted Sample FB_072922 submitted with SDG 480-200248-1 for SVOCs outside of holding time criteria because of a recovery outlier for naphthalene in the associated LCS/LCSD. Only naphthalene was reported from the reextraction, and all other results were qualified as do-not-report (R-DNR) because the results from the initial extraction were deemed more appropriate.

The laboratory reanalyzed the following samples for VOCs submitted with SDG 480-201615-1 because the internal standard and surrogate responses were outside of control limits: SS3 (0-2), SS3 (0-6), SS3 (6-12), SS3 (12-24), FDUP2_091322, SS4 (0-2), SS4 (0-6), SS4 (6-12), and SS4 (12-24). The laboratory did not provide the data for the reanalysis.

A few dissolved metals results in Samples MW1-100522, MW5-100522, and FDUP-100522 submitted with SDG 480-202448-1 and Samples MW2-013123, FDUP-013123, MW3-013123, MW5-013123, and MW1-013123 submitted with SDG 480-205868-1 were slightly higher than the associated total metals results. These results should be used with caution.

When a result was qualified with a positive bias (J+) and a negative bias (J-) during validation, the overall bias is unknown and the J qualifier was applied. When a result was qualified with a bias (J+ or J-) and an unknown bias (J), the J qualifier was applied.

The samples collected in January 2023 were analyzed for PFAS using EPA Draft Method 1633 (version 3) to report the list of PFAS noted in the New York State Department of Environmental Conservation's Sampling, Analysis, and Assessment of PFAS (November 2022).

2.10 INSTRUMENT PERFORMANCE

The gas chromatograph/mass spectrometer instrument performance checks ("tune") were analyzed at the start of each 12-hour analytical shift, and the method-specified acceptance criteria were met.

2.11 INITIAL CALIBRATION

Initial calibrations were analyzed on all instruments and met the acceptance criteria stated in the associated Region II data validation standard operating procedures, with the following exceptions.

SDG	Calibration	Analytes	Qualification
VOCs			
480-201563-1 480-201615-1 480-201707-1	ICV 480-639579/28	1,1-Dichloroethene Cyclohexane Carbon tetrachloride Methylcyclohexane	Because the bias was low, the results for these analytes in the following associated samples were qualified as estimated (J-/UJ, Cc): SS1 (0-2), SS1 (0-6), SS1 (6-12), SS1 (12-24) FDUP_091222, SS2 (0-2), SS2 (0-6) SS2 (6-12), SS2 (12-24), SS3 (0-2) SS3 (0-6), SS3 (6-12), SS3 (12-24) FDUP2_091322, SS4 (0-2) SS4 (0-6), SS4 (6-12), SS4 (12-24), SB2 (0-0.5), SB2 (0.5-1), SB2 (1-2) FDUP_091422, SB2 (13.5-15.5), SB4 (0-0.5), SB4 (0.5-1), SB4 (1-2).
480-202448-1	ICV 480-644313/35	*tert*-Butylbenzene	The bias was high and this analyte was not detected in the associated samples, and no qualifiers were assigned.
PFAS			
480-205868-2	ICVL 410-343978/10	PFOA	J+,Ci detected result Sample MW2-013123.
		1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	The bias was high and this analyte was not detected in the associated samples and no qualifiers were assigned.
		NEtFOSAA	UJ-Ci nondetected results in Samples MW2-013123 and FB_013123
	ICVL 410-346561/10	Perfluorohexanoic acid Perfluorodecanoic acid Perfluorooctanesulfonic acid	The biases were high and these analytes were not detected in the associated samples, and no qualifiers were assigned.

2.12 CONTINUING CALIBRATION

Continuing calibrations were analyzed at the appropriate frequency and met the acceptance criteria stated in the associated methods, with the following exceptions.

SDG	Calibration Identification	Analyte	Qualifiers Assigned
Metals			
480-200114-1	CCVL 480-635565/27	Potassium	Because the bias was high and this analyte was not detected in the associated samples, no qualifiers were assigned.
480-183421-1	CCVL 480-636329/55 CCVL 480-636329/64	Potassium	Because the bias was high the result in associated Sample SS7 (0-2) was qualified as estimated (J+, Cc)
480-202448-1	CCVL 480-645252/51	Manganese	Because the total manganese results in the associated samples were significantly greater than the CCVL value (0.003 mg /L) and the other associated CCVL met criteria; no qualifiers were assigned.
480-204989-1	CCVL 480-654754/39	Iron	Because the bias was high, the results in associated Samples SB-2 (0-0.5), SB-2 (0.5-1), SB-2 (20.4-22.4),and FDUP_122122 were qualified (J+, Cc).
VOCs			
480-200130-1	CCVIS 480-635513/4	1,1,1-Trichloroethane	Because the bias was high, the results for this analyte in associated Sample SB5 (13-15) was qualified as estimated (J+, Cc)
		Carbon tetrachloride 1,2-Dichloroethane Bromodichloromethane Tetrachloroethene Dibromochloromethane Bromoform	Because the bias was high and these analytes were not detected in the associated sample, no qualifiers were assigned.
	CCVIS 480-635772/4	1,1,1-Trichloroethane	Because the bias was high, the results for this analyte in associated Samples SB5 (0.5-1) and SB5 (1-2) were qualified as estimated (J+, Cc)
		Trichlorofluoromethane Carbon tetrachloride Tetrachloroethene Dibromochloromethane 1,1,1,2-Tetrachloroethane Bromoform	Because the bias was high and these analytes were not detected in the associated samples, no qualifiers were assigned
480-200156-1	CCVIS 480-636094/4	Dibromochloromethane Bromoform	Because the bias was high and these analytes were not detected in the associated samples, no qualifiers were assigned.

SDG	Calibration Identification	Analyte	Qualifiers Assigned
480-200248-1	CCVIS 480-635636/4	Methyl acetate	Because the bias was low, the result for this analyte in associated Sample ERB_072822 was qualified as estimated (UJ, Cc)
	CCVIS 480-635717/4	1,2-Dibromo-3-chloropropane	Because the bias was low, the result for this analyte in associated Sample FB_072922 was qualified as estimated (UJ, Cc).
	CCVIS 480-637219/2	Chloroethane	Because the bias was high and these analytes were not detected in the associated samples, no qualifiers were assigned.
480-201563-1	CCVIS 480-641153/4	Chloromethane	Because the bias was low, the result for this analyte in associated Sample FB-091222 and TB-091222was qualified as estimated (UJ, Cc).
		Dibromochloromethane	Because the bias was high and these analytes were not detected in the associated samples, no qualifiers were assigned.
	CCVIS 480-641452/4	Chloromethane Dibromochloromethane n-Butylbenzene	Because the bias was high and these analytes were not detected in the associated samples, no qualifiers were assigned.
480-201615-1	CCVIS 480-641512/4	Dibromochloromethane Bromoform	Because the bias was high and these analytes were not detected in the associated samples, no qualifiers were assigned.
	CCVIS 480-641452/4	N-Propylbenzene *tert*-Butylbenzene n-Butylbenzene	Because the bias was high and these analytes were not detected in the associated samples, no qualifiers were assigned.
480-200248-1 480-201615-1	CCVIS 480-636252/9	Carbazole	Because the bias was high and these analytes were not detected in the associated samples, no qualifiers were assigned.
480-202448-1	CCVIS 480-644817/6	Chloroform Bromodichloromethane	Because the bias was high and these analytes were not detected in the associated samples, no qualifiers were assigned.
	CCVIS 480-644728/4	1,1,2-Trichloroethane Ethylbenzene *m,p*-Xylene N-Propylbenzene 1,3,5-Trimethylbenzene 1,2,4-Trimethylbenzene *sec*-Butylbenzene n-Butylbenzene	The nondetected results for these analytes in the following samples were qualified as estimated, biased low (UJ, Cc): TB-100522, FB-100522, ERB-100522

SDG	Calibration Identification	Analyte	Qualifiers Assigned
480-204989-1	CCVIS 480-654942/29	Vinyl chloride Chloroethane Cyclohexane N-Propylbenzene tert-Butylbenzene sec-Butylbenzene n-Butylbenzene	Because the bias was high and these analytes were not detected in the associated samples, no qualifiers were assigned.
480-205124-1	CCVIS 480-655113/3	Vinyl chloride Trichlorofluoromethane Carbon tetrachloride Dibromochloromethane Bromoform	Because the bias was high and these analytes were not detected in the associated samples, no qualifiers were assigned.
	CCVIS 480-655097/4	Dibromochloromethane 1,1,1,2-Tetrachloroethane Bromoform	The nondetected results for these analytes in Sample SB3 (23-25) were qualified as estimated, biased low (UJ, Cc)
SVOC			
480-201615-1	CCVIS 480-642901/4	Hexachlorocyclopentadiene	Because the bias was low, the result for this analyte in associated Sample SS2 (12-24) was qualified as estimated (UJ, Cc).
	CCVIS 480-642029/3	Carbazole	Because the bias was high and these analytes were not detected in the associated samples, no qualifiers were assigned.
480-201707-1	CCVIS 480-642351/4	2-Nitrophenol	This calibration verification standard was associated with a batch method blank and LCS, and no qualifiers were assigned.
480-202448-1	CCVIS 480-644815/3	Bis(2-chloroisopropyl)ether Di-n-butylphthalate	Because the biases were high and these analytes were not detected in the associated samples, no qualifiers were assigned.
	CCVIS 480-645033/3	Bis(2-chloroisopropyl)ether Hexachlorocyclopentadiene Carbazole	Because the bias was low, the result for hexachlorocyclopentadiene in associated Sample ERB-100522 was estimated (UJ, Cc). Because the biases were high for the other analytes and these analytes were not detected in the associated samples, no qualifiers were assigned

SDG	Calibration Identification	Analyte	Qualifiers Assigned
	CCVIS 480-645318/3	Bis(2-chloroisopropyl)ether Hexachlorocyclopentadiene Carbazole	Because the bias was low, the result for hexachlorocyclopentadiene in associated Sample FDUP-100522 was estimated (UJ, Cc). Because the biases were high for the other analytes and these analytes were not detected in the associated samples, no qualifiers were assigned.
480-204989-1	CCVIS 480-654983/3	2,4-Dinitrotoluene	Because the bias was high and this analyte was not detected in the associated samples, no qualifiers were assigned.
	CCVIS 480-654446/3	4-Methylphenol	Because the bias was low, the result in associated Sample FB_122122 was estimated (UJ, Cc).
480-205124-1	CCVIS 480-655370/3	Bis (2-chloroisopropyl) ether Nitrobenzene	Because the biases were low, the results in associated Samples EB_010323 and FB_010323 were estimated (UJ, Cc).
PFAS			
480-201563-1	CCVLIS 200-183694/5	PFHxDA	Because the bias was low, the result for this analyte in associated Sample FB-091222 was estimated (UJ, Cc)
480-201707-1	CCVLIS 200-183694/5	PFHxDA	This calibration verification standard was associated with a batch method blank and LCS, and no qualifiers were assigned.
480-207989-1	CCV 200-187284/22	M2-8:2 FTS d3-NMeFOSAA d5-NEtFOSAA	Because these surrogate recoveries were within limits in the associated samples, no qualifiers assigned.
480-205868-2	CCV 410-349204/245	13C5 PFPeA	These surrogates were within the recovery control limits in the associated sample and no qualifiers assigned.

2.13 INTERNAL STANDARDS

Internal standards were added to all samples for SVOC, VOC, PFAS, and inductively coupled plasma metals analyses, and the areas and retention times of all internal standards were within the method-specified control limits with the following exceptions for VOC analyses.

SDG	Samples	Internal Standard	Qualification	Associated Analytes
480-200130-1	SB5 (0-0.5) SB5 (0.5-1) SB5 (1-2)	Chlorobenzene-d5	UJ, IS UJ, IS J-/UJ, IS	See footnote a.
		1,4-Dichlorobenzene-d4	R, IS	See footnote b.
480-200156-1	SS7 (0-6) SS7 (6-12)	Chlorobenzene-d5 1,4-Dichlorobenzene-d4	UJ, IS	See footnotes a and b.
	SS7 (12-24)	Chlorobenzene-d5	UJ, IS	See footnote a.
		1,4-Dichlorobenzene-d4	R, IS	See footnote b.
	SS7 (0-2)	1,4-Dichlorobenzene-d4	UJ, IS	See footnote b.
480-200248-1	SB6 (1-2)	Chlorobenzene-d5	UJ, IS	See footnote a
		1,4-Dichlorobenzene-d4	R, IS	See footnotes b.
	SB6 (1-2)MS SB6 (1-2)MSD	Chlorobenzene-d5 1,4-Dichlorobenzene-d4	No qualifiers assigned to quality control samples.	
	SB6 (0-0.5)	Chlorobenzene-d5 1,4-Dichlorobenzene-d4	J-/UJ, IS	See footnotes a and b.
	SB6 (0.5-1)	Chlorobenzene-d5	UJ, IS	See footnote a
		1,4-Dichlorobenzene-d4	R, IS	See footnotes b.
	SS5 (0-2) SS6 (0-2) SS6 (0-6) SS6 (0-6) SS6 (12-24)	1,4-Dichlorobenzene-d4	J-/UJ, IS	See footnote b.
	FDUP_072922	Chlorobenzene-d5 1,4-Dichlorobenzene-d4	J-/UJ, IS	See footnotes a and b.
480-201563-1	SS1 (0-2) SS1 (6-12) SS1 (12-24) FDUP_091222	1,4-Dichlorobenzene-d4	UJ, IS	See footnote b.
480-201615-1	SS2 (0-2) SS3 (0-2)	1,4-Dichlorobenzene-d4	UJ, IS	See footnote b.
	SS3 (0-6) SS3 (6-12)	1,4-Dichlorobenzene-d4 Chlorobenzene-d5 Chlorobenzene-d5	UJ, IS	See footnotes a and b.
	SS3 (12-24)	1,4-Dichlorobenzene-d4	R, IS	See footnote b.
		Chlorobenzene-d5	J-/UJ, IS	See footnote a.
	FDUP2_091322	1,4-Dichlorobenzene-d4	R, IS	See footnote b.
		Chlorobenzene-d5	UJ, IS	See footnote a.
	SS4 (0-2)	1,4-Dichlorobenzene-d4	R, IS	See footnote b.
	SS4 (0-6)	1,4-Dichlorobenzene-d4 Chlorobenzene-d5	UJ, IS	See footnotes a and b.

SDG	Samples	Internal Standard	Qualification	Associated Analytes
	SS4 (6-12)	1,4-Dichlorobenzene-d4	R, IS	See footnote b.
		Chlorobenzene-d5	UJ, IS	See footnote a.
	SS4 (12-24)	1,4-Dichlorobenzene-d4	R, IS	See footnote b.
		Chlorobenzene-d5	UJ, IS	See footnote a.
480-201707-1	SB2 (0-0.5)	1,4-Dichlorobenzene-d4	UJ, IS	See footnote b.
480-204989-1	FDUP_122122	1,4-Dichlorobenzene-d4	UJ, IS	See footnote b.

[a] 1,1,1,2-Tetrachloroethane, 1,1,2-trichloroethane, 1,2-dibromoethane, 1,3-dichloropropane, 2-hexanone, 4-methyl-2-pentanone, bromoform, chlorobenzene, dibromochloromethane, ethylbenzene, *m,p*-xylene, *o*-xylene, styrene, tetrachloroethene, toluene, *trans*-1,3-dichloropropene.

[b] 1,1,2,2-Tetrachloroethane, 1,2,4-trichlorobenzene, 1,2,4-trimethylbenzene, 1,2-dibromo-3-chloropropane, 1,2-dichlorobenzene, 1,3,5-trimethylbenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, isopropylbenzene, n-butylbenzene, N-propylbenzene, *sec*-butylbenzene, *tert*-butylbenzene.

The PFAS internal standard ^{13}PFOA recovery was greater than the control limits in ICV 200-182319/12 submitted with SDGs 480-200156-1 and 480-200248-1. Because PFOA met criteria in this ICV, no qualifiers assigned.

2.14 INTERFERENCE CHECK

The interference check sample was analyzed at the beginning of each analytical sequence and met the acceptance criteria stated in EPA's Region II guidelines for ICP-AES data validation (USEPA 2016b) with the following exceptions.

Analytes detected in the Interference Check Sample A (ICSA) with absolute values greater than the MDL and samples with interferents with concentrations similar to the ICSA are reported below.

SDG	Analyte	Samples(s)	Qualifiers Assigned
480-200130-1	Antimony	SB5 (0-0.5), SB5 (0.5-1), SB5 (13-15)	J-, ICS
		SB5 (1-2)	UJ, ICS
480-200156-1	Cadmium	SB5 (13-15)	J+, ICS
	Antimony	SS7 (0-6), SS7 (6-12), SS7 (12-24)	J-, ICS
	Cadmium	SS7 (0-6)	J+, ICS
480-200248-1	Cadmium	SB6 (13-15), SS5 (6-12), SS6 (0-6)	J+, ICS
		SS6 (0-2)	UJ, ICS
			J-, ICS
480-201563-1	Cadmium	SS1(0-6), SS1(6-12), SS1(12-24)	J+ICS
	Selenium	SS1(0-6), SS1(6-12), SS1(12-24)	J+ICS
		FDUP_091222	

SDG	Analyte	Samples(s)	Qualifiers Assigned
480-204989-1	Antimony	SB-2 (1-2)	J-, ICS
	Chromium	SB-2 (0-0.5)	J-, ICS
		SB-2 (0.5-1)	
		SB-2 (1-2)	
		SB-2 (20.4-22.4)	
		FDUP_122122	

2.15 RECALCULATION CHECKS

Recalculation checks were performed on all SDGs undergoing Stage 4 data validation. No calculation or transcription errors were discovered during the data validation review.

3 OVERALL ASSESSMENT

3.1 DATA QUALIFICATION

A total of 13,814 results were reported. A total of 2,241 results (16 percent) were qualified as estimated, tentatively identified, or not detected. The reasons for qualification are presented in Table 3-1. Some data points were qualified for multiple reasons; therefore, the sum of the qualifiers assigned is greater than the total number of data points qualified. A total of 151 results (1.1 percent) were rejected, and completeness was 99 percent, which meets the completeness goal of 90 to 100 percent. Sixty-seven rejected results were qualified as do-not-report because a more appropriate result was available, and these results were not included in the completeness calculation. A summary of all qualified results is presented in Table 3-2.

3.2 DATA USABILITY

The data meet the criteria set forth in the method and referenced quality assurance documents, with the exceptions noted above. All other results are acceptable for their intended use, as qualified.

4 REFERENCES

Integral. 2022. Quality assurance project plan. P-Site characterization work plan: Corning Refractories Plant NYSDEC Project ID 851048, 1 Front Street, Corning, New York. Integral Engineering, P.C. April.

NYSDEC. 2022. Sampling, analysis, and assessment of per- and polyfluoroalkyl substances (PFAS) under NYSDEC's Part 375 remedial programs. New York State Department of Environmental Conservation. November.

USEPA. 1994. SW-846: Test methods for evaluating solid wastes physical/chemical methods, Method 7470A, Mercury in liquid wastes (manual cold-vapor technique). Revision 1, September. U.S. Environmental Protection Agency, Washington, DC.

USEPA. 2000. SW-846: Test methods for evaluating solid wastes physical/chemical methods, Method 6010C, Inductively coupled plasma - atomic emission spectrometry. Revision 3, November. U.S. Environmental Protection Agency, Washington, DC.

USEPA. 2006. SW-846: Test methods for evaluating solid wastes physical/chemical methods, Method 8260C, Volatile organic compounds by gas chromatography/mass spectrometry (GC/MS). Revision 3, August. U.S. Environmental Protection Agency, Washington, DC.

USEPA. 2007. SW-846: Test methods for evaluating solid wastes physical/chemical methods, Method 7470A, Mercury in solid or semisolid waste (manual cold-vapor technique). Revision 2, February. U.S. Environmental Protection Agency, Washington, DC.

USEPA. 2009. Method 537, Determination of selected perfluorinated alkyl acids in drinking water by solid phase extraction and liquid chromatography/tandem mass spectrometry (LC/MS/MS). Revision 1.1, September. U.S. Environmental Protection Agency, Cincinnati, OH.

USEPA. 2010. Hazardous Waste Support Section: SOP No. HW-22, Validating semivolatile organic compounds by gas chromatography/mass spectrometry, SW-846 Method 8270D. Revision 5, December. U.S. Environmental Protection Agency Region II, New York, NY.

USEPA. 2014a. SW-846: Test methods for evaluating solid wastes physical/chemical methods, Method 8270D, Semivolatile organic compounds by gas chromatography/mass spectrometry. Revision 5, July. U.S. Environmental Protection Agency, Washington, DC.

USEPA. 2014b. Hazardous Waste Support Section: SOP No. HW-24, Validating volatile organic compounds by gas chromatography/mass spectrometry, SW-846 Method 8260B & 8260C. Revision 4, September. U.S. Environmental Protection Agency Region II, New York, NY.

USEPA. 2016a. Hazardous Waste Support Section: SOP No. HW-3c, Mercury and cyanide data validation. Revision 1, September. U.S. Environmental Protection Agency Region II, New York, NY.

USEPA. 2016b. Hazardous Waste Support Section: SOP No. HW-3a, ICP-AES data validation. Revision 1, September. U.S. Environmental Protection Agency Region II, New York, NY.

USEPA. 2018. Data review and validation guidelines for perfluoroalkyl substances (PFASs) analyzed using EPA Method 537. EPA-910-R-18-001. U.S. Environmental Protection Agency, Washington, DC.

USEPA. 2020a. National functional guidelines for inorganic superfund methods data review. EPA-540-R-20-005. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation, Washington, DC.

USEPA. 2020b. National functional guidelines for organic superfund methods data review. EPA-540-R-20-006. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation, Washington, DC.

USEPA. 2021. Draft Method 1633. Analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid, biosolids, and tissue samples by LC-MS/MS. EPA 821-D-21-001. U.S. Environmental Protection Agency, Office of Water, Washington, DC.

Tables

Table 1-1. SDGs Reviewed and Number of Samples

SDG	Number of Samples
480-200114-1	2 equipment blanks, 1 field blank
480-200130-1	4 soils
480-200156-1	9 soils, 1 equipment blank, 2 field blanks
480-200248-1	16 soils, 1 equipment blank, 1 field blank
480-201563-1	5 soils, 1 equipment blank, 1 field blank
480-201615-1	13 soils, 1 equipment blank, 1 field blank
480-201707-1	8 soils, 2 equipment blank, 2 field blank
480-202448-1	3 groundwaters, 1 equipment blank, 1 field blank, 1 trip blank
480-204989-1	5 soils, 1 field blank, 1 trip blank
480-205124-1	1 soil, 1 equipment blank, 1 field blank, 1 trip blank
480-205868-1	5 groundwaters, 1 field blank, 1 trip blank
480-205868-2	2 groundwaters, 1 field blank

Notes:
SDG = sample delivery group

Table 1-2. Analytical Parameters and Methods

Analytical Parameter	Analytical Method	Reference
1,4-Dioxane	EPA 8270D SIM ID	USEPA (2014a)
PFAS	EPA 537 ID	USEPA (2009)
	EPA 1633	USEPA (2021)
Metals	EPA 6010C	USEPA (2000)
Mercury	EPA 7470A/7471B	USEPA (1994/2007)
SVOCs	EPA 8270D	USEPA (2014a)
VOCs	EPA 8260C	USEPA (2006)

Notes:
EPA = U.S. Environmental Protection Agency
ID = isotope dilution
PFAS = per- and polyfluoroalkyl substances
SIM = selective ion monitoring
SVOC = semivolatile organic compound
VOC = volatile organic compound

Table 1-3. Definition of Data Qualifiers

Data Qualifier	Definition
J	The associated numerical value is an estimated quantity.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
NJ	The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value is the estimated concentration in the sample.
R	Rejected. The data are unusable.
U	The material was analyzed for, but was not detected.
UJ	The material was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

Table 1-4. Definition of Data Validation Reason Codes

Reason Code	Definition
Cc	Calibration (continuing)
Ci	Calibration (initial)
DNR	Do-not-report
EB	Equipment blank contamination
EMPC	Estimated maximum possible concentration
FB	Field or equipment rinsate blank contamination
HT	Holding time
ICPSD	ICP serial dilution % difference
ICS	Interference check sample
IS	Internal standard
LB	Laboratory blank contamination
LCS	Laboratory control sample
MS	Matrix spike
Other	Described in data validation report
REP	Precision
SSR	Surrogate standard recovery

Table 2-1. QA/QC Parameters Reviewed

QA/QC Parameter	Analytical Parameter						
	1,4-Dioxane EPA 8270D SIM ID	PFAS EPA 537 ID	PFAS EPA 1633	Metals EPA 6010C	Mercury EPA 7470A/7471B	SVOCs EPA 8270D	VOCs EPA 8260C
Sample Receipt and Holding Times	+	Q	+	+	+	Q	+
Blanks	+	Q	+	Q	+	Q	Q
Surrogate/Labeled Compounds	+	+	+	NA	NA	Q	Q
LCS/LCSD	+	D	+	+	+	Q	D
MS/MSD	+	+	D	Q	Q	Q	Q
Replicates	D	D	+	D	D	D	D
Serial Dilutions	NA	NA	NA	Q	+	NA	NA
MRL and Methodology	Q	Q	Q	D	D	Q	D
Instrument Performance	+	NA	+	NA	NA	+	+
Initial Calibration	+	+	Q	+	+	+	Q
Continuing Calibration	+	Q	D	Q	+	Q	Q
Internal Standards	+	D	+	+	NA	+	Q
Interference Check	NA	NA	NA	Q	NA	NA	NA
Recalculation Check	+	+	NA	+	+	+	+

Notes:

+ = All QA/QC criteria met
D = Data are discussed in the report. QA/QC criteria were not met; however no data were qualified.
NA = Not applicable
Q = Data were qualified and are discussed in the report.

EPA = U.S. Environmental Protection Agency
LCS = laboratory control sample
MRL = method reporting limit
MS/MSD = matrix spike/matrix spike duplicate
QA/QC = quality assurance and quality control
SVOC = semivolatile organic compound
VOC = volatile organic compound

Table 3-1. Summary of Data Points by Reason

Reason	Qualified as Estimated	Qualified as Not Detected	Qualified as Tentative Identification	Qualified as Rejected
Calibration (initial and continuing)	116	--	--	--
Do-not-report	--	--	--	67
Estimated maximum possible concentration	--	--	13	--
Field or equipment rinsate blank contamination	13	7	--	--
Holding time	387	--	--	--
ICP serial dilution % difference	26	--	--	--
Interference check sample	26	--	--	--
Internal standard	535	--	--	143
Laboratory blank contamination	--	87	--	--
Laboratory control sample	1	--	--	--
Matrix spike	94	--	--	9
Described in data validation report (Other)	20	--	--	--
Precision	53	--	--	--
Surrogate standard recovery	1,333	--	--	--

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200114-1	FB_072622	Manganese	0.00051	0.003	J	U	LB	mg/L
480-200114-1	ERB_072622	Manganese	0.0022	0.003	J	U	LB	mg/L
480-200114-1	ERB2_072622	Manganese	0.00089	0.003	J	U	LB	mg/L
480-200130-1	SB5 (0-0.5)	Antimony	2.2	16.6	J	J-	ICS	mg/kg
480-200130-1	SB5 (0-0.5)	Selenium	1	4.4	J B	U	LB	mg/kg
480-200130-1	SB5 (0.5-1)	Antimony	1.3	15.4	J	J-	ICS	mg/kg
480-200130-1	SB5 (0.5-1)	Selenium	0.65	4.1	J B	U	LB	mg/kg
480-200130-1	SB5 (1-2)	Antimony	0.45	17	U	UJ	ICS	mg/kg
480-200130-1	SB5 (1-2)	Selenium	0.92	4.5	J B	U	LB	mg/kg
480-200130-1	SB5 (13-15)	Antimony	0.87	19.6	J	J-	ICS	mg/kg
480-200130-1	SB5 (13-15)	Cadmium	0.16	0.26	J	J+	ICS	mg/kg
480-200130-1	SB5 (0-0.5)	1,1,1,2-Tetrachloroethane	0.6	6	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (0-0.5)	1,1,2,2-Tetrachloroethane	0.98	6	U *3	R	IS	µg/kg
480-200130-1	SB5 (0-0.5)	1,1,2-Trichloroethane	0.78	6	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (0-0.5)	1,2,4-Trichlorobenzene	0.37	6	U *3	R	IS	µg/kg
480-200130-1	SB5 (0-0.5)	1,2,4-Trimethylbenzene	1.2	6	U *3	R	IS	µg/kg
480-200130-1	SB5 (0-0.5)	1,2-Dibromo-3-chloropropane	3	6	U *3	R	IS	µg/kg
480-200130-1	SB5 (0-0.5)	1,2-Dibromoethane	0.77	6	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (0-0.5)	1,2-Dichlorobenzene	0.47	6	U *3	R	IS	µg/kg
480-200130-1	SB5 (0-0.5)	1,3,5-Trimethylbenzene	0.39	6	U *3	R	IS	µg/kg
480-200130-1	SB5 (0-0.5)	1,3-Dichlorobenzene	0.31	6	U *3	R	IS	µg/kg
480-200130-1	SB5 (0-0.5)	1,4-Dichlorobenzene	0.84	6	U *3	R	IS	µg/kg
480-200130-1	SB5 (0-0.5)	2-Hexanone	3	30	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (0-0.5)	4-Methyl-2-pentanone	2	30	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (0-0.5)	Bromoform	3	6	U *3 *+	UJ	IS	µg/kg
480-200130-1	SB5 (0-0.5)	Chlorobenzene	0.79	6	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (0-0.5)	Dibromochloromethane	0.77	6	U *3 *+	UJ	IS	µg/kg
480-200130-1	SB5 (0-0.5)	Ethylbenzene	0.42	6	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (0-0.5)	Isopropylbenzene	0.91	6	U *3	R	IS	µg/kg
480-200130-1	SB5 (0-0.5)	m,p-Xylene	1	12	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (0-0.5)	n-Butylbenzene	0.52	6	U *3	R	IS	µg/kg
480-200130-1	SB5 (0-0.5)	n-Propylbenzene	0.48	6	U *3	R	IS	µg/kg
480-200130-1	SB5 (0-0.5)	o-Xylene	0.79	6	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (0-0.5)	*sec* -Butylbenzene	0.52	6	U *3	R	IS	µg/kg
480-200130-1	SB5 (0-0.5)	Styrene	0.3	6	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (0-0.5)	*tert* -Butylbenzene	0.63	6	U *3	R	IS	µg/kg
480-200130-1	SB5 (0-0.5)	Toluene	0.46	6	U *3	UJ	IS	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200130-1	SB5 (0-0.5)	Tetrachloroethanes	0.81	6	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (0-0.5)	*trans* -1,3-Dichloropropene	2.6	6	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (0.5-1)	1,1,1,2-Tetrachloroethane	0.5	5	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (0.5-1)	1,1,1-Trichloroethane	0.44	5	J	J+	SSR,Cc	µg/kg
480-200130-1	SB5 (0.5-1)	1,1,2,2-Tetrachloroethane	0.81	5	U *3	R	IS	µg/kg
480-200130-1	SB5 (0.5-1)	1,1,2-Trichloroethane	0.65	5	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (0.5-1)	1,2,4-Trichlorobenzene	0.3	5	U *3	R	IS	µg/kg
480-200130-1	SB5 (0.5-1)	1,2,4-Trimethylbenzene	0.96	5	U *3	R	IS	µg/kg
480-200130-1	SB5 (0.5-1)	1,2-Dibromo-3-chloropropane	2.5	5	U *3	R	IS	µg/kg
480-200130-1	SB5 (0.5-1)	1,2-Dibromoethane	0.64	5	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (0.5-1)	1,2-Dichlorobenzene	0.39	5	U *3	R	IS	µg/kg
480-200130-1	SB5 (0.5-1)	1,3,5-Trimethylbenzene	0.32	5	U *3	R	IS	µg/kg
480-200130-1	SB5 (0.5-1)	1,3-Dichlorobenzene	0.26	5	U *3	R	IS	µg/kg
480-200130-1	SB5 (0.5-1)	1,4-Dichlorobenzene	0.7	5	U *3	R	IS	µg/kg
480-200130-1	SB5 (0.5-1)	2-Hexanone	2.5	25	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (0.5-1)	4-Methyl-2-pentanone	1.6	25	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (0.5-1)	Bromoform	2.5	5	U *3 *+	UJ	IS	µg/kg
480-200130-1	SB5 (0.5-1)	Chlorobenzene	0.66	5	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (0.5-1)	Dibromochloromethane	0.64	5	U *3 *+	UJ	IS	µg/kg
480-200130-1	SB5 (0.5-1)	Ethylbenzene	0.34	5	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (0.5-1)	Isopropylbenzene	0.75	5	U *3	R	IS	µg/kg
480-200130-1	SB5 (0.5-1)	m,p-Xylene	0.84	10	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (0.5-1)	n-Butylbenzene	0.43	5	U *3	R	IS	µg/kg
480-200130-1	SB5 (0.5-1)	n-Propylbenzene	0.4	5	U *3	R	IS	µg/kg
480-200130-1	SB5 (0.5-1)	o-Xylene	0.65	5	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (0.5-1)	*sec* -Butylbenzene	0.43	5	U *3	R	IS	µg/kg
480-200130-1	SB5 (0.5-1)	Styrene	0.25	5	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (0.5-1)	*tert* -Butylbenzene	0.52	5	U *3	R	IS	µg/kg
480-200130-1	SB5 (0.5-1)	Toluene	0.38	5	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (0.5-1)	Tetrachloroethanes	0.67	5	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (0.5-1)	*trans* -1,3-Dichloropropene	2.2	5	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (1-2)	1,1,1,2-Tetrachloroethane	0.54	5.4	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (1-2)	1,1,1-Trichloroethane	1.9	5.4	J	J+	SSR,Cc	µg/kg
480-200130-1	SB5 (1-2)	1,1,2,2-Tetrachloroethane	0.88	5.4	U *3	R	IS	µg/kg
480-200130-1	SB5 (1-2)	1,1,2-Trichloroethane	0.71	5.4	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (1-2)	1,2,4-Trichlorobenzene	0.33	5.4	U *3	R	IS	µg/kg
480-200130-1	SB5 (1-2)	1,2,4-Trimethylbenzene	1	5.4	U *3	R	IS	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200130-1	SB5 (1-2)	1,2-Dibromo-3-chloropropane	2.7	5.4	U *3	R	IS	µg/kg
480-200130-1	SB5 (1-2)	1,2-Dibromoethane	0.7	5.4	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (1-2)	1,2-Dichlorobenzene	0.43	5.4	U *3	R	IS	µg/kg
480-200130-1	SB5 (1-2)	1,3,5-Trimethylbenzene	0.35	5.4	U *3	R	IS	µg/kg
480-200130-1	SB5 (1-2)	1,3-Dichlorobenzene	0.28	5.4	U *3	R	IS	µg/kg
480-200130-1	SB5 (1-2)	1,4-Dichlorobenzene	0.76	5.4	U *3	R	IS	µg/kg
480-200130-1	SB5 (1-2)	2-Hexanone	2.7	27	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (1-2)	4-Methyl-2-pentanone	1.8	27	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (1-2)	Benzene	0.44	5.4	J	J+	SSR	µg/kg
480-200130-1	SB5 (1-2)	Bromoform	2.7	5.4	U *3 *+	UJ	IS	µg/kg
480-200130-1	SB5 (1-2)	Chlorobenzene	0.72	5.4	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (1-2)	Dibromochloromethane	0.7	5.4	U *3 *+	UJ	IS	µg/kg
480-200130-1	SB5 (1-2)	Ethylbenzene	0.38	5.4	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (1-2)	Isopropylbenzene	0.82	5.4	U *3	R	IS	µg/kg
480-200130-1	SB5 (1-2)	m,p-Xylene	0.92	11	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (1-2)	n-Butylbenzene	0.47	5.4	U *3	R	IS	µg/kg
480-200130-1	SB5 (1-2)	n-Propylbenzene	0.44	5.4	U *3	R	IS	µg/kg
480-200130-1	SB5 (1-2)	o-Xylene	0.71	5.4	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (1-2)	*sec* -Butylbenzene	0.47	5.4	U *3	R	IS	µg/kg
480-200130-1	SB5 (1-2)	Styrene	0.27	5.4	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (1-2)	*tert* -Butylbenzene	0.57	5.4	U *3	R	IS	µg/kg
480-200130-1	SB5 (1-2)	Toluene	0.63	5.4	J *3	J	SSR,IS	µg/kg
480-200130-1	SB5 (1-2)	Tetrachloroethanes	0.73	5.4	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (1-2)	*trans* -1,3-Dichloropropene	2.4	5.4	U *3	UJ	IS	µg/kg
480-200130-1	SB5 (13-15)	1,1,1-Trichloroethane	0.65	5	J	J+	Cc	µg/kg
480-200156-1	SS7 (12-24)	6:2 fluorotelomer sulfonate	0.061	2.1	U	UJ	HT	µg/kg
480-200156-1	SS7 (12-24)	8:2 fluorotelomer sulfonate	0.039	2.1	U	UJ	HT	µg/kg
480-200156-1	SS7 (12-24)	2-(N-ethyl-perfluorooctane sulfonamido) acetate	0.088	2.1	U	UJ	HT	µg/kg
480-200156-1	SS7 (12-24)	Perfluorobutyric acid	0.35	0.53	U	UJ	HT	µg/kg
480-200156-1	SS7 (12-24)	2-(N-methyl-perfluorooctane sulfonamido) acetic acid	0.12	2.1	U	UJ	HT	µg/kg
480-200156-1	SS7 (12-24)	Perfluorobutane sulfonic acid	0.035	0.21	U	UJ	HT	µg/kg
480-200156-1	SS7 (12-24)	Perfluorodecanoic acid	0.03	0.21	U	UJ	HT	µg/kg
480-200156-1	SS7 (12-24)	Perfluorododecanoic acid	0.027	0.21	U	UJ	HT	µg/kg
480-200156-1	SS7 (12-24)	Perfluorodecanesulfonic acid	0.072	0.21	J	J	HT	µg/kg
480-200156-1	SS7 (12-24)	Perfluoroheptanoic acid	0.042	0.21	U	UJ	HT	µg/kg
480-200156-1	SS7 (12-24)	Perfluoroheptanesulfonic acid	0.024	0.21	U	UJ	HT	µg/kg
480-200156-1	SS7 (12-24)	Perfluorohexanoic acid	0.049	0.21	U	UJ	HT	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200156-1	SS7 (12-24)	Perfluorohexane sulfonic acid	0.044	0.21	U	UJ	HT	µg/kg
480-200156-1	SS7 (12-24)	Perfluorononanoic acid	0.036	0.21	U	UJ	HT	µg/kg
480-200156-1	SS7 (12-24)	Perfluorooctanoic acid	0.062	0.21	U	UJ	HT	µg/kg
480-200156-1	SS7 (12-24)	Perfluorooctane sulfonate	0.23	0.21		J	HT	µg/kg
480-200156-1	SS7 (12-24)	Perfluorooctane sulfonamide	0.036	0.21	U	UJ	HT	µg/kg
480-200156-1	SS7 (12-24)	Perfluoropentanoic acid	0.059	0.21	U	UJ	HT	µg/kg
480-200156-1	SS7 (12-24)	Perfluorotetradecanoic acid	0.028	0.21	U	UJ	HT	µg/kg
480-200156-1	SS7 (12-24)	Perfluorotridecanoic acid	0.027	0.21	U	UJ	HT	µg/kg
480-200156-1	SS7 (12-24)	Perfluoroundecanoic acid	0.029	0.21	U	UJ	HT	µg/kg
480-200156-1	SS7 (0-2)	6:2 fluorotelomer sulfonate	0.064	2.3	U	UJ	HT	µg/kg
480-200156-1	SS7 (0-2)	8:2 fluorotelomer sulfonate	0.042	2.3	U	UJ	HT	µg/kg
480-200156-1	SS7 (0-2)	2-(N-ethyl-perfluorooctane sulfonamido) acetate	0.094	2.3	U	UJ	HT	µg/kg
480-200156-1	SS7 (0-2)	Perfluorobutyric acid	0.37	0.56	U	UJ	HT	µg/kg
480-200156-1	SS7 (0-2)	2-(N-methyl-perfluorooctane sulfonamido) acetic acid	0.12	2.3	U	UJ	HT	µg/kg
480-200156-1	SS7 (0-2)	Perfluorobutane sulfonic acid	0.037	0.23	U	UJ	HT	µg/kg
480-200156-1	SS7 (0-2)	Perfluorodecanoic acid	0.039	0.23	J I	NJ	HT,EMPC	µg/kg
480-200156-1	SS7 (0-2)	Perfluorododecanoic acid	0.028	0.23	U	UJ	HT	µg/kg
480-200156-1	SS7 (0-2)	Perfluorodecanesulfonic acid	0.036	0.23	J	J	HT	µg/kg
480-200156-1	SS7 (0-2)	Perfluoroheptanoic acid	0.044	0.23	U	UJ	HT	µg/kg
480-200156-1	SS7 (0-2)	Perfluoroheptanesulfonic acid	0.068	0.23	J	J	HT	µg/kg
480-200156-1	SS7 (0-2)	Perfluorohexanoic acid	0.13	0.23	J I	NJ	HT,EMPC	µg/kg
480-200156-1	SS7 (0-2)	Perfluorohexane sulfonic acid	0.046	0.23	U	UJ	HT	µg/kg
480-200156-1	SS7 (0-2)	Perfluorononanoic acid	0.063	0.23	J	J	HT	µg/kg
480-200156-1	SS7 (0-2)	Perfluorooctanoic acid	0.065	0.23	U	UJ	HT	µg/kg
480-200156-1	SS7 (0-2)	Perfluorooctane sulfonate	0.12	0.23	U	UJ	HT	µg/kg
480-200156-1	SS7 (0-2)	Perfluorooctane sulfonamide	0.038	0.23	U	UJ	HT	µg/kg
480-200156-1	SS7 (0-2)	Perfluoropentanoic acid	0.062	0.23	U	UJ	HT	µg/kg
480-200156-1	SS7 (0-2)	Perfluorotetradecanoic acid	0.029	0.23	U	UJ	HT	µg/kg
480-200156-1	SS7 (0-2)	Perfluorotridecanoic acid	0.028	0.23	U	UJ	HT	µg/kg
480-200156-1	SS7 (0-2)	Perfluoroundecanoic acid	0.042	0.23	J	J	HT	µg/kg
480-200156-1	SS7 (0-6)	6:2 fluorotelomer sulfonate	0.06	2.1	U	UJ	HT	µg/kg
480-200156-1	SS7 (0-6)	8:2 fluorotelomer sulfonate	0.039	2.1	U	UJ	HT	µg/kg
480-200156-1	SS7 (0-6)	2-(N-ethyl-perfluorooctane sulfonamido) acetate	0.087	2.1	U	UJ	HT	µg/kg
480-200156-1	SS7 (0-6)	Perfluorobutyric acid	0.35	0.53	U	UJ	HT	µg/kg
480-200156-1	SS7 (0-6)	2-(N-methyl-perfluorooctane sulfonamido) acetic acid	0.12	2.1	U	UJ	HT	µg/kg
480-200156-1	SS7 (0-6)	Perfluorobutane sulfonic acid	0.035	0.21	U	UJ	HT	µg/kg
480-200156-1	SS7 (0-6)	Perfluorodecanoic acid	0.043	0.21	J	J	HT	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200156-1	SS7 (0-6)	Perfluorododecanoic acid	0.026	0.21	J	J	HT	µg/kg
480-200156-1	SS7 (0-6)	Perfluorodecanesulfonic acid	0.021	0.21	J	J	HT	µg/kg
480-200156-1	SS7 (0-6)	Perfluoroheptanoic acid	0.053	0.21	J	J	HT	µg/kg
480-200156-1	SS7 (0-6)	Perfluoroheptanesulfonic acid	0.075	0.21	J	J	HT	µg/kg
480-200156-1	SS7 (0-6)	Perfluorohexanoic acid	0.15	0.21	J I	NJ	HT,EMPC	µg/kg
480-200156-1	SS7 (0-6)	Perfluorohexane sulfonic acid	0.043	0.21	U	UJ	HT	µg/kg
480-200156-1	SS7 (0-6)	Perfluorononanoic acid	0.078	0.21	J	J	HT	µg/kg
480-200156-1	SS7 (0-6)	Perfluorooctanoic acid	0.092	0.21	J	J	HT	µg/kg
480-200156-1	SS7 (0-6)	Perfluorooctane sulfonate	0.12	0.21	J I	NJ	HT,EMPC	µg/kg
480-200156-1	SS7 (0-6)	Perfluorooctane sulfonamide	0.036	0.21	U	UJ	HT	µg/kg
480-200156-1	SS7 (0-6)	Perfluoropentanoic acid	0.058	0.21	U	UJ	HT	µg/kg
480-200156-1	SS7 (0-6)	Perfluorotetradecanoic acid	0.027	0.21	U	UJ	HT	µg/kg
480-200156-1	SS7 (0-6)	Perfluorotridecanoic acid	0.026	0.21	J	J	HT	µg/kg
480-200156-1	SS7 (0-6)	Perfluoroundecanoic acid	0.051	0.21	J	J	HT	µg/kg
480-200156-1	SS7 (6-12)	6:2 fluorotelomer sulfonate	0.058	2	U	UJ	HT	µg/kg
480-200156-1	SS7 (6-12)	8:2 fluorotelomer sulfonate	0.038	2	U	UJ	HT	µg/kg
480-200156-1	SS7 (6-12)	2-(N-ethyl-perfluorooctane sulfonamido) acetate	0.085	2	U	UJ	HT	µg/kg
480-200156-1	SS7 (6-12)	Perfluorobutyric acid	0.34	0.51	U	UJ	HT	µg/kg
480-200156-1	SS7 (6-12)	2-(N-methyl-perfluorooctane sulfonamido) acetic acid	0.11	2	U	UJ	HT	µg/kg
480-200156-1	SS7 (6-12)	Perfluorobutane sulfonic acid	0.034	0.2	U	UJ	HT	µg/kg
480-200156-1	SS7 (6-12)	Perfluorodecanoic acid	0.029	0.2	U	UJ	HT	µg/kg
480-200156-1	SS7 (6-12)	Perfluorododecanoic acid	0.026	0.2	U	UJ	HT	µg/kg
480-200156-1	SS7 (6-12)	Perfluorodecanesulfonic acid	0.022	0.2	J	J	HT	µg/kg
480-200156-1	SS7 (6-12)	Perfluoroheptanoic acid	0.04	0.2	U	UJ	HT	µg/kg
480-200156-1	SS7 (6-12)	Perfluoroheptanesulfonic acid	0.024	0.2	U	UJ	HT	µg/kg
480-200156-1	SS7 (6-12)	Perfluorohexanoic acid	0.047	0.2	U	UJ	HT	µg/kg
480-200156-1	SS7 (6-12)	Perfluorohexane sulfonic acid	0.042	0.2	U	UJ	HT	µg/kg
480-200156-1	SS7 (6-12)	Perfluorononanoic acid	0.035	0.2	U	UJ	HT	µg/kg
480-200156-1	SS7 (6-12)	Perfluorooctanoic acid	0.06	0.2	J	J	HT	µg/kg
480-200156-1	SS7 (6-12)	Perfluorooctane sulfonate	0.12	0.2	J	J	HT	µg/kg
480-200156-1	SS7 (6-12)	Perfluorooctane sulfonamide	0.035	0.2	U	UJ	HT	µg/kg
480-200156-1	SS7 (6-12)	Perfluoropentanoic acid	0.056	0.2	U	UJ	HT	µg/kg
480-200156-1	SS7 (6-12)	Perfluorotetradecanoic acid	0.027	0.2	U	UJ	HT	µg/kg
480-200156-1	SS7 (6-12)	Perfluorotridecanoic acid	0.026	0.2	U	UJ	HT	µg/kg
480-200156-1	SS7 (6-12)	Perfluoroundecanoic acid	0.028	0.2	U	UJ	HT	µg/kg
480-200156-1	SS7 (12-24)	Antimony	1	16.1	J	J-	ICS	mg/kg
480-200156-1	SS7 (12-24)	Selenium	0.74	4.3	J B	U	LB	mg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200156-1	SS7 (0-2)	Potassium	1480	36.7	^+	J+	Cc	mg/kg
480-200156-1	SS7 (0-2)	Sodium	48.5	171	J	U	LB	mg/kg
480-200156-1	SB1 (0-0.5)	Selenium	1.1	5.3	J B	U	LB	mg/kg
480-200156-1	SB1 (0.5-1)	Selenium	0.64	4.6	J B	U	LB	mg/kg
480-200156-1	SB1 (1-2)	Selenium	0.72	4.8	J B	U	LB	mg/kg
480-200156-1	SS7 (0-6)	Antimony	1.4	16.8	J	J-	ICS	mg/kg
480-200156-1	SS7 (0-6)	Cadmium	0.21	0.22	J	J+	ICS	mg/kg
480-200156-1	SS7 (6-12)	Antimony	1.2	15.5	J	J-	ICS	mg/kg
480-200156-1	SB1 (15-16)	Mercury	0.005	0.02	J	U	LB	mg/kg
480-200156-1	SS7 (12-24)	1,1,1,2-Tetrachloroethane	0.55	5.5	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (12-24)	1,1,1-Trichloroethane	0.4	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (12-24)	1,1,2,2-Tetrachloroethane	0.89	5.5	U *3	R	IS	µg/kg
480-200156-1	SS7 (12-24)	1,1,2-Trichloroethane	0.72	5.5	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (12-24)	1,1-Dichloroethane	0.67	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (12-24)	1,1-Dichloroethene	0.67	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (12-24)	1,2,3-Trimethylbenzene	1.1	5.5	U *3	UJ	SSR	µg/kg
480-200156-1	SS7 (12-24)	1,2,4-Trichlorobenzene	0.33	5.5	U *3	R	IS	µg/kg
480-200156-1	SS7 (12-24)	1,2,4-Trimethylbenzene	1.1	5.5	U *3	R	IS	µg/kg
480-200156-1	SS7 (12-24)	1,2-Dibromo-3-chloropropane	2.8	5.5	U *3	R	IS	µg/kg
480-200156-1	SS7 (12-24)	1,2-Dibromoethane	0.71	5.5	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (12-24)	1,2-Dichlorobenzene	0.43	5.5	U *3	R	IS	µg/kg
480-200156-1	SS7 (12-24)	1,2-Dichloroethane	0.28	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (12-24)	1,2-Dichloropropane	2.8	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (12-24)	1,3,5-Trimethylbenzene	0.35	5.5	U *3	R	IS	µg/kg
480-200156-1	SS7 (12-24)	1,3-Dichlorobenzene	0.28	5.5	U *3	R	IS	µg/kg
480-200156-1	SS7 (12-24)	1,4-Dichlorobenzene	0.77	5.5	U *3	R	IS	µg/kg
480-200156-1	SS7 (12-24)	2-Hexanone	2.8	28	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (12-24)	4-Methyl-2-pentanone	1.8	28	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (12-24)	Acetone	7.9	28	J	J	SSR	µg/kg
480-200156-1	SS7 (12-24)	Benzene	0.27	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (12-24)	Bromodichloromethane	0.74	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (12-24)	Bromomethane	0.5	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (12-24)	Bromoform	2.8	5.5	U *3 *+	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (12-24)	Carbon disulfide	2.8	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (12-24)	Carbon Tetrachloride	0.53	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (12-24)	Chloroform	0.34	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (12-24)	*cis* -1,2-Dichloroethene	0.7	5.5	U	UJ	SSR	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200156-1	SS7 (12-24)	*cis*-1,3-Dichloropropene	0.79	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (12-24)	Chlorobenzene	0.73	5.5	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (12-24)	Chloroethane	1.2	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (12-24)	Chloromethane	0.33	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (12-24)	Cyclohexane	0.77	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (12-24)	Dibromochloromethane	0.7	5.5	U *3 *+	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (12-24)	Dichlorodifluoromethane	0.45	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (12-24)	Ethylbenzene	0.38	5.5	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (12-24)	Isopropylbenzene	0.83	5.5	U *3	R	IS	µg/kg
480-200156-1	SS7 (12-24)	2-Butanone	2	28	U	UJ	SSR	µg/kg
480-200156-1	SS7 (12-24)	m,p-Xylene	0.92	11	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (12-24)	Methyl Acetate	4.7	28	J	J	SSR	µg/kg
480-200156-1	SS7 (12-24)	Methylcyclohexane	0.84	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (12-24)	Methylene Chloride	2.5	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (12-24)	Methyl *tert*-butyl ether	0.54	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (12-24)	n-Butylbenzene	0.48	5.5	U *3	R	IS	µg/kg
480-200156-1	SS7 (12-24)	n-Propylbenzene	0.44	5.5	U *3	R	IS	µg/kg
480-200156-1	SS7 (12-24)	o-Xylene	0.72	5.5	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (12-24)	*sec*-Butylbenzene	0.48	5.5	U *3	R	IS	µg/kg
480-200156-1	SS7 (12-24)	Styrene	0.28	5.5	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (12-24)	*tert*-Butylbenzene	0.57	5.5	U *3 *+	R	IS	µg/kg
480-200156-1	SS7 (12-24)	Toluene	0.42	5.5	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (12-24)	Tetrachloroethanes	0.74	5.5	U *3 *+	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (12-24)	*trans*-1,2-Dichloroethene	0.57	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (12-24)	*trans*-1,3-Dichloropropene	2.4	5.5	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (12-24)	Trichloroethene	1.2	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (12-24)	Trichlorotrifluoroethane	1.3	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (12-24)	Trichlorofluoromethane	0.52	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (12-24)	Vinyl Chloride	0.67	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (12-24)	Xylenes	0.92	11	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-2)	1,1,2,2-Tetrachloroethane	1.4	8.6	U *3	UJ	IS	µg/kg
480-200156-1	SS7 (0-2)	1,2,4-Trichlorobenzene	0.52	8.6	U *3	UJ	IS	µg/kg
480-200156-1	SS7 (0-2)	1,2,4-Trimethylbenzene	1.6	8.6	U *3	UJ	IS	µg/kg
480-200156-1	SS7 (0-2)	1,2-Dibromo-3-chloropropane	4.3	8.6	U *3	UJ	IS	µg/kg
480-200156-1	SS7 (0-2)	1,2-Dichlorobenzene	0.67	8.6	U *3	UJ	IS	µg/kg
480-200156-1	SS7 (0-2)	1,3,5-Trimethylbenzene	0.55	8.6	U *3	UJ	IS	µg/kg
480-200156-1	SS7 (0-2)	1,3-Dichlorobenzene	0.44	8.6	U *3	UJ	IS	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200156-1	SS7 (0-2)	1,4-Dichlorobenzene	1.2	8.6	U *3	UJ	IS	µg/kg
480-200156-1	SS7 (0-2)	Isopropylbenzene	1.3	8.6	U *3	UJ	IS	µg/kg
480-200156-1	SS7 (0-2)	n-Butylbenzene	0.75	8.6	U *3	UJ	IS	µg/kg
480-200156-1	SS7 (0-2)	n-Propylbenzene	0.69	8.6	U *3	UJ	IS	µg/kg
480-200156-1	SS7 (0-2)	*sec*-Butylbenzene	0.75	8.6	U *3	UJ	IS	µg/kg
480-200156-1	SS7 (0-2)	*tert*-Butylbenzene	0.89	8.6	U *3 *+	UJ	IS	µg/kg
480-200156-1	SS7 (0-6)	1,1,1,2-Tetrachloroethane	0.59	5.9	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (0-6)	1,1,1-Trichloroethane	0.43	5.9	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	1,1,2,2-Tetrachloroethane	0.95	5.9	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (0-6)	1,1,2-Trichloroethane	0.76	5.9	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (0-6)	1,1-Dichloroethane	0.72	5.9	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	1,1-Dichloroethene	0.72	5.9	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	1,2,3-Trimethylbenzene	1.2	5.9	U *3	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	1,2,4-Trichlorobenzene	0.36	5.9	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (0-6)	1,2,4-Trimethylbenzene	1.1	5.9	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (0-6)	1,2-Dibromo-3-chloropropane	2.9	5.9	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (0-6)	1,2-Dibromoethane	0.75	5.9	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (0-6)	1,2-Dichlorobenzene	0.46	5.9	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (0-6)	1,2-Dichloroethane	0.29	5.9	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	1,2-Dichloropropane	2.9	5.9	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	1,3,5-Trimethylbenzene	0.38	5.9	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (0-6)	1,3-Dichlorobenzene	0.3	5.9	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (0-6)	1,4-Dichlorobenzene	0.82	5.9	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (0-6)	2-Hexanone	2.9	29	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (0-6)	4-Methyl-2-pentanone	1.9	29	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (0-6)	Acetone	4.9	29	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	Benzene	0.29	5.9	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	Bromodichloromethane	0.79	5.9	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	Bromomethane	0.53	5.9	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	Bromoform	2.9	5.9	U *3 *+	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (0-6)	Carbon disulfide	2.9	5.9	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	Carbon Tetrachloride	0.57	5.9	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	Chloroform	0.36	5.9	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	*cis*-1,2-Dichloroethene	0.75	5.9	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	*cis*-1,3-Dichloropropene	0.84	5.9	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	Chlorobenzene	0.77	5.9	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (0-6)	Chloroethane	1.3	5.9	U	UJ	SSR	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200156-1	SS7 (0-6)	Chloromethane	0.35	5.9	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	Cyclohexane	0.82	5.9	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	Dibromochloromethane	0.75	5.9	U *3 *+	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (0-6)	Dichlorodifluoromethane	0.48	5.9	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	Ethylbenzene	0.4	5.9	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (0-6)	Isopropylbenzene	0.88	5.9	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (0-6)	2-Butanone	2.1	29	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	m,p-Xylene	0.99	12	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (0-6)	Methyl Acetate	3.5	29	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	Methylcyclohexane	0.89	5.9	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	Methylene Chloride	2.7	5.9	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	Methyl *tert*-butyl ether	0.58	5.9	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	n-Butylbenzene	0.51	5.9	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (0-6)	n-Propylbenzene	0.47	5.9	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (0-6)	o-Xylene	0.77	5.9	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (0-6)	*sec*-Butylbenzene	0.51	5.9	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (0-6)	Styrene	0.29	5.9	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (0-6)	*tert*-Butylbenzene	0.61	5.9	U *3 *+	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (0-6)	Toluene	0.44	5.9	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (0-6)	Tetrachloroethanes	0.79	5.9	U *3 *+	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (0-6)	*trans*-1,2-Dichloroethene	0.61	5.9	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	*trans*-1,3-Dichloropropene	2.6	5.9	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (0-6)	Trichloroethene	1.3	5.9	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	Trichlorotrifluoroethane	1.3	5.9	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	Trichlorofluoromethane	0.55	5.9	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	Vinyl Chloride	0.72	5.9	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	Xylenes	0.99	12	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	1,1,1,2-Tetrachloroethane	0.55	5.5	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (6-12)	1,1,1-Trichloroethane	0.4	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	1,1,2,2-Tetrachloroethane	0.89	5.5	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (6-12)	1,1,2-Trichloroethane	0.71	5.5	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (6-12)	1,1-Dichloroethane	0.67	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	1,1-Dichloroethene	0.67	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	1,2,3-Trimethylbenzene	1.1	5.5	U *3	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	1,2,4-Trichlorobenzene	0.33	5.5	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (6-12)	1,2,4-Trimethylbenzene	1.1	5.5	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (6-12)	1,2-Dibromo-3-chloropropane	2.7	5.5	U *3	UJ	SSR,IS	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200156-1	SS7 (6-12)	1,2-Dibromoethane	0.7	5.5	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (6-12)	1,2-Dichlorobenzene	0.43	5.5	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (6-12)	1,2-Dichloroethane	0.28	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	1,2-Dichloropropane	2.7	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	1,3,5-Trimethylbenzene	0.35	5.5	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (6-12)	1,3-Dichlorobenzene	0.28	5.5	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (6-12)	1,4-Dichlorobenzene	0.77	5.5	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (6-12)	2-Hexanone	2.7	27	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (6-12)	4-Methyl-2-pentanone	1.8	27	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (6-12)	Acetone	4.6	27	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	Benzene	0.27	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	Bromodichloromethane	0.73	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	Bromomethane	0.49	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	Bromoform	2.7	5.5	U *3 *+	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (6-12)	Carbon disulfide	2.7	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	Carbon Tetrachloride	0.53	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	Chloroform	0.34	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	*cis*-1,2-Dichloroethene	0.7	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	*cis*-1,3-Dichloropropene	0.79	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	Chlorobenzene	0.72	5.5	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (6-12)	Chloroethane	1.2	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	Chloromethane	0.33	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	Cyclohexane	0.77	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	Dibromochloromethane	0.7	5.5	U *3 *+	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (6-12)	Dichlorodifluoromethane	0.45	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	Ethylbenzene	0.38	5.5	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (6-12)	Isopropylbenzene	0.83	5.5	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (6-12)	2-Butanone	2	27	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	m,p-Xylene	0.92	11	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (6-12)	Methyl Acetate	3.3	27	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	Methylcyclohexane	0.83	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	Methylene Chloride	2.5	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	Methyl *tert*-butyl ether	0.54	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	n-Butylbenzene	0.48	5.5	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (6-12)	n-Propylbenzene	0.44	5.5	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (6-12)	o-Xylene	0.72	5.5	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (6-12)	*sec*-Butylbenzene	0.48	5.5	U *3	UJ	SSR,IS	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200156-1	SS7 (6-12)	Styrene	0.27	5.5	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (6-12)	*tert* -Butylbenzene	0.57	5.5	U *3 *+	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (6-12)	Toluene	0.41	5.5	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (6-12)	Tetrachloroethanes	0.74	5.5	U *3 *+	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (6-12)	*trans* -1,2-Dichloroethene	0.57	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	trans-1,3-Dichloropropene	2.4	5.5	U *3	UJ	SSR,IS	µg/kg
480-200156-1	SS7 (6-12)	Trichloroethene	1.2	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	Trichlorotrifluoroethane	1.2	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	Trichlorofluoromethane	0.52	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	Vinyl Chloride	0.67	5.5	U	UJ	SSR	µg/kg
480-200156-1	SS7 (6-12)	Xylenes	0.92	11	U	UJ	SSR	µg/kg
480-200156-1	SS7 (0-6)	Naphthalene	34	180	J	U	FB	µg/kg
480-200156-1	FB2_072722	6:2 fluorotelomer sulfonate	1.1	4.2	U	UJ	HT	ng/L
480-200156-1	FB2_072722	8:2 fluorotelomer sulfonate	0.65	1.7	U	UJ	HT	ng/L
480-200156-1	FB2_072722	2-(N-ethyl-perfluorooctane sulfonamido) acetate	1.4	4.2	U	UJ	HT	ng/L
480-200156-1	FB2_072722	Perfluorobutyric acid	1	4.2	U	UJ	HT	ng/L
480-200156-1	FB2_072722	2-(N-methyl-perfluorooctane sulfonamido) acetic acid	1.6	4.2	U	UJ	HT	ng/L
480-200156-1	FB2_072722	Perfluorobutane sulfonic acid	0.52	1.7	U	UJ	HT	ng/L
480-200156-1	FB2_072722	Perfluorodecanoic acid	0.39	1.7	U	UJ	HT	ng/L
480-200156-1	FB2_072722	Perfluorododecanoic acid	0.41	1.7	U	UJ	HT	ng/L
480-200156-1	FB2_072722	Perfluorodecanesulfonic acid	0.34	1.7	U	UJ	HT	ng/L
480-200156-1	FB2_072722	Perfluoroheptanoic acid	0.46	1.7	U	UJ	HT	ng/L
480-200156-1	FB2_072722	Perfluoroheptanesulfonic acid	0.35	1.7	U	UJ	HT	ng/L
480-200156-1	FB2_072722	Perfluorohexanoic acid	0.55	1.7	U	UJ	HT	ng/L
480-200156-1	FB2_072722	Perfluorohexane sulfonic acid	0.46	1.7	U	UJ	HT	ng/L
480-200156-1	FB2_072722	Perfluorononanoic acid	0.41	1.7	U	UJ	HT	ng/L
480-200156-1	FB2_072722	Perfluorooctanoic acid	0.64	1.7	U	UJ	HT	ng/L
480-200156-1	FB2_072722	Perfluorooctane sulfonate	0.72	1.7	U	UJ	HT	ng/L
480-200156-1	FB2_072722	Perfluorooctane sulfonamide	0.78	1.7	U	UJ	HT	ng/L
480-200156-1	FB2_072722	Perfluoropentanoic acid	0.57	1.7	U	UJ	HT	ng/L
480-200156-1	FB2_072722	Perfluorotetradecanoic acid	0.54	1.7	U	UJ	HT	ng/L
480-200156-1	FB2_072722	Perfluorotridecanoic acid	0.41	1.7	U	UJ	HT	ng/L
480-200156-1	FB2_072722	Perfluoroundecanoic acid	0.46	1.7	U	UJ	HT	ng/L
480-200156-1	FB2_072722	1,4-Dioxane	1.1	10	U	R	DNR	µg/L
480-200156-1	ERB_072722	1,4-Dioxane	1.1	10	U	R	DNR	µg/L
480-200248-1	SB6 (0-0.5)	Perfluorohexanoic acid	0.13	0.22	J I	NJ	EMPC	µg/kg
480-200248-1	SB6 (0-0.5)	Perfluorooctane sulfonate	0.21	0.22	J I	NJ	EMPC	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200248-1	FDUP_072922	Perfluorohexanoic acid	0.1	0.22	J I	UJ	Other,EMPC	µg/kg
480-200248-1	FDUP_072922	Perfluorooctane sulfonate	0.25	0.22	I	UJ	Other,EMPC	µg/kg
480-200248-1	SB6 (1-2)	Perfluorobutane sulfonic acid	0.037	0.22	J	U	Other	µg/kg
480-200248-1	SB6 (1-2)	Perfluorohexanoic acid	0.053	0.22	J	U	Other	µg/kg
480-200248-1	SB6 (0.5-1)	Perfluoroheptanoic acid	0.045	0.22	J	U	Other	µg/kg
480-200248-1	SB6 (0.5-1)	Perfluorohexanoic acid	0.066	0.22	J	U	Other	µg/kg
480-200248-1	SB6 (0.5-1)	Perfluorohexane sulfonic acid	0.1	0.22	J I	UJ	Other,EMPC	µg/kg
480-200248-1	ERB_072822	Manganese	0.00062	0.003	J B	U	LB	mg/L
480-200248-1	FB_072922	Manganese	0.0011	0.003	J B	U	LB	mg/L
480-200248-1	SS6 (0-2)	Cadmium	0.097	0.21	J	J-	ICS	mg/kg
480-200248-1	SS6 (0-6)	Cadmium	0.034	0.23	U	UJ	ICS	mg/kg
480-200248-1	SB6 (1-2)	Aluminum	6570	10.9	B F1	J	MS	mg/kg
480-200248-1	SB6 (1-2)	Antimony	4.9	16.4	J F1	J-	MS	mg/kg
480-200248-1	SB6 (1-2)	Barium	445	0.55	B	J-	MS	mg/kg
480-200248-1	SB6 (1-2)	Calcium	4560	54.5	F1	J+	MS	mg/kg
480-200248-1	SB6 (1-2)	Cobalt	8.3	0.55		J+	MS,ICPSD	mg/kg
480-200248-1	SB6 (1-2)	Copper	79.7	1.1	F1 F2	J+	MS	mg/kg
480-200248-1	SB6 (1-2)	Iron	19400	10.9		J-	MS	mg/kg
480-200248-1	SB6 (1-2)	Manganese	291	0.22	B	J-	MS	mg/kg
480-200248-1	SB6 (1-2)	Nickel	18.4	5.5		J+	MS,ICPSD	mg/kg
480-200248-1	SB6 (1-2)	Potassium	1030	32.7	F1	J+	MS,ICPSD	mg/kg
480-200248-1	SB6 (1-2)	Zinc	333	2.2	B	J-	MS	mg/kg
480-200248-1	SB6 (13-15)	Cadmium	0.19	0.26	J	J+	ICS	mg/kg
480-200248-1	SS5 (6-12)	Cadmium	0.033	0.22	U	UJ	ICS	mg/kg
480-200248-1	SB6 (1-2)	Mercury	0.44	0.023	F1	J-	MS	mg/kg
480-200248-1	SB6 (0-0.5)	1,1,1,2-Tetrachloroethane	0.75	7.5	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0-0.5)	1,1,1-Trichloroethane	0.54	7.5	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	1,1,2,2-Tetrachloroethane	1.2	7.5	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0-0.5)	1,1,2-Trichloroethane	0.97	7.5	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0-0.5)	1,1-Dichloroethane	0.91	7.5	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	1,1-Dichloroethene	0.91	7.5	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	1,2,3-Trimethylbenzene	1.5	7.5	U *3	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	1,2,4-Trichlorobenzene	0.45	7.5	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0-0.5)	1,2,4-Trimethylbenzene	1.4	7.5	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0-0.5)	1,2-Dibromo-3-chloropropane	3.7	7.5	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0-0.5)	1,2-Dibromoethane	0.96	7.5	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0-0.5)	1,2-Dichlorobenzene	0.58	7.5	U *3	UJ	SSR,IS	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200248-1	SB6 (0-0.5)	1,2-Dichloroethane	0.37	7.5	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	1,2-Dichloropropane	3.7	7.5	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	1,3,5-Trimethylbenzene	0.48	7.5	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0-0.5)	1,3-Dichlorobenzene	0.38	7.5	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0-0.5)	1,4-Dichlorobenzene	1	7.5	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0-0.5)	2-Hexanone	3.7	37	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0-0.5)	4-Methyl-2-pentanone	2.4	37	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0-0.5)	Acetone	6.3	37	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	Benzene	0.37	7.5	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	Bromodichloromethane	1	7.5	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	Bromomethane	0.67	7.5	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	Bromoform	3.7	7.5	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0-0.5)	Carbon disulfide	3.7	7.5	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	Carbon Tetrachloride	0.72	7.5	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	Chloroform	0.46	7.5	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	*cis*-1,2-Dichloroethene	0.96	7.5	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	*cis*-1,3-Dichloropropene	1.1	7.5	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	Chlorobenzene	0.99	7.5	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0-0.5)	Chloroethane	1.7	7.5	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	Chloromethane	0.45	7.5	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	Cyclohexane	1	7.5	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	Dibromochloromethane	0.96	7.5	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0-0.5)	Dichlorodifluoromethane	0.62	7.5	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	Ethylbenzene	0.51	7.5	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0-0.5)	Isopropylbenzene	1.1	7.5	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0-0.5)	2-Butanone	2.7	37	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	m,p-Xylene	1.3	15	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0-0.5)	Methyl Acetate	4.5	37	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	Methylcyclohexane	1.1	7.5	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	Methylene Chloride	3.4	7.5	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	Methyl *tert*-butyl ether	0.73	7.5	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	n-Butylbenzene	0.65	7.5	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0-0.5)	n-Propylbenzene	0.6	7.5	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0-0.5)	o-Xylene	0.97	7.5	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0-0.5)	*sec*-Butylbenzene	0.65	7.5	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0-0.5)	Styrene	0.37	7.5	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0-0.5)	*tert*-Butylbenzene	0.78	7.5	U *3	UJ	SSR,IS	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200248-1	SB6 (0-0.5)	Toluene	0.61	7.5	J *3	J	SSR,IS	µg/kg
480-200248-1	SB6 (0-0.5)	Tetrachloroethanes	1	7.5	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0-0.5)	*trans* -1,2-Dichloroethene	0.77	7.5	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	*trans* -1,3-Dichloropropene	3.3	7.5	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0-0.5)	Trichloroethene	1.6	7.5	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	Trichlorotrifluoroethane	1.7	7.5	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	Trichlorofluoromethane	0.71	7.5	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	Vinyl Chloride	0.91	7.5	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0-0.5)	Xylenes	1.3	15	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	1,1,1,2-Tetrachloroethane	0.43	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	1,1,1-Trichloroethane	0.31	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	1,1,2,2-Tetrachloroethane	0.69	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	1,1,2-Trichloroethane	0.56	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	1,1-Dichloroethane	0.52	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	1,1-Dichloroethene	0.52	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	1,2,3-Trimethylbenzene	0.87	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	1,2,4-Trichlorobenzene	0.26	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	1,2,4-Trimethylbenzene	0.82	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	1,2-Dibromo-3-chloropropane	2.1	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	1,2-Dibromoethane	0.55	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	1,2-Dichlorobenzene	0.33	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	1,2-Dichloroethane	0.21	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	1,2-Dichloropropane	2.1	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	1,3,5-Trimethylbenzene	0.28	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	1,3-Dichlorobenzene	0.22	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	1,4-Dichlorobenzene	0.6	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	2-Hexanone	2.1	21	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	4-Methyl-2-pentanone	1.4	21	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	Acetone	20	21	J	J	SSR	µg/kg
480-200248-1	SS5 (12-24)	Benzene	0.21	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	Bromodichloromethane	0.57	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	Bromomethane	0.38	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	Bromoform	2.1	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	Carbon disulfide	2.1	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	Carbon Tetrachloride	0.41	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	Chloroform	0.26	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	*cis* -1,2-Dichloroethene	0.55	4.3	U	UJ	SSR	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200248-1	SS5 (12-24)	*cis*-1,3-Dichloropropene	0.62	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	Chlorobenzene	0.56	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	Chloroethane	0.97	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	Chloromethane	0.26	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	Cyclohexane	0.6	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	Dibromochloromethane	0.55	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	Dichlorodifluoromethane	0.35	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	Ethylbenzene	0.29	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	Isopropylbenzene	0.64	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	2-Butanone	1.6	21	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	m,p-Xylene	0.72	8.5	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	Methyl Acetate	2.6	21	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	Methylcyclohexane	0.65	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	Methylene Chloride	2	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	Methyl *tert*-butyl ether	0.42	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	n-Butylbenzene	0.37	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	n-Propylbenzene	0.34	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	o-Xylene	0.56	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	*sec*-Butylbenzene	0.37	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	Styrene	0.21	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	*tert*-Butylbenzene	0.44	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	Toluene	0.32	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	Tetrachloroethanes	0.57	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	*trans*-1,2-Dichloroethene	0.44	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	*trans*-1,3-Dichloropropene	1.9	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	Trichloroethene	0.94	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	Trichlorotrifluoroethane	0.97	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	Trichlorofluoromethane	0.4	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	Vinyl Chloride	0.52	4.3	U	UJ	SSR	µg/kg
480-200248-1	SS5 (12-24)	Xylenes	0.72	8.5	U	UJ	SSR	µg/kg
480-200248-1	ERB_072822	1,1,1,2-Tetrachloroethane	0.35	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	1,1,1-Trichloroethane	0.82	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	1,1,2,2-Tetrachloroethane	0.21	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	1,1,2-Trichloroethane	0.23	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	1,1-Dichloroethane	0.38	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	1,1-Dichloroethene	0.29	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	1,2,3-Trimethylbenzene	0.26	1	U	UJ	SSR	µg/L

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200248-1	ERB_072822	1,2,4-Trichlorobenzene	0.41	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	1,2,4-Trimethylbenzene	0.75	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	1,2-Dibromo-3-chloropropane	0.39	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	1,2-Dibromoethane	0.73	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	1,2-Dichlorobenzene	0.79	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	1,2-Dichloroethane	0.21	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	1,2-Dichloropropane	0.72	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	1,3,5-Trimethylbenzene	0.77	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	1,3-Dichlorobenzene	0.78	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	1,4-Dichlorobenzene	0.84	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	2-Hexanone	1.2	5	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	4-Methyl-2-pentanone	2.1	5	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	Acetone	3	10	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	Benzene	0.41	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	Bromodichloromethane	0.39	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	Bromomethane	0.69	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	Bromoform	0.26	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	Carbon disulfide	0.19	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	Carbon Tetrachloride	0.27	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	Chloroform	0.34	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	*cis*-1,2-Dichloroethene	0.81	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	*cis*-1,3-Dichloropropene	0.36	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	Chlorobenzene	0.75	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	Chloroethane	0.32	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	Chloromethane	0.35	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	Cyclohexane	0.18	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	Dibromochloromethane	0.32	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	Dichlorodifluoromethane	0.68	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	Ethylbenzene	0.74	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	Isopropylbenzene	0.79	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	2-Butanone	1.3	10	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	m,p-Xylene	0.66	2	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	Methyl Acetate	1.3	2.5	U	UJ	SSR,Cc	µg/L
480-200248-1	ERB_072822	Methylcyclohexane	0.16	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	Methylene Chloride	0.44	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	Methyl *tert*-butyl ether	0.16	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	n-Butylbenzene	0.64	1	U	UJ	SSR	µg/L

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200248-1	ERB_072822	n-Propylbenzene	0.69	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	o-Xylene	0.76	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	*sec* -Butylbenzene	0.75	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	Styrene	0.73	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	*tert* -Butylbenzene	0.81	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	Toluene	0.51	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	Tetrachloroethanes	0.36	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	*trans* -1,2-Dichloroethene	0.9	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	*trans* -1,3-Dichloropropene	0.37	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	Trichloroethene	0.46	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	Trichlorotrifluoroethane	0.31	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	Trichlorofluoromethane	0.88	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	Vinyl Chloride	0.9	1	U	UJ	SSR	µg/L
480-200248-1	ERB_072822	Xylenes	0.66	2	U	UJ	SSR	µg/L
480-200248-1	FB_072922	1,1,1,2-Tetrachloroethane	0.35	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	1,1,1-Trichloroethane	0.82	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	1,1,2,2-Tetrachloroethane	0.21	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	1,1,2-Trichloroethane	0.23	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	1,1-Dichloroethane	0.38	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	1,1-Dichloroethene	0.29	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	1,2,3-Trimethylbenzene	0.26	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	1,2,4-Trichlorobenzene	0.41	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	1,2,4-Trimethylbenzene	0.75	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	1,2-Dibromo-3-chloropropane	0.39	1	U	UJ	SSR,Cc	µg/L
480-200248-1	FB_072922	1,2-Dibromoethane	0.73	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	1,2-Dichlorobenzene	0.79	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	1,2-Dichloroethane	0.21	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	1,2-Dichloropropane	0.72	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	1,3,5-Trimethylbenzene	0.77	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	1,3-Dichlorobenzene	0.78	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	1,4-Dichlorobenzene	0.84	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	2-Hexanone	1.2	5	U	UJ	SSR	µg/L
480-200248-1	FB_072922	4-Methyl-2-pentanone	2.1	5	U	UJ	SSR	µg/L
480-200248-1	FB_072922	Acetone	3	10	U	UJ	SSR	µg/L
480-200248-1	FB_072922	Benzene	0.41	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	Bromodichloromethane	0.39	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	Bromomethane	0.69	1	U	UJ	SSR	µg/L

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200248-1	FB_072922	Bromoform	0.26	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	Carbon disulfide	0.19	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	Carbon Tetrachloride	0.27	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	Chloroform	0.34	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	*cis*-1,2-Dichloroethene	0.81	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	*cis*-1,3-Dichloropropene	0.36	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	Chlorobenzene	0.75	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	Chloroethane	0.32	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	Chloromethane	0.35	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	Cyclohexane	0.18	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	Dibromochloromethane	0.32	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	Dichlorodifluoromethane	0.68	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	Ethylbenzene	0.74	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	Isopropylbenzene	0.79	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	2-Butanone	1.3	10	U	UJ	SSR	µg/L
480-200248-1	FB_072922	m,p-Xylene	0.66	2	U	UJ	SSR	µg/L
480-200248-1	FB_072922	Methyl Acetate	1.3	2.5	U	UJ	SSR	µg/L
480-200248-1	FB_072922	Methylcyclohexane	0.16	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	Methylene Chloride	0.44	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	Methyl *tert*-butyl ether	0.16	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	n-Butylbenzene	0.64	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	n-Propylbenzene	0.69	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	o-Xylene	0.76	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	*sec*-Butylbenzene	0.75	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	Styrene	0.73	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	*tert*-Butylbenzene	0.81	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	Toluene	0.51	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	Tetrachloroethanes	0.36	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	*trans*-1,2-Dichloroethene	0.9	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	*trans*-1,3-Dichloropropene	0.37	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	Trichloroethene	0.46	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	Trichlorotrifluoroethane	0.31	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	Trichlorofluoromethane	0.88	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	Vinyl Chloride	0.9	1	U	UJ	SSR	µg/L
480-200248-1	FB_072922	Xylenes	0.66	2	U	UJ	SSR	µg/L
480-200248-1	SS6 (0-2)	1,1,1,2-Tetrachloroethane	0.58	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	1,1,1-Trichloroethane	0.42	5.8	U	UJ	SSR	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200248-1	SS6 (0-2)	1,1,2,2-Tetrachloroethane	0.94	5.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (0-2)	1,1,2-Trichloroethane	0.76	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	1,1-Dichloroethane	0.71	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	1,1-Dichloroethene	0.71	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	1,2,3-Trimethylbenzene	1.2	5.8	U *3	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	1,2,4-Trichlorobenzene	0.35	5.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (0-2)	1,2,4-Trimethylbenzene	1.1	5.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (0-2)	1,2-Dibromo-3-chloropropane	2.9	5.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (0-2)	1,2-Dibromoethane	0.75	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	1,2-Dichlorobenzene	0.46	5.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (0-2)	1,2-Dichloroethane	0.29	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	1,2-Dichloropropane	2.9	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	1,3,5-Trimethylbenzene	0.38	5.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (0-2)	1,3-Dichlorobenzene	0.3	5.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (0-2)	1,4-Dichlorobenzene	0.82	5.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (0-2)	2-Hexanone	2.9	29	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	4-Methyl-2-pentanone	1.9	29	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	Acetone	6.8	29	J	J	SSR	µg/kg
480-200248-1	SS6 (0-2)	Benzene	0.29	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	Bromodichloromethane	0.78	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	Bromomethane	0.52	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	Bromoform	2.9	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	Carbon disulfide	2.9	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	Carbon Tetrachloride	0.56	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	Chloroform	0.36	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	*cis*-1,2-Dichloroethene	0.75	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	*cis*-1,3-Dichloropropene	0.84	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	Chlorobenzene	0.77	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	Chloroethane	1.3	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	Chloromethane	0.35	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	Cyclohexane	0.82	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	Dibromochloromethane	0.75	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	Dichlorodifluoromethane	0.48	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	Ethylbenzene	0.4	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	Isopropylbenzene	0.88	5.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (0-2)	2-Butanone	2.1	29	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	m,p-Xylene	0.98	12	U	UJ	SSR	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200248-1	SS6 (0-2)	Methyl Acetate	3.5	29	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	Methylcyclohexane	0.89	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	Methylene Chloride	2.7	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	Methyl *tert*-butyl ether	0.57	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	n-Butylbenzene	0.51	5.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (0-2)	n-Propylbenzene	0.47	5.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (0-2)	o-Xylene	0.76	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	*sec*-Butylbenzene	0.51	5.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (0-2)	Styrene	0.29	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	*tert*-Butylbenzene	0.61	5.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (0-2)	Toluene	0.44	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	Tetrachloroethanes	0.78	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	*trans*-1,2-Dichloroethene	0.6	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	*trans*-1,3-Dichloropropene	2.6	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	Trichloroethene	1.3	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	Trichlorotrifluoroethane	1.3	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	Trichlorofluoromethane	0.55	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	Vinyl Chloride	0.71	5.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-2)	Xylenes	0.98	12	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	1,1,1,2-Tetrachloroethane	0.68	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	1,1,1-Trichloroethane	0.49	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	1,1,2,2-Tetrachloroethane	1.1	6.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (0-6)	1,1,2-Trichloroethane	0.88	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	1,1-Dichloroethane	0.83	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	1,1-Dichloroethene	0.83	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	1,2,3-Trimethylbenzene	1.4	6.8	U *3	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	1,2,4-Trichlorobenzene	0.41	6.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (0-6)	1,2,4-Trimethylbenzene	1.3	6.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (0-6)	1,2-Dibromo-3-chloropropane	3.4	6.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (0-6)	1,2-Dibromoethane	0.87	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	1,2-Dichlorobenzene	0.53	6.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (0-6)	1,2-Dichloroethane	0.34	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	1,2-Dichloropropane	3.4	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	1,3,5-Trimethylbenzene	0.44	6.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (0-6)	1,3-Dichlorobenzene	0.35	6.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (0-6)	1,4-Dichlorobenzene	0.95	6.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (0-6)	2-Hexanone	3.4	34	U	UJ	SSR	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200248-1	SS6 (0-6)	4-Methyl-2-pentanone	2.2	34	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	Acetone	5.7	34	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	Benzene	0.33	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	Bromodichloromethane	0.91	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	Bromomethane	0.61	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	Bromoform	3.4	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	Carbon disulfide	3.4	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	Carbon Tetrachloride	0.66	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	Chloroform	0.42	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	*cis*-1,2-Dichloroethene	0.87	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	*cis*-1,3-Dichloropropene	0.98	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	Chlorobenzene	0.9	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	Chloroethane	1.5	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	Chloromethane	0.41	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	Cyclohexane	0.95	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	Dibromochloromethane	0.87	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	Dichlorodifluoromethane	0.56	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	Ethylbenzene	0.47	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	Isopropylbenzene	1	6.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (0-6)	2-Butanone	2.5	34	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	m,p-Xylene	1.1	14	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	Methyl Acetate	4.1	34	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	Methylcyclohexane	1	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	Methylene Chloride	3.1	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	Methyl *tert*-butyl ether	0.67	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	n-Butylbenzene	0.59	6.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (0-6)	n-Propylbenzene	0.54	6.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (0-6)	o-Xylene	0.89	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	*sec*-Butylbenzene	0.59	6.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (0-6)	Styrene	0.34	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	*tert*-Butylbenzene	0.71	6.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (0-6)	Toluene	0.51	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	Tetrachloroethanes	0.91	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	*trans*-1,2-Dichloroethene	0.7	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	*trans*-1,3-Dichloropropene	3	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	Trichloroethene	1.5	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	Trichlorotrifluoroethane	1.6	6.8	U	UJ	SSR	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200248-1	SS6 (0-6)	Trichlorofluoromethane	0.64	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	Vinyl Chloride	0.83	6.8	U	UJ	SSR	µg/kg
480-200248-1	SS6 (0-6)	Xylenes	1.1	14	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	1,1,1,2-Tetrachloroethane	0.51	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	1,1,1-Trichloroethane	0.37	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	1,1,2,2-Tetrachloroethane	0.83	5.1	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (6-12)	1,1,2-Trichloroethane	0.66	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	1,1-Dichloroethane	0.62	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	1,1-Dichloroethene	0.62	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	1,2,3-Trimethylbenzene	1	5.1	U *3	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	1,2,4-Trichlorobenzene	0.31	5.1	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (6-12)	1,2,4-Trimethylbenzene	0.98	5.1	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (6-12)	1,2-Dibromo-3-chloropropane	2.5	5.1	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (6-12)	1,2-Dibromoethane	0.65	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	1,2-Dichlorobenzene	0.4	5.1	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (6-12)	1,2-Dichloroethane	0.26	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	1,2-Dichloropropane	2.5	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	1,3,5-Trimethylbenzene	0.33	5.1	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (6-12)	1,3-Dichlorobenzene	0.26	5.1	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (6-12)	1,4-Dichlorobenzene	0.71	5.1	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (6-12)	2-Hexanone	2.5	25	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	4-Methyl-2-pentanone	1.7	25	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	Acetone	7.7	25	J	J	SSR	µg/kg
480-200248-1	SS6 (6-12)	Benzene	0.25	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	Bromodichloromethane	0.68	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	Bromomethane	0.46	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	Bromoform	2.5	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	Carbon disulfide	2.5	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	Carbon Tetrachloride	0.49	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	Chloroform	0.31	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	*cis*-1,2-Dichloroethene	0.65	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	*cis*-1,3-Dichloropropene	0.73	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	Chlorobenzene	0.67	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	Chloroethane	1.2	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	Chloromethane	0.31	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	Cyclohexane	0.71	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	Dibromochloromethane	0.65	5.1	U	UJ	SSR	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200248-1	SS6 (6-12)	Dichlorodifluoromethane	0.42	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	Ethylbenzene	0.35	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	Isopropylbenzene	0.77	5.1	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (6-12)	2-Butanone	2.9	25	J	J	SSR	µg/kg
480-200248-1	SS6 (6-12)	m,p-Xylene	0.86	10	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	Methyl Acetate	3.1	25	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	Methylcyclohexane	0.77	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	Methylene Chloride	12	5.1		J	SSR	µg/kg
480-200248-1	SS6 (6-12)	Methyl *tert*-butyl ether	0.5	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	n-Butylbenzene	0.44	5.1	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (6-12)	n-Propylbenzene	0.41	5.1	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (6-12)	o-Xylene	0.66	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	*sec*-Butylbenzene	0.44	5.1	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (6-12)	Styrene	0.25	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	*tert*-Butylbenzene	0.53	5.1	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (6-12)	Toluene	0.38	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	Tetrachloroethanes	0.68	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	*trans*-1,2-Dichloroethene	0.53	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	*trans*-1,3-Dichloropropene	2.2	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	Trichloroethene	1.1	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	Trichlorotrifluoroethane	1.2	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	Trichlorofluoromethane	0.48	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	Vinyl Chloride	0.62	5.1	U	UJ	SSR	µg/kg
480-200248-1	SS6 (6-12)	Xylenes	0.86	10	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	1,1,1,2-Tetrachloroethane	0.49	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	1,1,1-Trichloroethane	0.35	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	1,1,2,2-Tetrachloroethane	0.79	4.9	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (12-24)	1,1,2-Trichloroethane	0.63	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	1,1-Dichloroethane	0.59	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	1,1-Dichloroethene	0.59	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	1,2,3-Trimethylbenzene	0.99	4.9	U *3	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	1,2,4-Trichlorobenzene	0.3	4.9	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (12-24)	1,2,4-Trimethylbenzene	0.93	4.9	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (12-24)	1,2-Dibromo-3-chloropropane	2.4	4.9	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (12-24)	1,2-Dibromoethane	0.62	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	1,2-Dichlorobenzene	0.38	4.9	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (12-24)	1,2-Dichloroethane	0.24	4.9	U	UJ	SSR	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200248-1	SS6 (12-24)	1,2-Dichloropropane	2.4	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	1,3,5-Trimethylbenzene	0.31	4.9	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (12-24)	1,3-Dichlorobenzene	0.25	4.9	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (12-24)	1,4-Dichlorobenzene	0.68	4.9	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (12-24)	2-Hexanone	2.4	24	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	4-Methyl-2-pentanone	1.6	24	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	Acetone	23	24	J	J	SSR	µg/kg
480-200248-1	SS6 (12-24)	Benzene	0.26	4.9	J	J	SSR	µg/kg
480-200248-1	SS6 (12-24)	Bromodichloromethane	0.65	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	Bromomethane	0.44	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	Bromoform	2.4	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	Carbon disulfide	2.4	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	Carbon Tetrachloride	0.47	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	Chloroform	0.3	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	*cis*-1,2-Dichloroethene	0.62	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	*cis*-1,3-Dichloropropene	0.7	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	Chlorobenzene	0.64	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	Chloroethane	1.1	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	Chloromethane	0.29	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	Cyclohexane	0.68	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	Dibromochloromethane	0.62	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	Dichlorodifluoromethane	0.4	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	Ethylbenzene	0.33	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	Isopropylbenzene	0.73	4.9	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (12-24)	2-Butanone	5.5	24	J	J	SSR	µg/kg
480-200248-1	SS6 (12-24)	m,p-Xylene	0.82	9.7	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	Methyl Acetate	2.9	24	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	Methylcyclohexane	0.74	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	Methylene Chloride	2.2	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	Methyl *tert*-butyl ether	0.48	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	n-Butylbenzene	0.42	4.9	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (12-24)	n-Propylbenzene	0.39	4.9	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (12-24)	o-Xylene	0.63	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	*sec*-Butylbenzene	0.42	4.9	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (12-24)	Styrene	0.24	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	*tert*-Butylbenzene	0.5	4.9	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SS6 (12-24)	Toluene	0.37	4.9	U	UJ	SSR	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200248-1	SS6 (12-24)	Tetrachloroethanes	0.65	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	*trans* -1,2-Dichloroethene	0.5	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	*trans* -1,3-Dichloropropene	2.1	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	Trichloroethene	1.1	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	Trichlorotrifluoroethane	1.1	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	Trichlorofluoromethane	0.46	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	Vinyl Chloride	0.59	4.9	U	UJ	SSR	µg/kg
480-200248-1	SS6 (12-24)	Xylenes	0.82	9.7	U	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	1,1,1,2-Tetrachloroethane	0.6	6	U *3	UJ	SSR,IS	µg/kg
480-200248-1	FDUP_072922	1,1,1-Trichloroethane	0.44	6	U	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	1,1,2,2-Tetrachloroethane	0.97	6	U *3	UJ	SSR,IS	µg/kg
480-200248-1	FDUP_072922	1,1,2-Trichloroethane	0.78	6	U *3	UJ	SSR,IS	µg/kg
480-200248-1	FDUP_072922	1,1-Dichloroethane	0.73	6	U	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	1,1-Dichloroethene	0.74	6	U	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	1,2,3-Trimethylbenzene	1.2	6	U *3	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	1,2,4-Trichlorobenzene	0.37	6	U *3	UJ	SSR,IS	µg/kg
480-200248-1	FDUP_072922	1,2,4-Trimethylbenzene	1.2	6	U *3	UJ	SSR,IS	µg/kg
480-200248-1	FDUP_072922	1,2-Dibromo-3-chloropropane	3	6	U *3	UJ	SSR,IS	µg/kg
480-200248-1	FDUP_072922	1,2-Dibromoethane	0.77	6	U *3	UJ	SSR,IS	µg/kg
480-200248-1	FDUP_072922	1,2-Dichlorobenzene	0.47	6	U *3	UJ	SSR,IS	µg/kg
480-200248-1	FDUP_072922	1,2-Dichloroethane	0.3	6	U	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	1,2-Dichloropropane	3	6	U	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	1,3,5-Trimethylbenzene	0.39	6	U *3	UJ	SSR,IS	µg/kg
480-200248-1	FDUP_072922	1,3-Dichlorobenzene	0.31	6	U *3	UJ	SSR,IS	µg/kg
480-200248-1	FDUP_072922	1,4-Dichlorobenzene	0.84	6	U *3	UJ	SSR,IS	µg/kg
480-200248-1	FDUP_072922	2-Hexanone	3	30	U *3	UJ	SSR,IS	µg/kg
480-200248-1	FDUP_072922	4-Methyl-2-pentanone	2	30	U *3	UJ	SSR,IS	µg/kg
480-200248-1	FDUP_072922	Acetone	5.1	30	U	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	Benzene	0.29	6	U	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	Bromodichloromethane	0.8	6	U	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	Bromomethane	0.54	6	U	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	Bromoform	3	6	U *3	UJ	SSR,IS	µg/kg
480-200248-1	FDUP_072922	Carbon disulfide	3	6	U	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	Carbon Tetrachloride	0.58	6	U	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	Chloroform	0.37	6	U	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	*cis* -1,2-Dichloroethene	0.77	6	U	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	*cis* -1,3-Dichloropropene	0.87	6	U	UJ	SSR	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200248-1	FDUP_072922	Chlorobenzene	0.79	6	U *3	UJ	SSR,IS	µg/kg
480-200248-1	FDUP_072922	Chloroethane	1.4	6	U	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	Chloromethane	0.36	6	U	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	Cyclohexane	0.84	6	U	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	Dibromochloromethane	0.77	6	U *3	UJ	SSR,IS	µg/kg
480-200248-1	FDUP_072922	Dichlorodifluoromethane	0.5	6	U	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	Ethylbenzene	0.41	6	U *3	UJ	SSR,IS	µg/kg
480-200248-1	FDUP_072922	Isopropylbenzene	0.91	6	U *3	UJ	SSR,IS	µg/kg
480-200248-1	FDUP_072922	2-Butanone	2.2	30	U	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	m,p-Xylene	1	12	U *3	UJ	SSR,IS	µg/kg
480-200248-1	FDUP_072922	Methyl Acetate	3.6	30	U	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	Methylcyclohexane	0.91	6	U	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	Methylene Chloride	2.8	6	U	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	Methyl *tert*-butyl ether	0.59	6	U	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	n-Butylbenzene	0.52	6	U *3	UJ	SSR,IS	µg/kg
480-200248-1	FDUP_072922	n-Propylbenzene	0.48	6	U *3	UJ	SSR,IS	µg/kg
480-200248-1	FDUP_072922	o-Xylene	0.78	6	U *3	UJ	SSR,IS	µg/kg
480-200248-1	FDUP_072922	*sec*-Butylbenzene	0.52	6	U *3	UJ	SSR,IS	µg/kg
480-200248-1	FDUP_072922	Styrene	0.3	6	U *3	UJ	SSR,IS	µg/kg
480-200248-1	FDUP_072922	*tert*-Butylbenzene	0.62	6	U *3	UJ	SSR,IS	µg/kg
480-200248-1	FDUP_072922	Toluene	0.45	6	U *3	UJ	SSR,IS	µg/kg
480-200248-1	FDUP_072922	Tetrachloroethanes	0.81	6	U *3	UJ	SSR,IS	µg/kg
480-200248-1	FDUP_072922	*trans*-1,2-Dichloroethene	0.62	6	U	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	*trans*-1,3-Dichloropropene	2.6	6	U *3	UJ	SSR,IS	µg/kg
480-200248-1	FDUP_072922	Trichloroethene	1.3	6	U	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	Trichlorotrifluoroethane	1.4	6	U	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	Trichlorofluoromethane	0.57	6	U	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	Vinyl Chloride	0.73	6	U	UJ	SSR	µg/kg
480-200248-1	FDUP_072922	Xylenes	1	12	U	UJ	SSR	µg/kg
480-200248-1	SB6 (1-2)	1,1,1,2-Tetrachloroethane	0.78	7.8	U F1 *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (1-2)	1,1,1-Trichloroethane	0.56	7.8	U	UJ	SSR	µg/kg
480-200248-1	SB6 (1-2)	1,1,2,2-Tetrachloroethane	1.3	7.8	U F1 *3	R	IS	µg/kg
480-200248-1	SB6 (1-2)	1,1,2-Trichloroethane	1	7.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (1-2)	1,1-Dichloroethane	0.95	7.8	U	UJ	SSR	µg/kg
480-200248-1	SB6 (1-2)	1,1-Dichloroethene	0.95	7.8	U	UJ	SSR	µg/kg
480-200248-1	SB6 (1-2)	1,2,3-Trimethylbenzene	1.6	7.8	U *3	UJ	SSR	µg/kg
480-200248-1	SB6 (1-2)	1,2,4-Trichlorobenzene	0.47	7.8	U F1 *3	R	MS,IS	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200248-1	SB6 (1-2)	1,2,4-Trimethylbenzene	1.5	7.8	U F1 *3	R	IS	µg/kg
480-200248-1	SB6 (1-2)	1,2-Dibromo-3-chloropropane	3.9	7.8	U *3	R	IS	µg/kg
480-200248-1	SB6 (1-2)	1,2-Dibromoethane	1	7.8	U F1 *3	UJ	SSR,MS,IS	µg/kg
480-200248-1	SB6 (1-2)	1,2-Dichlorobenzene	0.61	7.8	U F1 *3	R	IS	µg/kg
480-200248-1	SB6 (1-2)	1,2-Dichloroethane	0.39	7.8	U F1	UJ	SSR,MS	µg/kg
480-200248-1	SB6 (1-2)	1,2-Dichloropropane	3.9	7.8	U	UJ	SSR	µg/kg
480-200248-1	SB6 (1-2)	1,3,5-Trimethylbenzene	0.5	7.8	U *3	R	IS	µg/kg
480-200248-1	SB6 (1-2)	1,3-Dichlorobenzene	0.4	7.8	U F1 *3	R	IS	µg/kg
480-200248-1	SB6 (1-2)	1,4-Dichlorobenzene	1.1	7.8	U F1 *3	R	IS	µg/kg
480-200248-1	SB6 (1-2)	2-Hexanone	3.9	39	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (1-2)	4-Methyl-2-pentanone	2.6	39	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (1-2)	Acetone	6.5	39	U	UJ	SSR	µg/kg
480-200248-1	SB6 (1-2)	Benzene	0.38	7.8	U F1	UJ	SSR,MS	µg/kg
480-200248-1	SB6 (1-2)	Bromodichloromethane	1	7.8	U F1	UJ	SSR,MS	µg/kg
480-200248-1	SB6 (1-2)	Bromomethane	0.7	7.8	U	UJ	SSR	µg/kg
480-200248-1	SB6 (1-2)	Bromoform	3.9	7.8	U F1 *3	UJ	SSR,MS,IS	µg/kg
480-200248-1	SB6 (1-2)	Carbon disulfide	3.9	7.8	U F1	UJ	SSR,MS	µg/kg
480-200248-1	SB6 (1-2)	Carbon Tetrachloride	0.75	7.8	U	UJ	SSR	µg/kg
480-200248-1	SB6 (1-2)	Chloroform	0.48	7.8	U F1	UJ	SSR,MS	µg/kg
480-200248-1	SB6 (1-2)	*cis*-1,2-Dichloroethene	1	7.8	U F1	UJ	SSR,MS	µg/kg
480-200248-1	SB6 (1-2)	*cis*-1,3-Dichloropropene	1.1	7.8	U F1	UJ	SSR,MS	µg/kg
480-200248-1	SB6 (1-2)	Chlorobenzene	1	7.8	U F1 *3	UJ	SSR,MS,IS	µg/kg
480-200248-1	SB6 (1-2)	Chloroethane	1.8	7.8	U	UJ	SSR	µg/kg
480-200248-1	SB6 (1-2)	Chloromethane	0.47	7.8	U	UJ	SSR	µg/kg
480-200248-1	SB6 (1-2)	Cyclohexane	1.1	7.8	U	UJ	SSR	µg/kg
480-200248-1	SB6 (1-2)	Dibromochloromethane	1	7.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (1-2)	Dichlorodifluoromethane	0.64	7.8	U	UJ	SSR	µg/kg
480-200248-1	SB6 (1-2)	Ethylbenzene	0.54	7.8	U F1 *3	UJ	SSR,MS,IS	µg/kg
480-200248-1	SB6 (1-2)	Isopropylbenzene	1.2	7.8	U F1 *3	R	IS	µg/kg
480-200248-1	SB6 (1-2)	2-Butanone	2.8	39	U F1	UJ	SSR,MS	µg/kg
480-200248-1	SB6 (1-2)	m,p-Xylene	1.3	16	U F1 *3	UJ	SSR,MS,IS	µg/kg
480-200248-1	SB6 (1-2)	Methyl Acetate	4.7	39	U	UJ	SSR	µg/kg
480-200248-1	SB6 (1-2)	Methylcyclohexane	1.2	7.8	U F1	UJ	SSR,MS	µg/kg
480-200248-1	SB6 (1-2)	Methylene Chloride	3.6	7.8	U	UJ	SSR	µg/kg
480-200248-1	SB6 (1-2)	Methyl *tert*-butyl ether	0.76	7.8	U	UJ	SSR	µg/kg
480-200248-1	SB6 (1-2)	n-Butylbenzene	0.68	7.8	U F1 *3	R	IS	µg/kg
480-200248-1	SB6 (1-2)	n-Propylbenzene	0.62	7.8	U F1 *3	R	IS	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200248-1	SB6 (1-2)	o-Xylene	1	7.8	U F1 *3	UJ	SSR,MS,IS	µg/kg
480-200248-1	SB6 (1-2)	*sec* -Butylbenzene	0.68	7.8	U *3	R	IS	µg/kg
480-200248-1	SB6 (1-2)	Styrene	0.39	7.8	U F1 *3	UJ	SSR,MS,IS	µg/kg
480-200248-1	SB6 (1-2)	*tert* -Butylbenzene	0.81	7.8	U F1 *3	R	IS	µg/kg
480-200248-1	SB6 (1-2)	Toluene	0.59	7.8	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (1-2)	Tetrachloroethanes	1	7.8	U F1 *3	UJ	SSR,MS,IS	µg/kg
480-200248-1	SB6 (1-2)	*trans* -1,2-Dichloroethene	0.8	7.8	U F1	UJ	SSR,MS	µg/kg
480-200248-1	SB6 (1-2)	*trans* -1,3-Dichloropropene	3.4	7.8	U F1 *3	UJ	SSR,MS,IS	µg/kg
480-200248-1	SB6 (1-2)	Trichloroethene	1.7	7.8	U F1	UJ	SSR,MS	µg/kg
480-200248-1	SB6 (1-2)	Trichlorotrifluoroethane	1.8	7.8	U	UJ	SSR	µg/kg
480-200248-1	SB6 (1-2)	Trichlorofluoromethane	0.74	7.8	U	UJ	SSR	µg/kg
480-200248-1	SB6 (1-2)	Vinyl Chloride	0.95	7.8	U	UJ	SSR	µg/kg
480-200248-1	SB6 (1-2)	Xylenes	1.3	16	U F1	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	1,1,1,2-Tetrachloroethane	0.7	7	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0.5-1)	1,1,1-Trichloroethane	0.51	7	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	1,1,2,2-Tetrachloroethane	1.1	7	U *3	R	IS	µg/kg
480-200248-1	SB6 (0.5-1)	1,1,2-Trichloroethane	0.91	7	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0.5-1)	1,1-Dichloroethane	0.85	7	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	1,1-Dichloroethene	0.85	7	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	1,2,3-Trimethylbenzene	1.4	7	U *3	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	1,2,4-Trichlorobenzene	0.42	7	U *3	R	IS	µg/kg
480-200248-1	SB6 (0.5-1)	1,2,4-Trimethylbenzene	1.3	7	U *3	R	IS	µg/kg
480-200248-1	SB6 (0.5-1)	1,2-Dibromo-3-chloropropane	3.5	7	U *3	R	IS	µg/kg
480-200248-1	SB6 (0.5-1)	1,2-Dibromoethane	0.89	7	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0.5-1)	1,2-Dichlorobenzene	0.55	7	U *3	R	IS	µg/kg
480-200248-1	SB6 (0.5-1)	1,2-Dichloroethane	0.35	7	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	1,2-Dichloropropane	3.5	7	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	1,3,5-Trimethylbenzene	0.45	7	U *3	R	IS	µg/kg
480-200248-1	SB6 (0.5-1)	1,3-Dichlorobenzene	0.36	7	U *3	R	IS	µg/kg
480-200248-1	SB6 (0.5-1)	1,4-Dichlorobenzene	0.98	7	U *3	R	IS	µg/kg
480-200248-1	SB6 (0.5-1)	2-Hexanone	3.5	35	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0.5-1)	4-Methyl-2-pentanone	2.3	35	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0.5-1)	Acetone	5.9	35	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Benzene	0.34	7	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Bromodichloromethane	0.93	7	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Bromomethane	0.63	7	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Bromoform	3.5	7	U *3	UJ	SSR,IS	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200248-1	SB6 (0.5-1)	Carbon disulfide	3.5	7	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Carbon Tetrachloride	0.67	7	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Chloroform	0.43	7	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	*cis*-1,2-Dichloroethene	0.89	7	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	*cis*-1,3-Dichloropropene	1	7	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Chlorobenzene	0.92	7	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0.5-1)	Chloroethane	1.6	7	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Chloromethane	0.42	7	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Cyclohexane	0.98	7	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Dibromochloromethane	0.89	7	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0.5-1)	Dichlorodifluoromethane	0.58	7	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Ethylbenzene	0.48	7	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0.5-1)	Isopropylbenzene	1.1	7	U *3	R	IS	µg/kg
480-200248-1	SB6 (0.5-1)	2-Butanone	2.6	35	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	m,p-Xylene	1.2	14	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0.5-1)	Methyl Acetate	4.2	35	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Methylcyclohexane	1.1	7	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Methylene Chloride	3.2	7	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Methyl *tert*-butyl ether	0.68	7	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	n-Butylbenzene	0.61	7	U *3	R	IS	µg/kg
480-200248-1	SB6 (0.5-1)	n-Propylbenzene	0.56	7	U *3	R	IS	µg/kg
480-200248-1	SB6 (0.5-1)	o-Xylene	0.91	7	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0.5-1)	*sec*-Butylbenzene	0.61	7	U *3	R	IS	µg/kg
480-200248-1	SB6 (0.5-1)	Styrene	0.35	7	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0.5-1)	*tert*-Butylbenzene	0.72	7	U *3	R	IS	µg/kg
480-200248-1	SB6 (0.5-1)	Toluene	0.53	7	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0.5-1)	Tetrachloroethanes	0.94	7	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0.5-1)	*trans*-1,2-Dichloroethene	0.72	7	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	*trans*-1,3-Dichloropropene	3.1	7	U *3	UJ	SSR,IS	µg/kg
480-200248-1	SB6 (0.5-1)	Trichloroethene	1.5	7	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Trichlorotrifluoroethane	1.6	7	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Trichlorofluoromethane	0.66	7	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Vinyl Chloride	0.85	7	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Xylenes	1.2	14	U	UJ	SSR	µg/kg
480-200248-1	SS5 (0-2)	1,1,2,2-Tetrachloroethane	1.4	8.5	U *3	UJ	IS	µg/kg
480-200248-1	SS5 (0-2)	1,2,4-Trichlorobenzene	0.52	8.5	U *3	UJ	IS	µg/kg
480-200248-1	SS5 (0-2)	1,2,4-Trimethylbenzene	1.6	8.5	U *3	UJ	IS	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200248-1	SS5 (0-2)	1,2-Dibromo-3-chloropropane	4.2	8.5	U *3	UJ	IS	µg/kg
480-200248-1	SS5 (0-2)	1,2-Dichlorobenzene	0.66	8.5	U *3	UJ	IS	µg/kg
480-200248-1	SS5 (0-2)	1,3,5-Trimethylbenzene	0.55	8.5	U *3	UJ	IS	µg/kg
480-200248-1	SS5 (0-2)	1,3-Dichlorobenzene	0.44	8.5	U *3	UJ	IS	µg/kg
480-200248-1	SS5 (0-2)	1,4-Dichlorobenzene	1.2	8.5	U *3	UJ	IS	µg/kg
480-200248-1	SS5 (0-2)	Isopropylbenzene	1.3	8.5	U *3	UJ	IS	µg/kg
480-200248-1	SS5 (0-2)	n-Butylbenzene	0.74	8.5	U *3	UJ	IS	µg/kg
480-200248-1	SS5 (0-2)	n-Propylbenzene	0.68	8.5	U *3	UJ	IS	µg/kg
480-200248-1	SS5 (0-2)	*sec* -Butylbenzene	0.74	8.5	U *3	UJ	IS	µg/kg
480-200248-1	SS5 (0-2)	*tert* -Butylbenzene	0.88	8.5	U *3	UJ	IS	µg/kg
480-200248-1	FB_072922	1,1'-Biphenyl	0.65	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	2,2'-oxybis(1-Chloropropane)	0.52	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	2,4,5-Trichlorophenol	0.48	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	2,4,6-Trichlorophenol	0.61	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	2,4-Dichlorophenol	0.51	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	2,4-Dimethylphenol	0.5	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	2,4-Dinitrophenol	2.2	10	U H	R	DNR	µg/L
480-200248-1	FB_072922	2,4-Dinitrotoluene	0.45	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	2,6-Dinitrotoluene	0.4	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	2-Chloronaphthalene	0.46	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	2-Chlorophenol	0.53	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	2-Methylnaphthalene	0.6	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	2-Methylphenol	0.4	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	2-Nitroaniline	0.42	10	U H	R	DNR	µg/L
480-200248-1	FB_072922	2-Nitrophenol	0.48	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	3,3'-Dichlorobenzidine	0.4	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	3-Nitroaniline	0.48	10	U H	R	DNR	µg/L
480-200248-1	FB_072922	4,6-Dinitro-2-methylphenol	2.2	10	U H	R	DNR	µg/L
480-200248-1	FB_072922	4-Bromophenyl-phenylether	0.45	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	4-Chloro-3-methylphenol	0.45	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	4-Chloroaniline	0.59	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	4-Chlorophenyl-phenyl ether	0.35	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	4-Methylphenol	0.36	10	U H	R	DNR	µg/L
480-200248-1	FB_072922	4-Nitroaniline	0.25	10	U H	R	DNR	µg/L
480-200248-1	FB_072922	4-Nitrophenol	1.5	10	U H	R	DNR	µg/L
480-200248-1	FB_072922	Acenaphthene	0.41	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Acenaphthylene	0.38	5	U H	R	DNR	µg/L

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200248-1	FB_072922	Acetophenone	0.54	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Anthracene	0.28	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Atrazine	0.46	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Benzaldehyde	0.27	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Bis(2-chloroethyl)ether	0.4	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	bis(2-Chloroethoxy)methane	0.35	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	bis(2-Ethylhexyl)phthalate	2.2	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Benzo[a]anthracene	0.36	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Benzo[a]pyrene	0.47	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Benzo[b]fluoranthene	0.34	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Benzo[g,h,i]perylene	0.35	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Benzo[k]fluoranthene	0.73	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Benzyl n-butyl phthalate	1	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Caprolactam	2.2	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Carbazole	0.3	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Chrysene	0.33	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Dibenzofuran	0.51	10	U H	R	DNR	µg/L
480-200248-1	FB_072922	Dibenzo[a,h]anthracene	0.42	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Diethyl phthalate	0.22	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Dimethyl phthalate	0.36	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Di-n-butyl phthalate	0.31	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Di-n-octylphthalate	0.47	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Fluoranthene	0.4	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Fluorene	0.36	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Hexachloroethane	0.59	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Hexachlorobenzene	0.51	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Hexachlorobutadiene	0.68	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Hexachlorocyclopentadiene	0.59	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Indeno[1,2,3-cd]pyrene	0.47	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Isophorone	0.43	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Naphthalene	2.2	5	J H	J-	HT	µg/L
480-200248-1	FB_072922	Nitrobenzene	0.29	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	N-Nitrosodi-n-propylamine	0.54	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	N-Nitrosodiphenylamine	0.51	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Pentachlorophenol	2.2	10	U H	R	DNR	µg/L
480-200248-1	FB_072922	Phenanthrene	0.44	5	U H	R	DNR	µg/L
480-200248-1	FB_072922	Phenol	0.39	5	U H	R	DNR	µg/L

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200248-1	FB_072922	Pyrene	0.34	5	U H	R	DNR	µg/L
480-200248-1	SB6 (0-0.5)	Naphthalene	120	940	J	U	FB	µg/kg
480-200248-1	SS6 (0-2)	Naphthalene	45	180	J	U	FB	µg/kg
480-200248-1	SS6 (0-6)	Naphthalene	30	190	J	U	FB	µg/kg
480-200248-1	SB6 (1-2)	1,4-Dioxane	610	1100	U F1	R	MS	µg/kg
480-200248-1	SB6 (1-2)	2,4-Dinitrophenol	8600	18000	U	R	MS	µg/kg
480-200248-1	SB6 (1-2)	Acenaphthylene	3000	1900	F1	J-	MS	µg/kg
480-200248-1	SB6 (1-2)	Benzo[a]pyrene	8900	1900	F2	J	REP	µg/kg
480-200248-1	SB6 (1-2)	Benzo[b]fluoranthene	10000	1900	F2	J	REP	µg/kg
480-200248-1	SB6 (1-2)	Benzo[g,h,i]perylene	6300	1900	F1	J-	MS	µg/kg
480-200248-1	SB6 (1-2)	Chrysene	7500	1900		J-	MS	µg/kg
480-200248-1	SB6 (1-2)	Dibenzofuran	280	1900	J F2	J	REP	µg/kg
480-200248-1	SB6 (1-2)	Dibenzo[a,h]anthracene	2100	1900	F2	J	REP	µg/kg
480-200248-1	SB6 (1-2)	Fluorene	570	1900	J F2	J	REP	µg/kg
480-200248-1	SB6 (1-2)	Hexachlorocyclopentadiene	250	1900	U F1	R	MS	µg/kg
480-200248-1	SB6 (1-2)	Indeno[1,2,3-cd]pyrene	5800	1900	F1 F2	J	MS,REP	µg/kg
480-200248-1	SB6 (1-2)	Phenanthrene	5000	1900	F1 F2	J	REP	µg/kg
480-200248-1	SB6 (0.5-1)	1,1'-Biphenyl	270	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	1,4-Dioxane	600	1100	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	2,2'-oxybis(1-Chloropropane)	370	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	2,4-Dinitrotoluene	380	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	2,6-Dinitrotoluene	220	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	2-Chloronaphthalene	300	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	2-Methylnaphthalene	480	1800	J	J-	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	2-Nitroaniline	270	3600	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	3,3'-Dichlorobenzidine	2200	3600	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	3-Nitroaniline	510	3600	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	4-Bromophenyl-phenylether	260	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	4-Chloroaniline	450	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	4-Chlorophenyl-phenyl ether	230	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	4-Nitroaniline	960	3600	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Acenaphthene	270	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Acenaphthylene	1400	1800	J	J-	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Acetophenone	250	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Anthracene	17000	1800		J-	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Atrazine	640	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Benzaldehyde	1500	1800	U	UJ	SSR	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-200248-1	SB6 (0.5-1)	Bis(2-chloroethyl)ether	240	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	bis(2-Chloroethoxy)methane	390	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	bis(2-Ethylhexyl)phthalate	630	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Benzo[a]anthracene	6500	1800		J-	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Benzo[a]pyrene	5000	1800		J-	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Benzo[b]fluoranthene	6100	1800		J-	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Benzo[g,h,i]perylene	3500	1800		J-	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Benzo[k]fluoranthene	2400	1800		J-	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Benzyl n-butyl phthalate	300	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Caprolactam	550	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Carbazole	250	1800	J	J-	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Chrysene	6500	1800		J-	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Dibenzofuran	220	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Dibenzo[a,h]anthracene	900	1800	J	J-	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Diethyl phthalate	240	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Dimethyl phthalate	220	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Di-n-butyl phthalate	310	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Di-n-octylphthalate	220	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Fluoranthene	11000	1800		J-	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Fluorene	1200	1800	J	J-	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Hexachloroethane	240	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Hexachlorobenzene	250	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Hexachlorobutadiene	270	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Hexachlorocyclopentadiene	250	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Indeno[1,2,3-cd]pyrene	3200	1800		J-	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Isophorone	390	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Naphthalene	290	1800	J	UJ	FB,SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Nitrobenzene	210	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	N-Nitrosodi-n-propylamine	310	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	N-Nitrosodiphenylamine	1500	1800	U	UJ	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Phenanthrene	8200	1800		J-	SSR	µg/kg
480-200248-1	SB6 (0.5-1)	Pyrene	14000	1800		J-	SSR	µg/kg
480-200248-1	SS5 (0-6)	Naphthalene	70	180	J	U	FB	µg/kg
480-200248-1	SS5 (6-12)	Naphthalene	110	890	J	U	FB	µg/kg
480-200248-1	FB_072922	Naphthalene	16	5	*+ *1	R	DNR	µg/L
480-201563-1	SS1 (0-2)	Perfluorododecanoic acid	0.052	0.24	J B	U	LB,Other	µg/kg
480-201563-1	SS1 (0-2)	Perfluorodecanesulfonic acid	0.048	0.24	J B	U	LB,Other	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201563-1	SS1 (0-2)	Perfluoroheptanoic acid	0.074	0.24	J	U	Other	µg/kg
480-201563-1	SS1 (0-2)	Perfluorohexanoic acid	0.14	0.24	J I	UJ	EMPC,Other	µg/kg
480-201563-1	SS1 (0-2)	Perfluoropentanoic acid	0.068	0.24	J	U	Other	µg/kg
480-201563-1	SS1 (0-2)	Perfluorotridecanoic acid	0.031	0.24	J B	U	LB,Other	µg/kg
480-201563-1	SS1 (6-12)	Perfluorododecanoic acid	0.039	0.22	J B	U	LB,Other	µg/kg
480-201563-1	SS1 (6-12)	Perfluorodecanesulfonic acid	0.037	0.22	J B	U	LB,Other	µg/kg
480-201563-1	SS1 (6-12)	Perfluoroheptanoic acid	0.066	0.22	J	U	Other	µg/kg
480-201563-1	SS1 (6-12)	Perfluorohexanoic acid	0.077	0.22	J	U	Other	µg/kg
480-201563-1	SS1 (6-12)	Perfluoropentanoic acid	0.085	0.22	J	U	Other	µg/kg
480-201563-1	SS1 (6-12)	Perfluorotridecanoic acid	0.027	0.22	U	U	Other	µg/kg
480-201563-1	FDUP_091222	Perfluorohexanoic acid	0.05	0.22	J	U	Other	µg/kg
480-201563-1	SS1 (0-2)	Aluminum	9000	12.4	F1	J	MS	mg/kg
480-201563-1	SS1 (0-2)	Antimony	2.3	18.6	J F1	J-	MS	mg/kg
480-201563-1	SS1 (0-2)	Barium	86.9	0.62	F1	J+	MS,ICPSD	mg/kg
480-201563-1	SS1 (0-2)	Magnesium	2220	24.8	B	J+	ICPSD	mg/kg
480-201563-1	SS1 (0-2)	Potassium	1740	37.2	F1	J+	MS	mg/kg
480-201563-1	SS1 (0-6)	Cadmium	1	0.25		J+	ICS	mg/kg
480-201563-1	SS1 (0-6)	Selenium	0.92	5.1	J	J+	ICS	mg/kg
480-201563-1	SS1 (6-12)	Selenium	1.1	4.6	J	J+	ICS	mg/kg
480-201563-1	SS1 (12-24)	Cadmium	0.66	0.23		J+	ICS	mg/kg
480-201563-1	SS1 (12-24)	Selenium	0.68	4.5	J	J+	ICS	mg/kg
480-201563-1	FDUP_091222	Cadmium	0.72	0.22		J+	ICS	mg/kg
480-201563-1	FDUP_091222	Selenium	0.99	4.4	J	J+	ICS	mg/kg
480-201563-1	SS1 (0-2)	1,1,2,2-Tetrachloroethane	0.73	4.5	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (0-2)	1,1-Dichloroethene	0.55	4.5	U	UJ	Cc	µg/kg
480-201563-1	SS1 (0-2)	1,2,4-Trichlorobenzene	0.27	4.5	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (0-2)	1,2,4-Trimethylbenzene	0.86	4.5	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (0-2)	1,2-Dibromo-3-chloropropane	2.2	4.5	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (0-2)	1,2-Dichlorobenzene	0.35	4.5	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (0-2)	1,3,5-Trimethylbenzene	0.29	4.5	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (0-2)	1,3-Dichlorobenzene	0.23	4.5	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (0-2)	1,4-Dichlorobenzene	0.63	4.5	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (0-2)	Carbon Tetrachloride	0.43	4.5	U	UJ	Cc	µg/kg
480-201563-1	SS1 (0-2)	Chloroform	0.28	4.5	J B	UJ	LB,SSR	µg/kg
480-201563-1	SS1 (0-2)	Cyclohexane	0.63	4.5	U	UJ	Cc	µg/kg
480-201563-1	SS1 (0-2)	Isopropylbenzene	0.68	4.5	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (0-2)	Methylcyclohexane	0.68	4.5	U	UJ	Cc	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201563-1	SS1 (0-2)	n-Butylbenzene	0.39	4.5	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (0-2)	n-Propylbenzene	0.36	4.5	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (0-2)	*sec* -Butylbenzene	0.39	4.5	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (0-2)	*tert* -Butylbenzene	0.47	4.5	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (0-6)	1,1,2,2-Tetrachloroethane	0.89	5.5	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (0-6)	1,1-Dichloroethene	0.67	5.5	U	UJ	Cc	µg/kg
480-201563-1	SS1 (0-6)	1,2,4-Trichlorobenzene	0.33	5.5	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (0-6)	1,2,4-Trimethylbenzene	1.1	5.5	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (0-6)	1,2-Dibromo-3-chloropropane	2.7	5.5	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (0-6)	1,2-Dichlorobenzene	0.43	5.5	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (0-6)	1,3,5-Trimethylbenzene	0.35	5.5	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (0-6)	1,3-Dichlorobenzene	0.28	5.5	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (0-6)	1,4-Dichlorobenzene	0.77	5.5	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (0-6)	Carbon Tetrachloride	0.53	5.5	U	UJ	Cc	µg/kg
480-201563-1	SS1 (0-6)	Cyclohexane	0.77	5.5	U	UJ	Cc	µg/kg
480-201563-1	SS1 (0-6)	Isopropylbenzene	0.83	5.5	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (0-6)	Methylcyclohexane	0.83	5.5	U	UJ	Cc	µg/kg
480-201563-1	SS1 (0-6)	n-Butylbenzene	0.48	5.5	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (0-6)	n-Propylbenzene	0.44	5.5	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (0-6)	*sec* -Butylbenzene	0.48	5.5	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (0-6)	*tert* -Butylbenzene	0.57	5.5	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (6-12)	1,1,2,2-Tetrachloroethane	0.77	4.7	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (6-12)	1,1-Dichloroethene	0.58	4.7	U	UJ	Cc	µg/kg
480-201563-1	SS1 (6-12)	1,2,4-Trichlorobenzene	0.29	4.7	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (6-12)	1,2,4-Trimethylbenzene	0.91	4.7	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (6-12)	1,2-Dibromo-3-chloropropane	2.4	4.7	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (6-12)	1,2-Dichlorobenzene	0.37	4.7	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (6-12)	1,3,5-Trimethylbenzene	0.31	4.7	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (6-12)	1,3-Dichlorobenzene	0.24	4.7	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (6-12)	1,4-Dichlorobenzene	0.66	4.7	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (6-12)	Carbon Tetrachloride	0.46	4.7	U	UJ	Cc	µg/kg
480-201563-1	SS1 (6-12)	Chloroform	0.3	4.7	J B	UJ	LB,SSR	µg/kg
480-201563-1	SS1 (6-12)	Cyclohexane	0.66	4.7	U	UJ	Cc	µg/kg
480-201563-1	SS1 (6-12)	Isopropylbenzene	0.71	4.7	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (6-12)	Methylcyclohexane	0.72	4.7	U	UJ	Cc	µg/kg
480-201563-1	SS1 (6-12)	n-Butylbenzene	0.41	4.7	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (6-12)	n-Propylbenzene	0.38	4.7	U *3	UJ	IS	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201563-1	SS1 (6-12)	*sec*-Butylbenzene	0.41	4.7	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (6-12)	*tert*-Butylbenzene	0.49	4.7	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (12-24)	1,1-Dichloroethene	0.64	5.2	U	UJ	Cc	µg/kg
480-201563-1	SS1 (12-24)	Carbon Tetrachloride	0.51	5.2	U	UJ	Cc	µg/kg
480-201563-1	SS1 (12-24)	Chloroform	0.33	5.2	J B	U	LB	µg/kg
480-201563-1	SS1 (12-24)	Cyclohexane	0.73	5.2	U	UJ	Cc	µg/kg
480-201563-1	SS1 (12-24)	Methylcyclohexane	0.8	5.2	U	UJ	Cc	µg/kg
480-201563-1	FDUP_091222	1,1,2,2-Tetrachloroethane	0.82	5.1	U *3	UJ	IS	µg/kg
480-201563-1	FDUP_091222	1,1-Dichloroethene	0.62	5.1	U	UJ	Cc	µg/kg
480-201563-1	FDUP_091222	1,2,4-Trichlorobenzene	0.31	5.1	U *3	UJ	IS	µg/kg
480-201563-1	FDUP_091222	1,2,4-Trimethylbenzene	0.97	5.1	U *3	UJ	IS	µg/kg
480-201563-1	FDUP_091222	1,2-Dibromo-3-chloropropane	2.5	5.1	U *3	UJ	IS	µg/kg
480-201563-1	FDUP_091222	1,2-Dichlorobenzene	0.4	5.1	U *3	UJ	IS	µg/kg
480-201563-1	FDUP_091222	1,3,5-Trimethylbenzene	0.33	5.1	U *3	UJ	IS	µg/kg
480-201563-1	FDUP_091222	1,3-Dichlorobenzene	0.26	5.1	U *3	UJ	IS	µg/kg
480-201563-1	FDUP_091222	1,4-Dichlorobenzene	0.71	5.1	U *3	UJ	IS	µg/kg
480-201563-1	FDUP_091222	Carbon Tetrachloride	0.49	5.1	U	UJ	Cc	µg/kg
480-201563-1	FDUP_091222	Chloroform	0.33	5.1	J B	UJ	LB,SSR	µg/kg
480-201563-1	FDUP_091222	Cyclohexane	0.71	5.1	U	UJ	Cc	µg/kg
480-201563-1	FDUP_091222	Isopropylbenzene	0.77	5.1	U *3	UJ	IS	µg/kg
480-201563-1	FDUP_091222	Methylcyclohexane	0.77	5.1	U	UJ	Cc	µg/kg
480-201563-1	FDUP_091222	n-Butylbenzene	0.44	5.1	U *3	UJ	IS	µg/kg
480-201563-1	FDUP_091222	n-Propylbenzene	0.41	5.1	U *3	UJ	IS	µg/kg
480-201563-1	FDUP_091222	*sec*-Butylbenzene	0.44	5.1	U *3	UJ	IS	µg/kg
480-201563-1	FDUP_091222	*tert*-Butylbenzene	0.53	5.1	U *3	UJ	IS	µg/kg
480-201563-1	SS1 (0-2)	Diethyl phthalate	180	1000	J B	U	LB	µg/kg
480-201563-1	SS1 (6-12)	Diethyl phthalate	130	930	J B	U	LB	µg/kg
480-201563-1	SS1 (12-24)	Diethyl phthalate	110	180	J B	U	LB	µg/kg
480-201563-1	FDUP_091222	Diethyl phthalate	89	190	J B	U	LB	µg/kg
480-201563-1	FB_091222	6:2 fluorotelomer sulfonate	1.2	4.4	U	UJ	HT	ng/L
480-201563-1	FB_091222	8:2 fluorotelomer sulfonate	0.68	1.8	U	UJ	HT	ng/L
480-201563-1	FB_091222	2-(N-ethyl-perfluorooctane sulfonamido) acetate	1.4	4.4	U	UJ	HT	ng/L
480-201563-1	FB_091222	Perfluorobutyric acid	1.1	4.4	U	UJ	HT	ng/L
480-201563-1	FB_091222	2-(N-methyl-perfluorooctane sulfonamido) acetic acid	1.7	4.4	U	UJ	HT	ng/L
480-201563-1	FB_091222	Perfluorobutane sulfonic acid	0.55	1.8	U	UJ	HT	ng/L
480-201563-1	FB_091222	Perfluorodecanoic acid	0.41	1.8	U	UJ	HT	ng/L
480-201563-1	FB_091222	Perfluorododecanoic acid	0.44	1.8	U	UJ	HT	ng/L

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201563-1	FB_091222	Perfluorodecanesulfonic acid	0.36	1.8	U	UJ	HT	ng/L
480-201563-1	FB_091222	Perfluoroheptanoic acid	0.48	1.8	U	UJ	HT	ng/L
480-201563-1	FB_091222	Perfluoroheptanesulfonic acid	0.36	1.8	U	UJ	HT	ng/L
480-201563-1	FB_091222	Perfluorohexanoic acid	0.58	1.8	U	UJ	HT,Cc	ng/L
480-201563-1	FB_091222	Perfluorohexane sulfonic acid	0.49	1.8	U	UJ	HT	ng/L
480-201563-1	FB_091222	Perfluorononanoic acid	0.44	1.8	U	UJ	HT	ng/L
480-201563-1	FB_091222	Perfluorooctanoic acid	0.68	1.8	U	UJ	HT	ng/L
480-201563-1	FB_091222	Perfluorooctane sulfonate	0.76	1.8	U	UJ	HT	ng/L
480-201563-1	FB_091222	Perfluorooctane sulfonamide	0.82	1.8	U	UJ	HT	ng/L
480-201563-1	FB_091222	Perfluoropentanoic acid	0.6	1.8	U	UJ	HT	ng/L
480-201563-1	FB_091222	Perfluorotetradecanoic acid	0.57	1.8	U	UJ	HT	ng/L
480-201563-1	FB_091222	Perfluorotridecanoic acid	0.43	1.8	U	UJ	HT	ng/L
480-201563-1	FB_091222	Perfluoroundecanoic acid	0.49	1.8	U	UJ	HT	ng/L
480-201563-1	FB_091222	Potassium	0.25	0.5	J B	U	LB	mg/L
480-201563-1	FB_091222	Chloromethane	0.35	1	U	UJ	Cc	µg/L
480-201563-1	TB_091222	Chloromethane	0.35	1	U	UJ	Cc	µg/L
480-201615-1	SS2 (0-2)	Antimony	2	21.2	J F1	J-	MS	mg/kg
480-201615-1	SS2 (0-2)	Barium	103	0.71	B F1	J+	MS,ICPSD	mg/kg
480-201615-1	SS2 (0-2)	Calcium	3870	70.8	B F1 F2	J+	MS,ICPSD	mg/kg
480-201615-1	SS2 (0-2)	Chromium	15.2	0.71		J+	EB,ICPSD	mg/kg
480-201615-1	SS2 (0-2)	Iron	21900	14.2	B	J+	ICPSD	mg/kg
480-201615-1	SS2 (0-2)	Magnesium	2800	28.3	B F1	J	MS,REP,ICPSD	mg/kg
480-201615-1	SS2 (0-2)	Manganese	513	0.28	B	J+	ICPSD	mg/kg
480-201615-1	SS2 (0-2)	Potassium	2200	42.5	F1	J+	MS	mg/kg
480-201615-1	SS2 (0-2)	Zinc	98.9	2.8		J	MS,ICPSD	mg/kg
480-201615-1	SS4 (0-2)	Cadmium	0.16	0.26	J B	U	LB	mg/kg
480-201615-1	SS4 (0-2)	Chromium	12.9	0.66		J+	EB	mg/kg
480-201615-1	SS4 (0-2)	Magnesium	2250	26.4	B	J	REP	mg/kg
480-201615-1	SS4 (0-6)	Cadmium	0.16	0.24	J B	U	LB	mg/kg
480-201615-1	SS4 (0-6)	Chromium	12	0.59		J+	EB	mg/kg
480-201615-1	SS4 (0-6)	Magnesium	2200	23.6	B	J	REP	mg/kg
480-201615-1	SS4 (6-12)	Cadmium	0.23	0.24	J B	U	LB	mg/kg
480-201615-1	SS4 (6-12)	Chromium	15.5	0.6		J+	EB	mg/kg
480-201615-1	SS4 (6-12)	Magnesium	2740	24.2	B	J	REP	mg/kg
480-201615-1	SS4 (12-24)	Chromium	15.2	0.61		J+	EB	mg/kg
480-201615-1	SS4 (12-24)	Magnesium	4430	24.3	B	J	REP	mg/kg
480-201615-1	SS2 (0-6)	Chromium	13.7	0.6		J+	EB	mg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201615-1	SS2 (0-6)	Magnesium	2780	24.1	B	J	REP	mg/kg
480-201615-1	SS2 (6-12)	Antimony	1.5	16	J F1	J-	MS	mg/kg
480-201615-1	SS2 (6-12)	Barium	129	0.53	B F1	J+	MS	mg/kg
480-201615-1	SS2 (6-12)	Cadmium	0.19	0.21	J B	U	LB	mg/kg
480-201615-1	SS2 (6-12)	Calcium	4060	53.2	B F1	J+	MS	mg/kg
480-201615-1	SS2 (6-12)	Chromium	15	0.53		J+	EB	mg/kg
480-201615-1	SS2 (6-12)	Magnesium	3920	21.3	B F1 F2	J	MS,REP	mg/kg
480-201615-1	SS2 (6-12)	Potassium	1700	31.9	F1	J+	MS	mg/kg
480-201615-1	SS2 (6-12)	Zinc	76.7	2.1		J	MS	mg/kg
480-201615-1	SS2 (12-24)	Chromium	13	0.58		J+	EB	mg/kg
480-201615-1	SS2 (12-24)	Magnesium	3090	23.1	B	J	REP	mg/kg
480-201615-1	SS3 (0-2)	Cadmium	0.17	0.27	J B	U	LB	mg/kg
480-201615-1	SS3 (0-2)	Chromium	11.1	0.67		J+	EB	mg/kg
480-201615-1	SS3 (0-2)	Magnesium	2060	26.6	B	J	REP	mg/kg
480-201615-1	SS3 (0-6)	Cadmium	0.24	0.25	J B	U	LB	mg/kg
480-201615-1	SS3 (0-6)	Chromium	13.4	0.64		J+	EB	mg/kg
480-201615-1	SS3 (0-6)	Magnesium	2200	25.5	B	J	REP	mg/kg
480-201615-1	SS3 (6-12)	Chromium	14.6	0.57		J+	EB	mg/kg
480-201615-1	SS3 (6-12)	Magnesium	3450	22.9	B	J	REP	mg/kg
480-201615-1	SS3 (12-24)	Chromium	12.3	0.55		J+	EB	mg/kg
480-201615-1	SS3 (12-24)	Magnesium	2800	21.9	B	J	REP	mg/kg
480-201615-1	FDUP2_091322	Chromium	13.7	0.6		J+	EB	mg/kg
480-201615-1	FDUP2_091322	Magnesium	3240	24	B	J	REP	mg/kg
480-201615-1	SS2 (0-2)	1,1,2,2-Tetrachloroethane	1	6.3	U *3	UJ	IS	µg/kg
480-201615-1	SS2 (0-2)	1,1-Dichloroethene	0.78	6.3	U	UJ	Cc	µg/kg
480-201615-1	SS2 (0-2)	1,2,4-Trichlorobenzene	0.39	6.3	U F1 *3	UJ	MS,IS	µg/kg
480-201615-1	SS2 (0-2)	1,2,4-Trimethylbenzene	1.2	6.3	U *3	UJ	IS	µg/kg
480-201615-1	SS2 (0-2)	1,2-Dibromo-3-chloropropane	3.2	6.3	U *3	UJ	IS	µg/kg
480-201615-1	SS2 (0-2)	1,2-Dibromoethane	0.81	6.3	U F1	UJ	MS	µg/kg
480-201615-1	SS2 (0-2)	1,2-Dichlorobenzene	0.5	6.3	U F1 *3	UJ	IS	µg/kg
480-201615-1	SS2 (0-2)	1,3,5-Trimethylbenzene	0.41	6.3	U F1 *3	UJ	IS	µg/kg
480-201615-1	SS2 (0-2)	1,3-Dichlorobenzene	0.33	6.3	U *3	UJ	IS	µg/kg
480-201615-1	SS2 (0-2)	1,4-Dichlorobenzene	0.89	6.3	U F1 *3	UJ	IS	µg/kg
480-201615-1	SS2 (0-2)	2-Hexanone	3.2	32	U F1	UJ	MS	µg/kg
480-201615-1	SS2 (0-2)	Acetone	5.3	32	U F1	UJ	MS	µg/kg
480-201615-1	SS2 (0-2)	Bromodichloromethane	0.85	6.3	U F2 F1	UJ	MS	µg/kg
480-201615-1	SS2 (0-2)	Bromoform	3.2	6.3	U F1	UJ	MS	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201615-1	SS2 (0-2)	Carbon Tetrachloride	0.61	6.3	U	UJ	Cc	µg/kg
480-201615-1	SS2 (0-2)	Chloroform	0.45	6.3	J	UJ	LB,SSR	µg/kg
480-201615-1	SS2 (0-2)	*cis* -1,3-Dichloropropene	0.91	6.3	U F1	UJ	MS	µg/kg
480-201615-1	SS2 (0-2)	Cyclohexane	0.89	6.3	U	UJ	Cc	µg/kg
480-201615-1	SS2 (0-2)	Isopropylbenzene	0.96	6.3	U F1 *3	UJ	IS	µg/kg
480-201615-1	SS2 (0-2)	2-Butanone	2.3	32	U F1	UJ	MS	µg/kg
480-201615-1	SS2 (0-2)	Methylcyclohexane	0.96	6.3	U	UJ	Cc	µg/kg
480-201615-1	SS2 (0-2)	n-Butylbenzene	0.55	6.3	U F1 *3	UJ	MS,IS	µg/kg
480-201615-1	SS2 (0-2)	n-Propylbenzene	0.51	6.3	U *3	UJ	IS	µg/kg
480-201615-1	SS2 (0-2)	sec-Butylbenzene	0.55	6.3	U *3	UJ	IS	µg/kg
480-201615-1	SS2 (0-2)	Styrene	0.32	6.3	U F1	UJ	MS	µg/kg
480-201615-1	SS2 (0-2)	*tert* -Butylbenzene	0.66	6.3	U *3	UJ	IS	µg/kg
480-201615-1	SS2 (0-2)	*trans* -1,3-Dichloropropene	2.8	6.3	U F1	UJ	MS	µg/kg
480-201615-1	SS4 (0-2)	1,1,2,2-Tetrachloroethane	1.3	8.3	U *3	R	IS	µg/kg
480-201615-1	SS4 (0-2)	1,1-Dichloroethene	1	8.3	U	UJ	Cc	µg/kg
480-201615-1	SS4 (0-2)	1,2,4-Trichlorobenzene	0.51	8.3	U *3	R	IS	µg/kg
480-201615-1	SS4 (0-2)	1,2,4-Trimethylbenzene	1.6	8.3	U *3	R	IS	µg/kg
480-201615-1	SS4 (0-2)	1,2-Dibromo-3-chloropropane	4.2	8.3	U *3	R	IS	µg/kg
480-201615-1	SS4 (0-2)	1,2-Dichlorobenzene	0.65	8.3	U *3	R	IS	µg/kg
480-201615-1	SS4 (0-2)	1,3,5-Trimethylbenzene	0.54	8.3	U *3	R	IS	µg/kg
480-201615-1	SS4 (0-2)	1,3-Dichlorobenzene	0.43	8.3	U *3	R	IS	µg/kg
480-201615-1	SS4 (0-2)	1,4-Dichlorobenzene	1.2	8.3	U *3	R	IS	µg/kg
480-201615-1	SS4 (0-2)	Carbon Tetrachloride	0.8	8.3	U	UJ	Cc	µg/kg
480-201615-1	SS4 (0-2)	Chloroform	0.56	8.3	J B	UJ	LB,SSR	µg/kg
480-201615-1	SS4 (0-2)	Cyclohexane	1.2	8.3	U	UJ	Cc	µg/kg
480-201615-1	SS4 (0-2)	Isopropylbenzene	1.3	8.3	U *3	R	IS	µg/kg
480-201615-1	SS4 (0-2)	Methylcyclohexane	1.3	8.3	U	UJ	Cc	µg/kg
480-201615-1	SS4 (0-2)	n-Butylbenzene	0.72	8.3	U *3	R	IS	µg/kg
480-201615-1	SS4 (0-2)	n-Propylbenzene	0.66	8.3	U *3	R	IS	µg/kg
480-201615-1	SS4 (0-2)	*sec* -Butylbenzene	0.72	8.3	U *3	R	IS	µg/kg
480-201615-1	SS4 (0-2)	*tert* -Butylbenzene	0.86	8.3	U *3	R	IS	µg/kg
480-201615-1	SS4 (0-6)	1,1,1,2-Tetrachloroethane	0.54	5.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	1,1,1-Trichloroethane	0.39	5.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (0-6)	1,1,2,2-Tetrachloroethane	0.87	5.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	1,1,2-Trichloroethane	0.7	5.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	1,1-Dichloroethane	0.66	5.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (0-6)	1,1-Dichloroethene	0.66	5.4	U	UJ	Cc,SSR	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201615-1	SS4 (0-6)	1,2,3-Trimethylbenzene	1.1	5.4	U *3	UJ	SSR	µg/kg
480-201615-1	SS4 (0-6)	1,2,4-Trichlorobenzene	0.33	5.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	1,2,4-Trimethylbenzene	1	5.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	1,2-Dibromo-3-chloropropane	2.7	5.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	1,2-Dibromoethane	0.69	5.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	1,2-Dichlorobenzene	0.42	5.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	1,2-Dichloroethane	0.27	5.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (0-6)	1,2-Dichloropropane	2.7	5.4	U	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	1,3,5-Trimethylbenzene	0.35	5.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	1,3-Dichlorobenzene	0.28	5.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	1,4-Dichlorobenzene	0.75	5.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	2-Hexanone	2.7	27	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	4-Methyl-2-pentanone	1.8	27	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	Acetone	4.5	27	U	UJ	SSR	µg/kg
480-201615-1	SS4 (0-6)	Benzene	0.26	5.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (0-6)	Bromodichloromethane	0.72	5.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (0-6)	Bromomethane	0.48	5.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (0-6)	Bromoform	2.7	5.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	Carbon disulfide	2.7	5.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (0-6)	Carbon Tetrachloride	0.52	5.4	U	UJ	Cc,SSR	µg/kg
480-201615-1	SS4 (0-6)	Chloroform	0.37	5.4	J B	UJ	LB,SSR	µg/kg
480-201615-1	SS4 (0-6)	*cis* -1,2-Dichloroethene	0.69	5.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (0-6)	*cis* -1,3-Dichloropropene	0.78	5.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (0-6)	Chlorobenzene	0.71	5.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	Chloroethane	1.2	5.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (0-6)	Chloromethane	0.33	5.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (0-6)	Cyclohexane	0.75	5.4	U	UJ	Cc,SSR	µg/kg
480-201615-1	SS4 (0-6)	Dibromochloromethane	0.69	5.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	Dichlorodifluoromethane	0.45	5.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (0-6)	Ethylbenzene	0.37	5.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	Isopropylbenzene	0.81	5.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	2-Butanone	2	27	U	UJ	SSR	µg/kg
480-201615-1	SS4 (0-6)	m,p-Xylene	0.91	11	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	Methyl Acetate	3.3	27	U	UJ	SSR	µg/kg
480-201615-1	SS4 (0-6)	Methylcyclohexane	0.82	5.4	U	UJ	Cc,SSR	µg/kg
480-201615-1	SS4 (0-6)	Methylene Chloride	2.5	5.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (0-6)	Methyl *tert* -butyl ether	0.53	5.4	U	UJ	SSR	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201615-1	SS4 (0-6)	n-Butylbenzene	0.47	5.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	n-Propylbenzene	0.43	5.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	o-Xylene	0.7	5.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	*sec* -Butylbenzene	0.47	5.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	Styrene	0.27	5.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	*tert* -Butylbenzene	0.56	5.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	Toluene	0.41	5.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	Tetrachloroethanes	0.72	5.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	*trans* -1,2-Dichloroethene	0.56	5.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (0-6)	*trans* -1,3-Dichloropropene	2.4	5.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (0-6)	Trichloroethene	1.2	5.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (0-6)	Trichlorotrifluoroethane	1.2	5.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (0-6)	Trichlorofluoromethane	0.51	5.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (0-6)	Vinyl Chloride	0.66	5.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (0-6)	Xylenes	0.91	11	U	UJ	SSR	µg/kg
480-201615-1	SS4 (6-12)	1,1,1,2-Tetrachloroethane	0.61	6.1	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (6-12)	1,1,1-Trichloroethane	0.44	6.1	U	UJ	SSR	µg/kg
480-201615-1	SS4 (6-12)	1,1,2,2-Tetrachloroethane	0.99	6.1	U *3	R	IS	µg/kg
480-201615-1	SS4 (6-12)	1,1,2-Trichloroethane	0.8	6.1	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (6-12)	1,1-Dichloroethane	0.75	6.1	U	UJ	SSR	µg/kg
480-201615-1	SS4 (6-12)	1,1-Dichloroethene	0.75	6.1	U	UJ	Cc,SSR	µg/kg
480-201615-1	SS4 (6-12)	1,2,3-Trimethylbenzene	1.2	6.1	U *3	UJ	SSR	µg/kg
480-201615-1	SS4 (6-12)	1,2,4-Trichlorobenzene	0.37	6.1	U *3	R	IS	µg/kg
480-201615-1	SS4 (6-12)	1,2,4-Trimethylbenzene	1.2	6.1	U *3	R	IS	µg/kg
480-201615-1	SS4 (6-12)	1,2-Dibromo-3-chloropropane	3.1	6.1	U *3	R	IS	µg/kg
480-201615-1	SS4 (6-12)	1,2-Dibromoethane	0.79	6.1	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (6-12)	1,2-Dichlorobenzene	0.48	6.1	U *3	R	IS	µg/kg
480-201615-1	SS4 (6-12)	1,2-Dichloroethane	0.31	6.1	U	UJ	SSR	µg/kg
480-201615-1	SS4 (6-12)	1,2-Dichloropropane	3.1	6.1	U	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (6-12)	1,3,5-Trimethylbenzene	0.39	6.1	U *3	R	IS	µg/kg
480-201615-1	SS4 (6-12)	1,3-Dichlorobenzene	0.31	6.1	U *3	R	IS	µg/kg
480-201615-1	SS4 (6-12)	1,4-Dichlorobenzene	0.86	6.1	U *3	R	IS	µg/kg
480-201615-1	SS4 (6-12)	2-Hexanone	3.1	31	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (6-12)	4-Methyl-2-pentanone	2	31	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (6-12)	Acetone	5.2	31	U	UJ	SSR	µg/kg
480-201615-1	SS4 (6-12)	Benzene	0.3	6.1	U	UJ	SSR	µg/kg
480-201615-1	SS4 (6-12)	Bromodichloromethane	0.82	6.1	U	UJ	SSR	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201615-1	SS4 (6-12)	Bromomethane	0.55	6.1	U	UJ	SSR	µg/kg
480-201615-1	SS4 (6-12)	Bromoform	3.1	6.1	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (6-12)	Carbon disulfide	3.1	6.1	U	UJ	SSR	µg/kg
480-201615-1	SS4 (6-12)	Carbon Tetrachloride	0.59	6.1	U	UJ	Cc,SSR	µg/kg
480-201615-1	SS4 (6-12)	Chloroform	0.5	6.1	J B	UJ	LB,SSR	µg/kg
480-201615-1	SS4 (6-12)	*cis*-1,2-Dichloroethene	0.78	6.1	U	UJ	SSR	µg/kg
480-201615-1	SS4 (6-12)	*cis*-1,3-Dichloropropene	0.88	6.1	U	UJ	SSR	µg/kg
480-201615-1	SS4 (6-12)	Chlorobenzene	0.81	6.1	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (6-12)	Chloroethane	1.4	6.1	U	UJ	SSR	µg/kg
480-201615-1	SS4 (6-12)	Chloromethane	0.37	6.1	U	UJ	SSR	µg/kg
480-201615-1	SS4 (6-12)	Cyclohexane	0.86	6.1	U	UJ	Cc,SSR	µg/kg
480-201615-1	SS4 (6-12)	Dibromochloromethane	0.78	6.1	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (6-12)	Dichlorodifluoromethane	0.51	6.1	U	UJ	SSR	µg/kg
480-201615-1	SS4 (6-12)	Ethylbenzene	0.42	6.1	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (6-12)	Isopropylbenzene	0.92	6.1	U *3	R	IS	µg/kg
480-201615-1	SS4 (6-12)	2-Butanone	2.2	31	U	UJ	SSR	µg/kg
480-201615-1	SS4 (6-12)	m,p-Xylene	1	12	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (6-12)	Methyl Acetate	3.7	31	U	UJ	SSR	µg/kg
480-201615-1	SS4 (6-12)	Methylcyclohexane	0.93	6.1	U	UJ	Cc,SSR	µg/kg
480-201615-1	SS4 (6-12)	Methylene Chloride	2.8	6.1	U	UJ	SSR	µg/kg
480-201615-1	SS4 (6-12)	Methyl *tert*-butyl ether	0.6	6.1	U	UJ	SSR	µg/kg
480-201615-1	SS4 (6-12)	n-Butylbenzene	0.53	6.1	U *3	R	IS	µg/kg
480-201615-1	SS4 (6-12)	n-Propylbenzene	0.49	6.1	U *3	R	IS	µg/kg
480-201615-1	SS4 (6-12)	o-Xylene	0.8	6.1	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (6-12)	*sec*-Butylbenzene	0.53	6.1	U *3	R	IS	µg/kg
480-201615-1	SS4 (6-12)	Styrene	0.31	6.1	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (6-12)	*tert*-Butylbenzene	0.64	6.1	U *3	R	IS	µg/kg
480-201615-1	SS4 (6-12)	Toluene	0.46	6.1	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (6-12)	Tetrachloroethanes	0.82	6.1	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (6-12)	*trans*-1,2-Dichloroethene	0.63	6.1	U	UJ	SSR	µg/kg
480-201615-1	SS4 (6-12)	*trans*-1,3-Dichloropropene	2.7	6.1	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (6-12)	Trichloroethene	1.3	6.1	U	UJ	SSR	µg/kg
480-201615-1	SS4 (6-12)	Trichlorotrifluoroethane	1.4	6.1	U	UJ	SSR	µg/kg
480-201615-1	SS4 (6-12)	Trichlorofluoromethane	0.58	6.1	U	UJ	SSR	µg/kg
480-201615-1	SS4 (6-12)	Vinyl Chloride	0.75	6.1	U	UJ	SSR	µg/kg
480-201615-1	SS4 (6-12)	Xylenes	1	12	U	UJ	SSR	µg/kg
480-201615-1	SS4 (12-24)	1,1,1,2-Tetrachloroethane	0.64	6.4	U *3	UJ	IS,SSR	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201615-1	SS4 (12-24)	1,1,1-Trichloroethane	0.47	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (12-24)	1,1,2,2-Tetrachloroethane	1	6.4	U *3	R	IS	µg/kg
480-201615-1	SS4 (12-24)	1,1,2-Trichloroethane	0.84	6.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (12-24)	1,1-Dichloroethane	0.78	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (12-24)	1,1-Dichloroethene	0.79	6.4	U	UJ	Cc,SSR	µg/kg
480-201615-1	SS4 (12-24)	1,2,3-Trimethylbenzene	1.3	6.4	U *3	UJ	SSR	µg/kg
480-201615-1	SS4 (12-24)	1,2,4-Trichlorobenzene	0.39	6.4	U *3	R	IS	µg/kg
480-201615-1	SS4 (12-24)	1,2,4-Trimethylbenzene	1.2	6.4	U *3	R	IS	µg/kg
480-201615-1	SS4 (12-24)	1,2-Dibromo-3-chloropropane	3.2	6.4	U *3	R	IS	µg/kg
480-201615-1	SS4 (12-24)	1,2-Dibromoethane	0.83	6.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (12-24)	1,2-Dichlorobenzene	0.5	6.4	U *3	R	IS	µg/kg
480-201615-1	SS4 (12-24)	1,2-Dichloroethane	0.32	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (12-24)	1,2-Dichloropropane	3.2	6.4	U	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (12-24)	1,3,5-Trimethylbenzene	0.41	6.4	U *3	R	IS	µg/kg
480-201615-1	SS4 (12-24)	1,3-Dichlorobenzene	0.33	6.4	U *3	R	IS	µg/kg
480-201615-1	SS4 (12-24)	1,4-Dichlorobenzene	0.9	6.4	U *3	R	IS	µg/kg
480-201615-1	SS4 (12-24)	2-Hexanone	3.2	32	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (12-24)	4-Methyl-2-pentanone	2.1	32	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (12-24)	Acetone	5.4	32	U	UJ	SSR	µg/kg
480-201615-1	SS4 (12-24)	Benzene	0.31	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (12-24)	Bromodichloromethane	0.86	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (12-24)	Bromomethane	0.58	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (12-24)	Bromoform	3.2	6.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (12-24)	Carbon disulfide	3.2	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (12-24)	Carbon Tetrachloride	0.62	6.4	U	UJ	Cc,SSR	µg/kg
480-201615-1	SS4 (12-24)	Chloroform	0.59	6.4	J B	UJ	LB,SSR	µg/kg
480-201615-1	SS4 (12-24)	*cis*-1,2-Dichloroethene	0.82	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (12-24)	*cis*-1,3-Dichloropropene	0.93	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (12-24)	Chlorobenzene	0.85	6.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (12-24)	Chloroethane	1.5	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (12-24)	Chloromethane	0.39	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (12-24)	Cyclohexane	0.9	6.4	U	UJ	Cc,SSR	µg/kg
480-201615-1	SS4 (12-24)	Dibromochloromethane	0.82	6.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (12-24)	Dichlorodifluoromethane	0.53	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (12-24)	Ethylbenzene	0.44	6.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (12-24)	Isopropylbenzene	0.97	6.4	U *3	R	IS	µg/kg
480-201615-1	SS4 (12-24)	2-Butanone	2.4	32	U	UJ	SSR	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201615-1	SS4 (12-24)	m,p-Xylene	1.1	13	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (12-24)	Methyl Acetate	3.9	32	U	UJ	SSR	µg/kg
480-201615-1	SS4 (12-24)	Methylcyclohexane	0.98	6.4	U	UJ	Cc,SSR	µg/kg
480-201615-1	SS4 (12-24)	Methylene Chloride	3	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (12-24)	Methyl *tert*-butyl ether	0.63	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (12-24)	n-Butylbenzene	0.56	6.4	U *3	R	IS	µg/kg
480-201615-1	SS4 (12-24)	n-Propylbenzene	0.51	6.4	U *3	R	IS	µg/kg
480-201615-1	SS4 (12-24)	o-Xylene	0.84	6.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (12-24)	*sec*-Butylbenzene	0.56	6.4	U *3	R	IS	µg/kg
480-201615-1	SS4 (12-24)	Styrene	0.32	6.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (12-24)	*tert*-Butylbenzene	0.67	6.4	U *3	R	IS	µg/kg
480-201615-1	SS4 (12-24)	Toluene	0.49	6.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (12-24)	Tetrachloroethanes	0.86	6.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (12-24)	*trans*-1,2-Dichloroethene	0.66	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (12-24)	*trans*-1,3-Dichloropropene	2.8	6.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS4 (12-24)	Trichloroethene	1.4	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (12-24)	Trichlorotrifluoroethane	1.5	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (12-24)	Trichlorofluoromethane	0.61	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (12-24)	Vinyl Chloride	0.78	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS4 (12-24)	Xylenes	1.1	13	U	UJ	SSR	µg/kg
480-201615-1	SS2 (0-6)	1,1-Dichloroethene	0.57	4.6	U	UJ	Cc	µg/kg
480-201615-1	SS2 (0-6)	Carbon Tetrachloride	0.45	4.6	U	UJ	Cc	µg/kg
480-201615-1	SS2 (0-6)	Cyclohexane	0.65	4.6	U	UJ	Cc	µg/kg
480-201615-1	SS2 (0-6)	Methylcyclohexane	0.7	4.6	U	UJ	Cc	µg/kg
480-201615-1	SS2 (6-12)	1,1-Dichloroethene	0.66	5.4	U F2	UJ	Cc	µg/kg
480-201615-1	SS2 (6-12)	1,2,4-Trichlorobenzene	0.33	5.4	U F1	UJ	MS	µg/kg
480-201615-1	SS2 (6-12)	Carbon Tetrachloride	0.53	5.4	U F2	UJ	Cc	µg/kg
480-201615-1	SS2 (6-12)	*cis*-1,3-Dichloropropene	0.78	5.4	U F1	UJ	MS	µg/kg
480-201615-1	SS2 (6-12)	Cyclohexane	0.76	5.4	U F2	UJ	Cc	µg/kg
480-201615-1	SS2 (6-12)	2-Butanone	2	27	U F2 F1	UJ	MS	µg/kg
480-201615-1	SS2 (6-12)	Methylcyclohexane	0.83	5.4	U	UJ	Cc	µg/kg
480-201615-1	SS2 (12-24)	1,1-Dichloroethene	0.3	2.4	U	UJ	Cc	µg/kg
480-201615-1	SS2 (12-24)	Carbon Tetrachloride	0.24	2.4	U	UJ	Cc	µg/kg
480-201615-1	SS2 (12-24)	Cyclohexane	0.34	2.4	U	UJ	Cc	µg/kg
480-201615-1	SS2 (12-24)	Methylcyclohexane	0.37	2.4	U	UJ	Cc	µg/kg
480-201615-1	SS3 (0-2)	1,1,2,2-Tetrachloroethane	1.1	6.6	U *3	UJ	IS	µg/kg
480-201615-1	SS3 (0-2)	1,1-Dichloroethene	0.81	6.6	U	UJ	Cc	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201615-1	SS3 (0-2)	1,2,4-Trichlorobenzene	0.4	6.6	U *3	UJ	IS	µg/kg
480-201615-1	SS3 (0-2)	1,2,4-Trimethylbenzene	1.3	6.6	U *3	UJ	IS	µg/kg
480-201615-1	SS3 (0-2)	1,2-Dibromo-3-chloropropane	3.3	6.6	U *3	UJ	IS	µg/kg
480-201615-1	SS3 (0-2)	1,2-Dichlorobenzene	0.52	6.6	U *3	UJ	IS	µg/kg
480-201615-1	SS3 (0-2)	1,3,5-Trimethylbenzene	0.43	6.6	U *3	UJ	IS	µg/kg
480-201615-1	SS3 (0-2)	1,3-Dichlorobenzene	0.34	6.6	U *3	UJ	IS	µg/kg
480-201615-1	SS3 (0-2)	1,4-Dichlorobenzene	0.93	6.6	U *3	UJ	IS	µg/kg
480-201615-1	SS3 (0-2)	Carbon Tetrachloride	0.64	6.6	U	UJ	Cc	µg/kg
480-201615-1	SS3 (0-2)	Chloroform	0.48	6.6	J B	UJ	LB,SSR	µg/kg
480-201615-1	SS3 (0-2)	Cyclohexane	0.93	6.6	U	UJ	Cc	µg/kg
480-201615-1	SS3 (0-2)	Isopropylbenzene	1	6.6	U *3	UJ	IS	µg/kg
480-201615-1	SS3 (0-2)	Methylcyclohexane	1	6.6	U	UJ	Cc	µg/kg
480-201615-1	SS3 (0-2)	n-Butylbenzene	0.58	6.6	U *3	UJ	IS	µg/kg
480-201615-1	SS3 (0-2)	n-Propylbenzene	0.53	6.6	U *3	UJ	IS	µg/kg
480-201615-1	SS3 (0-2)	*sec* -Butylbenzene	0.58	6.6	U *3	UJ	IS	µg/kg
480-201615-1	SS3 (0-2)	*tert* -Butylbenzene	0.69	6.6	U *3	UJ	IS	µg/kg
480-201615-1	SS3 (0-6)	1,1,1,2-Tetrachloroethane	0.52	5.2	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	1,1,1-Trichloroethane	0.38	5.2	U	UJ	SSR	µg/kg
480-201615-1	SS3 (0-6)	1,1,2,2-Tetrachloroethane	0.85	5.2	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	1,1,2-Trichloroethane	0.68	5.2	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	1,1-Dichloroethane	0.64	5.2	U	UJ	SSR	µg/kg
480-201615-1	SS3 (0-6)	1,1-Dichloroethene	0.64	5.2	U	UJ	Cc,SSR	µg/kg
480-201615-1	SS3 (0-6)	1,2,3-Trimethylbenzene	1.1	5.2	U *3	UJ	SSR	µg/kg
480-201615-1	SS3 (0-6)	1,2,4-Trichlorobenzene	0.32	5.2	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	1,2,4-Trimethylbenzene	1	5.2	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	1,2-Dibromo-3-chloropropane	2.6	5.2	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	1,2-Dibromoethane	0.67	5.2	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	1,2-Dichlorobenzene	0.41	5.2	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	1,2-Dichloroethane	0.26	5.2	U	UJ	SSR	µg/kg
480-201615-1	SS3 (0-6)	1,2-Dichloropropane	2.6	5.2	U	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	1,3,5-Trimethylbenzene	0.34	5.2	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	1,3-Dichlorobenzene	0.27	5.2	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	1,4-Dichlorobenzene	0.73	5.2	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	2-Hexanone	2.6	26	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	4-Methyl-2-pentanone	1.7	26	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	Acetone	5.1	26	J	J	SSR	µg/kg
480-201615-1	SS3 (0-6)	Benzene	0.26	5.2	U	UJ	SSR	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201615-1	SS3 (0-6)	Bromodichloromethane	0.7	5.2	U	UJ	SSR	µg/kg
480-201615-1	SS3 (0-6)	Bromomethane	0.47	5.2	U	UJ	SSR	µg/kg
480-201615-1	SS3 (0-6)	Bromoform	2.6	5.2	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	Carbon disulfide	2.6	5.2	U	UJ	SSR	µg/kg
480-201615-1	SS3 (0-6)	Carbon Tetrachloride	0.51	5.2	U	UJ	Cc,SSR	µg/kg
480-201615-1	SS3 (0-6)	Chloroform	0.44	5.2	J B	UJ	LB,SSR	µg/kg
480-201615-1	SS3 (0-6)	*cis* -1,2-Dichloroethene	0.67	5.2	U	UJ	SSR	µg/kg
480-201615-1	SS3 (0-6)	*cis* -1,3-Dichloropropene	0.75	5.2	U	UJ	SSR	µg/kg
480-201615-1	SS3 (0-6)	Chlorobenzene	0.69	5.2	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	Chloroethane	1.2	5.2	U	UJ	SSR	µg/kg
480-201615-1	SS3 (0-6)	Chloromethane	0.32	5.2	U	UJ	SSR	µg/kg
480-201615-1	SS3 (0-6)	Cyclohexane	0.73	5.2	U	UJ	Cc,SSR	µg/kg
480-201615-1	SS3 (0-6)	Dibromochloromethane	0.67	5.2	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	Dichlorodifluoromethane	0.43	5.2	U	UJ	SSR	µg/kg
480-201615-1	SS3 (0-6)	Ethylbenzene	0.36	5.2	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	Isopropylbenzene	0.79	5.2	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	2-Butanone	1.9	26	U	UJ	SSR	µg/kg
480-201615-1	SS3 (0-6)	m,p-Xylene	0.88	10	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	Methyl Acetate	3.2	26	U	UJ	SSR	µg/kg
480-201615-1	SS3 (0-6)	Methylcyclohexane	0.8	5.2	U	UJ	Cc,SSR	µg/kg
480-201615-1	SS3 (0-6)	Methylene Chloride	2.4	5.2	U	UJ	SSR	µg/kg
480-201615-1	SS3 (0-6)	Methyl *tert* -butyl ether	0.51	5.2	U	UJ	SSR	µg/kg
480-201615-1	SS3 (0-6)	n-Butylbenzene	0.46	5.2	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	n-Propylbenzene	0.42	5.2	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	o-Xylene	0.68	5.2	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	*sec* -Butylbenzene	0.46	5.2	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	Styrene	0.26	5.2	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	*tert* -Butylbenzene	0.54	5.2	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	Toluene	0.4	5.2	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	Tetrachloroethanes	0.7	5.2	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	*trans* -1,2-Dichloroethene	0.54	5.2	U	UJ	SSR	µg/kg
480-201615-1	SS3 (0-6)	*trans* -1,3-Dichloropropene	2.3	5.2	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (0-6)	Trichloroethene	1.2	5.2	U	UJ	SSR	µg/kg
480-201615-1	SS3 (0-6)	Trichlorotrifluoroethane	1.2	5.2	U	UJ	SSR	µg/kg
480-201615-1	SS3 (0-6)	Trichlorofluoromethane	0.5	5.2	U	UJ	SSR	µg/kg
480-201615-1	SS3 (0-6)	Vinyl Chloride	0.64	5.2	U	UJ	SSR	µg/kg
480-201615-1	SS3 (0-6)	Xylenes	0.88	10	U	UJ	SSR	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201615-1	SS3 (6-12)	1,1,1,2-Tetrachloroethane	0.5	5	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (6-12)	1,1,1-Trichloroethane	0.36	5	U	UJ	SSR	µg/kg
480-201615-1	SS3 (6-12)	1,1,2,2-Tetrachloroethane	0.81	5	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (6-12)	1,1,2-Trichloroethane	0.65	5	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (6-12)	1,1-Dichloroethane	0.61	5	U	UJ	SSR	µg/kg
480-201615-1	SS3 (6-12)	1,1-Dichloroethene	0.61	5	U	UJ	Cc,SSR	µg/kg
480-201615-1	SS3 (6-12)	1,2,3-Trimethylbenzene	1	5	U *3	UJ	SSR	µg/kg
480-201615-1	SS3 (6-12)	1,2,4-Trichlorobenzene	0.3	5	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (6-12)	1,2,4-Trimethylbenzene	0.95	5	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (6-12)	1,2-Dibromo-3-chloropropane	2.5	5	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (6-12)	1,2-Dibromoethane	0.64	5	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (6-12)	1,2-Dichlorobenzene	0.39	5	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (6-12)	1,2-Dichloroethane	0.25	5	U	UJ	SSR	µg/kg
480-201615-1	SS3 (6-12)	1,2-Dichloropropane	2.5	5	U	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (6-12)	1,3,5-Trimethylbenzene	0.32	5	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (6-12)	1,3-Dichlorobenzene	0.26	5	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (6-12)	1,4-Dichlorobenzene	0.7	5	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (6-12)	2-Hexanone	2.5	25	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (6-12)	4-Methyl-2-pentanone	1.6	25	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (6-12)	Acetone	23	25	J	J	SSR	µg/kg
480-201615-1	SS3 (6-12)	Benzene	0.24	5	U	UJ	SSR	µg/kg
480-201615-1	SS3 (6-12)	Bromodichloromethane	0.67	5	U	UJ	SSR	µg/kg
480-201615-1	SS3 (6-12)	Bromomethane	0.45	5	U	UJ	SSR	µg/kg
480-201615-1	SS3 (6-12)	Bromoform	2.5	5	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (6-12)	Carbon disulfide	2.5	5	U	UJ	SSR	µg/kg
480-201615-1	SS3 (6-12)	Carbon Tetrachloride	0.48	5	U	UJ	Cc,SSR	µg/kg
480-201615-1	SS3 (6-12)	Chloroform	0.37	5	J B	UJ	LB,SSR	µg/kg
480-201615-1	SS3 (6-12)	*cis*-1,2-Dichloroethene	0.64	5	U	UJ	SSR	µg/kg
480-201615-1	SS3 (6-12)	*cis*-1,3-Dichloropropene	0.72	5	U	UJ	SSR	µg/kg
480-201615-1	SS3 (6-12)	Chlorobenzene	0.66	5	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (6-12)	Chloroethane	1.1	5	U	UJ	SSR	µg/kg
480-201615-1	SS3 (6-12)	Chloromethane	0.3	5	U	UJ	SSR	µg/kg
480-201615-1	SS3 (6-12)	Cyclohexane	0.7	5	U	UJ	Cc,SSR	µg/kg
480-201615-1	SS3 (6-12)	Dibromochloromethane	0.64	5	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (6-12)	Dichlorodifluoromethane	0.41	5	U	UJ	SSR	µg/kg
480-201615-1	SS3 (6-12)	Ethylbenzene	0.34	5	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (6-12)	Isopropylbenzene	0.75	5	U *3	UJ	IS,SSR	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201615-1	SS3 (6-12)	2-Butanone	4.2	25	J	J	SSR	µg/kg
480-201615-1	SS3 (6-12)	m,p-Xylene	0.84	9.9	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (6-12)	Methyl Acetate	3	25	U	UJ	SSR	µg/kg
480-201615-1	SS3 (6-12)	Methylcyclohexane	0.76	5	U	UJ	Cc,SSR	µg/kg
480-201615-1	SS3 (6-12)	Methylene Chloride	2.3	5	U	UJ	SSR	µg/kg
480-201615-1	SS3 (6-12)	Methyl *tert*-butyl ether	0.49	5	U	UJ	SSR	µg/kg
480-201615-1	SS3 (6-12)	n-Butylbenzene	0.43	5	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (6-12)	n-Propylbenzene	0.4	5	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (6-12)	o-Xylene	0.65	5	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (6-12)	*sec*-Butylbenzene	0.43	5	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (6-12)	Styrene	0.25	5	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (6-12)	*tert*-Butylbenzene	0.52	5	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (6-12)	Toluene	0.38	5	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (6-12)	Tetrachloroethanes	0.67	5	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (6-12)	*trans*-1,2-Dichloroethene	0.51	5	U	UJ	SSR	µg/kg
480-201615-1	SS3 (6-12)	*trans*-1,3-Dichloropropene	2.2	5	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (6-12)	Trichloroethene	1.1	5	U	UJ	SSR	µg/kg
480-201615-1	SS3 (6-12)	Trichlorotrifluoroethane	1.1	5	U	UJ	SSR	µg/kg
480-201615-1	SS3 (6-12)	Trichlorofluoromethane	0.47	5	U	UJ	SSR	µg/kg
480-201615-1	SS3 (6-12)	Vinyl Chloride	0.61	5	U	UJ	SSR	µg/kg
480-201615-1	SS3 (6-12)	Xylenes	0.84	9.9	U	UJ	SSR	µg/kg
480-201615-1	SS3 (12-24)	1,1,1,2-Tetrachloroethane	0.64	6.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (12-24)	1,1,1-Trichloroethane	0.47	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS3 (12-24)	1,1,2,2-Tetrachloroethane	1	6.4	U *3	R	IS	µg/kg
480-201615-1	SS3 (12-24)	1,1,2-Trichloroethane	0.83	6.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (12-24)	1,1-Dichloroethane	0.78	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS3 (12-24)	1,1-Dichloroethene	0.79	6.4	U	UJ	Cc,SSR	µg/kg
480-201615-1	SS3 (12-24)	1,2,3-Trimethylbenzene	1.3	6.4	U *3	UJ	SSR	µg/kg
480-201615-1	SS3 (12-24)	1,2,4-Trichlorobenzene	0.39	6.4	U *3	R	IS	µg/kg
480-201615-1	SS3 (12-24)	1,2,4-Trimethylbenzene	1.2	6.4	U *3	R	IS	µg/kg
480-201615-1	SS3 (12-24)	1,2-Dibromo-3-chloropropane	3.2	6.4	U *3	R	IS	µg/kg
480-201615-1	SS3 (12-24)	1,2-Dibromoethane	0.82	6.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (12-24)	1,2-Dichlorobenzene	0.5	6.4	U *3	R	IS	µg/kg
480-201615-1	SS3 (12-24)	1,2-Dichloroethane	0.32	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS3 (12-24)	1,2-Dichloropropane	3.2	6.4	U	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (12-24)	1,3,5-Trimethylbenzene	0.41	6.4	U *3	R	IS	µg/kg
480-201615-1	SS3 (12-24)	1,3-Dichlorobenzene	0.33	6.4	U *3	R	IS	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201615-1	SS3 (12-24)	1,4-Dichlorobenzene	0.9	6.4	U *3	R	IS	µg/kg
480-201615-1	SS3 (12-24)	2-Hexanone	3.2	32	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (12-24)	4-Methyl-2-pentanone	2.1	32	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (12-24)	Acetone	19	32	J	J	SSR	µg/kg
480-201615-1	SS3 (12-24)	Benzene	0.95	6.4	J	J	SSR	µg/kg
480-201615-1	SS3 (12-24)	Bromodichloromethane	0.86	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS3 (12-24)	Bromomethane	0.58	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS3 (12-24)	Bromoform	3.2	6.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (12-24)	Carbon disulfide	3.2	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS3 (12-24)	Carbon Tetrachloride	0.62	6.4	U	UJ	Cc,SSR	µg/kg
480-201615-1	SS3 (12-24)	Chloroform	0.4	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS3 (12-24)	*cis*-1,2-Dichloroethene	0.82	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS3 (12-24)	*cis*-1,3-Dichloropropene	0.92	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS3 (12-24)	Chlorobenzene	0.85	6.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (12-24)	Chloroethane	1.5	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS3 (12-24)	Chloromethane	0.39	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS3 (12-24)	Cyclohexane	1.1	6.4	J	J	SSR,Cc	µg/kg
480-201615-1	SS3 (12-24)	Dibromochloromethane	0.82	6.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (12-24)	Dichlorodifluoromethane	0.53	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS3 (12-24)	Ethylbenzene	0.44	6.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (12-24)	Isopropylbenzene	0.97	6.4	U *3	R	IS	µg/kg
480-201615-1	SS3 (12-24)	2-Butanone	4.6	32	J	J	SSR	µg/kg
480-201615-1	SS3 (12-24)	m,p-Xylene	1.1	13	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (12-24)	Methyl Acetate	3.9	32	U	UJ	SSR	µg/kg
480-201615-1	SS3 (12-24)	Methylcyclohexane	0.98	6.4	U	UJ	Cc,SSR	µg/kg
480-201615-1	SS3 (12-24)	Methylene Chloride	3	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS3 (12-24)	Methyl *tert*-butyl ether	0.63	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS3 (12-24)	n-Butylbenzene	0.56	6.4	U *3	R	IS	µg/kg
480-201615-1	SS3 (12-24)	n-Propylbenzene	0.51	6.4	U *3	R	IS	µg/kg
480-201615-1	SS3 (12-24)	o-Xylene	0.84	6.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (12-24)	*sec*-Butylbenzene	0.56	6.4	U *3	R	IS	µg/kg
480-201615-1	SS3 (12-24)	Styrene	0.32	6.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (12-24)	*tert*-Butylbenzene	0.67	6.4	U *3	R	IS	µg/kg
480-201615-1	SS3 (12-24)	Toluene	1.8	6.4	J *3	J	SSR,IS	µg/kg
480-201615-1	SS3 (12-24)	Tetrachloroethanes	0.86	6.4	U *3	UJ	IS,SSR	µg/kg
480-201615-1	SS3 (12-24)	*trans*-1,2-Dichloroethene	0.66	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS3 (12-24)	*trans*-1,3-Dichloropropene	2.8	6.4	U *3	UJ	IS,SSR	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201615-1	SS3 (12-24)	Trichloroethene	1.4	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS3 (12-24)	Trichlorotrifluoroethane	1.5	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS3 (12-24)	Trichlorofluoromethane	0.61	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS3 (12-24)	Vinyl Chloride	0.78	6.4	U	UJ	SSR	µg/kg
480-201615-1	SS3 (12-24)	Xylenes	1.1	13	U	UJ	SSR	µg/kg
480-201615-1	FDUP2_091322	1,1,1,2-Tetrachloroethane	0.56	5.6	U *3	UJ	IS,SSR	µg/kg
480-201615-1	FDUP2_091322	1,1,1-Trichloroethane	0.41	5.6	U	UJ	SSR	µg/kg
480-201615-1	FDUP2_091322	1,1,2,2-Tetrachloroethane	0.91	5.6	U *3	R	IS	µg/kg
480-201615-1	FDUP2_091322	1,1,2-Trichloroethane	0.73	5.6	U *3	UJ	IS,SSR	µg/kg
480-201615-1	FDUP2_091322	1,1-Dichloroethane	0.68	5.6	U	UJ	SSR	µg/kg
480-201615-1	FDUP2_091322	1,1-Dichloroethene	0.69	5.6	U	UJ	Cc,SSR	µg/kg
480-201615-1	FDUP2_091322	1,2,3-Trimethylbenzene	1.1	5.6	U *3	UJ	SSR	µg/kg
480-201615-1	FDUP2_091322	1,2,4-Trichlorobenzene	0.34	5.6	U *3	R	IS	µg/kg
480-201615-1	FDUP2_091322	1,2,4-Trimethylbenzene	1.1	5.6	U *3	R	IS	µg/kg
480-201615-1	FDUP2_091322	1,2-Dibromo-3-chloropropane	2.8	5.6	U *3	R	IS	µg/kg
480-201615-1	FDUP2_091322	1,2-Dibromoethane	0.72	5.6	U *3	UJ	IS,SSR	µg/kg
480-201615-1	FDUP2_091322	1,2-Dichlorobenzene	0.44	5.6	U *3	R	IS	µg/kg
480-201615-1	FDUP2_091322	1,2-Dichloroethane	0.28	5.6	U	UJ	SSR	µg/kg
480-201615-1	FDUP2_091322	1,2-Dichloropropane	2.8	5.6	U	UJ	IS,SSR	µg/kg
480-201615-1	FDUP2_091322	1,3,5-Trimethylbenzene	0.36	5.6	U *3	R	IS	µg/kg
480-201615-1	FDUP2_091322	1,3-Dichlorobenzene	0.29	5.6	U *3	R	IS	µg/kg
480-201615-1	FDUP2_091322	1,4-Dichlorobenzene	0.78	5.6	U *3	R	IS	µg/kg
480-201615-1	FDUP2_091322	2-Hexanone	2.8	28	U *3	UJ	IS,SSR	µg/kg
480-201615-1	FDUP2_091322	4-Methyl-2-pentanone	1.8	28	U *3	UJ	IS,SSR	µg/kg
480-201615-1	FDUP2_091322	Acetone	13	28	J	J	SSR	µg/kg
480-201615-1	FDUP2_091322	Benzene	0.27	5.6	U	UJ	SSR	µg/kg
480-201615-1	FDUP2_091322	Bromodichloromethane	0.75	5.6	U	UJ	SSR	µg/kg
480-201615-1	FDUP2_091322	Bromomethane	0.5	5.6	U	UJ	SSR	µg/kg
480-201615-1	FDUP2_091322	Bromoform	2.8	5.6	U *3	UJ	IS,SSR	µg/kg
480-201615-1	FDUP2_091322	Carbon disulfide	2.8	5.6	U	UJ	SSR	µg/kg
480-201615-1	FDUP2_091322	Carbon Tetrachloride	0.54	5.6	U	UJ	Cc,SSR	µg/kg
480-201615-1	FDUP2_091322	Chloroform	0.47	5.6	J B	UJ	LB,SSR	µg/kg
480-201615-1	FDUP2_091322	*cis* -1,2-Dichloroethene	0.72	5.6	U	UJ	SSR	µg/kg
480-201615-1	FDUP2_091322	*cis* -1,3-Dichloropropene	0.81	5.6	U	UJ	SSR	µg/kg
480-201615-1	FDUP2_091322	Chlorobenzene	0.74	5.6	U *3	UJ	IS,SSR	µg/kg
480-201615-1	FDUP2_091322	Chloroethane	1.3	5.6	U	UJ	SSR	µg/kg
480-201615-1	FDUP2_091322	Chloromethane	0.34	5.6	U	UJ	SSR	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201615-1	FDUP2_091322	Cyclohexane	0.78	5.6	U	UJ	Cc,SSR	µg/kg
480-201615-1	FDUP2_091322	Dibromochloromethane	0.72	5.6	U *3	UJ	IS,SSR	µg/kg
480-201615-1	FDUP2_091322	Dichlorodifluoromethane	0.46	5.6	U	UJ	SSR	µg/kg
480-201615-1	FDUP2_091322	Ethylbenzene	0.39	5.6	U *3	UJ	IS,SSR	µg/kg
480-201615-1	FDUP2_091322	Isopropylbenzene	0.85	5.6	U *3	R	IS	µg/kg
480-201615-1	FDUP2_091322	2-Butanone	2.1	28	U	UJ	SSR	µg/kg
480-201615-1	FDUP2_091322	m,p-Xylene	0.94	11	U *3	UJ	IS,SSR	µg/kg
480-201615-1	FDUP2_091322	Methyl Acetate	3.4	28	U	UJ	SSR	µg/kg
480-201615-1	FDUP2_091322	Methylcyclohexane	1	5.6	J	J	SSR,Cc	µg/kg
480-201615-1	FDUP2_091322	Methylene Chloride	2.6	5.6	U	UJ	SSR	µg/kg
480-201615-1	FDUP2_091322	Methyl *tert*-butyl ether	0.55	5.6	U	UJ	SSR	µg/kg
480-201615-1	FDUP2_091322	n-Butylbenzene	0.49	5.6	U *3	R	IS	µg/kg
480-201615-1	FDUP2_091322	n-Propylbenzene	0.45	5.6	U *3	R	IS	µg/kg
480-201615-1	FDUP2_091322	o-Xylene	0.73	5.6	U *3	UJ	IS,SSR	µg/kg
480-201615-1	FDUP2_091322	*sec*-Butylbenzene	0.49	5.6	U *3	R	IS	µg/kg
480-201615-1	FDUP2_091322	Styrene	0.28	5.6	U *3	UJ	IS,SSR	µg/kg
480-201615-1	FDUP2_091322	*tert*-Butylbenzene	0.58	5.6	U *3	R	IS	µg/kg
480-201615-1	FDUP2_091322	Toluene	0.42	5.6	U *3	UJ	IS,SSR	µg/kg
480-201615-1	FDUP2_091322	Tetrachloroethanes	0.75	5.6	U *3	UJ	IS,SSR	µg/kg
480-201615-1	FDUP2_091322	*trans*-1,2-Dichloroethene	0.58	5.6	U	UJ	SSR	µg/kg
480-201615-1	FDUP2_091322	*trans*-1,3-Dichloropropene	2.5	5.6	U *3	UJ	IS,SSR	µg/kg
480-201615-1	FDUP2_091322	Trichloroethene	1.2	5.6	U	UJ	SSR	µg/kg
480-201615-1	FDUP2_091322	Trichlorotrifluoroethane	1.3	5.6	U	UJ	SSR	µg/kg
480-201615-1	FDUP2_091322	Trichlorofluoromethane	0.53	5.6	U	UJ	SSR	µg/kg
480-201615-1	FDUP2_091322	Vinyl Chloride	0.68	5.6	U	UJ	SSR	µg/kg
480-201615-1	FDUP2_091322	Xylenes	0.94	11	U	UJ	SSR	µg/kg
480-201615-1	SS2 (0-2)	2,4-Dinitrophenol	21000	45000	U	R	MS	µg/kg
480-201615-1	SS2 (0-2)	3,3'-Dichlorobenzidine	5500	9000	U	R	MS	µg/kg
480-201615-1	SS2 (0-2)	Acenaphthylene	920	4700	J F2	J	REP	µg/kg
480-201615-1	SS2 (0-2)	Benzaldehyde	3700	4700	U F1	R	MS	µg/kg
480-201615-1	SS2 (0-2)	Bis(2-chloroethyl)ether	600	4700	U F1 F2	UJ	MS	µg/kg
480-201615-1	SS2 (0-2)	Benzo[a]anthracene	1200	4700	J F2	J	REP	µg/kg
480-201615-1	SS2 (0-2)	Benzo[a]pyrene	1900	4700	J F2	J	REP	µg/kg
480-201615-1	SS2 (0-2)	Benzo[b]fluoranthene	1700	4700	J F2	J	REP	µg/kg
480-201615-1	SS2 (0-2)	Benzo[k]fluoranthene	620	4700	J F2	J	REP	µg/kg
480-201615-1	SS2 (0-2)	Chrysene	1200	4700	J F2	J	REP	µg/kg
480-201615-1	SS2 (0-2)	Diethyl phthalate	740	4700	JBF1F2	UJ	LB ,MS,REP	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201615-1	SS2 (0-2)	Fluoranthene	1300	4700	J F1 F2	J	MS,REP	µg/kg
480-201615-1	SS2 (0-2)	N-Nitrosodiphenylamine	3800	4700	U	R	MS	µg/kg
480-201615-1	SS4 (0-2)	Diethyl phthalate	720	1100	J B	U	LB	µg/kg
480-201615-1	SS4 (0-6)	Diethyl phthalate	740	1000	J B	U	LB	µg/kg
480-201615-1	SS4 (6-12)	Diethyl phthalate	730	970	J B	U	LB	µg/kg
480-201615-1	SS4 (12-24)	Diethyl phthalate	240	970	J B	U	LB	µg/kg
480-201615-1	SS2 (0-6)	Acenaphthylene	150	1000	J	J+	SSR	µg/kg
480-201615-1	SS2 (0-6)	Benzo[g,h,i]perylene	750	1000	J	J+	SSR	µg/kg
480-201615-1	SS2 (0-6)	Benzo[k]fluoranthene	520	1000	J	J+	SSR	µg/kg
480-201615-1	SS2 (0-6)	Carbazole	120	1000	J	J+	SSR	µg/kg
480-201615-1	SS2 (0-6)	Dibenzo[a,h]anthracene	180	1000	J	J+	SSR	µg/kg
480-201615-1	SS2 (0-6)	Diethyl phthalate	760	1000	J B	UJ	LB,SSR	µg/kg
480-201615-1	SS2 (0-6)	Indeno[1,2,3-cd]pyrene	850	1000	J	J+	SSR	µg/kg
480-201615-1	SS2 (0-6)	Phenanthrene	920	1000	J	J+	SSR	µg/kg
480-201615-1	SS2 (6-12)	2,4-Dinitrophenol	4200	8900	U	R	MS	µg/kg
480-201615-1	SS2 (6-12)	Diethyl phthalate	760	920	JBF1F2	UJ	LB,REP	µg/kg
480-201615-1	SS2 (12-24)	Benzyl n-butyl phthalate	30	180	J	U	LB	µg/kg
480-201615-1	SS2 (12-24)	Diethyl phthalate	240	180	B	U	LB	µg/kg
480-201615-1	SS2 (12-24)	Hexachlorocyclopentadiene	25	180	U	UJ	Cc	µg/kg
480-201615-1	SS3 (0-2)	Diethyl phthalate	710	1100	J B	U	LB	µg/kg
480-201615-1	SS3 (0-6)	Diethyl phthalate	820	1100	J B	U	LB	µg/kg
480-201615-1	SS3 (6-12)	Diethyl phthalate	450	920	J B	U	LB	µg/kg
480-201615-1	SS3 (12-24)	Diethyl phthalate	540	1900	J B	U	LB	µg/kg
480-201615-1	FDUP2_091322	Diethyl phthalate	700	1900	J B	U	LB	µg/kg
480-201615-1	FB_091322	Diethyl phthalate	21	25	J B *+	UJ	LB,LCS	µg/L
480-201707-1	SB2 (1-2)	Perfluorooctanoic acid	0.16	0.23	J I	NJ	EMPC	µg/kg
480-201707-1	FDUP_091422	Perfluorooctanoic acid	0.098	0.23	J I	NJ	EMPC	µg/kg
480-201707-1	SB2 (0-0.5)	Mercury	0.066	0.027	F1	J-	MS	mg/kg
480-201707-1	SB2 (0-0.5)	1,1,1,2-Tetrachloroethane	0.78	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	1,1,1-Trichloroethane	0.56	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	1,1,2,2-Tetrachloroethane	1.3	7.8	U *3	UJ	SSR,IS	µg/kg
480-201707-1	SB2 (0-0.5)	1,1,2-Trichloroethane	1	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	1,1-Dichloroethane	0.95	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	1,1-Dichloroethene	0.95	7.8	U	UJ	SSR,Cc	µg/kg
480-201707-1	SB2 (0-0.5)	1,2,3-Trimethylbenzene	1.6	7.8	U *3	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	1,2,4-Trichlorobenzene	0.47	7.8	U *3	UJ	SSR,IS	µg/kg
480-201707-1	SB2 (0-0.5)	1,2,4-Trimethylbenzene	1.5	7.8	U *3	UJ	SSR,IS	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201707-1	SB2 (0-0.5)	1,2-Dibromo-3-chloropropane	3.9	7.8	U *3	UJ	SSR,IS	µg/kg
480-201707-1	SB2 (0-0.5)	1,2-Dibromoethane	1	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	1,2-Dichlorobenzene	0.61	7.8	U *3	UJ	SSR,IS	µg/kg
480-201707-1	SB2 (0-0.5)	1,2-Dichloroethane	0.39	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	1,2-Dichloropropane	3.9	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	1,3,5-Trimethylbenzene	0.5	7.8	U *3	UJ	SSR,IS	µg/kg
480-201707-1	SB2 (0-0.5)	1,3-Dichlorobenzene	0.4	7.8	U *3	UJ	SSR,IS	µg/kg
480-201707-1	SB2 (0-0.5)	1,4-Dichlorobenzene	1.1	7.8	U *3	UJ	SSR,IS	µg/kg
480-201707-1	SB2 (0-0.5)	2-Hexanone	3.9	39	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	4-Methyl-2-pentanone	2.5	39	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Acetone	15	39	J	J	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Benzene	0.38	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Bromodichloromethane	1	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Bromomethane	0.7	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Bromoform	3.9	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Carbon disulfide	3.9	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Carbon Tetrachloride	0.75	7.8	U	UJ	SSR,Cc	µg/kg
480-201707-1	SB2 (0-0.5)	Chloroform	0.48	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	*cis*-1,2-Dichloroethene	0.99	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	*cis*-1,3-Dichloropropene	1.1	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Chlorobenzene	1	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Chloroethane	1.8	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Chloromethane	0.47	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Cyclohexane	1.1	7.8	U	UJ	SSR,Cc	µg/kg
480-201707-1	SB2 (0-0.5)	Dibromochloromethane	0.99	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Dichlorodifluoromethane	0.64	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Ethylbenzene	0.54	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Isopropylbenzene	1.2	7.8	U *3	UJ	SSR,IS	µg/kg
480-201707-1	SB2 (0-0.5)	2-Butanone	2.8	39	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	m,p-Xylene	1.3	16	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Methyl Acetate	4.7	39	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Methylcyclohexane	1.2	7.8	U	UJ	SSR,Cc	µg/kg
480-201707-1	SB2 (0-0.5)	Methylene Chloride	3.6	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Methyl *tert*-butyl ether	0.76	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	n-Butylbenzene	0.68	7.8	U *3	UJ	SSR,IS	µg/kg
480-201707-1	SB2 (0-0.5)	n-Propylbenzene	0.62	7.8	U *3	UJ	SSR,IS	µg/kg
480-201707-1	SB2 (0-0.5)	o-Xylene	1	7.8	U	UJ	SSR	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201707-1	SB2 (0-0.5)	*sec* -Butylbenzene	0.68	7.8	U *3	UJ	SSR,IS	µg/kg
480-201707-1	SB2 (0-0.5)	Styrene	0.39	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	*tert* -Butylbenzene	0.81	7.8	U *3	UJ	SSR,IS	µg/kg
480-201707-1	SB2 (0-0.5)	Toluene	0.59	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Tetrachloroethanes	1	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	*trans* -1,2-Dichloroethene	0.8	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	*trans* -1,3-Dichloropropene	3.4	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Trichloroethene	1.7	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Trichlorotrifluoroethane	1.8	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Trichlorofluoromethane	0.74	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Vinyl Chloride	0.95	7.8	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Xylenes	1.3	16	U	UJ	SSR	µg/kg
480-201707-1	SB4 (0-0.5)	1,1-Dichloroethene	1.1	8.9	U	UJ	Cc	µg/kg
480-201707-1	SB4 (0-0.5)	Carbon Tetrachloride	0.86	8.9	U	UJ	Cc	µg/kg
480-201707-1	SB4 (0-0.5)	Cyclohexane	1.2	8.9	U	UJ	Cc	µg/kg
480-201707-1	SB4 (0-0.5)	Methylcyclohexane	1.3	8.9	U	UJ	Cc	µg/kg
480-201707-1	SB4 (0.5-1)	1,1-Dichloroethene	0.65	5.3	U	UJ	Cc	µg/kg
480-201707-1	SB4 (0.5-1)	Carbon Tetrachloride	0.51	5.3	U	UJ	Cc	µg/kg
480-201707-1	SB4 (0.5-1)	Cyclohexane	0.74	5.3	U	UJ	Cc	µg/kg
480-201707-1	SB4 (0.5-1)	Methylcyclohexane	0.81	5.3	U	UJ	Cc	µg/kg
480-201707-1	SB2 (0.5-1)	1,1-Dichloroethene	1.7	14	U	UJ	Cc	µg/kg
480-201707-1	SB2 (0.5-1)	Carbon Tetrachloride	1.3	14	U	UJ	Cc	µg/kg
480-201707-1	SB2 (0.5-1)	Cyclohexane	1.9	14	U	UJ	Cc	µg/kg
480-201707-1	SB2 (0.5-1)	Methylcyclohexane	2.1	14	U	UJ	Cc	µg/kg
480-201707-1	SB2 (1-2)	1,1-Dichloroethene	0.82	6.7	U	UJ	Cc	µg/kg
480-201707-1	SB2 (1-2)	Carbon Tetrachloride	0.65	6.7	U	UJ	Cc	µg/kg
480-201707-1	SB2 (1-2)	Cyclohexane	0.93	6.7	U	UJ	Cc	µg/kg
480-201707-1	SB2 (1-2)	Methylcyclohexane	1	6.7	U	UJ	Cc	µg/kg
480-201707-1	FDUP_091422	1,1-Dichloroethene	0.75	6.1	U	UJ	Cc	µg/kg
480-201707-1	FDUP_091422	Carbon Tetrachloride	0.59	6.1	U	UJ	Cc	µg/kg
480-201707-1	FDUP_091422	Cyclohexane	0.86	6.1	U	UJ	Cc	µg/kg
480-201707-1	SB2 (13.5-15.5)	1,1-Dichloroethene	0.66	5.4	U	UJ	Cc	µg/kg
480-201707-1	SB2 (13.5-15.5)	Carbon Tetrachloride	0.52	5.4	U	UJ	Cc	µg/kg
480-201707-1	SB2 (13.5-15.5)	Cyclohexane	0.76	5.4	U	UJ	Cc	µg/kg
480-201707-1	SB2 (13.5-15.5)	Methylcyclohexane	0.82	5.4	U	UJ	Cc	µg/kg
480-201707-1	SB4 (1-2)	1,1-Dichloroethene	0.64	5.3	U	UJ	Cc	µg/kg
480-201707-1	SB4 (1-2)	Carbon Tetrachloride	0.51	5.3	U	UJ	Cc	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201707-1	SB4 (1-2)	Cyclohexane	0.74	5.3	U	UJ	Cc	µg/kg
480-201707-1	SB4 (1-2)	Methylcyclohexane	0.8	5.3	U	UJ	Cc	µg/kg
480-201707-1	SB2 (0-0.5)	1,1'-Biphenyl	33	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	2,2'-oxybis(1-Chloropropane)	45	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	2,4-Dinitrotoluene	46	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	2,6-Dinitrotoluene	26	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	2-Chloronaphthalene	37	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	2-Methylnaphthalene	45	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	2-Nitroaniline	33	430	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	3,3'-Dichlorobenzidine	260	430	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	3-Nitroaniline	62	430	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	4-Bromophenyl-phenylether	32	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	4-Chloroaniline	55	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	4-Chlorophenyl-phenyl ether	28	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	4-Nitroaniline	120	430	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Acenaphthene	33	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Acenaphthylene	44	220	J	J-	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Acetophenone	30	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Anthracene	55	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Atrazine	78	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Benzaldehyde	180	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Bis(2-chloroethyl)ether	29	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	bis(2-Chloroethoxy)methane	47	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	bis(2-Ethylhexyl)phthalate	120	220	J	J-	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Benzo[a]anthracene	200	220	J	J-	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Benzo[a]pyrene	230	220		J-	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Benzo[b]fluoranthene	340	220		J-	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Benzo[g,h,i]perylene	160	220	J	J-	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Benzo[k]fluoranthene	110	220	J	J-	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Benzyl n-butyl phthalate	65	220	J	J-	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Caprolactam	140	220	J	J-	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Carbazole	31	220	J	J-	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Chrysene	390	220		J-	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Dibenzofuran	26	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Dibenzo[a,h]anthracene	46	220	J	J-	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Diethyl phthalate	94	220	J B	UJ	LB,SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Dimethyl phthalate	26	220	U	UJ	SSR	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201707-1	SB2 (0-0.5)	Di-n-butyl phthalate	38	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Di-n-octylphthalate	26	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Fluoranthene	400	220		J-	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Fluorene	26	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Hexachloroethane	29	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Hexachlorobenzene	30	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Hexachlorobutadiene	33	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Hexachlorocyclopentadiene	30	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Indeno[1,2,3-cd]pyrene	180	220	J	J-	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Isophorone	47	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Naphthalene	29	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Nitrobenzene	25	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	N-Nitrosodi-n-propylamine	38	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	N-Nitrosodiphenylamine	180	220	U	UJ	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Phenanthrene	380	220		J-	SSR	µg/kg
480-201707-1	SB2 (0-0.5)	Pyrene	360	220		J-	SSR	µg/kg
480-201707-1	FDUP_091422	Benzo[a]anthracene	190	200	J	J+	SSR	µg/kg
480-201707-1	FDUP_091422	Benzo[a]pyrene	240	200		J+	SSR	µg/kg
480-201707-1	FDUP_091422	Benzo[b]fluoranthene	300	200		J+	SSR	µg/kg
480-201707-1	FDUP_091422	Benzo[g,h,i]perylene	150	200	J	J+	SSR	µg/kg
480-201707-1	FDUP_091422	Benzo[k]fluoranthene	120	200	J	J+	SSR	µg/kg
480-201707-1	FDUP_091422	Benzyl n-butyl phthalate	32	200	J	J+	SSR	µg/kg
480-201707-1	FDUP_091422	Carbazole	30	200	J	J+	SSR	µg/kg
480-201707-1	FDUP_091422	Chrysene	280	200		J+	SSR	µg/kg
480-201707-1	FDUP_091422	Dibenzo[a,h]anthracene	40	200	J	J+	SSR	µg/kg
480-201707-1	FDUP_091422	Diethyl phthalate	190	200	J B	UJ	LB,SSR	µg/kg
480-201707-1	FDUP_091422	Fluoranthene	410	200		J+	SSR	µg/kg
480-201707-1	FDUP_091422	Indeno[1,2,3-cd]pyrene	180	200	J	J+	SSR	µg/kg
480-201707-1	FDUP_091422	Phenanthrene	280	200		J+	SSR	µg/kg
480-201707-1	FDUP_091422	Pyrene	350	200		J+	SSR	µg/kg
480-201707-1	SB2 (13.5-15.5)	Diethyl phthalate	51	190	J B	U	LB	µg/kg
480-201707-1	SB4 (1-2)	Acenaphthylene	250	920	J	J+	SSR	µg/kg
480-201707-1	SB4 (1-2)	Benzo[a]anthracene	2200	920		J+	SSR	µg/kg
480-201707-1	SB4 (1-2)	Benzo[a]pyrene	3600	920		J+	SSR	µg/kg
480-201707-1	SB4 (1-2)	Benzo[b]fluoranthene	4700	920		J+	SSR	µg/kg
480-201707-1	SB4 (1-2)	Benzo[g,h,i]perylene	1800	920		J+	SSR	µg/kg
480-201707-1	SB4 (1-2)	Benzo[k]fluoranthene	2000	920		J+	SSR	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201707-1	SB4 (1-2)	Chrysene	2000	920		J+	SSR	µg/kg
480-201707-1	SB4 (1-2)	Dibenzo[a,h]anthracene	470	920	J	J+	SSR	µg/kg
480-201707-1	SB4 (1-2)	Diethyl phthalate	130	920	J B	UJ	LB,SSR	µg/kg
480-201707-1	SB4 (1-2)	Fluoranthene	2200	920		J+	SSR	µg/kg
480-201707-1	SB4 (1-2)	Indeno[1,2,3-cd]pyrene	2900	920		J+	SSR	µg/kg
480-201707-1	SB4 (1-2)	Phenanthrene	470	920	J	J+	SSR	µg/kg
480-201707-1	SB4 (1-2)	Pyrene	2800	920		J+	SSR	µg/kg
480-201707-1	FB_091422	Lead	0.0034	0.01	J	U	LB	mg/L
480-201707-1	FB_091422	1,1'-Biphenyl	0.71	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	2,2'-oxybis(1-Chloropropane)	0.57	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	2,4,5-Trichlorophenol	0.52	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	2,4,6-Trichlorophenol	0.66	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	2,4-Dichlorophenol	0.55	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	2,4-Dimethylphenol	0.54	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	2,4-Dinitrophenol	2.4	11	U H	UJ	HT	µg/L
480-201707-1	FB_091422	2,4-Dinitrotoluene	0.49	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	2,6-Dinitrotoluene	0.43	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	2-Chloronaphthalene	0.5	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	2-Chlorophenol	0.58	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	2-Methylnaphthalene	0.65	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	2-Methylphenol	0.43	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	2-Nitroaniline	0.46	11	U H	UJ	HT	µg/L
480-201707-1	FB_091422	2-Nitrophenol	0.52	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	3,3'-Dichlorobenzidine	0.43	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	3-Nitroaniline	0.52	11	U H	UJ	HT	µg/L
480-201707-1	FB_091422	4,6-Dinitro-2-methylphenol	2.4	11	U H	UJ	HT	µg/L
480-201707-1	FB_091422	4-Bromophenyl-phenylether	0.49	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	4-Chloro-3-methylphenol	0.49	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	4-Chloroaniline	0.64	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	4-Chlorophenyl-phenyl ether	0.38	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	4-Methylphenol	0.39	11	U H	UJ	HT	µg/L
480-201707-1	FB_091422	4-Nitroaniline	0.27	11	U H	UJ	HT	µg/L
480-201707-1	FB_091422	4-Nitrophenol	1.7	11	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Acenaphthene	0.45	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Acenaphthylene	0.41	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Acetophenone	0.59	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Anthracene	0.3	5.4	U H	UJ	HT	µg/L

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201707-1	FB_091422	Atrazine	0.5	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Benzaldehyde	0.29	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Bis(2-chloroethyl)ether	0.43	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	bis(2-Chloroethoxy)methane	0.38	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	bis(2-Ethylhexyl)phthalate	2.4	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Benzo[a]anthracene	0.39	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Benzo[a]pyrene	0.51	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Benzo[b]fluoranthene	0.37	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Benzo[g,h,i]perylene	0.38	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Benzo[k]fluoranthene	0.79	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Benzyl n-butyl phthalate	1.1	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Caprolactam	2.4	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Carbazole	0.33	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Chrysene	0.36	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Dibenzofuran	0.55	11	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Dibenzo[a,h]anthracene	0.46	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Diethyl phthalate	21	5.4	H	J-	HT	µg/L
480-201707-1	FB_091422	Dimethyl phthalate	0.39	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Di-n-butyl phthalate	0.34	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Di-n-octylphthalate	0.51	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Fluoranthene	0.43	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Fluorene	0.39	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Hexachloroethane	0.64	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Hexachlorobenzene	0.55	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Hexachlorobutadiene	0.74	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Hexachlorocyclopentadiene	0.64	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Indeno[1,2,3-cd]pyrene	0.51	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Isophorone	0.47	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Naphthalene	0.83	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Nitrobenzene	0.32	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	N-Nitrosodi-n-propylamine	0.59	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	N-Nitrosodiphenylamine	0.55	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Pentachlorophenol	2.4	11	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Phenanthrene	0.48	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Phenol	0.42	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091422	Pyrene	0.37	5.4	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	1,1'-Biphenyl	0.65	5	U H	UJ	HT	µg/L

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201707-1	ERB1_091422	2,2'-oxybis(1-Chloropropane)	0.52	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	2,4,5-Trichlorophenol	0.48	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	2,4,6-Trichlorophenol	0.61	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	2,4-Dichlorophenol	0.51	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	2,4-Dimethylphenol	0.5	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	2,4-Dinitrophenol	2.2	10	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	2,4-Dinitrotoluene	0.45	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	2,6-Dinitrotoluene	0.4	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	2-Chloronaphthalene	0.46	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	2-Chlorophenol	0.53	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	2-Methylnaphthalene	0.6	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	2-Methylphenol	0.4	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	2-Nitroaniline	0.42	10	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	2-Nitrophenol	0.48	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	3,3'-Dichlorobenzidine	0.4	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	3-Nitroaniline	0.48	10	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	4,6-Dinitro-2-methylphenol	2.2	10	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	4-Bromophenyl-phenylether	0.45	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	4-Chloro-3-methylphenol	0.45	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	4-Chloroaniline	0.59	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	4-Chlorophenyl-phenyl ether	0.35	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	4-Methylphenol	0.36	10	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	4-Nitroaniline	0.25	10	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	4-Nitrophenol	1.5	10	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Acenaphthene	0.41	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Acenaphthylene	0.38	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Acetophenone	0.54	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Anthracene	0.28	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Atrazine	0.46	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Benzaldehyde	0.27	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Bis(2-chloroethyl)ether	0.4	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	bis(2-Chloroethoxy)methane	0.35	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	bis(2-Ethylhexyl)phthalate	2.2	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Benzo[a]anthracene	0.36	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Benzo[a]pyrene	0.47	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Benzo[b]fluoranthene	0.34	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Benzo[g,h,i]perylene	0.35	5	U H	UJ	HT	µg/L

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201707-1	ERB1_091422	Benzo[k]fluoranthene	0.73	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Benzyl n-butyl phthalate	1	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Caprolactam	2.2	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Carbazole	0.3	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Chrysene	0.33	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Dibenzofuran	0.51	10	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Dibenzo[a,h]anthracene	0.42	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Diethyl phthalate	18	5	H	J-	HT	µg/L
480-201707-1	ERB1_091422	Dimethyl phthalate	0.36	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Di-n-butyl phthalate	0.31	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Di-n-octylphthalate	0.47	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Fluoranthene	0.4	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Fluorene	0.36	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Hexachloroethane	0.59	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Hexachlorobenzene	0.51	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Hexachlorobutadiene	0.68	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Hexachlorocyclopentadiene	0.59	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Indeno[1,2,3-cd]pyrene	0.47	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Isophorone	0.43	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Naphthalene	0.76	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Nitrobenzene	0.29	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	N-Nitrosodi-n-propylamine	0.54	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	N-Nitrosodiphenylamine	0.51	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Pentachlorophenol	2.2	10	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Phenanthrene	0.44	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Phenol	0.39	5	U H	UJ	HT	µg/L
480-201707-1	ERB1_091422	Pyrene	0.34	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	1,1'-Biphenyl	0.65	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	2,2'-oxybis(1-Chloropropane)	0.52	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	2,4,5-Trichlorophenol	0.48	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	2,4,6-Trichlorophenol	0.61	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	2,4-Dichlorophenol	0.51	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	2,4-Dimethylphenol	0.5	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	2,4-Dinitrophenol	2.2	10	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	2,4-Dinitrotoluene	0.45	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	2,6-Dinitrotoluene	0.4	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	2-Chloronaphthalene	0.46	5	U H	UJ	HT	µg/L

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201707-1	ERB2_091422	2-Chlorophenol	0.53	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	2-Methylnaphthalene	0.6	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	2-Methylphenol	0.4	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	2-Nitroaniline	0.42	10	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	2-Nitrophenol	0.48	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	3,3'-Dichlorobenzidine	0.4	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	3-Nitroaniline	0.48	10	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	4,6-Dinitro-2-methylphenol	2.2	10	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	4-Bromophenyl-phenylether	0.45	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	4-Chloro-3-methylphenol	0.45	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	4-Chloroaniline	0.59	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	4-Chlorophenyl-phenyl ether	0.35	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	4-Methylphenol	0.36	10	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	4-Nitroaniline	0.25	10	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	4-Nitrophenol	1.5	10	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Acenaphthene	0.41	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Acenaphthylene	0.38	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Acetophenone	0.54	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Anthracene	0.28	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Atrazine	0.46	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Benzaldehyde	0.27	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Bis(2-chloroethyl)ether	0.4	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Bis(2-chloroethoxy)methane	0.35	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Bis(2-ethylhexyl)phthalate	2.2	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Benzo[a]anthracene	0.36	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Benzo[a]pyrene	0.47	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Benzo[b]fluoranthene	0.34	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Benzo[g,h,i]perylene	0.35	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Benzo[k]fluoranthene	0.73	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Benzyl n-butyl phthalate	1	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Caprolactam	2.2	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Carbazole	0.3	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Chrysene	0.33	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Dibenzofuran	0.51	10	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Dibenzo[a,h]anthracene	0.42	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Diethyl phthalate	19	5	H	J-	HT	µg/L
480-201707-1	ERB2_091422	Dimethyl phthalate	0.36	5	U H	UJ	HT	µg/L

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201707-1	ERB2_091422	Di-n-butyl phthalate	0.31	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Di-n-octylphthalate	0.47	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Fluoranthene	0.4	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Fluorene	0.36	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Hexachloroethane	0.59	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Hexachlorobenzene	0.51	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Hexachlorobutadiene	0.68	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Hexachlorocyclopentadiene	0.59	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Indeno[1,2,3-cd]pyrene	0.47	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Isophorone	0.43	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Naphthalene	0.76	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Nitrobenzene	0.29	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	N-Nitrosodi-n-propylamine	0.54	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	N-Nitrosodiphenylamine	0.51	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Pentachlorophenol	2.2	10	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Phenanthrene	0.44	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Phenol	0.39	5	U H	UJ	HT	µg/L
480-201707-1	ERB2_091422	Pyrene	0.34	5	U H	UJ	HT	µg/L
480-201707-1	FB_091522	1,1'-Biphenyl	0.71	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	2,2'-Oxybis(1-chloropropane)	0.57	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	2,4,5-Trichlorophenol	0.52	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	2,4,6-Trichlorophenol	0.66	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	2,4-Dichlorophenol	0.55	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	2,4-Dimethylphenol	0.54	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	2,4-Dinitrophenol	2.4	11	U H	UJ	HT	µg/L
480-201707-1	FB_091522	2,4-Dinitrotoluene	0.49	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	2,6-Dinitrotoluene	0.43	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	2-Chloronaphthalene	0.5	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	2-Chlorophenol	0.58	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	2-Methylnaphthalene	0.65	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	2-Methylphenol	0.43	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	2-Nitroaniline	0.46	11	U H	UJ	HT	µg/L
480-201707-1	FB_091522	2-Nitrophenol	0.52	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	3,3'-Dichlorobenzidine	0.43	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	3-Nitroaniline	0.52	11	U H	UJ	HT	µg/L
480-201707-1	FB_091522	4,6-Dinitro-2-methylphenol	2.4	11	U H	UJ	HT	µg/L
480-201707-1	FB_091522	4-Bromophenyl-phenylether	0.49	5.4	U H	UJ	HT	µg/L

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201707-1	FB_091522	4-Chloro-3-methylphenol	0.49	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	4-Chloroaniline	0.64	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	4-Chlorophenyl-phenyl ether	0.38	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	4-Methylphenol	0.39	11	U H	UJ	HT	µg/L
480-201707-1	FB_091522	4-Nitroaniline	0.27	11	U H	UJ	HT	µg/L
480-201707-1	FB_091522	4-Nitrophenol	1.7	11	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Acenaphthene	0.45	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Acenaphthylene	0.41	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Acetophenone	0.59	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Anthracene	0.3	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Atrazine	0.5	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Benzaldehyde	0.29	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Bis(2-chloroethyl)ether	0.43	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Bis(2-chloroethoxy)methane	0.38	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Bis(2-ethylhexyl)phthalate	2.4	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Benzo[a]anthracene	0.39	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Benzo[a]pyrene	0.51	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Benzo[b]fluoranthene	0.37	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Benzo[g,h,i]perylene	0.38	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Benzo[k]fluoranthene	0.79	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Benzyl n-butyl phthalate	1.1	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Caprolactam	2.4	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Carbazole	0.33	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Chrysene	0.36	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Dibenzofuran	0.55	11	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Dibenzo[a,h]anthracene	0.46	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Diethyl phthalate	39	5.4	H	J-	HT	µg/L
480-201707-1	FB_091522	Dimethyl phthalate	0.39	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Di-n-butyl phthalate	0.34	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Di-n-octylphthalate	0.51	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Fluoranthene	0.43	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Fluorene	0.39	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Hexachloroethane	0.64	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Hexachlorobenzene	0.55	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Hexachlorobutadiene	0.74	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Hexachlorocyclopentadiene	0.64	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Indeno[1,2,3-cd]pyrene	0.51	5.4	U H	UJ	HT	µg/L

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-201707-1	FB_091522	Isophorone	0.47	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Naphthalene	0.83	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Nitrobenzene	0.32	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	N-Nitrosodi-n-propylamine	0.59	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	N-Nitrosodiphenylamine	0.55	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Pentachlorophenol	2.4	11	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Phenanthrene	0.48	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Phenol	0.42	5.4	U H	UJ	HT	µg/L
480-201707-1	FB_091522	Pyrene	0.37	5.4	U H	UJ	HT	µg/L
480-202448-1	MW1-100522	Copper	0.0017	0.01	J	U	LB	mg/L
480-202448-1	MW5-100522	Copper	0.0036	0.01	J	U	LB	mg/L
480-202448-1	FDUP-100522	Copper	0.0021	0.01	J	U	LB	mg/L
480-202448-1	FB-100522	Manganese	0.00095	0.003	J B	U	LB	mg/L
480-202448-1	ERB-100522	Manganese	0.0014	0.003	J B	U	LB	mg/L
480-202448-1	TB-100522	1,1,2-Trichloroethane	0.23	1	U	UJ	Cc	µg/L
480-202448-1	TB-100522	1,2,4-Trimethylbenzene	0.75	1	U	UJ	Cc	µg/L
480-202448-1	TB-100522	1,3,5-Trimethylbenzene	0.77	1	U	UJ	Cc	µg/L
480-202448-1	TB-100522	Ethylbenzene	0.74	1	U	UJ	Cc	µg/L
480-202448-1	TB-100522	m,p-Xylene	0.66	2	U	UJ	Cc	µg/L
480-202448-1	TB-100522	n-Butylbenzene	0.64	1	U	UJ	Cc	µg/L
480-202448-1	TB-100522	n-Propylbenzene	0.69	1	U	UJ	Cc	µg/L
480-202448-1	TB-100522	*sec* -Butylbenzene	0.75	1	U	UJ	Cc	µg/L
480-202448-1	FB-100522	1,1,2-Trichloroethane	0.23	1	U	UJ	Cc	µg/L
480-202448-1	FB-100522	1,2,4-Trimethylbenzene	0.75	1	U	UJ	Cc	µg/L
480-202448-1	FB-100522	1,3,5-Trimethylbenzene	0.77	1	U	UJ	Cc	µg/L
480-202448-1	FB-100522	Ethylbenzene	0.74	1	U	UJ	Cc	µg/L
480-202448-1	FB-100522	m,p-Xylene	0.66	2	U	UJ	Cc	µg/L
480-202448-1	FB-100522	n-Butylbenzene	0.64	1	U	UJ	Cc	µg/L
480-202448-1	FB-100522	n-Propylbenzene	0.69	1	U	UJ	Cc	µg/L
480-202448-1	FB-100522	*sec* -Butylbenzene	0.75	1	U	UJ	Cc	µg/L
480-202448-1	ERB-100522	1,1,2-Trichloroethane	0.23	1	U	UJ	Cc	µg/L
480-202448-1	ERB-100522	1,2,4-Trimethylbenzene	0.75	1	U	UJ	Cc	µg/L
480-202448-1	ERB-100522	1,3,5-Trimethylbenzene	0.77	1	U	UJ	Cc	µg/L
480-202448-1	ERB-100522	Ethylbenzene	0.74	1	U	UJ	Cc	µg/L
480-202448-1	ERB-100522	m,p-Xylene	0.66	2	U	UJ	Cc	µg/L
480-202448-1	ERB-100522	n-Butylbenzene	0.64	1	U	UJ	Cc	µg/L
480-202448-1	ERB-100522	n-Propylbenzene	0.69	1	U	UJ	Cc	µg/L

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-202448-1	ERB-100522	*sec*-Butylbenzene	0.75	1	U	UJ	Cc	µg/L
480-202448-1	FB-100522	Diethyl phthalate	4	5	J B	U	LB	µg/L
480-202448-1	MW1-100522	Diethyl phthalate	2.4	5.2	J B	U	LB	µg/L
480-202448-1	MW5-100522	Diethyl phthalate	3.1	6	J B	U	LB	µg/L
480-202448-1	FDUP-100522	Diethyl phthalate	3.1	5.2	J B	U	LB	µg/L
480-202448-1	FDUP-100522	Hexachlorocyclopentadiene	0.61	5.2	U	UJ	Cc	µg/L
480-202448-1	ERB-100522	Diethyl phthalate	1.3	5	J B	U	LB	µg/L
480-202448-1	ERB-100522	Hexachlorocyclopentadiene	0.59	5	U	UJ	Cc	µg/L
480-204989-1	FDUP_122122	Perfluorooctanoic acid	0.076	0.2	J I	NJ	EMPC	µg/kg
480-204989-1	SB2 (0-0.5)	Chromium	17.3	0.62		J-	ICS	mg/kg
480-204989-1	SB2 (0-0.5)	Iron	19700	12.4	B	J+	Cc	mg/kg
480-204989-1	SB2 (0.5-1)	Chromium	17.3	0.57		J-	ICS	mg/kg
480-204989-1	SB2 (0.5-1)	Iron	27600	11.3	B ^+	J+	Cc	mg/kg
480-204989-1	SB2 (1-2)	Aluminum	8640	10.6	B F1	J	MS,ICPSD	mg/kg
480-204989-1	SB2 (1-2)	Antimony	4.1	31.7	J F1 F2	J	MS,REP,ICS	mg/kg
480-204989-1	SB2 (1-2)	Arsenic	14.2	2.1	F2	J	REP	mg/kg
480-204989-1	SB2 (1-2)	Barium	79.8	0.53	F1 F2	J	MS,REP,ICPSD	mg/kg
480-204989-1	SB2 (1-2)	Cadmium	0.79	0.42	F2	J	REP	mg/kg
480-204989-1	SB2 (1-2)	Calcium	2730	52.9	B F1	J	MS,ICPSD	mg/kg
480-204989-1	SB2 (1-2)	Chromium	16.2	0.53		J-	ICS	mg/kg
480-204989-1	SB2 (1-2)	Copper	60.6	1.1	F1	J	MS,REP	mg/kg
480-204989-1	SB2 (1-2)	Iron	84900	21.2	B F2	J	REP	mg/kg
480-204989-1	SB2 (1-2)	Lead	105	2.1	F1 F2	J	MS,REP,ICPSD	mg/kg
480-204989-1	SB2 (1-2)	Magnesium	2570	21.2	B F1	J+	ICPSD	mg/kg
480-204989-1	SB2 (1-2)	Manganese	610	0.21	B	J+	ICPSD	mg/kg
480-204989-1	SB2 (1-2)	Nickel	23.2	10.6	F1 F2	J	MS,REP	mg/kg
480-204989-1	SB2 (1-2)	Potassium	1380	31.7	F1 F2	J	MS,REP	mg/kg
480-204989-1	SB2 (1-2)	Vanadium	28.7	1.1	F1 F2	J	MS,REP	mg/kg
480-204989-1	SB2 (1-2)	Zinc	89.4	2.1	F1 F2	J	MS,REP,ICPSD	mg/kg
480-204989-1	SB2 (20.4-22.4)	Chromium	9.5	0.57		J-	ICS	mg/kg
480-204989-1	SB2 (20.4-22.4)	Iron	22200	11.5	B ^+	J+	Cc	mg/kg
480-204989-1	FDUP_122122	Aluminum	8800	10.3	B	J	MS,ICPSD	mg/kg
480-204989-1	FDUP_122122	Antimony	0.41	15.4	U	UJ	MS	mg/kg
480-204989-1	FDUP_122122	Arsenic	10	2.1		J	REP	mg/kg
480-204989-1	FDUP_122122	Barium	94.5	0.51		J	MS,REP,ICPSD	mg/kg
480-204989-1	FDUP_122122	Cadmium	0.27	0.21		J	REP	mg/kg
480-204989-1	FDUP_122122	Calcium	1920	51.5	B	J	MS,ICPSD	mg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-204989-1	FDUP_122122	Chromium	18.5	0.51		J-	ICS	mg/kg
480-204989-1	FDUP_122122	Copper	23.9	1		J	MS,REP	mg/kg
480-204989-1	FDUP_122122	Iron	26400	10.3	B ^+	J	REP,Cc	mg/kg
480-204989-1	FDUP_122122	Lead	1010	1		J	MS,REP,ICPSD	mg/kg
480-204989-1	FDUP_122122	Magnesium	2770	20.6	B	J+	ICPSD	mg/kg
480-204989-1	FDUP_122122	Manganese	367	0.21	B	J+	ICPSD	mg/kg
480-204989-1	FDUP_122122	Nickel	20.6	5.1		J	MS,REP	mg/kg
480-204989-1	FDUP_122122	Potassium	1260	30.9		J	MS,REP	mg/kg
480-204989-1	FDUP_122122	Vanadium	19.1	0.51		J	MS,REP	mg/kg
480-204989-1	FDUP_122122	Zinc	98.4	2.1		J	MS,REP,ICPSD	mg/kg
480-204989-1	SB2 (0-0.5)	Chloroform	0.55	6.5	J B	U	LB	µg/kg
480-204989-1	SB2 (0-0.5)	Tetrachloroethene	2.9	6.5	J B	U	LB	µg/kg
480-204989-1	SB2 (0.5-1)	Chloroform	0.56	6.6	J B	U	LB	µg/kg
480-204989-1	SB2 (0.5-1)	Tetrachloroethene	2.1	6.6	J B	U	LB	µg/kg
480-204989-1	SB2 (1-2)	1,2,4-Trichlorobenzene	0.27	4.5	U F1	UJ	MS	µg/kg
480-204989-1	SB2 (1-2)	Bromoform	2.2	4.5	U F1	UJ	MS	µg/kg
480-204989-1	SB2 (1-2)	Chloroform	0.37	4.5	J B	U	LB	µg/kg
480-204989-1	SB2 (1-2)	Tetrachloroethene	1.7	4.5	J B	U	LB	µg/kg
480-204989-1	SB2 (20.4-22.4)	Chloroform	0.43	5.3	J B	U	LB	µg/kg
480-204989-1	SB2 (20.4-22.4)	Tetrachloroethene	1.8	5.3	J B	U	LB	µg/kg
480-204989-1	FDUP_122122	1,1,2,2-Tetrachloroethane	0.94	5.8	U *3	UJ	IS	µg/kg
480-204989-1	FDUP_122122	1,2,4-Trichlorobenzene	0.35	5.8	U *3	UJ	MS,IS	µg/kg
480-204989-1	FDUP_122122	1,2-Dibromo-3-chloropropane	2.9	5.8	U *3	UJ	IS	µg/kg
480-204989-1	FDUP_122122	1,2-Dichlorobenzene	0.45	5.8	U *3	UJ	IS	µg/kg
480-204989-1	FDUP_122122	1,2,4-Trimethylbenzene	1.1	5.8	U *3	UJ	IS	µg/kg
480-204989-1	FDUP_122122	1,3,5-Trimethylbenzene	0.37	5.8	U *3	UJ	IS	µg/kg
480-204989-1	FDUP_122122	1,3-Dichlorobenzene	0.3	5.8	U *3	UJ	IS	µg/kg
480-204989-1	FDUP_122122	1,4-Dichlorobenzene	0.81	5.8	U *3	UJ	IS	µg/kg
480-204989-1	FDUP_122122	Bromoform	2.9	5.8	U	UJ	MS	µg/kg
480-204989-1	FDUP_122122	Chloroform	0.57	5.8	J B	U	LB	µg/kg
480-204989-1	FDUP_122122	Isopropylbenzene	0.87	5.8	U *3	UJ	IS	µg/kg
480-204989-1	FDUP_122122	n-Butylbenzene	0.5	5.8	U *3	UJ	IS	µg/kg
480-204989-1	FDUP_122122	n-Propylbenzene	0.46	5.8	U *3	UJ	IS	µg/kg
480-204989-1	FDUP_122122	sec-Butylbenzene	0.5	5.8	U *3	UJ	IS	µg/kg
480-204989-1	FDUP_122122	tert-Butylbenzene	0.6	5.8	U *3	UJ	IS	µg/kg
480-204989-1	FDUP_122122	Tetrachloroethene	3	5.8	J B	U	LB	µg/kg
480-204989-1	FDUP_122122	Benzo[g,h,i]perylene	3600	18000	J	J	REP	µg/kg

Table 3-2. Summary of Qualified Data

SDG	Sample	Analyte	Result	Method Reporting Limit	Lab Qualifier	DV Qualifier	DV Qualifier Reason	Units
480-204989-1	FDUP_122122	Benzo[k]fluoranthene	2500	18000	J	J	REP	µg/kg
480-204989-1	FDUP_122122	Phenanthrene	3100	18000	J	J	REP	µg/kg
480-204989-1	FB_122122	Manganese	0.0007	0.003	J B	U	LB	mg/L
480-204989-1	FB_122122	Nickel	0.0022	0.01	J B	U	LB	mg/L
480-204989-1	FB_122122	4-Methylphenol	0.38	10	U	UJ	Cc	µg/L
480-205124-1	SB3 (23-25)	1,1,1,2-Tetrachloroethane	0.42	4.2	U	UJ	Cc	µg/kg
480-205124-1	SB3 (23-25)	Bromoform	2.1	4.2	U	UJ	Cc	µg/kg
480-205124-1	SB3 (23-25)	Chloroform	0.31	4.2	J B	U	LB	µg/kg
480-205124-1	SB3 (23-25)	Dibromochloromethane	0.53	4.2	U	UJ	Cc	µg/kg
480-205124-1	EB_010323	2,2'-Oxybis(1-chloropropane)	0.54	5.2	U	UJ	Cc	µg/L
480-205124-1	FB_010323	2,2'-Oxybis(1-chloropropane)	0.57	5.4	U	UJ	Cc	µg/L
480-205124-1	EB_010323	Nitrobenzene	0.3	5.2	U	UJ	Cc	µg/L
480-205124-1	FB_010323	Nitrobenzene	0.32	5.4	U	UJ	Cc	µg/L
480-205868-1	FB_013123	Manganese	0.00089	0.003	J B	U	LB	mg/L
480-205868-1	MW2-013123	EtFOSAA	0.63	1.8	U	UJ	Ci	ng/L
480-205868-1	MW2-013123	PFOA	0.7	1.8	J	J+	Ci	ng/L
480-205868-6	FB_013123	EtFOSAA	0.63	1.8	U	UJ	Ci	ng/L

Notes:

Cc = calibration (continuing)
Ci = calibration (initial)
DNR = co-not-report
EMPC = estimated maximum possible concentration
FB/EB = field or equipment rinsate blank contamination
HT = holding time
ICPSD = ICP serial dilution % difference
ICS = interference check sample
IS = internal standard
LB = laboratory blank contamination
MS = matrix spike
Other = described in data validation report
REP = precision
SSR = surrogate standard recovery

Qualifiers:

J = The associated numerical value is an estimated quantity.
J+ = The result is an estimated quantity, but the result may be biased high.
J- = The result is an estimated quantity, but the result may be biased low.
NJ = The analyte has been “tentatively identified” or “presumptively” as present and the associated numerical value is the estimated concentration in the sample.

R = Rejected. The data are unusable.
U = The material was analyzed for, but was not detected.
UJ = The material was analyzed for, but was not detected. The sample quantitation limit is an estimated quantity.

Appendix B

Quality Control Summary Forms

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200114-1

SDG No.:

ICV Source: MEI_10_CCVL_00457 Concentration Units: mg/L

CCV Source: MEI_10_CCVL_00457

Analyte	ICVL 480-635565/7 07/29/2022 11:27				CCVL 480-635565/20 07/29/2022 14:41				CCVL 480-635565/27 07/29/2022 15:28			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	0.219		0.200	110	0.197	J	0.200	99	0.200		0.200	100
Antimony	0.0192	J	0.0200	96	0.0212		0.0200	106	0.0178	J	0.0200	89
Arsenic	0.0143	J	0.0150	95	0.0110	J	0.0150	74	0.0135	J	0.0150	90
Barium	0.00217		0.00200	109	0.00217		0.00200	109	0.00213		0.00200	107
Beryllium	0.00216		0.00200	108	0.00213		0.00200	107	0.00212		0.00200	106
Cadmium	0.00186	J	0.00200	93	0.00173	J	0.00200	87	0.00182	J	0.00200	91
Calcium	0.508		0.500	102	0.509		0.500	102	0.510		0.500	102
Chromium	0.00423		0.00400	106	0.00439		0.00400	110	0.00432		0.00400	108
Cobalt	0.00387	J	0.00400	97	0.00367	J	0.00400	92	0.00385	J	0.00400	96
Copper	0.0121		0.0100	121	0.0113		0.0100	113	0.0109		0.0100	109
Iron	0.0518		0.0500	104	0.0510		0.0500	102	0.0511		0.0500	102
Lead	0.00903	J	0.0100	90	0.00838	J	0.0100	84	0.00817	J	0.0100	82
Magnesium	0.205		0.200	102	0.212		0.200	106	0.213		0.200	107
Manganese	0.00350		0.00300	117	0.00366		0.00300	122	0.00370		0.00300	123
Nickel	0.00985	J	0.0100	99	0.0102		0.0100	102	0.00987	J	0.0100	99
Potassium	0.564		0.500	113	0.512		0.500	102	0.654		0.500	131
Selenium	0.0261		0.0250	104	0.0294		0.0250	118	0.0243	J	0.0250	97
Silver	0.00576	J	0.00600	96	0.00615		0.00600	103	0.00575	J	0.00600	96
Sodium	1.01		1.01	100	0.990	J	1.01	98	1.07		1.01	106
Thallium	0.0206		0.0200	103	0.0202		0.0200	101	0.0207		0.0200	104
Vanadium	0.00514		0.00500	103	0.00528		0.00500	106	0.00536		0.00500	107
Zinc	0.0104		0.0100	104	0.0101		0.0100	101	0.0101		0.0100	101

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200114-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-635565/6 07/29/2022 11:23		CCB 480-635565/19 07/29/2022 14:38		CCB 480-635565/26 07/29/2022 15:24		CCB 480-635565/36 07/29/2022 16:09	
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND		ND		ND		ND	
Antimony	0.020	ND		ND		ND		ND	
Arsenic	0.015	ND		ND		ND		ND	
Barium	0.0020	ND		ND		ND		ND	
Beryllium	0.0020	ND		ND		ND		ND	
Cadmium	0.0020	ND		ND		ND		ND	
Calcium	0.50	ND		ND		ND		ND	
Chromium	0.0040	ND		ND		ND		ND	
Cobalt	0.0040	ND		ND		ND		ND	
Copper	0.010	ND		ND		ND		ND	
Iron	0.050	ND		ND		ND		ND	
Lead	0.010	ND		ND		ND		ND	
Magnesium	0.20	ND		ND		ND		ND	
Manganese	0.0030	0.000610	J	ND		ND		ND	
Nickel	0.010	ND		ND		ND		ND	
Potassium	0.50	ND		ND		0.145	J	ND	
Selenium	0.025	ND		ND		ND		ND	
Silver	0.0060	ND		ND		ND		ND	
Sodium	1.0	ND		ND		ND		ND	
Thallium	0.020	ND		ND		ND		ND	
Vanadium	0.0050	ND		ND		ND		ND	
Zinc	0.010	ND		ND		ND		ND	

Italicized analytes were not requested for this

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-200130-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): ZB-624 (30) ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
SB5 (0-0.5)	480-200130-1	148 S1+	131 S1+	146 S1+ *3	76 *3
SB5 (0.5-1)	480-200130-2	147 S1+	132 S1+	141 S1+ *3	80 *3
SB5 (1-2)	480-200130-3	150 S1+	134 S1+	141 S1+ *3	71 S1- *3
SB5 (13-15)	480-200130-4	117	112	104	108
	MB 480-635335/3-A	117	113	93	111
	MB 480-635770/2-A	123	117	97	115
	LCS 480-635335/1-A	112	106	97	110
	LCS 480-635770/1-A	120	111	98	117
	LCSD 480-635335/2-A	117	112	98	114

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	60-140
DCA = 1,2-Dichloroethane-d4 (Surr)	64-126
TOL = Toluene-d8 (Surr)	71-125
BFB = 4-Bromofluorobenzene (Surr)	72-126

Column to be used to flag recovery values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-200130-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: M04971.D

Lab ID: LCS 480-635335/1-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	50.0	62.0	124	74-127	
1,1,1-Trichloroethane	50.0	60.3	121	77-121	
1,1,2,2-Tetrachloroethane	50.0	42.4	85	80-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	45.5	91	60-140	
1,1,2-Trichloroethane	50.0	47.0	94	78-122	
1,1-Dichloroethane	50.0	47.9	96	73-126	
1,1-Dichloroethene	50.0	47.4	95	59-125	
1,2,4-Trichlorobenzene	50.0	52.7	105	64-120	
1,2,4-Trimethylbenzene	50.0	47.4	95	74-120	
1,2-Dibromo-3-Chloropropane	50.0	54.9	110	63-124	
1,2-Dibromoethane	50.0	53.6	107	78-120	
1,2-Dichlorobenzene	50.0	48.9	98	75-120	
1,2-Dichloroethane	50.0	58.1	116	77-122	
1,2-Dichloropropane	50.0	44.6	89	75-124	
1,3,5-Trimethylbenzene	50.0	47.6	95	74-120	
1,3-Dichlorobenzene	50.0	48.7	97	74-120	
1,4-Dichlorobenzene	50.0	49.0	98	73-120	
2-Butanone (MEK)	250	244	98	70-134	
2-Hexanone	250	246	99	59-130	
4-Methyl-2-pentanone (MIBK)	250	241	96	65-133	
Acetone	250	245	98	61-137	
Benzene	50.0	45.2	90	79-127	
Bromodichloromethane	50.0	60.1	120	80-122	
Bromoform	50.0	77.7	155	68-126	*+
Bromomethane	50.0	49.1	98	37-149	
Carbon disulfide	50.0	44.3	89	64-131	
Carbon tetrachloride	50.0	66.3	133	75-135	
Chlorobenzene	50.0	52.4	105	76-124	
Chloroethane	50.0	36.0	72	69-135	
Chloroform	50.0	51.2	102	80-120	
Chloromethane	50.0	48.7	97	63-127	
cis-1,2-Dichloroethene	50.0	48.7	97	81-120	
cis-1,3-Dichloropropene	50.0	50.2	100	80-120	
Cyclohexane	50.0	43.6	87	65-120	
Dibromochloromethane	50.0	70.8	142	76-125	*+
Dichlorodifluoromethane	50.0	54.2	108	57-142	
Ethylbenzene	50.0	49.9	100	80-120	
Isopropylbenzene	50.0	46.1	92	72-120	
m,p-Xylene	50.0	51.1	102	70-130	
Methyl acetate	100	90.4	90	55-136	
Methyl tert-butyl ether	50.0	47.0	94	63-125	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-200130-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: M05036.D

Lab ID: LCS 480-635770/1-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	50.0	62.0	124	74-127	
1,1,1-Trichloroethane	50.0	59.5	119	77-121	
1,1,2,2-Tetrachloroethane	50.0	40.2	80	80-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	49.3	99	60-140	
1,1,2-Trichloroethane	50.0	45.1	90	78-122	
1,1-Dichloroethane	50.0	45.7	91	73-126	
1,1-Dichloroethene	50.0	46.0	92	59-125	
1,2,4-Trichlorobenzene	50.0	49.2	98	64-120	
1,2,4-Trimethylbenzene	50.0	43.2	86	74-120	
1,2-Dibromo-3-Chloropropane	50.0	54.0	108	63-124	
1,2-Dibromoethane	50.0	51.2	102	78-120	
1,2-Dichlorobenzene	50.0	46.7	93	75-120	
1,2-Dichloroethane	50.0	55.4	111	77-122	
1,2-Dichloropropane	50.0	43.0	86	75-124	
1,3,5-Trimethylbenzene	50.0	43.1	86	74-120	
1,3-Dichlorobenzene	50.0	45.9	92	74-120	
1,4-Dichlorobenzene	50.0	45.7	91	73-120	
2-Butanone (MEK)	250	217	87	70-134	
2-Hexanone	250	231	92	59-130	
4-Methyl-2-pentanone (MIBK)	250	233	93	65-133	
Acetone	250	207	83	61-137	
Benzene	50.0	44.0	88	79-127	
Bromodichloromethane	50.0	58.8	118	80-122	
Bromoform	50.0	76.1	152	68-126	*+
Bromomethane	50.0	48.2	96	37-149	
Carbon disulfide	50.0	42.4	85	64-131	
Carbon tetrachloride	50.0	68.6	137	75-135	*+
Chlorobenzene	50.0	49.5	99	76-124	
Chloroethane	50.0	36.2	72	69-135	
Chloroform	50.0	50.4	101	80-120	
Chloromethane	50.0	44.5	89	63-127	
cis-1,2-Dichloroethene	50.0	46.1	92	81-120	
cis-1,3-Dichloropropene	50.0	45.7	91	80-120	
Cyclohexane	50.0	44.1	88	65-120	
Dibromochloromethane	50.0	68.2	136	76-125	*+
Dichlorodifluoromethane	50.0	55.5	111	57-142	
Ethylbenzene	50.0	46.4	93	80-120	
Isopropylbenzene	50.0	42.8	86	72-120	
m,p-Xylene	50.0	48.1	96	70-130	
Methyl acetate	100	84.5	85	55-136	
Methyl tert-butyl ether	50.0	47.1	94	63-125	

Column to be used to flag recovery and RPD values

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-200130-1

SDG No.:

Sample No.: CCVIS 480-635772/4 Date Analyzed: 08/01/2022 19:06

Instrument ID: HP5977M GC Column: ZB-624 (30) VOA ID: 0.25(mm)

Lab File ID (Standard): M05034.D Heated Purge: (Y/N) Y

Calibration ID: 43305

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		74239	5.23	155142	8.22	192814	10.62
UPPER LIMIT		148478	5.73	310284	8.72	385628	11.12
LOWER LIMIT		37120	4.73	77571	7.72	96407	10.12
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 480-635772/5		71405	5.23	154637	8.22	192937	10.62
LCS 480-635770/1-A		74929	5.23	158629	8.21	197132	10.62
MB 480-635770/2-A		72806	5.23	159064	8.22	201911	10.62
480-200130-1	SB5 (0-0.5)	40957	5.23	47154*3	8.22	26678*3	10.62
480-200130-2	SB5 (0.5-1)	45295	5.23	56834*3	8.22	36819*3	10.62
480-200130-3	SB5 (1-2)	46053	5.23	54126*3	8.22	30543*3	10.62

FB = Fluorobenzene (IS)
FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
CBNZd5 = Chlorobenzene-d5
Area Limit = 50%-200% of internal standard area
DCBd4 = 1,4-Dichlorobenzene-d4
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-200130-1

SDG No.:

Lab Sample ID: CCVIS 480-635513/4 Calibration Date: 07/29/2022 13:38

Instrument ID: HP5977M Calib Start Date: 04/03/2022 22:58

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 04/04/2022 01:23

Lab File ID: M04968.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.390	1.537	0.1000	55.3	50.0	10.6	50.0
Chloromethane	Ave	1.852	1.989	0.1000	53.7	50.0	7.4	20.0
Vinyl chloride	Ave	1.570	1.308	0.1000	41.6	50.0	-16.7	20.0
Butadiene	Ave	1.627	1.146		35.2	50.0	-29.6*	20.0
Bromomethane	Ave	0.7820	0.8465	0.1000	54.1	50.0	8.2	50.0
Chloroethane	Ave	0.8552	0.7152	0.1000	41.8	50.0	-16.4	50.0
Trichlorofluoromethane	Ave	1.614	1.985	0.1000	61.5	50.0	23.0*	20.0
Dichlorofluoromethane	Ave	2.000	1.861		46.5	50.0	-7.0	20.0
Ethyl ether	Ave	1.171	0.9359		40.0	50.0	-20.1*	20.0
Acrolein	Ave	0.1169	0.1616		346	250	38.3	50.0
1,1-Dichloroethene	Ave	1.011	1.032	0.1000	51.0	50.0	2.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.177	1.029	0.1000	43.7	50.0	-12.6	20.0
Acetone	Ave	0.4870	0.4694	0.1000	241	250	-3.6	50.0
Iodomethane	Ave	1.947	2.347		60.3	50.0	20.5*	20.0
Carbon disulfide	Ave	3.587	3.521	0.1000	49.1	50.0	-1.8	20.0
Allyl chloride	Ave	2.148	1.972		45.9	50.0	-8.2	20.0
Methyl acetate	Ave	1.072	0.996	0.1000	92.9	100	-7.1	50.0
Methylene Chloride	Lin1		1.339	0.1000	52.8	50.0	5.5	20.0
2-Methyl-2-propanol	Ave	0.1761	0.1644		467	500	-6.7	50.0
Methyl tert-butyl ether	Ave	3.801	3.732	0.1000	49.1	50.0	-1.8	20.0
trans-1,2-Dichloroethene	Ave	1.227	1.298	0.1000	52.9	50.0	5.8	20.0
Acrylonitrile	Ave	0.5772	0.5717		495	500	-1.0	20.0
Hexane	Ave	2.062	1.752		42.5	50.0	-15.0	20.0
1,1-Dichloroethane	Ave	2.381	2.447	0.2000	51.4	50.0	2.8	20.0
Vinyl acetate	Ave	2.631	2.531		96.2	100	-3.8	20.0
2,2-Dichloropropane	Ave	1.418	1.620		57.1	50.0	14.3	20.0
cis-1,2-Dichloroethene	Ave	1.413	1.448	0.1000	51.3	50.0	2.5	20.0
2-Butanone (MEK)	Ave	0.6729	0.6611	0.1000	246	250	-1.8	20.0
Chlorobromomethane	Ave	0.7413	0.8473		57.2	50.0	14.3	20.0
Tetrahydrofuran	Ave	0.4779	0.4348		91.0	100	-9.0	20.0
Chloroform	Ave	2.206	2.451	0.2000	55.6	50.0	11.1	20.0
Cyclohexane	Ave	2.517	2.278	0.1000	45.3	50.0	-9.5	20.0
1,1,1-Trichloroethane	Ave	1.713	2.207	0.1000	64.4	50.0	28.8*	20.0
Carbon tetrachloride	Ave	1.356	1.899	0.1000	70.1	50.0	40.1*	20.0
1,1-Dichloropropene	Ave	1.554	1.652		53.2	50.0	6.4	20.0
Benzene	Ave	4.743	4.776	0.5000	50.3	50.0	0.7	20.0
Isobutyl alcohol	Ave	0.0580	0.0578		1250	1250	-0.2	50.0
1,2-Dichloroethane	Ave	1.764	2.149	0.1000	60.9	50.0	21.8*	20.0
n-Heptane	Ave	2.020	1.730		42.8	50.0	-14.4	20.0
Trichloroethene	Ave	1.229	1.373	0.2000	55.9	50.0	11.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-200130-1

SDG No.:

Lab Sample ID: CCVIS 480-635513/4 Calibration Date: 07/29/2022 13:38

Instrument ID: HP5977M Calib Start Date: 04/03/2022 22:58

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 04/04/2022 01:23

Lab File ID: M04968.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.133	1.858	0.1000	43.5	50.0	-12.9	20.0
1,2-Dichloropropane	Ave	1.340	1.347	0.1000	50.3	50.0	0.5	20.0
Dibromomethane	Ave	0.7527	0.8592	0.1000	57.1	50.0	14.1	20.0
1,4-Dioxane	Ave	0.0082	0.0073		893	1000	-10.7	50.0
Bromodichloromethane	Ave	1.395	1.726	0.2000	61.9	50.0	23.8*	20.0
2-Chloroethyl vinyl ether	Ave	0.7351	0.7612		51.8	50.0	3.6	20.0
cis-1,3-Dichloropropene	Ave	1.804	1.881	0.2000	52.1	50.0	4.3	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6451	0.6344	0.1000	246	250	-1.7	20.0
Toluene	Ave	1.441	1.458	0.4000	50.6	50.0	1.1	20.0
trans-1,3-Dichloropropene	Ave	0.7542	0.7937	0.1000	52.6	50.0	5.2	20.0
Ethyl methacrylate	Ave	0.6511	0.5946		45.7	50.0	-8.7	20.0
1,1,2-Trichloroethane	Ave	0.4080	0.4053	0.1000	49.7	50.0	-0.7	20.0
Tetrachloroethene	Ave	0.5670	0.6852	0.2000	60.4	50.0	20.8*	20.0
1,3-Dichloropropane	Ave	0.8206	0.8038		49.0	50.0	-2.0	20.0
2-Hexanone	Ave	0.4339	0.4348	0.1000	251	250	0.2	20.0
Dibromochloromethane	Ave	0.4628	0.6423	0.1000	69.4	50.0	38.8*	20.0
1,2-Dibromoethane	Ave	0.5040	0.5474		54.3	50.0	8.6	20.0
Chlorobenzene	Ave	1.646	1.798	0.5000	54.6	50.0	9.2	20.0
Ethylbenzene	Ave	2.632	2.800	0.1000	53.2	50.0	6.4	20.0
1,1,1,2-Tetrachloroethane	Ave	0.5702	0.7085		62.1	50.0	24.3*	20.0
m,p-Xylene	Ave	1.057	1.154	0.1000	54.6	50.0	9.2	20.0
o-Xylene	Ave	1.087	1.174	0.3000	54.0	50.0	8.0	20.0
Styrene	Ave	1.849	1.948	0.3000	52.7	50.0	5.4	20.0
Bromoform	Ave	0.2738	0.4073	0.1000	74.4	50.0	48.8	50.0
Isopropylbenzene	Ave	2.597	2.584	0.1000	49.8	50.0	-0.5	20.0
Bromobenzene	Ave	0.6642	0.6875		51.8	50.0	3.5	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6545	0.5780	0.3000	44.2	50.0	-11.7	20.0
N-Propylbenzene	Ave	3.015	2.810		46.6	50.0	-6.8	20.0
1,2,3-Trichloropropane	Ave	0.2098	0.2117		50.5	50.0	0.9	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2181	0.2258		51.7	50.0	3.5	50.0
2-Chlorotoluene	Ave	0.6594	0.6583		49.9	50.0	-0.2	20.0
1,3,5-Trimethylbenzene	Ave	2.259	2.274		50.3	50.0	0.7	20.0
4-Chlorotoluene	Ave	0.6680	0.6953		52.0	50.0	4.1	20.0
tert-Butylbenzene	Ave	0.4963	0.5341		53.8	50.0	7.6	20.0
1,2,4-Trimethylbenzene	Ave	2.366	2.362		49.9	50.0	-0.1	20.0
sec-Butylbenzene	Ave	2.876	2.791		48.5	50.0	-2.9	20.0
1,3-Dichlorobenzene	Ave	1.368	1.403	0.6000	51.3	50.0	2.6	20.0
4-Isopropyltoluene	Ave	2.602	2.671		51.3	50.0	2.6	20.0
1,4-Dichlorobenzene	Ave	1.399	1.426	0.5000	51.0	50.0	1.9	20.0
n-Butylbenzene	Ave	2.344	2.200		46.9	50.0	-6.1	20.0
1,2-Dichlorobenzene	Ave	1.369	1.403	0.4000	51.2	50.0	2.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-200130-1

SDG No.:

Lab Sample ID: CCVIS 480-635772/4 Calibration Date: 08/01/2022 19:06

Instrument ID: HP5977M Calib Start Date: 04/03/2022 22:58

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 04/04/2022 01:23

Lab File ID: M05034.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.390	1.809	0.1000	65.1	50.0	30.2	50.0
Chloromethane	Ave	1.852	1.916	0.1000	51.7	50.0	3.4	20.0
Vinyl chloride	Ave	1.570	1.300	0.1000	41.4	50.0	-17.2	20.0
Butadiene	Ave	1.627	1.282		39.4	50.0	-21.2*	20.0
Bromomethane	Ave	0.7820	0.8196	0.1000	52.4	50.0	4.8	50.0
Chloroethane	Ave	0.8552	0.7100	0.1000	41.5	50.0	-17.0	50.0
Trichlorofluoromethane	Ave	1.614	2.306	0.1000	71.4	50.0	42.9*	20.0
Dichlorofluoromethane	Ave	2.000	1.850		46.2	50.0	-7.5	20.0
Ethyl ether	Ave	1.171	0.8841		37.7	50.0	-24.5*	20.0
Acrolein	Ave	0.1169	0.1506		322	250	28.8	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.177	1.399	0.1000	59.4	50.0	18.9	20.0
1,1-Dichloroethene	Ave	1.011	1.088	0.1000	53.8	50.0	7.6	20.0
Acetone	Ave	0.4870	0.4016	0.1000	206	250	-17.5	50.0
Iodomethane	Ave	1.947	2.375		61.0	50.0	22.0*	20.0
Carbon disulfide	Ave	3.587	3.548	0.1000	49.5	50.0	-1.1	20.0
Allyl chloride	Ave	2.148	1.929		44.9	50.0	-10.2	20.0
Methyl acetate	Ave	1.072	0.8878	0.1000	82.8	100	-17.2	50.0
Methylene Chloride	Lin1		1.262	0.1000	49.7	50.0	-0.7	20.0
2-Methyl-2-propanol	Ave	0.1761	0.1370		389	500	-22.2	50.0
Methyl tert-butyl ether	Ave	3.801	3.632	0.1000	47.8	50.0	-4.4	20.0
trans-1,2-Dichloroethene	Ave	1.227	1.318	0.1000	53.7	50.0	7.5	20.0
Acrylonitrile	Ave	0.5772	0.5146		446	500	-10.9	20.0
Hexane	Ave	2.062	2.153		52.2	50.0	4.4	20.0
1,1-Dichloroethane	Ave	2.381	2.394	0.2000	50.3	50.0	0.6	20.0
Vinyl acetate	Ave	2.631	2.267		86.2	100	-13.8	20.0
2,2-Dichloropropane	Ave	1.418	1.704		60.1	50.0	20.2*	20.0
cis-1,2-Dichloroethene	Ave	1.413	1.421	0.1000	50.3	50.0	0.6	20.0
2-Butanone (MEK)	Ave	0.6729	0.5774	0.1000	215	250	-14.2	20.0
Chlorobromomethane	Ave	0.7413	0.8452		57.0	50.0	14.0	20.0
Tetrahydrofuran	Ave	0.4779	0.3658		76.5	100	-23.5*	20.0
Chloroform	Ave	2.206	2.405	0.2000	54.5	50.0	9.0	20.0
1,1,1-Trichloroethane	Ave	1.713	2.291	0.1000	66.9	50.0	33.8*	20.0
Cyclohexane	Ave	2.517	2.613	0.1000	51.9	50.0	3.8	20.0
Carbon tetrachloride	Ave	1.356	2.113	0.1000	77.9	50.0	55.9*	20.0
1,1-Dichloropropene	Ave	1.554	1.670		53.7	50.0	7.5	20.0
Benzene	Ave	4.743	4.477	0.5000	47.2	50.0	-5.6	20.0
Isobutyl alcohol	Ave	0.0580	0.0459		989	1250	-20.9	50.0
1,2-Dichloroethane	Ave	1.764	2.048	0.1000	58.1	50.0	16.1	20.0
n-Heptane	Ave	2.020	2.071		51.3	50.0	2.6	20.0
Trichloroethene	Ave	1.229	1.344	0.2000	54.7	50.0	9.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-200130-1

SDG No.:

Lab Sample ID: CCVIS 480-635772/4 Calibration Date: 08/01/2022 19:06

Instrument ID: HP5977M Calib Start Date: 04/03/2022 22:58

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 04/04/2022 01:23

Lab File ID: M05034.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.133	2.202	0.1000	51.6	50.0	3.3	20.0
1,2-Dichloropropane	Ave	1.340	1.204	0.1000	44.9	50.0	-10.2	20.0
Dibromomethane	Ave	0.7527	0.8087	0.1000	53.7	50.0	7.4	20.0
1,4-Dioxane	Ave	0.0082	0.0064		783	1000	-21.7	50.0
Bromodichloromethane	Ave	1.395	1.665	0.2000	59.7	50.0	19.4	20.0
2-Chloroethyl vinyl ether	Ave	0.7351	0.6327		43.0	50.0	-13.9	20.0
cis-1,3-Dichloropropene	Ave	1.804	1.698	0.2000	47.0	50.0	-5.9	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6451	0.5968	0.1000	231	250	-7.5	20.0
Toluene	Ave	1.441	1.422	0.4000	49.3	50.0	-1.3	20.0
trans-1,3-Dichloropropene	Ave	0.7542	0.7389	0.1000	49.0	50.0	-2.0	20.0
Ethyl methacrylate	Ave	0.6511	0.5413		41.6	50.0	-16.9	20.0
1,1,2-Trichloroethane	Ave	0.4080	0.3668	0.1000	45.0	50.0	-10.1	20.0
Tetrachloroethene	Ave	0.5670	0.7197	0.2000	63.5	50.0	26.9*	20.0
1,3-Dichloropropane	Ave	0.8206	0.7402		45.1	50.0	-9.8	20.0
2-Hexanone	Ave	0.4339	0.3854	0.1000	222	250	-11.2	20.0
Dibromochloromethane	Ave	0.4628	0.6442	0.1000	69.6	50.0	39.2*	20.0
1,2-Dibromoethane	Ave	0.5040	0.4996		49.6	50.0	-0.9	20.0
Chlorobenzene	Ave	1.646	1.731	0.5000	52.6	50.0	5.1	20.0
Ethylbenzene	Ave	2.632	2.732	0.1000	51.9	50.0	3.8	20.0
1,1,1,2-Tetrachloroethane	Ave	0.5702	0.7319		64.2	50.0	28.3*	20.0
m,p-Xylene	Ave	1.057	1.131	0.1000	53.5	50.0	6.9	20.0
o-Xylene	Ave	1.087	1.130	0.3000	52.0	50.0	3.9	20.0
Styrene	Ave	1.849	1.850	0.3000	50.0	50.0	0.0	20.0
Bromoform	Ave	0.2738	0.4182	0.1000	76.4	50.0	52.8*	50.0
Isopropylbenzene	Ave	2.597	2.498	0.1000	48.1	50.0	-3.8	20.0
Bromobenzene	Ave	0.6642	0.6491		48.9	50.0	-2.3	20.0
1,1,2,2-Tetrachloroethane	Ave	0.6545	0.5267	0.3000	40.2	50.0	-19.5	20.0
N-Propylbenzene	Ave	3.015	2.701		44.8	50.0	-10.4	20.0
1,2,3-Trichloropropane	Ave	0.2098	0.2029		48.3	50.0	-3.3	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2181	0.1845		42.3	50.0	-15.4	50.0
2-Chlorotoluene	Ave	0.6594	0.6299		47.8	50.0	-4.5	20.0
1,3,5-Trimethylbenzene	Ave	2.259	2.200		48.7	50.0	-2.6	20.0
4-Chlorotoluene	Ave	0.6680	0.6352		47.5	50.0	-4.9	20.0
tert-Butylbenzene	Ave	0.4963	0.5120		51.6	50.0	3.2	20.0
1,2,4-Trimethylbenzene	Ave	2.366	2.265		47.9	50.0	-4.3	20.0
sec-Butylbenzene	Ave	2.876	2.756		47.9	50.0	-4.2	20.0
1,3-Dichlorobenzene	Ave	1.368	1.330	0.6000	48.6	50.0	-2.7	20.0
4-Isopropyltoluene	Ave	2.602	2.600		50.0	50.0	-0.0	20.0
1,4-Dichlorobenzene	Ave	1.399	1.343	0.5000	48.0	50.0	-4.0	20.0
n-Butylbenzene	Ave	2.344	2.128		45.4	50.0	-9.2	20.0
1,2-Dichlorobenzene	Ave	1.369	1.330	0.4000	48.5	50.0	-2.9	20.0

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200130-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-635981/7 08/02/2022 11:16		CCB 480-635981/20 08/02/2022 14:28		CCB 480-635981/28 08/02/2022 15:14		CCB 480-635981/31 08/02/2022 16:04	
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND		ND		ND		ND	
Antimony	0.020	ND		ND		ND		ND	
Arsenic	0.015	ND		ND		ND		ND	
Barium	0.0020	ND		ND		ND		ND	
Beryllium	0.0020	ND		ND		ND		ND	
Cadmium	0.0020	ND		ND		ND		ND	
Calcium	0.50	ND		ND		ND		ND	
Chromium	0.0040	ND		ND		ND		ND	
Cobalt	0.0040	ND		ND		ND		ND	
Copper	0.010	ND		ND		ND		ND	
Iron	0.050	ND		ND		ND		ND	
Lead	0.010	ND		ND		ND		ND	
Magnesium	0.20	ND		ND		ND		ND	
Manganese	0.0030	ND		ND		ND		ND	
Nickel	0.010	ND		ND		ND		ND	
Potassium	0.50	ND		ND		ND		ND	
Selenium	0.025	0.00877	J	0.00919	J	ND		ND	
Silver	0.0060	ND		ND		ND		ND	
Sodium	1.0	ND		ND		ND		ND	
Thallium	0.020	ND		ND		ND		ND	
Vanadium	0.0050	ND		ND		ND		ND	
Zinc	0.010	ND		ND		ND		ND	
Boron	0.020	ND		ND		ND		ND	

Italicized analytes were not requested for this

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200130-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	CCB 480-635981/43 08/02/2022 16:55							
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND							
Antimony	0.020	ND							
Arsenic	0.015	ND							
Barium	0.0020	ND							
Beryllium	0.0020	ND							
Cadmium	0.0020	ND							
Calcium	0.50	ND							
Chromium	0.0040	ND							
Cobalt	0.0040	ND							
Copper	0.010	ND							
Iron	0.050	ND							
Lead	0.010	ND							
Magnesium	0.20	ND							
Manganese	0.0030	ND							
Nickel	0.010	ND							
Potassium	0.50	ND							
Selenium	0.025	0.00887	J						
Silver	0.0060	ND							
Sodium	1.0	ND							
Thallium	0.020	ND							
Vanadium	0.0050	ND							
Zinc	0.010	ND							
Boron	0.020	ND							

Italicized analytes were not requested for this

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200130-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-635900/8 08/02/2022 12:04		CCB 480-635900/84 08/02/2022 14:19		CCB 480-635900/96 08/02/2022 14:35			
		Found	C	Found	C	Found	C	Found	C
Mercury	0.00020	ND		0.0000100	J	ND			

Italicized analytes were not requested for this

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200130-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 480-635468/1-A

Instrument Code: ICAP1 Batch No.: 635981

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			6010C
7440-36-0	Antimony	ND			6010C
7440-38-2	Arsenic	ND			6010C
7440-39-3	Barium	ND			6010C
7440-41-7	Beryllium	ND			6010C
7440-43-9	Cadmium	ND			6010C
7440-70-2	Calcium	ND			6010C
7440-47-3	Chromium	ND			6010C
7440-48-4	Cobalt	ND			6010C
7440-50-8	Copper	ND			6010C
7439-89-6	Iron	ND			6010C
7439-92-1	Lead	ND			6010C
7439-95-4	Magnesium	1.11	J		6010C
7439-96-5	Manganese	0.0510	J		6010C
7440-02-0	Nickel	ND			6010C
7440-09-7	Potassium	ND			6010C
7782-49-2	Selenium	0.686	J		6010C
7440-22-4	Silver	ND			6010C
7440-23-5	Sodium	ND			6010C
7440-28-0	Thallium	ND			6010C
7440-62-2	Vanadium	ND			6010C
7440-66-6	Zinc	ND			6010C

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200130-1

SDG No.:

Lab Sample ID: ICSA 480-635981/9 Instrument ID: ICAP1

Lab File ID: I1080222A-4.asc ICS Source: MEI_MSS_ICSA_00043

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**500**	**493**	**99**
Antimony		**-0.0090**	
Arsenic		**-0.0058**	
Barium	**0.0120**	**0.0136**	
Beryllium		**0.0001**	
Cadmium		**0.0008**	
Calcium	**500**	**466**	**93**
Chromium		**0.0015**	
Cobalt		**-0.0005**	
Copper		**0.0033**	
Iron	**200**	**186**	**93**
Lead		**0.0032**	
Magnesium	**500**	**507**	**101**
Manganese		**0.0018**	
Nickel		**0.0016**	
Potassium		**0.0200**	
Selenium		**0.0036**	
Silver		**-0.0004**	
Sodium		**0.0717**	
Thallium		**-0.0006**	
Vanadium		**-0.0004**	
Zinc		**0.0032**	
Boron		*-0.0006*	
Lithium		*0.0066*	
Molybdenum		*-0.0013*	
Tin		*-0.0030*	
Titanium		*0.0022*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-200156-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): ZB-624 (30) ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
SB1 (0-0.5)	480-200156-2	106	104	107	87
SB1 (0.5-1)	480-200156-3	111	109	100	93
SB1 (1-2)	480-200156-4	112	107	104	84
SB1 (15-16)	480-200156-6	107	106	97	99
SS7 (0-6)	480-200156-8	113	107	127 *3 S1+	73 *3
SS7 (6-12)	480-200156-9	111	110	132 *3 S1+	69 *3 S1-
SS7 (12-24)	480-200156-10	131	119	152 *3 S1+	57 *3 S1-
SS7 (0-2)	480-200156-11	111	107	122	73
	MB 480-635934/2-A	107	101	96	99
	MB 480-636092/3-A	107	102	96	100
	LCS 480-635934/1-A	104	100	99	100
	LCS 480-636092/1-A	103	105	97	98

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	60-140
DCA = 1,2-Dichloroethane-d4 (Surr)	64-126
TOL = Toluene-d8 (Surr)	71-125
BFB = 4-Bromofluorobenzene (Surr)	72-126

Column to be used to flag recovery values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-200156-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: M05098.D

Lab ID: LCS 480-636092/1-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	50.0	60.0	120	74-127	
1,1,1-Trichloroethane	50.0	58.9	118	77-121	
1,1,2,2-Tetrachloroethane	50.0	52.0	104	80-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	59.5	119	60-140	
1,1,2-Trichloroethane	50.0	52.4	105	78-122	
1,1-Dichloroethane	50.0	54.3	109	73-126	
1,1-Dichloroethene	50.0	57.4	115	59-125	
1,2,4-Trichlorobenzene	50.0	54.9	110	64-120	
1,2,4-Trimethylbenzene	50.0	55.7	111	74-120	
1,2-Dibromo-3-Chloropropane	50.0	57.3	115	63-124	
1,2-Dibromoethane	50.0	52.4	105	78-120	
1,2-Dichlorobenzene	50.0	53.2	106	75-120	
1,2-Dichloroethane	50.0	51.0	102	77-122	
1,2-Dichloropropane	50.0	51.5	103	75-124	
1,3,5-Trimethylbenzene	50.0	57.1	114	74-120	
1,3-Dichlorobenzene	50.0	54.2	108	74-120	
1,4-Dichlorobenzene	50.0	53.5	107	73-120	
2-Butanone (MEK)	250	237	95	70-134	
2-Hexanone	250	252	101	59-130	
4-Methyl-2-pentanone (MIBK)	250	260	104	65-133	
Acetone	250	238	95	61-137	
Benzene	50.0	52.5	105	79-127	
Bromodichloromethane	50.0	58.3	117	80-122	
Bromoform	50.0	67.3	135	68-126	*+
Bromomethane	50.0	53.2	106	37-149	
Carbon disulfide	50.0	55.2	110	64-131	
Carbon tetrachloride	50.0	64.6	129	75-135	
Chlorobenzene	50.0	55.2	110	76-124	
Chloroethane	50.0	54.6	109	69-135	
Chloroform	50.0	51.5	103	80-120	
Chloromethane	50.0	52.7	105	63-127	
cis-1,2-Dichloroethene	50.0	52.3	105	81-120	
cis-1,3-Dichloropropene	50.0	53.0	106	80-120	
Cyclohexane	50.0	58.5	117	65-120	
Dibromochloromethane	50.0	65.1	130	76-125	*+
Dichlorodifluoromethane	50.0	48.7	97	57-142	
Ethylbenzene	50.0	55.4	111	80-120	
Isopropylbenzene	50.0	57.7	115	72-120	
m,p-Xylene	50.0	55.4	111	70-130	
Methyl acetate	100	99.5	99	55-136	
Methyl tert-butyl ether	50.0	46.1	92	63-125	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-200156-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: M05098.D

Lab ID: LCS 480-636092/1-A Client ID:

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Methylcyclohexane	50.0	56.7	113	60-140	
Methylene Chloride	50.0	54.6	109	61-127	
n-Butylbenzene	50.0	56.7	113	70-120	
N-Propylbenzene	50.0	56.5	113	70-130	
o-Xylene	50.0	55.0	110	70-130	
sec-Butylbenzene	50.0	58.3	117	74-120	
Styrene	50.0	52.3	105	80-120	
tert-Butylbenzene	50.0	60.4	121	73-120	*+
Tetrachloroethene	50.0	63.3	127	74-122	*+
Toluene	50.0	53.0	106	74-128	
trans-1,2-Dichloroethene	50.0	55.1	110	78-126	
trans-1,3-Dichloropropene	50.0	53.1	106	73-123	
Trichloroethene	50.0	54.4	109	77-129	
Trichlorofluoromethane	50.0	60.8	122	65-146	
Vinyl chloride	50.0	52.3	105	61-133	

Column to be used to flag recovery and RPD values

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-200156-1

SDG No.:

Sample No.: CCVIS 480-636094/4 Date Analyzed: 08/03/2022 18:57

Instrument ID: HP5977M GC Column: ZB-624 (30) VOA ID: 0.25(mm)

Lab File ID (Standard): M05096.D Heated Purge: (Y/N) Y

Calibration ID: 43305

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		149852	5.23	301606	8.21	325862	10.62
UPPER LIMIT		299704	5.73	603212	8.71	651724	11.12
LOWER LIMIT		74926	4.73	150803	7.71	162931	10.12
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 480-636094/5		139669	5.23	277420	8.22	312143	10.62
LCS 480-636092/1-A		144867	5.23	291077	8.21	309734	10.62
MB 480-636092/3-A		136488	5.23	277174	8.22	314474	10.62
480-200156-2	SB1 (0-0.5)	133579	5.23	236142	8.22	177745	10.62
480-200156-8	SS7 (0-6)	107321	5.23	147004*3	8.22	85203*3	10.62
480-200156-9	SS7 (6-12)	106090	5.23	137545*3	8.22	77988*3	10.62
480-200156-10	SS7 (12-24)	80348	5.23	72148*3	8.22	31130*3	10.62
480-200156-11	SS7 (0-2)	109027	5.23	158924	8.22	97906*3	10.62

FB = Fluorobenzene (IS)
FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4
Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-200156-1

SDG No.:

Lab Sample ID: CCVIS 480-636094/4 Calibration Date: 08/03/2022 18:57

Instrument ID: HP5977M Calib Start Date: 04/03/2022 22:58

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 04/04/2022 01:23

Lab File ID: M05096.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.390	1.219	0.1000	43.9	50.0	-12.3	50.0
Chloromethane	Ave	1.852	1.864	0.1000	50.3	50.0	0.6	20.0
Vinyl chloride	Ave	1.570	1.533	0.1000	48.8	50.0	-2.4	20.0
Butadiene	Ave	1.627	1.537		47.2	50.0	-5.5	20.0
Bromomethane	Ave	0.7820	0.8166	0.1000	52.2	50.0	4.4	50.0
Chloroethane	Ave	0.8552	0.8586	0.1000	50.2	50.0	0.4	50.0
Trichlorofluoromethane	Ave	1.614	1.790	0.1000	55.4	50.0	10.9	20.0
Dichlorofluoromethane	Ave	2.000	1.928		48.2	50.0	-3.6	20.0
Ethyl ether	Ave	1.171	1.209		51.6	50.0	3.3	20.0
Acrolein	Ave	0.1169	0.1794		384	250	53.5*	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.177	1.273	0.1000	54.1	50.0	8.1	20.0
1,1-Dichloroethene	Ave	1.011	1.096	0.1000	54.2	50.0	8.4	20.0
Acetone	Ave	0.4870	0.4361	0.1000	224	250	-10.4	50.0
Iodomethane	Ave	1.947	2.080		53.4	50.0	6.8	20.0
Carbon disulfide	Ave	3.587	3.755	0.1000	52.3	50.0	4.7	20.0
Allyl chloride	Ave	2.148	2.158		50.2	50.0	0.5	20.0
Methyl acetate	Ave	1.072	1.054	0.1000	98.3	100	-1.7	50.0
Methylene Chloride	Lin1		1.366	0.1000	53.8	50.0	7.6	20.0
2-Methyl-2-propanol	Ave	0.1761	0.1475		419	500	-16.3	50.0
Methyl tert-butyl ether	Ave	3.801	3.505	0.1000	46.1	50.0	-7.8	20.0
trans-1,2-Dichloroethene	Ave	1.227	1.277	0.1000	52.1	50.0	4.1	20.0
Acrylonitrile	Ave	0.5772	0.5759		499	500	-0.2	20.0
Hexane	Ave	2.062	2.340		56.8	50.0	13.5	20.0
1,1-Dichloroethane	Ave	2.381	2.469	0.2000	51.8	50.0	3.7	20.0
Vinyl acetate	Ave	2.631	2.617		99.5	100	-0.5	20.0
2,2-Dichloropropane	Ave	1.418	1.471		51.9	50.0	3.8	20.0
cis-1,2-Dichloroethene	Ave	1.413	1.425	0.1000	50.4	50.0	0.9	20.0
2-Butanone (MEK)	Ave	0.6729	0.6697	0.1000	249	250	-0.5	20.0
Chlorobromomethane	Ave	0.7413	0.7690		51.9	50.0	3.7	20.0
Tetrahydrofuran	Ave	0.4779	0.4607		96.4	100	-3.6	20.0
Chloroform	Ave	2.206	2.244	0.2000	50.9	50.0	1.7	20.0
1,1,1-Trichloroethane	Ave	1.713	1.889	0.1000	55.1	50.0	10.3	20.0
Cyclohexane	Ave	2.517	2.812	0.1000	55.9	50.0	11.8	20.0
Carbon tetrachloride	Ave	1.356	1.638	0.1000	60.4	50.0	20.8*	20.0
1,1-Dichloropropene	Ave	1.554	1.661		53.5	50.0	6.9	20.0
Benzene	Ave	4.743	4.902	0.5000	51.7	50.0	3.4	20.0
Isobutyl alcohol	Ave	0.0580	0.0569		1230	1250	-1.8	50.0
1,2-Dichloroethane	Ave	1.764	1.792	0.1000	50.8	50.0	1.6	20.0
n-Heptane	Ave	2.020	2.269		56.2	50.0	12.4	20.0
Trichloroethene	Ave	1.229	1.319	0.2000	53.7	50.0	7.4	20.0

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-200156-1

SDG No.:

Matrix: Water Level: Low Lab File ID: W10021270.d

Lab ID: LCS 480-635534/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
2,4,5-Trichlorophenol	32.0	31.3	98	65-126	
2,4,6-Trichlorophenol	32.0	30.8	96	64-120	
2,4-Dichlorophenol	32.0	29.3	91	63-120	
2,4-Dimethylphenol	32.0	28.4	89	47-120	
2,4-Dinitrophenol	64.0	65.8	103	31-137	
2,4-Dinitrotoluene	32.0	33.4	104	69-120	
2,6-Dinitrotoluene	32.0	32.2	101	68-120	
2-Chloronaphthalene	32.0	27.0	84	58-120	
2-Chlorophenol	32.0	26.8	84	48-120	
2-Methylnaphthalene	32.0	24.9	78	59-120	
2-Methylphenol	32.0	26.5	83	39-120	
2-Nitroaniline	32.0	31.5	98	54-127	
2-Nitrophenol	32.0	28.6	89	52-125	
3,3'-Dichlorobenzidine	64.0	57.6	90	49-135	
3-Nitroaniline	32.0	27.4	86	51-120	
4,6-Dinitro-2-methylphenol	64.0	70.2	110	46-136	
4-Bromophenyl phenyl ether	32.0	32.2	101	65-120	
4-Chloro-3-methylphenol	32.0	30.6	96	61-123	
4-Chloroaniline	32.0	20.8	65	30-120	
4-Chlorophenyl phenyl ether	32.0	30.4	95	62-120	
4-Methylphenol	32.0	26.3	82	29-131	
4-Nitroaniline	32.0	39.0	122	65-120	*+
4-Nitrophenol	64.0	55.3	86	45-120	
Acenaphthene	32.0	28.8	90	60-120	
Acenaphthylene	32.0	29.6	92	63-120	
Acetophenone	32.0	27.6	86	45-120	
Anthracene	32.0	33.1	104	67-120	
Atrazine	64.0	70.0	109	71-130	
Benzaldehyde	64.0	54.5	85	10-140	
Benzo[a]anthracene	32.0	30.6	96	70-121	
Benzo[a]pyrene	32.0	32.3	101	60-123	
Benzo[b]fluoranthene	32.0	32.6	102	66-126	
Benzo[g,h,i]perylene	32.0	31.4	98	66-150	
Benzo[k]fluoranthene	32.0	31.7	99	65-124	
Biphenyl	32.0	27.2	85	59-120	
bis (2-chloroisopropyl) ether	32.0	27.4	86	21-136	
Bis(2-chloroethoxy)methane	32.0	27.8	87	50-128	
Bis(2-chloroethyl)ether	32.0	26.3	82	44-120	
Bis(2-ethylhexyl) phthalate	32.0	32.7	102	63-139	
Butyl benzyl phthalate	32.0	33.3	104	70-129	
Caprolactam	64.0	26.4	41	22-120	
Carbazole	32.0	47.9	150	66-123	*+

Column to be used to flag recovery and RPD values

FORM VIII
PFAS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Burlington Job No.: 480-200156-1

SDG No.:

Sample No.: ICIS 200-182319/8 Date Analyzed: 08/03/2022 13:24

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm)

Lab File ID (Standard): PA220803ICAL08.d Heated Purge: (Y/N) N

Calibration ID: 48756

		13PFOA					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		1727269	3.48				
UPPER LIMIT		2590904	3.68				
LOWER LIMIT		863635	3.28				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 200-182319/11		1738669	3.48				
ICV 200-182319/12		2802391*3	3.48				
CCVLIS 200-182364/5		1733343	3.47				

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200156-1

SDG No.:

ICV Source: MEI_10_CCVL_00458 Concentration Units: mg/L

CCV Source: MEI_10_CCVL_00458

Analyte	CCVL 480-636329/30 08/04/2022 16:45				CCVL 480-636329/43 08/04/2022 19:54				CCVL 480-636329/55 08/04/2022 20:40			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	0.180	J	0.200	90	0.205		0.200	102	0.211		0.200	105
Antimony	0.0197	J	0.0200	99	0.0197	J	0.0200	99	0.0184	J	0.0200	92
Arsenic	0.0159		0.0150	106	0.0162		0.0150	108	0.0165		0.0150	110
Barium	0.00221		0.00200	111	0.00223		0.00200	112	0.00232		0.00200	116
Beryllium	0.00222		0.00200	111	0.00211		0.00200	106	0.00195	J	0.00200	98
Cadmium	0.00198	J	0.00200	99	0.00200		0.00200	100	0.00197	J	0.00200	99
Calcium	0.489	J	0.500	98	0.481	J	0.500	96	0.489	J	0.500	98
Chromium	0.00441		0.00400	110	0.00429		0.00400	107	0.00419		0.00400	105
Cobalt	0.00390	J	0.00400	98	0.00376	J	0.00400	94	0.00390	J	0.00400	98
Copper	0.00908	J	0.0100	91	0.00963	J	0.0100	96	0.0110		0.0100	110
Iron	0.0517		0.0500	103	0.0471	J	0.0500	94	0.0581		0.0500	116
Lead	0.00920	J	0.0100	92	0.00904	J	0.0100	90	0.00928	J	0.0100	93
Magnesium	0.216		0.200	108	0.211		0.200	106	0.218		0.200	109
Manganese	0.00343		0.00300	114	0.00352		0.00300	117	0.00372		0.00300	124
Nickel	0.00969	J	0.0100	97	0.00992	J	0.0100	99	0.00965	J	0.0100	97
Potassium	1.41		0.500	281					0.804		0.500	161
Selenium	0.0244	J	0.0250	98	0.0220	J	0.0250	88	0.0220	J	0.0250	88
Silver	0.00585	J	0.00600	98	0.00545	J	0.00600	91	0.00546	J	0.00600	91
Sodium					1.27		1.01	126	1.21		1.01	120
Thallium	0.0225		0.0200	113	0.0205		0.0200	103	0.0220		0.0200	110
Vanadium	0.00553		0.00500	111	0.00529		0.00500	106	0.00497	J	0.00500	99
Zinc	0.0104		0.0100	104	0.0102		0.0100	102	0.0107		0.0100	107
Boron	0.0216		0.0200	108	0.0202		0.0200	101	0.0201		0.0200	101

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200156-1

SDG No.:

ICV Source: MEI_10_CCVL_00458 Concentration Units: mg/L

CCV Source: MEI_10_CCVL_00458

Analyte	CCVL 480-636329/64 08/04/2022 21:27											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	0.191	J	0.200	95								
Antimony	0.0213		0.0200	107								
Arsenic	0.0161		0.0150	107								
Barium	0.00229		0.00200	115								
Beryllium	0.00229		0.00200	115								
Cadmium	0.00187	J	0.00200	94								
Calcium	0.475	J	0.500	95								
Chromium	0.00458		0.00400	115								
Cobalt	0.00387	J	0.00400	97								
Copper	0.0107		0.0100	107								
Iron	0.0463	J	0.0500	93								
Lead	0.00804	J	0.0100	80								
Magnesium	0.230		0.200	115								
Manganese	0.00367		0.00300	122								
Nickel	0.00964	J	0.0100	96								
Potassium	0.729		0.500	146								
Selenium	0.0231	J	0.0250	93								
Silver	0.00572	J	0.00600	95								
Sodium												
Thallium	0.0202		0.0200	101								
Vanadium	0.00522		0.00500	104								
Zinc	0.0109		0.0100	109								
Boron	0.0224		0.0200	112								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200156-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-635823/6 08/01/2022 12:12		CCB 480-635823/19 08/01/2022 17:03		CCB 480-635823/30 08/01/2022 17:49		CCB 480-635823/36 08/01/2022 18:35	
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND		ND		ND		ND	
Antimony	0.020	ND		ND		ND		ND	
Arsenic	0.015	ND		ND		ND		ND	
Barium	0.0020	ND		ND		ND		ND	
Beryllium	0.0020	ND		ND		ND		ND	
Cadmium	0.0020	ND		ND		ND		ND	
Calcium	0.50	ND		ND		ND		ND	
Chromium	0.0040	ND		ND		ND		ND	
Cobalt	0.0040	ND		ND		ND		ND	
Copper	0.010	ND		ND		ND		ND	
Iron	0.050	ND		ND		ND		ND	
Lead	0.010	ND		ND		ND		ND	
Magnesium	0.20	ND		ND		ND		ND	
Manganese	0.0030	ND		ND		ND		ND	
Nickel	0.010	ND		ND		ND		ND	
Potassium	0.50	0.119	J	ND		ND		ND	
Selenium	0.025	ND		ND		ND		ND	
Silver	0.0060	ND		ND		ND		ND	
Sodium	1.0	ND		ND		ND		ND	
Thallium	0.020	ND		ND		ND		ND	
Vanadium	0.0050	ND		ND		ND		ND	
Zinc	0.010	ND		ND		ND		ND	

Italicized analytes were not requested for this

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200156-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-635981/7 08/02/2022 11:16		CCB 480-635981/20 08/02/2022 14:28		CCB 480-635981/28 08/02/2022 15:14		CCB 480-635981/31 08/02/2022 16:04	
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND		ND		ND		ND	
Antimony	0.020	ND		ND		ND		ND	
Arsenic	0.015	ND		ND		ND		ND	
Barium	0.0020	ND		ND		ND		ND	
Beryllium	0.0020	ND		ND		ND		ND	
Cadmium	0.0020	ND		ND		ND		ND	
Calcium	0.50	ND		ND		ND		ND	
Chromium	0.0040	ND		ND		ND		ND	
Cobalt	0.0040	ND		ND		ND		ND	
Copper	0.010	ND		ND		ND		ND	
Iron	0.050	ND		ND		ND		ND	
Lead	0.010	ND		ND		ND		ND	
Magnesium	0.20	ND		ND		ND		ND	
Manganese	0.0030	ND		ND		ND		ND	
Nickel	0.010	ND		ND		ND		ND	
Potassium	0.50	ND		ND		ND		ND	
Selenium	0.025	0.00877	J	0.00919	J	ND		ND	
Silver	0.0060	ND		ND		ND		ND	
Sodium	1.0	ND		ND		ND		ND	
Thallium	0.020	ND		ND		ND		ND	
Vanadium	0.0050	ND		ND		ND		ND	
Zinc	0.010	ND		ND		ND		ND	
Boron	0.020	ND		ND		ND		ND	

Italicized analytes were not requested for this

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200156-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	CCB 480-635981/43 08/02/2022 16:55		CCB 480-635981/53 08/02/2022 17:42					
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND		ND					
Antimony	0.020	ND		ND					
Arsenic	0.015	ND		ND					
Barium	0.0020	ND		ND					
Beryllium	0.0020	ND		ND					
Cadmium	0.0020	ND		ND					
Calcium	0.50	ND		ND					
Chromium	0.0040	ND		ND					
Cobalt	0.0040	ND		ND					
Copper	0.010	ND		ND					
Iron	0.050	ND		ND					
Lead	0.010	ND		ND					
Magnesium	0.20	ND		ND					
Manganese	0.0030	ND		ND					
Nickel	0.010	ND		ND					
Potassium	0.50	ND		ND					
Selenium	0.025	0.00887	J	ND					
Silver	0.0060	ND		ND					
Sodium	1.0	ND		ND					
Thallium	0.020	ND		ND					
Vanadium	0.0050	ND		ND					
Zinc	0.010	ND		ND					
Boron	0.020	ND		ND					

Italicized analytes were not requested for this

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200156-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-636329/6 08/04/2022 12:45		CCB 480-636329/19 08/04/2022 15:08		CCB 480-636329/24 08/04/2022 15:54		CCB 480-636329/29 08/04/2022 16:41	
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND		ND		ND		ND	
Antimony	0.020	ND		ND		ND		ND	
Arsenic	0.015	ND		ND		ND		ND	
Barium	0.0020	ND		ND		ND		ND	
Beryllium	0.0020	ND		ND		ND		ND	
Cadmium	0.0020	ND		ND		ND		ND	
Calcium	0.50	ND		ND		ND		ND	
Chromium	0.0040	ND		ND		ND		ND	
Cobalt	0.0040	ND		ND		ND		ND	
Copper	0.010	ND		ND		ND		ND	
Iron	0.050	ND		ND		ND		ND	
Lead	0.010	ND		ND		ND		ND	
Magnesium	0.20	ND		ND		ND		ND	
Manganese	0.0030	ND		ND		ND		ND	
Nickel	0.010	ND		ND		ND		ND	
Potassium	0.50	ND		ND		ND		1.19	
Selenium	0.025	ND		ND		ND		ND	
Silver	0.0060	ND		ND		ND		ND	
Sodium	1.0	ND		ND		ND		0.885	J
Thallium	0.020	ND		ND		ND		ND	
Vanadium	0.0050	ND		ND		ND		ND	
Zinc	0.010	ND		ND		ND		ND	
Boron	0.020	ND		ND		ND		ND	

Italicized analytes were not requested for this

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200156-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	CCB 480-636329/42 08/04/2022 19:50		CCB 480-636329/54 08/04/2022 20:36		CCB 480-636329/63 08/04/2022 21:23			
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND		ND		ND			
Antimony	0.020	ND		ND		ND			
Arsenic	0.015	ND		ND		ND			
Barium	0.0020	ND		ND		ND			
Beryllium	0.0020	ND		ND		ND			
Cadmium	0.0020	ND		ND		ND			
Calcium	0.50	ND		ND		ND			
Chromium	0.0040	ND		ND		ND			
Cobalt	0.0040	ND		ND		ND			
Copper	0.010	ND		ND		ND			
Iron	0.050	ND		ND		ND			
Lead	0.010	ND		ND		ND			
Magnesium	0.20	ND		ND		ND			
Manganese	0.0030	ND		ND		ND			
Nickel	0.010	ND		ND		ND			
Potassium	0.50	0.339	J	0.364	J	0.289	J		
Selenium	0.025	ND		ND		ND			
Silver	0.0060	ND		ND		ND			
Sodium	1.0	ND		ND		0.373	J		
Thallium	0.020	ND		ND		ND			
Vanadium	0.0050	ND		ND		ND			
Zinc	0.010	ND		ND		ND			
Boron	0.020	ND		ND		0.00484	J		

Italicized analytes were not requested for this

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200156-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-635900/8 08/02/2022 12:04		CCB 480-635900/84 08/02/2022 14:19		CCB 480-635900/96 08/02/2022 14:35		CCB 480-635900/105 08/02/2022 14:47	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.00020	ND		0.0000100	J	ND		0.0000100	J

Italicized analytes were not requested for this

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200156-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 480-635468/1-A

Instrument Code: ICAP1 Batch No.: 635981

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			6010C
7440-36-0	Antimony	ND			6010C
7440-38-2	Arsenic	ND			6010C
7440-39-3	Barium	ND			6010C
7440-41-7	Beryllium	ND			6010C
7440-43-9	Cadmium	ND			6010C
7440-70-2	Calcium	ND			6010C
7440-47-3	Chromium	ND			6010C
7440-48-4	Cobalt	ND			6010C
7440-50-8	Copper	ND			6010C
7439-89-6	Iron	ND			6010C
7439-92-1	Lead	ND			6010C
7439-95-4	Magnesium	1.11	J		6010C
7439-96-5	Manganese	0.0510	J		6010C
7440-02-0	Nickel	ND			6010C
7440-09-7	Potassium	ND			6010C
7782-49-2	Selenium	0.686	J		6010C
7440-22-4	Silver	ND			6010C
7440-23-5	Sodium	ND			6010C
7440-28-0	Thallium	ND			6010C
7440-62-2	Vanadium	ND			6010C
7440-66-6	Zinc	ND			6010C

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200156-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 480-636002/1-A

Instrument Code: ICAP2 Batch No.: 636329

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			6010C
7440-36-0	Antimony	ND			6010C
7440-38-2	Arsenic	ND			6010C
7440-39-3	Barium	ND			6010C
7440-41-7	Beryllium	ND			6010C
7440-43-9	Cadmium	ND			6010C
7440-70-2	Calcium	ND			6010C
7440-47-3	Chromium	ND			6010C
7440-48-4	Cobalt	ND			6010C
7440-50-8	Copper	ND			6010C
7439-89-6	Iron	ND			6010C
7439-92-1	Lead	ND			6010C
7439-95-4	Magnesium	1.47	J		6010C
7439-96-5	Manganese	0.0328	J		6010C
7440-02-0	Nickel	ND			6010C
7440-09-7	Potassium	ND			6010C
7782-49-2	Selenium	ND			6010C
7440-22-4	Silver	ND			6010C
7440-23-5	Sodium	ND			6010C
7440-28-0	Thallium	ND			6010C
7440-62-2	Vanadium	ND			6010C
7440-66-6	Zinc	ND			6010C

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200156-1

SDG No.:

Lab Sample ID: ICSA 480-635823/8 Instrument ID: ICAP1

Lab File ID: I1080122A-7.asc ICS Source: MEI_MSS_ICSA_00043

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**500**	**496**	**99**
Antimony		**-0.0068**	
Arsenic		**0.0045**	
Barium	**0.0120**	**0.0136**	
Beryllium		**-0.0001**	
Cadmium		**0.0007**	
Calcium	**500**	**467**	**93**
Chromium		**0.0017**	
Cobalt		**-0.0007**	
Copper		**0.0057**	
Iron	**200**	**189**	**95**
Lead		**0.0047**	
Magnesium	**500**	**514**	**103**
Manganese		**0.0017**	
Nickel		**0.0008**	
Potassium		**0.342**	
Selenium		**0.0030**	
Silver		**-0.0004**	
Sodium		**0.0878**	
Thallium		**-0.0095**	
Vanadium		**0.0001**	
Zinc		**0.0036**	
Boron		*-0.0006*	
Lithium		*0.0073*	
Molybdenum		*-0.0015*	
Silicon		*-0.0113*	
Sulfur		*-0.137*	
Tin		*-0.0023*	
Titanium		*0.0026*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200156-1

SDG No.:

Lab Sample ID: ICSA 480-635981/9 Instrument ID: ICAP1

Lab File ID: I1080222A-4.asc ICS Source: MEI_MSS_ICSA_00043

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**500**	**493**	**99**
Antimony		**-0.0090**	
Arsenic		**-0.0058**	
Barium	**0.0120**	**0.0136**	
Beryllium		**0.0001**	
Cadmium		**0.0008**	
Calcium	**500**	**466**	**93**
Chromium		**0.0015**	
Cobalt		**-0.0005**	
Copper		**0.0033**	
Iron	**200**	**186**	**93**
Lead		**0.0032**	
Magnesium	**500**	**507**	**101**
Manganese		**0.0018**	
Nickel		**0.0016**	
Potassium		**0.0200**	
Selenium		**0.0036**	
Silver		**-0.0004**	
Sodium		**0.0717**	
Thallium		**-0.0006**	
Vanadium		**-0.0004**	
Zinc		**0.0032**	
Boron		*-0.0006*	
Lithium		*0.0066*	
Molybdenum		*-0.0013*	
Tin		*-0.0030*	
Titanium		*0.0022*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200156-1

SDG No.:

Lab Sample ID: ICSA 480-636329/8 Instrument ID: ICAP2

Lab File ID: I2080422A-2.asc ICS Source: MEI_MSS_ICSA_00044

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**500**	**503**	**101**
Antimony		**0.0087**	
Arsenic		**-0.0061**	
Barium	**0.0120**	**0.0138**	
Beryllium		**0.0000**	
Cadmium		**-0.0008**	
Calcium	**500**	**479**	**96**
Chromium		**-0.0003**	
Cobalt		**0.0000**	
Copper		**-0.0030**	
Iron	**200**	**192**	**96**
Lead		**-0.0016**	
Magnesium	**500**	**530**	**106**
Manganese		**0.0026**	
Nickel		**0.0006**	
Potassium		**0.0707**	
Selenium		**-0.0008**	
Silver		**-0.0009**	
Sodium		**0.0560**	
Thallium		**-0.0030**	
Vanadium		**-0.0025**	
Zinc		**0.0037**	
Boron		*-0.0010*	
Lithium		*0.0029*	
Molybdenum		*-0.0011*	
Tin		*-0.0012*	
Titanium		*0.0026*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

Login Sample Receipt Checklist

Client: Integral Consulting Inc

Job Number: 480-200156-1

Login Number: 200156
List Number: 2
Creator: Cunningham, Caroline R

List Source: Eurofins Burlington
List Creation: 08/03/22 09:00 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	1979791
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Water present in cooler; indicates evidence of melted ice.
Cooler Temperature is acceptable.	False	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	23.3ºC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-200248-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): ZB-624 (30) ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
SB6 (0-0.5)	480-200248-1	114	111	134 *3 S1+	71 *3 S1-
SB6 (0.5-1)	480-200248-2	119	115	146 *3 S1+	64 *3 S1-
SB6 (13-15)	480-200248-3	102	105	100	98
FDUP2_072922	480-200248-6	102	107	101	97
SS5 (0-2)	480-200248-7	107	115	117	78
SS5 (0-6)	480-200248-8	105	110	115	81
SS5 (6-12)	480-200248-9	104	104	113	86
SS5 (12-24)	480-200248-10	101	104	113	85
SS6 (0-2)	480-200248-13	109	110	125	74
SS6 (0-6)	480-200248-14	111	112	131 S1+	73
SS6 (6-12)	480-200248-15	109	110	122	75
SS6 (12-24)	480-200248-16	108	115	122	78
FDUP_072922	480-200248-17	111	110	135 *3 S1+	75 *3
SB6 (1-2)	480-200248-18	120	115	148 S1+ *3	65 S1- *3
	MB 480-636617/3-A	103	102	100	104
	MB 480-636757/2-A	98	101	99	98
	MB 480-636951/2-A	103	102	100	100
	MB 480-637228/3-A	103	102	99	100
	LCS 480-636617/1-A	98	104	100	98
	LCS 480-636757/1-A	98	100	102	98
	LCS 480-636951/1-A	98	100	102	99
	LCS 480-637228/1-A	100	107	102	97
	LCSD 480-636617/2-A	98	103	98	99
SB6 (1-2) MS	480-200248-18 MS	112	100	156 S1+ *3	61 S1- *3
SB6 (1-2) MSD	480-200248-18 MSD	109	97	161 S1+ *3	62 S1- *3

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	60-140
DCA = 1,2-Dichloroethane-d4 (Surr)	64-126
TOL = Toluene-d8 (Surr)	71-125
BFB = 4-Bromofluorobenzene (Surr)	72-126

Column to be used to flag recovery values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-200248-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: M05343.D

Lab ID: 480-200248-18 MS Client ID: SB6 (1-2) MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	81.8	ND	109	133	74-127	F1 *3
1,1,1-Trichloroethane	81.8	ND	87.7	107	77-121	
1,1,2,2-Tetrachloroethane	81.8	ND	144	176	80-120	F1 *3
1,1,2-Trichloro-1,2,2-trifluoroethane	81.8	ND	88.4	108	60-140	
1,1,2-Trichloroethane	81.8	ND	80.5	98	78-122	*3
1,1-Dichloroethane	81.8	ND	75.9	93	73-126	
1,1-Dichloroethene	81.8	ND	59.0	72	59-125	
1,2,4-Trichlorobenzene	81.8	ND	6.00 J	7	64-120	F1 *3
1,2,4-Trimethylbenzene	81.8	ND	52.0	64	74-120	F1 *3
1,2-Dibromo-3-Chloropropane	81.8	ND	73.8	90	63-124	*3
1,2-Dibromoethane	81.8	ND	34.5	42	78-120	F1 *3
1,2-Dichlorobenzene	81.8	ND	26.8	33	75-120	F1 *3
1,2-Dichloroethane	81.8	ND	43.6	53	77-122	F1
1,2-Dichloropropane	81.8	ND	61.6	75	75-124	
1,3,5-Trimethylbenzene	81.8	ND	80.4	98	74-120	*3
1,3-Dichlorobenzene	81.8	ND	20.7	25	74-120	F1 *3
1,4-Dichlorobenzene	81.8	ND	15.9	19	73-120	F1 *3
2-Butanone (MEK)	409	ND	286	70	70-134	
2-Hexanone	409	ND	293	72	59-130	*3
4-Methyl-2-pentanone (MIBK)	409	ND	512	125	65-133	*3
Acetone	409	ND	321	78	61-137	
Benzene	81.8	ND	60.0	73	79-127	F1
Bromodichloromethane	81.8	ND	49.7	61	80-122	F1
Bromoform	81.8	ND	45.5	56	68-126	F1 *3
Bromomethane	81.8	ND	91.0	111	37-149	
Carbon disulfide	81.8	ND	38.0	46	64-131	F1
Carbon tetrachloride	81.8	ND	78.8	96	75-135	
Chlorobenzene	81.8	ND	28.6	35	76-124	F1 *3
Chloroethane	81.8	ND	87.0	106	69-135	
Chloroform	81.8	ND	64.6	79	80-120	F1
Chloromethane	81.8	ND	90.0	110	63-127	
cis-1,2-Dichloroethene	81.8	ND	42.5	52	80-120	F1
cis-1,3-Dichloropropene	81.8	ND	20.9	26	80-120	F1
Cyclohexane	81.8	ND	65.1	80	65-120	
Dibromochloromethane	81.8	ND	64.8	79	76-125	*3
Dichlorodifluoromethane	81.8	ND	82.2	100	57-142	
Ethylbenzene	81.8	ND	35.3	43	80-120	F1 *3
Isopropylbenzene	81.8	ND	98.8	121	72-120	F1 *3
m,p-Xylene	81.8	ND	37.0	45	70-130	F1 *3
Methyl acetate	164	ND	166	101	55-136	
Methyl tert-butyl ether	81.8	ND	90.2	110	63-125	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-200248-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: M05343.D

Lab ID: 480-200248-18 MS Client ID: SB6 (1-2) MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Methylcyclohexane	81.8	ND	38.8	47	60-140	F1
Methylene Chloride	81.8	ND	65.2	80	61-127	
n-Butylbenzene	81.8	ND	13.0	16	70-120	F1 *3
N-Propylbenzene	81.8	ND	36.5	45	70-130	F1 *3
o-Xylene	81.8	ND	47.6	58	70-130	F1 *3
sec-Butylbenzene	81.8	ND	61.6	75	74-120	*3
Styrene	81.8	ND	17.4	21	80-120	F1 *3
tert-Butylbenzene	81.8	ND	139	170	73-120	F1 *3
Tetrachloroethene	81.8	ND	46.2	56	74-122	F1 *3
Toluene	81.8	ND	79.6	97	74-128	*3
trans-1,2-Dichloroethene	81.8	ND	37.6	46	78-126	F1
trans-1,3-Dichloropropene	81.8	ND	22.6	28	73-123	F1 *3
Trichloroethene	81.8	ND	29.2	36	77-129	F1
Trichlorofluoromethane	81.8	ND	92.5	113	65-146	
Vinyl chloride	81.8	ND	76.5	94	61-133	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-200248-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: M05344.D

Lab ID: 480-200248-18 MSD Client ID: SB6 (1-2) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	83.0	112	135	3	30	74-127	F1 *3
1,1,1-Trichloroethane	83.0	84.4	102	4	30	77-121	
1,1,2,2-Tetrachloroethane	83.0	161	193	11	30	80-120	F1 *3
1,1,2-Trichloro-1,2,2-trifluoroethane	83.0	81.8	99	8	30	60-140	
1,1,2-Trichloroethane	83.0	85.1	102	5	30	78-122	*3
1,1-Dichloroethane	83.0	72.4	87	5	30	73-126	
1,1-Dichloroethene	83.0	54.2	65	9	30	59-125	
1,2,4-Trichlorobenzene	83.0	6.51 J	8	8	30	64-120	*3 F1
1,2,4-Trimethylbenzene	83.0	54.4	66	5	30	74-120	*3 F1
1,2-Dibromo-3-Chloropropane	83.0	73.1	88	1	30	63-124	*3
1,2-Dibromoethane	83.0	36.1	44	5	30	78-120	*3 F1
1,2-Dichlorobenzene	83.0	27.1	33	1	30	75-120	*3 F1
1,2-Dichloroethane	83.0	43.5	52	0	30	77-122	F1
1,2-Dichloropropane	83.0	63.7	77	3	30	75-124	
1,3,5-Trimethylbenzene	83.0	85.2	103	6	30	74-120	*3
1,3-Dichlorobenzene	83.0	22.1	27	7	30	74-120	*3 F1
1,4-Dichlorobenzene	83.0	17.3	21	8	30	73-120	*3 F1
2-Butanone (MEK)	415	284	68	1	30	70-134	F1
2-Hexanone	415	304	73	4	30	59-130	*3
4-Methyl-2-pentanone (MIBK)	415	527	127	3	30	65-133	*3
Acetone	415	303	73	6	30	61-137	
Benzene	83.0	55.1	66	9	30	79-127	F1
Bromodichloromethane	83.0	50.8	61	2	30	80-122	F1
Bromoform	83.0	47.9	58	5	30	68-126	*3 F1
Bromomethane	83.0	76.9	93	17	30	37-149	
Carbon disulfide	83.0	32.7	39	15	30	64-131	F1
Carbon tetrachloride	83.0	76.0	92	4	30	75-135	
Chlorobenzene	83.0	29.6	36	3	30	76-124	*3 F1
Chloroethane	83.0	79.5	96	9	30	69-135	
Chloroform	83.0	62.0	75	4	30	80-120	F1
Chloromethane	83.0	81.7	98	10	30	63-127	
cis-1,2-Dichloroethene	83.0	38.5	46	10	30	80-120	F1
cis-1,3-Dichloropropene	83.0	22.1	27	6	30	80-120	F1
Cyclohexane	83.0	66.1	80	2	30	65-120	
Dibromochloromethane	83.0	71.6	86	10	30	76-125	*3
Dichlorodifluoromethane	83.0	74.4	90	10	30	57-142	
Ethylbenzene	83.0	37.4	45	6	30	80-120	*3 F1
Isopropylbenzene	83.0	108	130	9	30	72-120	F1 *3
m,p-Xylene	83.0	34.1	41	8	30	70-130	*3 F1
Methyl acetate	166	159	96	4	30	55-136	
Methyl tert-butyl ether	83.0	88.1	106	2	30	63-125	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-200248-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: M05344.D

Lab ID: 480-200248-18 MSD Client ID: SB6 (1-2) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylcyclohexane	83.0	42.8	52	10	30	60-140	F1
Methylene Chloride	83.0	58.8	71	10	30	61-127	
n-Butylbenzene	83.0	15.7	19	19	30	70-120	*3 F1
N-Propylbenzene	83.0	43.5	52	18	30	70-130	*3 F1
o-Xylene	83.0	47.6	57	0	30	70-130	*3 F1
sec-Butylbenzene	83.0	69.0	83	11	30	74-120	*3
Styrene	83.0	17.1	21	2	30	80-120	*3 F1
tert-Butylbenzene	83.0	153	184	9	30	73-120	F1 *3
Tetrachloroethene	83.0	50.1	60	8	30	74-122	*3 F1
Toluene	83.0	63.2	76	23	30	74-128	*3
trans-1,2-Dichloroethene	83.0	34.2	41	9	30	78-126	F1
trans-1,3-Dichloropropene	83.0	23.1	28	2	30	73-123	*3 F1
Trichloroethene	83.0	29.5	35	1	30	77-129	F1
Trichlorofluoromethane	83.0	85.1	102	8	30	65-146	
Vinyl chloride	83.0	68.0	82	12	30	61-133	

Column to be used to flag recovery and RPD values

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-200248-1

SDG No.:

Sample No.: CCVIS 480-636948/2 Date Analyzed: 08/10/2022 22:44

Instrument ID: HP5977M GC Column: ZB-624 (30) VOA ID: 0.25(mm)

Lab File ID (Standard): M05319.D Heated Purge: (Y/N) Y

Calibration ID: 43795

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		145206	5.23	286990	8.21	307302	10.62
UPPER LIMIT		290412	5.73	573980	8.71	614604	11.12
LOWER LIMIT		72603	4.73	143495	7.71	153651	10.12
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 480-636948/3		143901	5.23	287606	8.22	309452	10.62
LCS 480-636757/1-A		147807	5.23	297947	8.22	312770	10.62
MB 480-636757/2-A		141030	5.23	289309	8.22	308511	10.62
480-200248-6	FDUP2_072922	131529	5.23	256324	8.22	254459	10.62
480-200248-18	SB6 (1-2)	84480	5.23	92868*3	8.22	48175*3	10.62
480-200248-18 MS	SB6 (1-2) MS	96925	5.23	103884*3	8.22	45701*3	10.62
480-200248-18 MSD	SB6 (1-2) MSD	103875	5.23	111995*3	8.22	48493*3	10.62

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-200248-1

SDG No.:

Sample No.: CCVIS 480-636985/2 Date Analyzed: 08/11/2022 10:30

Instrument ID: HP5977M GC Column: ZB-624 (30) VOA ID: 0.25(mm)

Lab File ID (Standard): M05347.D Heated Purge: (Y/N) Y

Calibration ID: 43795

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		139120	5.23	266930	8.21	281121	10.62
UPPER LIMIT		278240	5.73	533860	8.71	562242	11.12
LOWER LIMIT		69560	4.73	133465	7.71	140561	10.12
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 480-636985/3		139487	5.23	280116	8.21	294729	10.62
LCS 480-636951/1-A		143881	5.23	282844	8.22	305381	10.62
MB 480-636951/2-A		134124	5.23	266825	8.22	294873	10.62
480-200248-1	SB6 (0-0.5)	100174	5.23	127962*3	8.22	73587*3	10.62
480-200248-2	SB6 (0.5-1)	90180	5.23	100218*3	8.22	49307*3	10.62
480-200248-7	SS5 (0-2)	107665	5.23	167698	8.22	117200*3	10.62
480-200248-13	SS6 (0-2)	105919	5.23	153824	8.22	101342*3	10.62

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-200248-1

SDG No.:

Sample No.: CCVIS 480-637219/2 Date Analyzed: 08/12/2022 11:38

Instrument ID: HP5977M GC Column: ZB-624 (30) VOA ID: 0.25(mm)

Lab File ID (Standard): M05410.D Heated Purge: (Y/N) Y

Calibration ID: 43795

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		141062	5.23	280803	8.22	292574	10.62
UPPER LIMIT		282124	5.73	561606	8.72	585148	11.12
LOWER LIMIT		70531	4.73	140402	7.72	146287	10.12
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 480-637219/3		139156	5.23	265504	8.21	287956	10.62
LCS 480-637228/1-A		141326	5.23	278103	8.22	293761	10.62
MB 480-637228/3-A		135450	5.23	270024	8.22	299623	10.62
480-200248-14	SS6 (0-6)	105628	5.23	147263	8.21	88625*3	10.62
480-200248-15	SS6 (6-12)	119937	5.23	187277	8.22	117941*3	10.62
480-200248-16	SS6 (12-24)	112061	5.23	169742	8.22	113904*3	10.62
480-200248-17	FDUP_072922	95906	5.23	122777*3	8.22	74702*3	10.62

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-200248-1

SDG No.:

Lab Sample ID: CCVIS 480-635636/4 Calibration Date: 08/01/2022 11:03

Instrument ID: HP5973S Calib Start Date: 06/15/2022 15:05

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 06/15/2022 17:48

Lab File ID: S4251.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.980	1.739	0.1000	22.0	25.0	-12.2	50.0
Chloromethane	Ave	2.164	2.032	0.1000	23.5	25.0	-6.1	20.0
Vinyl chloride	Ave	1.868	1.903	0.1000	25.5	25.0	1.9	20.0
Butadiene	Ave	1.882	1.876		24.9	25.0	-0.3	20.0
Bromomethane	Ave	1.275	1.343	0.1000	26.3	25.0	5.3	50.0
Chloroethane	Ave	1.201	1.240	0.1000	25.8	25.0	3.3	50.0
Trichlorofluoromethane	Ave	2.653	2.991	0.1000	28.2	25.0	12.7	20.0
Dichlorofluoromethane	Ave	2.793	2.880		25.8	25.0	3.1	20.0
Ethyl ether	Ave	1.541	1.500		24.3	25.0	-2.6	20.0
Acrolein	Ave	0.2284	0.1930		106	125	-15.5	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.314	1.402	0.1000	26.7	25.0	6.7	20.0
1,1-Dichloroethene	Ave	1.335	1.442	0.1000	27.0	25.0	8.0	20.0
Acetone	Ave	0.7380	0.7289	0.1000	123	125	-1.2	50.0
Iodomethane	Ave	2.419	2.667		27.6	25.0	10.2	20.0
Carbon disulfide	Ave	4.458	4.235	0.1000	23.7	25.0	-5.0	20.0
Allyl chloride	Ave	2.474	2.433		24.6	25.0	-1.6	20.0
Methyl acetate	Ave	1.750	1.393	0.1000	39.8	50.0	-20.4	50.0
Methylene Chloride	Lin1		1.774	0.1000	27.2	25.0	8.9	20.0
2-Methyl-2-propanol	Ave	0.2074	0.1925		232	250	-7.2	50.0
Methyl tert-butyl ether	Ave	5.478	5.163	0.1000	23.6	25.0	-5.8	20.0
trans-1,2-Dichloroethene	Ave	1.587	1.746	0.1000	27.5	25.0	10.0	20.0
Acrylonitrile	Ave	0.7954	0.7511		236	250	-5.6	20.0
Hexane	Ave	2.650	2.718		25.6	25.0	2.6	20.0
1,1-Dichloroethane	Ave	2.907	3.100	0.2000	26.7	25.0	6.6	20.0
Vinyl acetate	Ave	4.343	3.236		37.3	50.0	-25.5*	20.0
2,2-Dichloropropane	Ave	2.054	2.204		26.8	25.0	7.3	20.0
cis-1,2-Dichloroethene	Ave	1.745	1.889	0.1000	27.1	25.0	8.2	20.0
2-Butanone (MEK)	Ave	1.088	0.9184	0.1000	106	125	-15.6	20.0
Chlorobromomethane	Ave	0.9268	1.012		27.3	25.0	9.2	20.0
Tetrahydrofuran	Ave	0.6595	0.5665		43.0	50.0	-14.1	20.0
Chloroform	Ave	2.964	3.154	0.2000	26.6	25.0	6.4	20.0
1,1,1-Trichloroethane	Ave	2.547	2.729	0.1000	26.8	25.0	7.1	20.0
Cyclohexane	Ave	2.855	2.979	0.1000	26.1	25.0	4.3	20.0
Carbon tetrachloride	Ave	2.204	2.335	0.1000	26.5	25.0	5.9	20.0
1,1-Dichloropropene	Ave	2.203	2.461		27.9	25.0	11.7	20.0
Benzene	Ave	6.641	7.105	0.5000	26.7	25.0	7.0	20.0
Isobutyl alcohol	Ave	0.0763	0.0627		514	625	-17.8	50.0
1,2-Dichloroethane	Ave	2.636	2.603	0.1000	24.7	25.0	-1.3	20.0
n-Heptane	Ave	3.091	2.966		24.0	25.0	-4.1	20.0
Trichloroethene	Ave	1.687	1.875	0.2000	27.8	25.0	11.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-200248-1

SDG No.:

Lab Sample ID: CCVIS 480-635717/4 Calibration Date: 08/01/2022 23:53

Instrument ID: HP5973S Calib Start Date: 06/15/2022 15:05

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 06/15/2022 17:48

Lab File ID: S4282.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.2105	0.1447	0.0500	17.2	25.0	-31.2	50.0
1,2,4-Trichlorobenzene	Ave	1.557	1.486	0.2000	23.9	25.0	-4.5	20.0
Hexachlorobutadiene	Ave	0.6966	0.7325		26.3	25.0	5.2	20.0
Naphthalene	Ave	4.168	3.572		21.4	25.0	-14.3	20.0
1,2,3-Trichlorobenzene	Ave	1.536	1.431		23.3	25.0	-6.8	20.0
Dibromofluoromethane (Surr)	Ave	1.290	1.347		26.1	25.0	4.4	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.8484	0.8333		24.6	25.0	-1.8	20.0
Toluene-d8 (Surr)	Ave	2.499	2.551		25.5	25.0	2.1	20.0
4-Bromofluorobenzene (Surr)	Ave	0.8493	0.9077		26.7	25.0	6.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-200248-1

SDG No.:

Lab Sample ID: CCVIS 480-637219/2 Calibration Date: 08/12/2022 11:38

Instrument ID: HP5977M Calib Start Date: 08/09/2022 16:17

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 08/09/2022 18:42

Lab File ID: M05410.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.199	1.153	0.1000	48.1	50.0	-3.8	50.0
Chloromethane	Ave	2.073	2.047	0.1000	49.4	50.0	-1.3	20.0
Vinyl chloride	Ave	1.288	1.395	0.1000	54.1	50.0	8.3	20.0
Butadiene	Ave	1.375	1.408		51.2	50.0	2.4	20.0
Bromomethane	Ave	0.6794	0.7731	0.1000	56.9	50.0	13.8	50.0
Chloroethane	Ave	0.6790	0.8625	0.1000	63.5	50.0	27.0	50.0
Trichlorofluoromethane	Ave	1.396	1.650	0.1000	59.1	50.0	18.2	20.0
Dichlorofluoromethane	Ave	1.727	2.135		61.8	50.0	23.7*	20.0
Ethyl ether	Ave	1.016	1.148		56.5	50.0	13.1	20.0
Acrolein	Ave	0.1650	0.1633		247	250	-1.1	50.0
1,1-Dichloroethene	Ave	0.9568	0.9852	0.1000	51.5	50.0	3.0	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.052	1.064	0.1000	50.5	50.0	1.1	20.0
Acetone	Ave	0.5229	0.5285	0.1000	253	250	1.1	50.0
Iodomethane	Ave	1.907	1.868		49.0	50.0	-2.1	20.0
Carbon disulfide	Ave	3.381	3.406	0.1000	50.4	50.0	0.7	20.0
Allyl chloride	Ave	2.080	2.179		52.4	50.0	4.7	20.0
Methyl acetate	Ave	1.162	1.146	0.1000	98.6	100	-1.4	50.0
Methylene Chloride	Lin1		1.280	0.1000	50.5	50.0	1.0	20.0
2-Methyl-2-propanol	Ave	0.1657	0.1631		492	500	-1.6	50.0
Methyl tert-butyl ether	Ave	3.435	3.327	0.1000	48.4	50.0	-3.1	20.0
trans-1,2-Dichloroethene	Ave	1.176	1.204	0.1000	51.2	50.0	2.4	20.0
Acrylonitrile	Ave	0.5943	0.6022		507	500	1.3	20.0
Hexane	Ave	1.848	1.934		52.3	50.0	4.7	20.0
1,1-Dichloroethane	Ave	2.188	2.251	0.2000	51.4	50.0	2.9	20.0
Vinyl acetate	Ave	2.742	2.873		105	100	4.8	20.0
2,2-Dichloropropane	Ave	1.284	1.333		51.9	50.0	3.8	20.0
cis-1,2-Dichloroethene	Ave	1.340	1.368	0.1000	51.0	50.0	2.0	20.0
2-Butanone (MEK)	Ave	0.7451	0.7852	0.1000	263	250	5.4	20.0
Chlorobromomethane	Ave	0.7370	0.7127		48.4	50.0	-3.3	20.0
Tetrahydrofuran	Ave	0.5184	0.5150		99.3	100	-0.7	20.0
Chloroform	Ave	2.116	2.105	0.2000	49.7	50.0	-0.5	20.0
Cyclohexane	Ave	2.213	2.361	0.1000	53.3	50.0	6.7	20.0
1,1,1-Trichloroethane	Ave	1.603	1.689	0.1000	52.7	50.0	5.3	20.0
Carbon tetrachloride	Ave	1.342	1.452	0.1000	54.1	50.0	8.2	20.0
1,1-Dichloropropene	Ave	1.450	1.559		53.8	50.0	7.5	20.0
Benzene	Ave	4.591	4.678	0.5000	50.9	50.0	1.9	20.0
Isobutyl alcohol	Ave	0.0709	0.0715		1260	1250	0.8	50.0
1,2-Dichloroethane	Ave	1.651	1.637	0.1000	49.6	50.0	-0.9	20.0
n-Heptane	Ave	2.064	2.238		54.2	50.0	8.4	20.0
Trichloroethene	Ave	1.160	1.218	0.2000	52.5	50.0	5.0	20.0

FORM VIII
PFAS INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Burlington Job No.: 480-200248-1

SDG No.:

Sample No.: ICIS 200-182319/8 Date Analyzed: 08/03/2022 13:24

Instrument ID: LC812 GC Column: C-18 ID: 4.6(mm)

Lab File ID (Standard): PA220803ICAL08.d Heated Purge: (Y/N) N

Calibration ID: 48756

		13PFOA					
		AREA #	RT #	#	RT #	#	RT #
INITIAL CALIBRATION MID-POINT		1727269	3.48				
UPPER LIMIT		2590904	3.68				
LOWER LIMIT		863635	3.28				
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICB 200-182319/11		1738669	3.48				
ICV 200-182319/12		2802391*3	3.48				
CCVLIS 200-182364/5		1733343	3.47				
CCVLIS 200-182412/5		1819621	3.47				

13PFOA = 13C2 PFOA

Area Limit = 50%-150% of internal standard area
RT Limit = ± 0.2 minutes of internal standard RT

Column used to flag values outside QC limits

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 480-200248-1

SDG No.:

Instrument ID: LC812 Start Date: 08/05/2022 17:17

Analysis Batch Number: 182423 End Date: 08/05/2022 21:31

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 200-182423/1		08/05/2022 17:17	1	PA220805B01.d	C-18 4.6(mm)
ZZZZZ		08/05/2022 17:25	1		C-18 4.6(mm)
ZZZZZ		08/05/2022 17:34	1		C-18 4.6(mm)
ZZZZZ		08/05/2022 17:42	1		C-18 4.6(mm)
ZZZZZ		08/05/2022 17:50	1		C-18 4.6(mm)
ZZZZZ		08/05/2022 17:58	1		C-18 4.6(mm)
MB 200-182393/1-A		08/05/2022 18:06	1	PA220805B07.d	C-18 4.6(mm)
LCS 200-182393/2-A		08/05/2022 18:15	1	PA220805B08.d	C-18 4.6(mm)
ZZZZZ		08/05/2022 18:23	1		C-18 4.6(mm)
ZZZZZ		08/05/2022 18:31	1		C-18 4.6(mm)
ZZZZZ		08/05/2022 18:39	1		C-18 4.6(mm)
ZZZZZ		08/05/2022 18:47	1		C-18 4.6(mm)
ZZZZZ		08/05/2022 18:56	1		C-18 4.6(mm)
ZZZZZ		08/05/2022 19:04	1		C-18 4.6(mm)
ZZZZZ		08/05/2022 19:12	1		C-18 4.6(mm)
ZZZZZ		08/05/2022 19:20	1		C-18 4.6(mm)
CCV 200-182423/17		08/05/2022 19:28	1	PA220805B17.d	C-18 4.6(mm)
ZZZZZ		08/05/2022 19:36	1		C-18 4.6(mm)
ZZZZZ		08/05/2022 19:45	1		C-18 4.6(mm)
ZZZZZ		08/05/2022 19:53	1		C-18 4.6(mm)
ZZZZZ		08/05/2022 20:01	1		C-18 4.6(mm)
ZZZZZ		08/05/2022 20:09	1		C-18 4.6(mm)
ZZZZZ		08/05/2022 20:17	1		C-18 4.6(mm)
ZZZZZ		08/05/2022 20:26	1		C-18 4.6(mm)
480-200248-1	SB6 (0-0.5)	08/05/2022 20:34	1	PA220805B25.d	C-18 4.6(mm)
480-200248-2	SB6 (0.5-1)	08/05/2022 20:42	1	PA220805B26.d	C-18 4.6(mm)
480-200248-3	SB6 (13-15)	08/05/2022 20:50	1	PA220805B27.d	C-18 4.6(mm)
480-200248-17	FDUP_072922	08/05/2022 20:58	1	PA220805B28.d	C-18 4.6(mm)
480-200248-18	SB6 (1-2)	08/05/2022 21:07	1	PA220805B29.d	C-18 4.6(mm)
480-200248-18 MS	SB6 (1-2) MS	08/05/2022 21:15	1	PA220805B30.d	C-18 4.6(mm)
480-200248-18 MSD	SB6 (1-2) MSD	08/05/2022 21:23	1	PA220805B31.d	C-18 4.6(mm)
CCV 200-182423/32		08/05/2022 21:31	1	PA220805B32.d	C-18 4.6(mm)

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200248-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-636171/6 08/03/2022 11:58		CCB 480-636171/19 08/03/2022 22:54		CCB 480-636171/24 08/03/2022 23:41		CCB 480-636171/36 08/04/2022 00:27	
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND		ND		ND		ND	
Antimony	0.020	ND		ND		ND		ND	
Arsenic	0.015	ND		ND		ND		ND	
Barium	0.0020	ND		ND		ND		ND	
Beryllium	0.0020	0.000360	J	ND		ND		ND	
Cadmium	0.0020	ND		ND		ND		ND	
Calcium	0.50	ND		ND		ND		ND	
Chromium	0.0040	ND		ND		ND		ND	
Cobalt	0.0040	ND		ND		ND		ND	
Iron	0.050	ND		ND		ND		ND	
Lead	0.010	ND		ND		ND		ND	
Magnesium	0.20	ND		ND		ND		ND	
Manganese	0.0030	ND		0.000670	J	ND		ND	
Nickel	0.010	ND		ND		ND		ND	
Selenium	0.025	ND		ND		ND		ND	
Silver	0.0060	ND		ND		ND		ND	
Thallium	0.020	ND		ND		ND		ND	
Vanadium	0.0050	ND		ND		ND		ND	
Zinc	0.010	ND		ND		ND		ND	
Copper	0.010	ND		0.00285	J	0.00261	J	ND	
Potassium	0.50	ND		ND		ND		ND	
Sodium	1.0	ND		ND		ND		ND	

Italicized analytes were not requested for this

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200248-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: MB 480-635895/1-A

Instrument Code: ICAP2 Batch No.: 636171

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			6010C
7440-36-0	Antimony	ND			6010C
7440-38-2	Arsenic	ND			6010C
7440-39-3	Barium	ND			6010C
7440-41-7	Beryllium	ND			6010C
7440-43-9	Cadmium	ND			6010C
7440-70-2	Calcium	ND			6010C
7440-47-3	Chromium	ND			6010C
7440-48-4	Cobalt	ND			6010C
7439-89-6	Iron	ND			6010C
7439-92-1	Lead	ND			6010C
7439-95-4	Magnesium	ND			6010C
7439-96-5	Manganese	0.000510	J		6010C
7440-02-0	Nickel	ND			6010C
7782-49-2	Selenium	ND			6010C
7440-22-4	Silver	ND			6010C
7440-28-0	Thallium	ND			6010C
7440-62-2	Vanadium	ND			6010C
7440-66-6	Zinc	ND			6010C

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200248-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 480-636004/1-A

Instrument Code: ICAP1 Batch No.: 636339

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			6010C
7440-36-0	Antimony	ND			6010C
7440-38-2	Arsenic	ND			6010C
7440-39-3	Barium	ND			6010C
7440-41-7	Beryllium	ND			6010C
7440-43-9	Cadmium	ND			6010C
7440-70-2	Calcium	4.53	J		6010C
7440-47-3	Chromium	ND			6010C
7440-48-4	Cobalt	ND			6010C
7440-50-8	Copper	ND			6010C
7439-89-6	Iron	ND			6010C
7439-92-1	Lead	ND			6010C
7439-95-4	Magnesium	2.42	J		6010C
7439-96-5	Manganese	0.132	J		6010C
7440-02-0	Nickel	ND			6010C
7440-09-7	Potassium	ND			6010C
7782-49-2	Selenium	ND			6010C
7440-22-4	Silver	ND			6010C
7440-23-5	Sodium	ND			6010C
7440-28-0	Thallium	ND			6010C
7440-62-2	Vanadium	ND			6010C
7440-66-6	Zinc	ND			6010C

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200248-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 480-636010/1-A

Instrument Code: ICAP2 Batch No.: 636536

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	8.75	J		6010C
7440-36-0	Antimony	ND			6010C
7440-38-2	Arsenic	ND			6010C
7440-39-3	Barium	0.116	J		6010C
7440-41-7	Beryllium	ND			6010C
7440-43-9	Cadmium	ND			6010C
7440-70-2	Calcium	ND			6010C
7440-47-3	Chromium	ND			6010C
7440-48-4	Cobalt	ND			6010C
7440-50-8	Copper	ND			6010C
7439-89-6	Iron	ND			6010C
7439-95-4	Magnesium	2.51	J		6010C
7440-02-0	Nickel	ND			6010C
7782-49-2	Selenium	ND			6010C
7440-22-4	Silver	ND			6010C
7440-23-5	Sodium	ND			6010C
7440-28-0	Thallium	ND			6010C
7440-62-2	Vanadium	ND			6010C
7440-66-6	Zinc	1.46	J		6010C

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200248-1

SDG No.:

Lab Sample ID: ICSA 480-636339/8 Instrument ID: ICAP1

Lab File ID: I1080422A-12.asc ICS Source: MEI_MSS_ICSA_00044

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**500**	**517**	**103**
Antimony		**-0.0004**	
Arsenic		**0.0036**	
Barium	**0.0120**	**0.0142**	
Beryllium		**0.0001**	
Cadmium		**0.0008**	
Calcium	**500**	**472**	**94**
Chromium		**0.0016**	
Cobalt		**-0.0005**	
Copper		**0.0042**	
Iron	**200**	**191**	**95**
Lead		**0.0012**	
Magnesium	**500**	**524**	**105**
Manganese		**0.0024**	
Nickel		**0.0010**	
Potassium		**0.0143**	
Selenium		**0.0022**	
Silver		**-0.0003**	
Sodium		**0.0659**	
Thallium		**-0.0054**	
Vanadium		**0.0005**	
Zinc		**0.0029**	
Boron		*-0.0013*	
Lithium		*0.0074*	
Molybdenum		*-0.0018*	
Tin		*-0.0044*	
Titanium		*0.0027*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200248-1

SDG No.:

Lab Sample ID: ICSA 480-636347/8 Instrument ID: ICAP1

Lab File ID: I1080422A-8.asc ICS Source: MEI_MSS_ICSA_00044

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Copper		**0.0042**	
Potassium		**0.0143**	
Sodium		**0.0659**	
Aluminum	*500*	*517*	*103*
Antimony		*-0.0004*	
Arsenic		*0.0036*	
Barium	*0.0120*	*0.0142*	
Beryllium		*0.0001*	
Boron		*-0.0013*	
Cadmium		*0.0008*	
Calcium	*500*	*472*	*94*
Chromium		*0.0016*	
Cobalt		*-0.0005*	
Iron	*200*	*191*	*95*
Lead		*0.0012*	
Lithium		*0.0074*	
Magnesium	*500*	*524*	*105*
Manganese		*0.0024*	
Molybdenum		*-0.0018*	
Nickel		*0.0010*	
Selenium		*0.0022*	
Silicon		*-0.0414*	
Silver		*-0.0003*	
Sulfur		*-0.167*	
Thallium		*-0.0054*	
Tin		*-0.0044*	
Titanium		*0.0027*	
Vanadium		*0.0005*	
Zinc		*0.0029*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200248-1

SDG No.:

Lab Sample ID: ICSA 480-637198/8 Instrument ID: ICAP1

Lab File ID: I1081122A-2.asc ICS Source: MEI_MSS_ICSA_00044

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**0.0036**	
Cadmium		**0.0008**	
Iron	**200**	**199**	**100**
Lead		**-0.0015**	
Manganese		**0.0022**	
Nickel		**0.0010**	
Potassium		**0.335**	
Vanadium		**-0.0003**	
Aluminum	*500*	*520*	*104*
Arsenic		*0.0009*	
Barium	*0.0120*	*0.0140*	
Beryllium		*0.0001*	
Boron		*-0.0010*	
Calcium	*500*	*489*	*98*
Chromium		*0.0022*	
Cobalt		*-0.0005*	
Copper		*0.0059*	
Lithium		*0.0087*	
Magnesium	*500*	*548*	*110*
Molybdenum		*-0.0014*	
Selenium		*0.0078*	
Silver		*-0.0014*	
Sodium		*0.0658*	
Thallium		*-0.0076*	
Tin		*-0.0027*	
Titanium		*0.0025*	
Zinc		*0.0017*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200248-1

SDG No.:

Lab Sample ID: ICSA 480-636171/8 Instrument ID: ICAP2

Lab File ID: I2080322B-9.asc ICS Source: MEI_MSS_ICSA_00044

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**500**	**500**	**100**
Antimony		**0.0042**	
Arsenic		**-0.0086**	
Barium	**0.0120**	**0.0136**	
Beryllium		**-0.0003**	
Cadmium		**-0.0005**	
Calcium	**500**	**477**	**95**
Chromium		**-0.0001**	
Cobalt		**0.0000**	
Iron	**200**	**192**	**96**
Lead		**-0.0012**	
Magnesium	**500**	**532**	**106**
Manganese		**0.0024**	
Nickel		**-0.0003**	
Selenium		**-0.0002**	
Silver		**-0.0005**	
Thallium		**-0.0037**	
Vanadium		**-0.0035**	
Zinc		**0.0028**	
Boron		*-0.0011*	
Copper		*-0.0013*	
Lithium		*0.0161*	
Molybdenum		*-0.0014*	
Potassium		*0.236*	
Silicon		*-0.0229*	
Sodium		*0.0744*	
Sulfur		*-0.0420*	
Tin		*-0.0011*	
Titanium		*0.0018*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-200248-1

SDG No.:

Lab Sample ID: ICSA 480-636536/8 Instrument ID: ICAP2

Lab File ID: I2080522B-4.asc ICS Source: MEI_MSS_ICSA_00044

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**500**	**484**	**97**
Antimony		**0.0067**	
Arsenic		**-0.0091**	
Barium	**0.0120**	**0.0135**	
Beryllium		**-0.0002**	
Cadmium		**-0.0008**	
Calcium	**500**	**467**	**93**
Chromium		**-0.0009**	
Cobalt		**-0.0001**	
Copper		**0.0016**	
Iron	**200**	**185**	**92**
Magnesium	**500**	**515**	**103**
Nickel		**0.0002**	
Selenium		**0.0017**	
Silver		**-0.0009**	
Sodium		**0.227**	
Thallium		**0.0004**	
Vanadium		**-0.0033**	
Zinc		**0.0023**	
Boron		*-0.0012*	
Lead		*-0.0007*	
Lithium		*0.0011*	
Manganese		*0.0024*	
Molybdenum		*-0.0012*	
Potassium		*0.269*	
Tin		*-0.0022*	
Titanium		*0.0023*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: SB6 (1-2) MS
Lab ID: 480-200248-18 MS
Lab Name: Eurofins Buffalo
Job No.: 480-200248-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 89.9

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	16520		6570		2250	442	75-125	F1	6010C
Antimony	33.42		4.9	J	45.0	63	75-125	F1	6010C
Arsenic	59.26		17.6		45.0	92	75-125		6010C
Barium	591.7		445		45.0	326	75-125	4	6010C
Beryllium	38.66		0.70		45.0	84	75-125		6010C
Cadmium	40.61		0.74		45.0	89	75-125		6010C
Calcium	7031		4560		2250	110	75-125		6010C
Chromium	58.24		13.2		45.0	100	75-125		6010C
Cobalt	54.63		8.3		45.0	103	75-125		6010C
Copper	125.3		79.7		45.0	101	75-125		6010C
Iron	21750		19400		2250	104	75-125	4	6010C
Magnesium	4604		1910		2250	120	75-125		6010C
Manganese	373.4		291		45.0	182	75-125	4	6010C
Nickel	65.68		18.4		45.0	105	75-125		6010C
Potassium	5126		1030		2250	182	75-125	F1	6010C
Selenium	39.02		2.8	J	45.0	81	75-125		6010C
Silver	9.63		ND		11.3	86	75-125		6010C
Sodium	2188		71.2	J	2250	94	75-125		6010C
Thallium	33.88		ND		45.0	75	75-125		6010C
Vanadium	71.35		22.6		45.0	108	75-125		6010C
Zinc	373.3		333		45.0	90	75-125	4	6010C
Mercury	0.626		0.44		0.358	52	80-120	F1	7471B

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: SB6 (1-2) MSD
Lab ID: 480-200248-18 MSD
Lab Name: Eurofins Buffalo
Job No.: 480-200248-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 89.9

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	15960		2370	397	75-125	3	20	F1	6010C
Antimony	36.42		47.3	67	75-125	9	20	F1	6010C
Arsenic	61.15		47.3	92	75-125	3	20		6010C
Barium	543.8		47.3	209	75-125	8	20	4	6010C
Beryllium	41.86		47.3	87	75-125	8	20		6010C
Cadmium	43.77		47.3	91	75-125	7	20		6010C
Calcium	6022		2360	62	75-125	15	20	F1	6010C
Chromium	61.56		47.3	102	75-125	6	20		6010C
Cobalt	58.01		47.3	105	75-125	6	20		6010C
Copper	184.0		47.3	221	75-125	38	20	F1 F2	6010C
Iron	22800		2360	143	75-125	5	20	4	6010C
Magnesium	4575		2360	113	75-125	1	20		6010C
Manganese	372.1		47.3	171	75-125	0	20	4	6010C
Nickel	68.68		47.3	106	75-125	4	20		6010C
Potassium	5063		2370	171	75-125	1	20	F1	6010C
Selenium	42.08		47.3	83	75-125	8	20		6010C
Silver	10.57		11.8	89	75-125	9	20		6010C
Sodium	2328		2370	95	75-125	6	20		6010C
Thallium	38.32		47.3	81	75-125	12	20		6010C
Vanadium	75.23		47.3	111	75-125	5	20		6010C
Zinc	353.9		47.3	44	75-125	5	20	4	6010C
Mercury	0.681		0.367	66	80-120	8	20	F1	7471B

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: SB6 (1-2) PDS | Lab ID: 480-200248-18 PDS

Lab Name: Eurofins Buffalo | Job No.: 480-200248-1

SDG No.:

Matrix: Solid | Concentration Units: mg/Kg

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	8238		6570		2180	76	80-120	W	6010C
Antimony	53.48		4.9	J	43.6	111	80-120		6010C
Arsenic	65.38		17.6		43.6	109	80-120		6010C
Barium	466.4		445		43.6	NC	80-120		6010C
Beryllium	41.74		0.70		43.6	94	80-120		6010C
Cadmium	49.70		0.74		43.6	112	80-120		6010C
Calcium	6311		4560		2180	80	80-120		6010C
Chromium	56.81		13.2		43.6	100	80-120		6010C
Cobalt	63.49		8.3		43.6	127	80-120	W	6010C
Copper	118.9		79.7		43.6	90	80-120		6010C
Iron	20340		19400		2180	43	80-120	W	6010C
Magnesium	4152		1910		2180	103	80-120		6010C
Manganese	314.6		291		43.6	53	80-120	W	6010C
Nickel	72.29		18.4		43.6	124	80-120	W	6010C
Potassium	3212		1030		2180	100	80-120		6010C
Selenium	48.07		2.8	J	43.6	104	80-120		6010C
Silver	11.10		ND		10.9	102	80-120		6010C
Sodium	2238		71.2	J	2180	99	80-120		6010C
Thallium	50.14		ND		43.6	115	80-120		6010C
Vanadium	65.70		22.6		43.6	99	80-120		6010C
Zinc	357.7		333		43.6	57	80-120	W	6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 480-200248-18

SDG No:

Lab Name: Eurofins Buffalo Job No: 480-200248-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	6570		6264		4.7		6010C
Antimony	4.9	J	4.52	J	NC		6010C
Arsenic	17.6		15.52		12	V	6010C
Barium	445		421.8		5.2		6010C
Beryllium	0.70		0.709	J	NC		6010C
Cadmium	0.74		0.769	J	NC		6010C
Calcium	4560		4444		2.6		6010C
Chromium	13.2		12.40		5.8		6010C
Cobalt	8.3		6.83		18	V	6010C
Copper	79.7		74.11		7.0		6010C
Iron	19400		18410		5.2		6010C
Magnesium	1910		1846		3.1		6010C
Manganese	291		318.4		9.3		6010C
Nickel	18.4		14.92	J	19	V	6010C
Potassium	1030		1143		11	V	6010C
Selenium	2.8	J	3.13	J	NC		6010C
Silver	ND		ND		NC		6010C
Sodium	71.2	J	ND		NC		6010C
Thallium	ND		ND		NC		6010C
Vanadium	22.6		21.45		5.3		6010C
Zinc	333		321.3		3.5		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

Job Narrative
480-201563-1

Comments
No additional comments.

Revision 1
The report being provided is a revision of the original report sent on 9/27/2022. The report (revision 1) is being revised due to: Client requested a character change in sample IDs for samples FB_091222 and TB_091222.

Receipt
The samples were received on 9/13/2022 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.4º C.

Receipt Exceptions
Method 537 (modified): The following sample was received at the laboratory outside the required temperature criteria: FB_091222 (480-201563-6). This does not meet regulatory requirements. The cooler was receievd with a corrected temperature of 10.9C. There was water in the cooler to indicate melted ice.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-641153 recovered outside acceptance criteria, low biased, for 2-Butanone (MEK), 2-Hexanone, Vinyl chloride, Chloromethane, and 4-Methyl-2-pentanone (MIBK) . A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported. The associated samples are impacted: FB_091222 (480-201563-6) and TB_091222 (480-201563-7).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-641153 recovered above the upper control limit for Chlorodibromomethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: FB_091222 (480-201563-6) and TB_091222 (480-201563-7).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-641452 recovered above the upper control limit for Isopropylbenzene, n-Butylbenzene, N-Propylbenzene, tert-Butylbenzene and Vinyl chloride. The sample(s) associated with this CCV were non-detects above the reporting limits for the affected analytes; therefore, the data have been reported. The associated sample is impacted: SS1 (12-24) (480-201563-4).

Method 8260C: Internal standard and surrogate response for the following samples were outside control limits: SS1 (0-2) (480-201563-1), SS1 (0-6) (480-201563-2), SS1 (6-12) (480-201563-3) and FDUP_091222 (480-201563-5). The samples were re-analyzed and responses were outside control limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270D: The following samples were diluted due to color , appearance, and viscosity: SS1 (0-2) (480-201563-1), SS1 (0-6) (480-201563-2) and SS1 (6-12) (480-201563-3). Elevated reporting limits (RL) are provided.

Method 8270D: The following compound has been spiked at a level above the upper range of the initial calibration: Benzaldehyde. The laboratory control sample (LCS) associated with preparation batch 480-641440 and analytical batch 480-641495 recovered within acceptable limits for this analyte and has been qualified with an "E" flag.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method 6010C: The following samples were diluted due to the presence of Total Iron which interferes with Chromium, Nickel, Lead, Manganese, and Vanadium: SS1 (12-24) (480-201563-4) and FDUP_091222 (480-201563-5). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

LCMS
Method 537 (modified): The method blank for preparation batch 200-183583 and analytical batch 200-183606 contained Perfluorododecanoic acid (PFDoA), Perfluorotridecanoic acid (PFTriA), Perfluoroheptanesulfonic acid (PFHpS) and Perfluorodecanesulfonic acid (PFDS) above the method detection limit. This target analyte concentration was less than half the reporting limit (1/2RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 537 (modified): Method 537 (modified): The “I” qualifier associated with sample SS1 (0-2) (480-201563-1) is applied because the transition mass ratio for the indicated analyte(s) was outside of the established ratio limits. The qualitative identification has some degree of uncertainty, however analyst judgment was used to positively identify the analyte(s).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-201563-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): ZB-624 (30) ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
SS1 (0-2)	480-201563-1	104	108	129 S1+	78
SS1 (0-6)	480-201563-2	105	109	136 S1+	78
SS1 (6-12)	480-201563-3	102	107	132 S1+	72
SS1 (12-24)	480-201563-4	102	108	120	84
FDUP_091222	480-201563-5	107	112	128 S1+	77
	MB 480-641451/2-A	97	101	106	98
	MB 480-641652/2-A	97	103	107	98
	LCS 480-641451/1-A	100	103	108	95
	LCS 480-641652/1-A	96	100	107	94

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	60-140
DCA = 1,2-Dichloroethane-d4 (Surr)	64-126
TOL = Toluene-d8 (Surr)	71-125
BFB = 4-Bromofluorobenzene (Surr)	72-126

Column to be used to flag recovery values

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-201563-1

SDG No.:

Sample No.: CCVIS 480-641653/4 Date Analyzed: 09/15/2022 19:39

Instrument ID: HP5977M GC Column: ZB-624 (30) VOA ID: 0.25(mm)

Lab File ID (Standard): M06199.D Heated Purge: (Y/N) Y

Calibration ID: 43905

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		413763	5.23	854777	8.22	833269	10.62
UPPER LIMIT		827526	5.73	1709554	8.72	1666538	11.12
LOWER LIMIT		206882	4.73	427389	7.72	416635	10.12
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 480-641653/5		398807	5.23	813959	8.22	824550	10.62
LCS 480-641652/1-A		402433	5.23	826466	8.22	830645	10.62
MB 480-641652/2-A		385737	5.23	798530	8.22	854805	10.62
480-201563-1	SS1 (0-2)	316309	5.23	503620	8.22	335862*3	10.62
480-201563-2	SS1 (0-6)	297880	5.23	455026	8.22	291493*3	10.62
480-201563-3	SS1 (6-12)	338132	5.23	530165	8.22	317156*3	10.62
480-201563-5	FDUP_091222	311848	5.23	521726	8.22	350022*3	10.62

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-201563-1

SDG No.:

Lab Sample ID: CCVIS 480-641153/4 Calibration Date: 09/13/2022 11:18

Instrument ID: HP5973S Calib Start Date: 08/09/2022 17:06

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 08/09/2022 19:49

Lab File ID: S0333.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	2.049	1.754	0.1000	21.4	25.0	-14.4	50.0
Chloromethane	Ave	3.252	2.180	0.1000	16.8	25.0	-33.0*	20.0
Vinyl chloride	Ave	2.065	1.604	0.1000	19.4	25.0	-22.4*	20.0
Butadiene	Ave	2.438	1.802		18.5	25.0	-26.1*	20.0
Bromomethane	Ave	1.206	1.015	0.1000	21.0	25.0	-15.8	50.0
Chloroethane	Ave	1.301	1.050	0.1000	20.2	25.0	-19.3	50.0
Trichlorofluoromethane	Ave	2.590	2.536	0.1000	24.5	25.0	-2.1	20.0
Dichlorofluoromethane	Ave	2.892	2.595		22.4	25.0	-10.3	20.0
Ethyl ether	Ave	1.839	1.607		21.8	25.0	-12.6	20.0
Acrolein	Ave	0.2569	0.1781		86.7	125	-30.7	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.241	1.355	0.1000	27.3	25.0	9.1	20.0
1,1-Dichloroethene	Ave	1.368	1.293	0.1000	23.6	25.0	-5.5	20.0
Acetone	Ave	0.8070	0.8204	0.1000	127	125	1.7	50.0
Iodomethane	Ave	2.428	2.694		27.7	25.0	11.0	20.0
Carbon disulfide	Ave	4.412	4.705	0.1000	26.7	25.0	6.6	20.0
Allyl chloride	Ave	3.287	2.638		20.1	25.0	-19.7	20.0
Methyl acetate	Ave	2.196	1.491	0.1000	34.0	50.0	-32.1	50.0
Methylene Chloride	Lin1		1.678	0.1000	24.3	25.0	-3.0	20.0
2-Methyl-2-propanol	Ave	0.2386	0.2463		258	250	3.2	50.0
Methyl tert-butyl ether	Ave	5.489	5.309	0.1000	24.2	25.0	-3.3	20.0
trans-1,2-Dichloroethene	Ave	1.714	1.648	0.1000	24.0	25.0	-3.8	20.0
Acrylonitrile	Ave	1.098	0.8813		201	250	-19.8	20.0
Hexane	Ave	3.542	3.089		21.8	25.0	-12.8	20.0
1,1-Dichloroethane	Ave	3.599	3.349	0.2000	23.3	25.0	-7.0	20.0
Vinyl acetate	Ave	4.870	4.130		42.4	50.0	-15.2	20.0
2,2-Dichloropropane	Ave	1.991	2.263		28.4	25.0	13.6	20.0
cis-1,2-Dichloroethene	Ave	1.926	1.853	0.1000	24.1	25.0	-3.8	20.0
2-Butanone (MEK)	Ave	1.363	1.071	0.1000	98.2	125	-21.5*	20.0
Chlorobromomethane	Ave	1.054	0.9617		22.8	25.0	-8.8	20.0
Tetrahydrofuran	Ave	0.8946	0.6314		35.3	50.0	-29.4*	20.0
Chloroform	Ave	3.184	3.146	0.2000	24.7	25.0	-1.2	20.0
1,1,1-Trichloroethane	Ave	2.495	2.777	0.1000	27.8	25.0	11.3	20.0
Cyclohexane	Ave	3.711	3.406	0.1000	22.9	25.0	-8.2	20.0
Carbon tetrachloride	Ave	2.114	2.402	0.1000	28.4	25.0	13.6	20.0
1,1-Dichloropropene	Ave	2.476	2.425		24.5	25.0	-2.0	20.0
Benzene	Ave	7.485	6.856	0.5000	22.9	25.0	-8.4	20.0
Isobutyl alcohol	Ave	0.0998	0.0918		575	625	-8.1	50.0
1,2-Dichloroethane	Ave	3.002	2.848	0.1000	23.7	25.0	-5.1	20.0
n-Heptane	Ave	4.242	3.165		18.7	25.0	-25.4*	20.0
Trichloroethene	Ave	1.845	1.772	0.2000	24.0	25.0	-4.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-201563-1

SDG No.:

Lab Sample ID: CCVIS 480-641153/4 Calibration Date: 09/13/2022 11:18

Instrument ID: HP5973S Calib Start Date: 08/09/2022 17:06

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 08/09/2022 19:49

Lab File ID: S0333.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	3.199	3.211	0.1000	25.1	25.0	0.4	20.0
1,2-Dichloropropane	Ave	2.067	1.820	0.1000	22.0	25.0	-12.0	20.0
Dibromomethane	Ave	1.101	1.041	0.1000	23.6	25.0	-5.4	20.0
1,4-Dioxane	Ave	0.0095	0.0092		488	500	-2.3	50.0
Bromodichloromethane	Ave	2.138	2.308	0.2000	27.0	25.0	8.0	20.0
2-Chloroethyl vinyl ether	Ave	1.391	1.262		22.7	25.0	-9.3	20.0
cis-1,3-Dichloropropene	Ave	2.654	2.751	0.2000	25.9	25.0	3.7	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.466	1.070	0.1000	91.3	125	-27.0*	20.0
Toluene	Ave	2.304	2.224	0.4000	24.1	25.0	-3.5	20.0
trans-1,3-Dichloropropene	Ave	1.159	1.293	0.1000	27.9	25.0	11.6	20.0
Ethyl methacrylate	Ave	1.108	1.143		25.8	25.0	3.1	20.0
1,1,2-Trichloroethane	Ave	0.6983	0.6262	0.1000	22.4	25.0	-10.3	20.0
Tetrachloroethene	Ave	1.000	1.004	0.2000	25.1	25.0	0.4	20.0
1,3-Dichloropropane	Ave	1.482	1.333		22.5	25.0	-10.0	20.0
2-Hexanone	Ave	1.005	0.7962	0.1000	99.0	125	-20.8*	20.0
Dibromochloromethane	Ave	0.6946	0.8545	0.1000	30.8	25.0	23.0*	20.0
1,2-Dibromoethane	Ave	0.8428	0.8391		24.9	25.0	-0.4	20.0
Chlorobenzene	Ave	2.715	2.586	0.5000	23.8	25.0	-4.8	20.0
Ethylbenzene	Ave	4.322	4.219	0.1000	24.4	25.0	-2.4	20.0
1,1,1,2-Tetrachloroethane	Ave	0.8908	0.9718		27.3	25.0	9.1	20.0
m,p-Xylene	Ave	1.712	1.732	0.1000	25.3	25.0	1.2	20.0
o-Xylene	Ave	1.653	1.718	0.3000	26.0	25.0	3.9	20.0
Styrene	Ave	2.774	2.902	0.3000	26.2	25.0	4.6	20.0
Bromoform	Ave	0.4622	0.5736	0.1000	31.0	25.0	24.1	50.0
Isopropylbenzene	Ave	4.118	4.291	0.1000	26.1	25.0	4.2	20.0
Bromobenzene	Ave	1.083	1.087		25.1	25.0	0.4	20.0
1,1,2,2-Tetrachloroethane	Ave	1.110	0.9556	0.3000	21.5	25.0	-13.9	20.0
N-Propylbenzene	Ave	4.901	4.775		24.4	25.0	-2.6	20.0
1,2,3-Trichloropropane	Ave	0.3684	0.3395		23.0	25.0	-7.8	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2890	0.2975		25.7	25.0	2.9	50.0
2-Chlorotoluene	Ave	1.007	0.9734		24.2	25.0	-3.4	20.0
1,3,5-Trimethylbenzene	Ave	3.567	3.748		26.3	25.0	5.1	20.0
4-Chlorotoluene	Ave	1.052	1.024		24.3	25.0	-2.6	20.0
tert-Butylbenzene	Ave	0.8055	0.8559		26.6	25.0	6.3	20.0
1,2,4-Trimethylbenzene	Ave	3.569	3.922		27.5	25.0	9.9	20.0
sec-Butylbenzene	Ave	4.589	4.806		26.2	25.0	4.7	20.0
1,3-Dichlorobenzene	Ave	2.188	2.142	0.6000	24.5	25.0	-2.1	20.0
4-Isopropyltoluene	Ave	3.847	4.199		27.3	25.0	9.1	20.0
1,4-Dichlorobenzene	Ave	2.272	2.195	0.5000	24.1	25.0	-3.4	20.0
n-Butylbenzene	Ave	3.450	3.674		26.6	25.0	6.5	20.0
1,2-Dichlorobenzene	Ave	2.095	2.090	0.4000	24.9	25.0	-0.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-201563-1

SDG No.:

Lab Sample ID: ICV 480-639579/28 Calibration Date: 08/30/2022 07:38

Instrument ID: HP5977M Calib Start Date: 08/30/2022 00:22

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 08/30/2022 02:47

Lab File ID: M05811.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.313	0.998	0.1000	38.0	50.0	-24.0	50.0
Chloromethane	Ave	2.078	1.781	0.1000	42.9	50.0	-14.3	30.0
Vinyl chloride	Ave	1.370	1.098	0.1000	40.1	50.0	-19.9	30.0
Butadiene	Ave	1.464	1.118		38.2	50.0	-23.6	30.0
Bromomethane	Ave	0.7796	0.6612	0.1000	42.4	50.0	-15.2	50.0
Chloroethane	Ave	0.8148	0.6646	0.1000	40.8	50.0	-18.4	50.0
Trichlorofluoromethane	Ave	1.640	1.249	0.1000	38.1	50.0	-23.8	30.0
Dichlorofluoromethane	Ave	1.986	1.649		41.5	50.0	-17.0	30.0
Ethyl ether	Ave	1.161	1.041		44.8	50.0	-10.3	30.0
Acrolein	Ave	0.1617	0.1315		203	250	-18.7	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.195	0.9041	0.1000	37.8	50.0	-24.4	30.0
1,1-Dichloroethene	Ave	1.056	0.8127	0.1000	38.5	50.0	-23.0	30.0
Acetone	Ave	0.5369	0.4505	0.1000	210	250	-16.1	50.0
Iodomethane	Ave	2.117	1.810		42.8	50.0	-14.5	30.0
Carbon disulfide	Ave	3.898	3.081	0.1000	39.5	50.0	-21.0	30.0
Allyl chloride	Ave	2.312	1.891		40.9	50.0	-18.2	30.0
Methyl acetate	Ave	1.253	1.108	0.1000	88.5	100	-11.5	50.0
Methylene Chloride	Lin1		1.238	0.1000	45.9	50.0	-8.2	30.0
2-Methyl-2-propanol	Ave	0.2222	0.1923		433	500	-13.5	50.0
Methyl tert-butyl ether	Ave	4.094	3.694	0.1000	45.1	50.0	-9.8	30.0
trans-1,2-Dichloroethene	Ave	1.314	1.081	0.1000	41.1	50.0	-17.7	30.0
Acrylonitrile	Ave	0.6330	0.5593		442	500	-11.6	30.0
Hexane	Ave	2.219	1.603		36.1	50.0	-27.7	30.0
1,1-Dichloroethane	Ave	2.499	2.112	0.2000	42.2	50.0	-15.5	30.0
Vinyl acetate	Ave	3.316	2.710		81.7	100	-18.3	30.0
2,2-Dichloropropane	Ave	1.743	1.307		37.5	50.0	-25.0	30.0
cis-1,2-Dichloroethene	Ave	1.502	1.292	0.1000	43.0	50.0	-14.0	30.0
2-Butanone (MEK)	Ave	0.7873	0.7152	0.1000	227	250	-9.2	30.0
Chlorobromomethane	Ave	0.8222	0.7234		44.0	50.0	-12.0	30.0
Tetrahydrofuran	Ave	0.5465	0.4869		89.1	100	-10.9	30.0
Chloroform	Ave	2.413	2.012	0.2000	41.7	50.0	-16.6	30.0
Cyclohexane	Ave	2.643	1.935	0.1000	36.6	50.0	-26.8	30.0
1,1,1-Trichloroethane	Ave	2.002	1.533	0.1000	38.3	50.0	-23.4	30.0
Carbon tetrachloride	Ave	1.683	1.256	0.1000	37.3	50.0	-25.4	30.0
1,1-Dichloropropene	Ave	1.701	1.315		38.6	50.0	-22.7	30.0
Benzene	Ave	4.988	4.223	0.5000	42.3	50.0	-15.3	30.0
Isobutyl alcohol	Ave	0.0881	0.0798		1130	1250	-9.4	50.0
1,2-Dichloroethane	Ave	1.931	1.722	0.1000	44.6	50.0	-10.9	30.0
n-Heptane	Ave	2.322	1.714		36.9	50.0	-26.2	30.0
Trichloroethene	Ave	1.337	1.102	0.2000	41.2	50.0	-17.6	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-201563-1

SDG No.:

Lab Sample ID: ICV 480-639579/28 Calibration Date: 08/30/2022 07:38

Instrument ID: HP5977M Calib Start Date: 08/30/2022 00:22

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 08/30/2022 02:47

Lab File ID: M05811.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.304	1.692	0.1000	36.7	50.0	-26.6	30.0
1,2-Dichloropropane	Ave	1.424	1.245	0.1000	43.7	50.0	-12.5	30.0
Dibromomethane	Ave	0.8519	0.7628	0.1000	44.8	50.0	-10.5	30.0
1,4-Dioxane	Ave	0.0083	0.0080		965	1000	-3.5	50.0
Bromodichloromethane	Ave	1.659	1.500	0.2000	45.2	50.0	-9.6	30.0
2-Chloroethyl vinyl ether	Ave	0.8250	0.7634		46.3	50.0	-7.5	30.0
cis-1,3-Dichloropropene	Ave	2.070	1.830	0.2000	44.2	50.0	-11.6	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7501	0.7346	0.1000	245	250	-2.1	30.0
Toluene	Ave	1.433	1.280	0.4000	44.7	50.0	-10.7	30.0
trans-1,3-Dichloropropene	Ave	0.8480	0.8126	0.1000	47.9	50.0	-4.2	30.0
Ethyl methacrylate	Ave	0.7499	0.7278		48.5	50.0	-2.9	30.0
1,1,2-Trichloroethane	Ave	0.4352	0.4211	0.1000	48.4	50.0	-3.2	30.0
Tetrachloroethene	Ave	0.6335	0.5219	0.2000	41.2	50.0	-17.6	30.0
1,3-Dichloropropane	Ave	0.8727	0.8459		48.5	50.0	-3.1	30.0
2-Hexanone	Ave	0.5096	0.4949	0.1000	243	250	-2.9	30.0
Dibromochloromethane	Ave	0.5654	0.5589	0.1000	49.4	50.0	-1.2	30.0
1,2-Dibromoethane	Ave	0.5557	0.5326		47.9	50.0	-4.1	30.0
Chlorobenzene	Ave	1.670	1.531	0.5000	45.8	50.0	-8.4	30.0
Ethylbenzene	Ave	2.682	2.330	0.1000	43.4	50.0	-13.1	30.0
1,1,1,2-Tetrachloroethane	Ave	0.6351	0.6154		48.5	50.0	-3.1	30.0
m,p-Xylene	Ave	1.082	0.9456	0.1000	43.7	50.0	-12.6	30.0
o-Xylene	Ave	1.123	0.998	0.3000	44.4	50.0	-11.1	30.0
Styrene	Ave	1.903	1.720	0.3000	45.2	50.0	-9.6	30.0
Bromoform	Ave	0.3734	0.3662	0.1000	49.0	50.0	-1.9	50.0
Isopropylbenzene	Ave	2.616	2.329	0.1000	44.5	50.0	-11.0	30.0
Bromobenzene	Ave	0.7081	0.6815		48.1	50.0	-3.8	30.0
1,1,2,2-Tetrachloroethane	Ave	0.7135	0.7019	0.3000	49.2	50.0	-1.6	30.0
N-Propylbenzene	Ave	3.014	2.650		44.0	50.0	-12.1	30.0
1,2,3-Trichloropropane	Ave	0.2255	0.2265		50.2	50.0	0.5	30.0
trans-1,4-Dichloro-2-butene	Ave	0.2475	0.2356		47.6	50.0	-4.8	50.0
2-Chlorotoluene	Ave	0.6595	0.6111		46.3	50.0	-7.3	30.0
1,3,5-Trimethylbenzene	Ave	2.253	2.023		44.9	50.0	-10.2	30.0
4-Chlorotoluene	Ave	0.6758	0.6178		45.7	50.0	-8.6	30.0
tert-Butylbenzene	Ave	0.4987	0.4361		43.7	50.0	-12.5	30.0
1,2,4-Trimethylbenzene	Ave	2.307	2.130		46.2	50.0	-7.7	30.0
sec-Butylbenzene	Ave	2.825	2.426		42.9	50.0	-14.1	30.0
1,3-Dichlorobenzene	Ave	1.369	1.271	0.6000	46.4	50.0	-7.2	30.0
4-Isopropyltoluene	Ave	2.532	2.190		43.2	50.0	-13.5	30.0
1,4-Dichlorobenzene	Ave	1.395	1.298	0.5000	46.5	50.0	-7.0	30.0
n-Butylbenzene	Ave	2.268	1.918		42.3	50.0	-15.4	30.0
1,2-Dichlorobenzene	Ave	1.379	1.303	0.4000	47.3	50.0	-5.5	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-201563-1

SDG No.:

Lab Sample ID: CCVIS 480-641452/4 Calibration Date: 09/14/2022 19:09

Instrument ID: HP5977M Calib Start Date: 08/30/2022 00:22

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 08/30/2022 02:47

Lab File ID: M06168.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.313	1.597	0.1000	60.8	50.0	21.6	50.0
Chloromethane	Ave	2.078	2.484	0.1000	59.8	50.0	19.6	20.0
Vinyl chloride	Ave	1.370	1.691	0.1000	61.7	50.0	23.4*	20.0
Butadiene	Ave	1.464	1.784		60.9	50.0	21.9*	20.0
Bromomethane	Ave	0.7796	0.8964	0.1000	57.5	50.0	15.0	50.0
Chloroethane	Ave	0.8148	0.9623	0.1000	59.0	50.0	18.1	50.0
Trichlorofluoromethane	Ave	1.640	1.831	0.1000	55.8	50.0	11.6	20.0
Dichlorofluoromethane	Ave	1.986	2.256		56.8	50.0	13.6	20.0
Ethyl ether	Ave	1.161	1.209		52.1	50.0	4.2	20.0
Acrolein	Ave	0.1617	0.1495		231	250	-7.5	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.195	1.024	0.1000	42.8	50.0	-14.4	20.0
1,1-Dichloroethene	Ave	1.056	1.139	0.1000	53.9	50.0	7.9	20.0
Acetone	Ave	0.5369	0.5462	0.1000	254	250	1.7	50.0
Iodomethane	Ave	2.117	2.090		49.3	50.0	-1.3	20.0
Carbon disulfide	Ave	3.898	4.024	0.1000	51.6	50.0	3.2	20.0
Allyl chloride	Ave	2.312	2.511		54.3	50.0	8.6	20.0
Methyl acetate	Ave	1.253	1.161	0.1000	92.6	100	-7.4	50.0
Methylene Chloride	Lin1		1.393	0.1000	51.7	50.0	3.4	20.0
2-Methyl-2-propanol	Ave	0.2222	0.1950		439	500	-12.3	50.0
Methyl tert-butyl ether	Ave	4.094	3.822	0.1000	46.7	50.0	-6.6	20.0
trans-1,2-Dichloroethene	Ave	1.314	1.351	0.1000	51.4	50.0	2.8	20.0
Acrylonitrile	Ave	0.6330	0.6085		481	500	-3.9	20.0
Hexane	Ave	2.219	2.518		56.7	50.0	13.5	20.0
1,1-Dichloroethane	Ave	2.499	2.581	0.2000	51.6	50.0	3.3	20.0
Vinyl acetate	Ave	3.316	3.361		101	100	1.4	20.0
2,2-Dichloropropane	Ave	1.743	1.753		50.3	50.0	0.6	20.0
cis-1,2-Dichloroethene	Ave	1.502	1.454	0.1000	48.4	50.0	-3.2	20.0
2-Butanone (MEK)	Ave	0.7873	0.7825	0.1000	248	250	-0.6	20.0
Chlorobromomethane	Ave	0.8222	0.7620		46.3	50.0	-7.3	20.0
Tetrahydrofuran	Ave	0.5465	0.5158		94.4	100	-5.6	20.0
Chloroform	Ave	2.413	2.321	0.2000	48.1	50.0	-3.8	20.0
Cyclohexane	Ave	2.643	2.972	0.1000	56.2	50.0	12.4	20.0
1,1,1-Trichloroethane	Ave	2.002	2.052	0.1000	51.3	50.0	2.5	20.0
Carbon tetrachloride	Ave	1.683	1.723	0.1000	51.2	50.0	2.4	20.0
1,1-Dichloropropene	Ave	1.701	1.831		53.8	50.0	7.6	20.0
Benzene	Ave	4.988	5.070	0.5000	50.8	50.0	1.6	20.0
Isobutyl alcohol	Ave	0.0881	0.0806		1140	1250	-8.4	50.0
1,2-Dichloroethane	Ave	1.931	1.856	0.1000	48.0	50.0	-3.9	20.0
n-Heptane	Ave	2.322	2.735		58.9	50.0	17.8	20.0
Trichloroethene	Ave	1.337	1.406	0.2000	52.6	50.0	5.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-201563-1

SDG No.:

Lab Sample ID: CCVIS 480-641452/4 Calibration Date: 09/14/2022 19:09

Instrument ID: HP5977M Calib Start Date: 08/30/2022 00:22

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 08/30/2022 02:47

Lab File ID: M06168.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.304	2.487	0.1000	54.0	50.0	7.9	20.0
1,2-Dichloropropane	Ave	1.424	1.430	0.1000	50.2	50.0	0.4	20.0
Dibromomethane	Ave	0.8519	0.7845	0.1000	46.0	50.0	-7.9	20.0
1,4-Dioxane	Ave	0.0083	0.0081		972	1000	-2.8	50.0
Bromodichloromethane	Ave	1.659	1.613	0.2000	48.6	50.0	-2.8	20.0
2-Chloroethyl vinyl ether	Ave	0.8250	0.7893		47.8	50.0	-4.3	20.0
cis-1,3-Dichloropropene	Ave	2.070	2.030	0.2000	49.0	50.0	-2.0	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7501	0.7752	0.1000	258	250	3.4	20.0
Toluene	Ave	1.433	1.550	0.4000	54.1	50.0	8.2	20.0
trans-1,3-Dichloropropene	Ave	0.8480	0.8813	0.1000	52.0	50.0	3.9	20.0
Ethyl methacrylate	Ave	0.7499	0.7489		49.9	50.0	-0.1	20.0
1,1,2-Trichloroethane	Ave	0.4352	0.4423	0.1000	50.8	50.0	1.6	20.0
Tetrachloroethene	Ave	0.6335	0.6782	0.2000	53.5	50.0	7.1	20.0
1,3-Dichloropropane	Ave	0.8727	0.8874		50.8	50.0	1.7	20.0
2-Hexanone	Ave	0.5096	0.5298	0.1000	260	250	4.0	20.0
Dibromochloromethane	Ave	0.5654	0.5734	0.1000	50.7	50.0	1.4	20.0
1,2-Dibromoethane	Ave	0.5557	0.5420		48.8	50.0	-2.5	20.0
Chlorobenzene	Ave	1.670	1.733	0.5000	51.9	50.0	3.8	20.0
Ethylbenzene	Ave	2.682	2.920	0.1000	54.4	50.0	8.9	20.0
1,1,1,2-Tetrachloroethane	Ave	0.6351	0.6575		51.8	50.0	3.5	20.0
m,p-Xylene	Ave	1.082	1.169	0.1000	54.0	50.0	8.0	20.0
o-Xylene	Ave	1.123	1.174	0.3000	52.3	50.0	4.6	20.0
Styrene	Ave	1.903	1.969	0.3000	51.7	50.0	3.4	20.0
Bromoform	Ave	0.3734	0.3654	0.1000	48.9	50.0	-2.1	50.0
Isopropylbenzene	Ave	2.616	3.147	0.1000	60.2	50.0	20.3*	20.0
Bromobenzene	Ave	0.7081	0.7652		54.0	50.0	8.1	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7135	0.7620	0.3000	53.4	50.0	6.8	20.0
N-Propylbenzene	Ave	3.014	3.619		60.0	50.0	20.1*	20.0
1,2,3-Trichloropropane	Ave	0.2255	0.2353		52.2	50.0	4.4	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2475	0.2716		54.9	50.0	9.7	50.0
2-Chlorotoluene	Ave	0.6595	0.7556		57.3	50.0	14.6	20.0
1,3,5-Trimethylbenzene	Ave	2.253	2.621		58.2	50.0	16.3	20.0
4-Chlorotoluene	Ave	0.6758	0.7514		55.6	50.0	11.2	20.0
tert-Butylbenzene	Ave	0.4987	0.6010		60.3	50.0	20.5*	20.0
1,2,4-Trimethylbenzene	Ave	2.307	2.686		58.2	50.0	16.4	20.0
sec-Butylbenzene	Ave	2.825	3.375		59.7	50.0	19.5	20.0
1,3-Dichlorobenzene	Ave	1.369	1.509	0.6000	55.1	50.0	10.2	20.0
4-Isopropyltoluene	Ave	2.532	2.996		59.2	50.0	18.4	20.0
1,4-Dichlorobenzene	Ave	1.395	1.501	0.5000	53.8	50.0	7.6	20.0
n-Butylbenzene	Ave	2.268	2.725		60.1	50.0	20.1*	20.0
1,2-Dichlorobenzene	Ave	1.379	1.464	0.4000	53.1	50.0	6.2	20.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-201563-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-641451/2-A

Matrix: Solid | Lab File ID: M06172.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 09/14/2022 20:46

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (30) VOA ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) Y pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 641452 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		5.0	0.50
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.36
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.81
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.65
75-34-3	1,1-Dichloroethane	ND		5.0	0.61
75-35-4	1,1-Dichloroethene	ND		5.0	0.61
526-73-8	1,2,3-Trimethylbenzene	ND		5.0	1.0
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.30
95-63-6	1,2,4-Trimethylbenzene	ND		5.0	0.96
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	2.5
106-93-4	1,2-Dibromoethane	ND		5.0	0.64
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.39
107-06-2	1,2-Dichloroethane	ND		5.0	0.25
78-87-5	1,2-Dichloropropane	ND		5.0	2.5
108-67-8	1,3,5-Trimethylbenzene	ND		5.0	0.32
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.26
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.70
78-93-3	2-Butanone (MEK)	ND		25	1.8
591-78-6	2-Hexanone	ND		25	2.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		25	1.6
67-64-1	Acetone	ND		25	4.2
71-43-2	Benzene	ND		5.0	0.25
75-27-4	Bromodichloromethane	ND		5.0	0.67
75-25-2	Bromoform	ND		5.0	2.5
74-83-9	Bromomethane	ND		5.0	0.45
75-15-0	Carbon disulfide	ND		5.0	2.5
56-23-5	Carbon tetrachloride	ND		5.0	0.48
108-90-7	Chlorobenzene	ND		5.0	0.66
75-00-3	Chloroethane	ND		5.0	1.1
67-66-3	Chloroform	0.465	J	5.0	0.31
74-87-3	Chloromethane	ND		5.0	0.30
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.64

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-201563-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-641652/2-A

Matrix: Solid | Lab File ID: M06203.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 09/15/2022 21:15

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (30) VOA ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) Y pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 641653 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		5.0	0.50
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.36
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.81
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.65
75-34-3	1,1-Dichloroethane	ND		5.0	0.61
75-35-4	1,1-Dichloroethene	ND		5.0	0.61
526-73-8	1,2,3-Trimethylbenzene	ND		5.0	1.0
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.30
95-63-6	1,2,4-Trimethylbenzene	ND		5.0	0.96
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	2.5
106-93-4	1,2-Dibromoethane	ND		5.0	0.64
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.39
107-06-2	1,2-Dichloroethane	ND		5.0	0.25
78-87-5	1,2-Dichloropropane	ND		5.0	2.5
108-67-8	1,3,5-Trimethylbenzene	ND		5.0	0.32
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.26
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.70
78-93-3	2-Butanone (MEK)	ND		25	1.8
591-78-6	2-Hexanone	ND		25	2.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		25	1.6
67-64-1	Acetone	ND		25	4.2
71-43-2	Benzene	ND		5.0	0.25
75-27-4	Bromodichloromethane	ND		5.0	0.67
75-25-2	Bromoform	ND		5.0	2.5
74-83-9	Bromomethane	ND		5.0	0.45
75-15-0	Carbon disulfide	ND		5.0	2.5
56-23-5	Carbon tetrachloride	ND		5.0	0.48
108-90-7	Chlorobenzene	ND		5.0	0.66
75-00-3	Chloroethane	ND		5.0	1.1
67-66-3	Chloroform	0.559	J	5.0	0.31
74-87-3	Chloromethane	ND		5.0	0.30
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.64

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-201563-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-641440/1-A

Matrix: Solid | Lab File ID: Z0025605.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3550C | Date Extracted: 09/14/2022 15:47

Sample wt/vol: 30.81(g) | Date Analyzed: 09/15/2022 11:49

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Intuvo DB-5MS ID: 0.18(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor: | Level: (low/med) Low

Analysis Batch No.: 641495 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
205-99-2	Benzo[b]fluoranthene	ND		170	26
191-24-2	Benzo[g,h,i]perylene	ND		170	18
207-08-9	Benzo[k]fluoranthene	ND		170	21
92-52-4	Biphenyl	ND		170	24
108-60-1	bis (2-chloroisopropyl) ether	ND		170	33
111-91-1	Bis(2-chloroethoxy)methane	ND		170	35
111-44-4	Bis(2-chloroethyl)ether	ND		170	21
117-81-7	Bis(2-ethylhexyl) phthalate	ND		170	56
85-68-7	Butyl benzyl phthalate	ND		170	27
105-60-2	Caprolactam	ND		170	50
86-74-8	Carbazole	ND		170	19
218-01-9	Chrysene	ND		170	37
53-70-3	Dibenz(a,h)anthracene	ND		170	29
132-64-9	Dibenzofuran	ND		170	19
84-66-2	Diethyl phthalate	56.3	J	170	21
131-11-3	Dimethyl phthalate	ND		170	19
84-74-2	Di-n-butyl phthalate	ND		170	28
117-84-0	Di-n-octyl phthalate	ND		170	19
206-44-0	Fluoranthene	ND		170	18
86-73-7	Fluorene	ND		170	19
118-74-1	Hexachlorobenzene	ND		170	22
87-68-3	Hexachlorobutadiene	ND		170	24
77-47-4	Hexachlorocyclopentadiene	ND		170	22
67-72-1	Hexachloroethane	ND		170	21
193-39-5	Indeno[1,2,3-cd]pyrene	ND		170	20
78-59-1	Isophorone	ND		170	35
91-20-3	Naphthalene	ND		170	21
98-95-3	Nitrobenzene	ND		170	19
621-64-7	N-Nitrosodi-n-propylamine	ND		170	28
86-30-6	N-Nitrosodiphenylamine	ND		170	130
87-86-5	Pentachlorophenol	ND		320	170
85-01-8	Phenanthrene	ND		170	24

Report Date: 16-Sep-2022 12:30:44 Chrom Revision: 2.3 30-Aug-2022 19:06:20
Data File: \\chromfs\Burlington\ChromData\LC812\20220915-52466.b\PA220915C30.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.448	3.448	0.0	1.000	503	0.001743			3.6	M
D 12 M2-6:2 FTS										M
429.00 > 81.00	3.448	3.448	0.0	0.997	188140	1.22		103	107	M
D 14 13C4 PFOA										
417.00 > 372.00	3.456	3.465	-0.009	1.000	1511017	1.14		90.9	3052	
* 62 13C2 PFOA										
415.00 > 370.00	3.456	3.465	-0.009		1621508	1.25			2851	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.456	3.465	-0.009	1.000	160306	0.1172	Target=2.73		13.2	
413.00 > 169.00	3.448	3.465	-0.017	0.997	58373		2.75(1.37-4.10)		74.5	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.745	3.783	-0.038	1.000	233881	0.4251	Target=5.09		246	M
499.00 > 99.00	3.745	3.783	-0.038	1.000	58513		4.00(2.55-7.64)		57.6	M
D 18 13C4 PFOS										
503.00 > 80.00	3.745	3.783	-0.038	1.083	541138	0.9120		76.3	852	
D 19 13C5 PFNA										
468.00 > 423.00	3.764	3.802	-0.038	1.089	1375755	1.05		84.1	3020	
20 Perfluorononanoic acid										M
463.00 > 419.00	3.764	3.802	-0.038	1.000	75301	0.0652	Target=7.76		12.4	
463.00 > 169.00	3.764	3.802	-0.038	1.000	7966		9.45(3.88-11.63)		41.8	M
D 23 13C2 PFDA										
515.00 > 470.00	4.041	4.104	-0.063	1.169	1452504	1.14		91.4	2756	
24 Perfluorodecanoic acid										
513.00 > 469.00	4.041	4.104	-0.063	1.000	61533	0.0492	Target=9.83		13.3	
513.00 > 169.00	4.051	4.104	-0.053	1.002	7440		8.27(4.91-14.74)		12.6	
D 26 M2-8:2 FTS										M
529.00 > 81.00	4.051	4.116	-0.065	1.172	246625	1.36		113	268	M
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.061	4.116	-0.055	1.003	210	0.000823			2.8	M
D 21 13C8 FOSA										
506.00 > 78.00	4.093	4.161	-0.068	1.184	952581	0.9198		73.6	2339	
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.093	4.161	-0.068	1.000	3399	0.004417			17.8	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.184	4.250	-0.066	1.211	189103	1.06		84.5	712	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.184	4.250	-0.066	1.000	408	0.002916			2.1	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.261	4.342	-0.081	1.138	6360	0.0204	Target=2.59		9.6	M
599.00 > 99.00	4.261	4.342	-0.081	1.138	3923		1.62(1.30-3.89)		7.6	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.297	4.376	-0.079	1.243	1107450	1.06		85.1	2710	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.297	4.376	-0.079	1.000	30781	0.0333	Target=9.68		13.8	M
563.00 > 169.00	4.297	4.376	-0.079	1.000	2335		13.18(4.84-14.53)		13.6	M

Report Date: 16-Sep-2022 12:30:44 Chrom Revision: 2.3 30-Aug-2022 19:06:20
Data File: \\chromfs\Burlington\ChromData\LC812\20220915-52466.b\PA220915C30.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.308	4.387	-0.079	1.000	7197	0.0458			44.8	M
D 32 d5-NEtFOSAA										
589.00 > 419.00	4.308	4.387	-0.079	1.246	214892	1.21		96.8	678	
37 Perfluorododecanoic acid										M
613.00 > 569.00	4.517	4.612	-0.095	1.000	20951	0.0217	Target=6.96		5.2	
613.00 > 169.00	4.517	4.612	-0.095	1.000	3557		5.89(3.48-10.43)		43.4	M
D 36 13C2 PFDoA										
615.00 > 570.00	4.517	4.612	-0.095	1.307	1128063	1.11		88.9	2369	
41 Perfluorotridecanoic acid										M
663.00 > 619.00	4.731	4.837	-0.106	1.047	11513	0.0130	Target=4.85		3.0	
663.00 > 169.00	4.731	4.837	-0.106	1.047	2261		5.09(2.42-7.27)		15.7	M
42 Perfluorotetradecanoic acid										M
713.00 > 169.00	4.932	5.032	-0.100	1.002	1044	0.009219	Target=0.99		18.1	M
713.00 > 219.00	4.922	5.032	-0.110	1.000	1275		0.82(0.49-1.48)		18.3	M
D 43 13C2 PFTeDA										
715.00 > 670.00	4.922	5.042	-0.120	1.424	910036	1.05		83.9	3234	

QC Flag Legend

Processing Flags

R - Failed Signal Ratio Test

Review Flags

M - Manually Integrated

Report Date: 16-Sep-2022 12:30:47 Chrom Revision: 2.3 30-Aug-2022 19:06:20

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20220915-52466.b\PA220915C31.d
Lims ID: 480-201563-A-3-A
Client ID: SS1 (6-12)
Sample Type: Client
Inject. Date: 15-Sep-2022 19:32:02 ALS Bottle#: 31 Worklist Smp#: 31
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 480-201563-A-3-A
Misc. Info.: 200-0052466-031 Plate: 1 Rack: 3
Operator ID: lc812tech Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20220915-52466.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 16-Sep-2022 12:30:03 Calib Date: 14-Sep-2022 11:14:32
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20220914-52438.b\PA220914ICAL10.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1626

First Level Reviewer: nampitakw Date: 16-Sep-2022 14:24:19
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	2.076	2.085	-0.009	0.601	2123490	1.14		91.3	7509	
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.076	2.085	-0.009	1.000	132870	0.0773			9.8	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.386	2.400	-0.014	0.691	1670896	1.14		91.3	2291	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.373	2.400	-0.027	0.994	55128	0.0385			1.1	M
D 47 13C3 PFBS										M
301.90 > 80.00	2.400	2.413	-0.013	0.695	1519669	1.02		88.2	118967	M
5 Perfluorobutanesulfonic acid										RM
298.90 > 80.00	2.400	2.413	-0.013	1.000	8257	0.005479	Target=2.19		5.1	RM
298.90 > 99.00	2.400	2.413	-0.013	1.000	1659		4.98(1.09-3.28)		0.0	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.737	2.738	-0.001	0.792	1696708	1.14		91.2	3295	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.725	2.750	-0.025	0.996	51931	0.0352	Target=13.67		4.3	M
313.00 > 119.00	2.737	2.750	-0.013	1.000	4149		12.52(6.83-20.50)		4.5	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.098	3.110	-0.012	1.000	45801	0.0301	Target=3.76		6.8	M
363.00 > 169.00	3.110	3.110	0.0	1.004	12648		3.62(1.88-5.65)		21.5	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.098	3.110	-0.012	0.897	1706453	1.17		93.4	2822	
D 11 18O2 PFHxS										
403.00 > 84.00	3.098	3.110	-0.012	0.897	1079797	1.02		86.3	1925	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.098	3.110	-0.012	1.000	10049	0.009460	Target=3.60		7.3	M
399.00 > 99.00	3.121	3.110	0.011	1.00			2.45(1.80-5.40)		0.7	M

Report Date: 16-Sep-2022 12:30:47 Chrom Revision: 2.3 30-Aug-2022 19:06:20
Data File: \\chromfs\Burlington\ChromData\LC812\20220915-52466.b\PA220915C31.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.446	3.448	-0.002	1.000	122	0.000381			0.8	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.446	3.448	-0.002	0.997	208532	1.15		97.1	165	
D 14 13C4 PFOA										
417.00 > 372.00	3.455	3.465	-0.010	1.000	1922208	1.23		98.3	2779	
* 62 13C2 PFOA										M
415.00 > 370.00	3.455	3.465	-0.010		1906447	1.25			2911	M
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.455	3.465	-0.010	1.000	205390	0.1180	Target=2.73		18.6	
413.00 > 169.00	3.455	3.465	-0.010	1.000	78175		2.63(1.37-4.10)		129	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.772	3.783	-0.011	1.000	263682	0.3720	Target=5.09		189	M
499.00 > 99.00	3.772	3.783	-0.011	1.000	69381		3.80(2.55-7.64)		82.0	M
D 18 13C4 PFOS										
503.00 > 80.00	3.772	3.783	-0.011	1.092	697209	1.00		83.6	961	
D 19 13C5 PFNA										M
468.00 > 423.00	3.791	3.802	-0.011	1.097	1665910	1.08		86.6	2419	M
20 Perfluorononanoic acid										
463.00 > 419.00	3.791	3.802	-0.011	1.000	67238	0.0481	Target=7.76		11.5	
463.00 > 169.00	3.791	3.802	-0.011	1.000	6800		9.89(3.88-11.63)		36.5	
D 23 13C2 PFDA										M
515.00 > 470.00	4.093	4.104	-0.011	1.185	1659420	1.11		88.8	2681	M
24 Perfluorodecanoic acid										
513.00 > 469.00	4.093	4.104	-0.011	1.000	52090	0.0365	Target=9.83		13.7	
513.00 > 169.00	4.093	4.104	-0.011	1.000	5209		10.00(4.91-14.74)		10.4	
D 26 M2-8:2 FTS										M
529.00 > 81.00	4.104	4.116	-0.012	1.188	270055	1.26		105	443	M
25 1H,1H,2H,2H-perfluorodecanesulfo										M
527.00 > 507.00	4.104	4.116	-0.012	1.000	581	0.002079			8.7	M
D 21 13C8 FOSA										M
506.00 > 78.00	4.150	4.161	-0.011	1.201	1213151	1.00		79.7	1408	M
22 Perfluorooctanesulfonamide										M
498.00 > 78.00	4.150	4.161	-0.011	1.000	13382	0.0137			97.3	M
D 27 d3-NMeFOSAA										M
573.00 > 419.00	4.238	4.250	-0.012	1.227	241934	1.15		92.0	945	M
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.238	4.250	-0.012	1.000	1312	0.007330			7.0	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.331	4.342	-0.011	1.148	6760	0.0168	Target=2.59		14.5	M
599.00 > 99.00	4.331	4.342	-0.011	1.148	3254		2.08(1.30-3.89)		7.1	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.365	4.376	-0.011	1.263	1346681	1.10		88.0	2337	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.365	4.376	-0.011	1.000	26687	0.0237	Target=9.68		13.1	M
563.00 > 169.00	4.365	4.376	-0.011	1.000	2212		12.06(4.84-14.53)		15.9	M

Report Date: 16-Sep-2022 12:30:57 Chrom Revision: 2.3 30-Aug-2022 19:06:20

Eurofins Burlington
Target Compound Quantitation Report

Data File: \\chromfs\Burlington\ChromData\LC812\20220915-52466.b\PA220915C33.d
Lims ID: 480-201563-A-5-A
Client ID: FDUP_091222
Sample Type: Client
Inject. Date: 15-Sep-2022 19:48:23 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: 480-201563-A-5-A
Misc. Info.: 200-0052466-033 Plate: 1 Rack: 3
Operator ID: lc812tech Instrument ID: LC812

Method: \\chromfs\Burlington\ChromData\LC812\20220915-52466.b\PFC_LC812.m
Limit Group: LC_PFC_ICAL
Last Update: 16-Sep-2022 12:30:03 Calib Date: 14-Sep-2022 11:14:32
Integrator: Picker
Quant Method: Isotopic Dilution Quant By: Initial Calibration
Last ICal File: \\chromfs\Burlington\ChromData\LC812\20220914-52438.b\PA220914ICAL10.d

Column 1 : C-18 (4.60 mm) Det: EXP1
Process Host: CTX1626

First Level Reviewer: nampitakw Date: 16-Sep-2022 14:36:38
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
D 1 13C4 PFBA										
217.00 > 172.00	2.085	2.085	0.0	0.603	1977891	1.06		84.4	8622	
2 Perfluorobutanoic acid										M
212.90 > 169.00	2.076	2.085	-0.009	0.996	44409	0.0277			5.6	M
D 3 13C5 PFPeA										
267.90 > 223.00	2.386	2.400	-0.014	0.691	1568910	1.06		85.1	2630	
4 Perfluoropentanoic acid										M
262.90 > 219.00	2.386	2.400	-0.014	1.000	30214	0.0225			0.9	M
D 47 13C3 PFBS										
301.90 > 80.00	2.400	2.413	-0.013	0.695	1435849	0.9611		82.7	146896	
5 Perfluorobutanesulfonic acid										M
298.90 > 80.00	2.400	2.413	-0.013	1.000	2898	0.002035	Target=2.19		3.2	
298.90 > 99.00	2.400	2.413	-0.013	1.000	1405		2.06(1.09-3.28)		0.3	M
D 7 13C2 PFHxA										
315.00 > 270.00	2.737	2.738	-0.001	0.792	1691329	1.13		90.2	3009	
6 Perfluorohexanoic acid										M
313.00 > 269.00	2.737	2.750	-0.013	1.000	33849	0.0230	Target=13.67		4.2	M
313.00 > 119.00	2.737	2.750	-0.013	1.000	2343		14.45(6.83-20.50)		3.6	M
10 Perfluoroheptanoic acid										M
363.00 > 319.00	3.098	3.110	-0.012	1.000	46995	0.0330	Target=3.76		10.9	M
363.00 > 169.00	3.098	3.110	-0.012	1.000	11210		4.19(1.88-5.65)		33.6	M
D 9 13C4 PFHpA										
367.00 > 322.00	3.098	3.110	-0.012	0.897	1598629	1.09		86.8	3279	
D 11 18O2 PFHxS										
403.00 > 84.00	3.098	3.110	-0.012	0.897	1008437	0.9454		79.9	2193	
8 Perfluorohexanesulfonic acid										M
399.00 > 80.00	3.098	3.110	-0.012	1.000	25247	0.0254	Target=3.60		41.9	M
399.00 > 99.00	3.098	3.110	-0.012	1.00			4.65(1.80-5.40)		3.6	M

Report Date: 16-Sep-2022 12:30:57 Chrom Revision: 2.3 30-Aug-2022 19:06:20
Data File: \\chromfs\Burlington\ChromData\LC812\20220915-52466.b\PA220915C33.d
Ratio Calibration: Initial Calibration Level: 4

Signal	RT	EXP RT	DLT RT	REL RT	Response	Amount ng/ml	Ratio(Limits)	%Rec	S/N	Flags
16 Perfluoroheptanesulfonic acid										M
449.00 > 80.00	3.438	3.448	-0.010	0.911	3037	0.004125	Target=5.32		1.7	M
449.00 > 99.00	3.446	3.448	-0.002	0.914	382		7.95(2.66-7.97)		1.7	M
13 1H,1H,2H,2H-perfluorooctanesulfo										M
427.00 > 407.00	3.455	3.448	0.007	1.003	449	0.001559			2.9	M
D 12 M2-6:2 FTS										
429.00 > 81.00	3.446	3.448	-0.002	0.997	187699	1.03		86.8	230	
D 14 13C4 PFOA										
417.00 > 372.00	3.455	3.465	-0.010	1.000	1804870	1.15		91.6	2539	
* 62 13C2 PFOA										
415.00 > 370.00	3.455	3.465	-0.010		1920885	1.25			3200	
15 Perfluorooctanoic acid										M
413.00 > 369.00	3.455	3.465	-0.010	1.000	252092	0.1542	Target=2.73		24.0	M
413.00 > 169.00	3.455	3.465	-0.010	1.000	89436		2.82(1.37-4.10)		174	M
17 Perfluorooctanesulfonic acid										M
499.00 > 80.00	3.661	3.783	-0.122	0.971	143573	0.2262	Target=5.09		83.2	M
499.00 > 99.00	3.772	3.783	-0.011	1.000	27345		5.25(2.55-7.64)		36.3	M
D 18 13C4 PFOS										
503.00 > 80.00	3.772	3.783	-0.011	1.092	624391	0.8883		74.3	1567	
D 19 13C5 PFNA										M
468.00 > 423.00	3.791	3.802	-0.011	1.097	1723803	1.11		89.0	4269	M
20 Perfluorononanoic acid										M
463.00 > 419.00	3.791	3.802	-0.011	1.000	10198	0.007045	Target=7.76		2.7	M
463.00 > 169.00	3.791	3.802	-0.011	1.000	920		11.08(3.88-11.63)		8.1	M
D 23 13C2 PFDA										M
515.00 > 470.00	4.092	4.104	-0.012	1.184	1648133	1.09		87.5	2844	M
24 Perfluorodecanoic acid										M
513.00 > 469.00	4.092	4.104	-0.012	1.000	5684	0.004009	Target=9.83		2.5	M
513.00 > 169.00	4.104	4.104	0.0	1.003	767		7.41(4.91-14.74)		2.3	M
D 26 M2-8:2 FTS										
529.00 > 81.00	4.104	4.116	-0.012	1.188	217544	1.01		84.3	488	
D 21 13C8 FOSA										M
506.00 > 78.00	4.150	4.161	-0.011	1.201	1192332	0.9719		77.8	2005	M
D 27 d3-NMeFOSAA										
573.00 > 419.00	4.238	4.250	-0.012	1.227	214146	1.01		80.8	1405	
28 N-methylperfluorooctanesulfonami										M
570.00 > 419.00	4.249	4.250	-0.001	1.003	97	0.000612			0.6	M
29 Perfluorodecanesulfonic acid										M
599.00 > 80.00	4.319	4.342	-0.023	1.145	604	0.001675	Target=2.59		5.7	M
599.00 > 99.00	4.319	4.342	-0.023	1.145	297		2.03(1.30-3.89)		1.8	M
D 30 13C2 PFUnA										
565.00 > 520.00	4.364	4.376	-0.012	1.263	1330430	1.08		86.3	2723	
31 Perfluoroundecanoic acid										M
563.00 > 519.00	4.364	4.376	-0.012	1.000	2492	0.002245	Target=9.68		1.7	
563.00 > 169.00	4.364	4.376	-0.012	1.000	467		5.34(4.84-14.53)		4.4	M
33 N-ethylperfluorooctanesulfonamid										M
584.00 > 419.00	4.398	4.387	0.011	1.005	479	0.002993			7.5	M

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 480-201563-1

SDG No.:

Lab Sample ID: CCVLIS 200-183694/5 Calibration Date: 09/19/2022 16:41

Instrument ID: LC812 Calib Start Date: 09/14/2022 10:33

GC Column: C-18 ID: 4.60(mm) Calib End Date: 09/14/2022 11:14

Lab File ID: PA220919A05.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorotridecanoic acid (PFTriA)	AveID	0.9793	0.9672		0.0494	0.0500	-1.2	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.1555	0.1370		0.0440	0.0500	-11.9	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L1ID		1.076		0.0334	0.0500	-33.2	50.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7228	0.6375		0.0441	0.0500	-11.8	50.0
13C4 PFBA	Ave	1.220	1.160		1.19	1.25	-4.9	
13C5 PFPeA	Ave	0.9597	0.9147		1.19	1.25	-4.7	
13C3 PFBS	Ave	0.9722	0.9280		1.11	1.16	-4.6	
M2-4:2 FTS	Ave	0.0881	0.0859		1.14	1.17	-2.6	
13C2 PFHxA	Ave	0.9758	0.9688		1.24	1.25	-0.7	
13C3 HFPO-DA	Ave	0.1832	0.1849		1.26	1.25	0.9	
18O2 PFHxS	Ave	0.6942	0.6649		1.13	1.18	-4.2	
13C4 PFHpA	Ave	0.9588	0.9125		1.19	1.25	-4.8	
M2-6:2 FTS	Ave	0.1186	0.1195		1.20	1.19	0.8	
13C4 PFOA	Ave	1.025	1.038		1.27	1.25	1.3	
13C4 PFOS	Ave	0.4574	0.4448		1.16	1.20	-2.7	
13C5 PFNA	Ave	1.009	0.9537		1.18	1.25	-5.4	
13C2 PFDA	Ave	0.9801	0.998		1.27	1.25	1.8	
M2-8:2 FTS	Ave	0.1402	0.1310		1.12	1.20	-6.5	
13C8 FOSA	Ave	0.7983	0.7957		1.25	1.25	-0.3	
d3-NMeFOSAA	Ave	0.1380	0.1377		1.25	1.25	-0.2	
13C2 PFUnA	Ave	0.8025	0.8192		1.28	1.25	2.1	
d5-NEtFOSAA	Ave	0.1370	0.1232		1.12	1.25	-10.0	
13C2 PFDoA	Ave	0.7827	0.8166		1.30	1.25	4.3	
13C2 PFTeDA	Ave	0.6687	0.7143		1.34	1.25	6.8	
13C2 PFHxDA	Ave	0.7383	0.7822		1.32	1.25	6.0	

FORM I
PFAS ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Burlington Job No.: 480-201563-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 200-183583/1-A

Matrix: Solid Lab File ID: PA220915C08.d

Analysis Method: 537 IDA Date Collected:

Extraction Method: SHAKE Date Extracted: 09/15/2022 08:50

Sample wt/vol: 5.00(g) Date Analyzed: 09/15/2022 16:23

Con. Extract Vol.: 10(mL) Dilution Factor: 1

Injection Volume: 20(uL) GC Column: C-18 ID: 4.6(mm)

% Moisture: % Solids: GPC Cleanup:(Y/N) N

Cleanup Factor:

Analysis Batch No.: 183606 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
375-22-4	Perfluorobutanoic acid (PFBA)	ND		0.50	0.33
2706-90-3	Perfluoropentanoic acid (PFPeA)	ND		0.20	0.055
307-24-4	Perfluorohexanoic acid (PFHxA)	ND		0.20	0.046
375-85-9	Perfluoroheptanoic acid (PFHpA)	ND		0.20	0.039
335-67-1	Perfluorooctanoic acid (PFOA)	ND		0.20	0.058
375-95-1	Perfluorononanoic acid (PFNA)	ND		0.20	0.034
335-76-2	Perfluorodecanoic acid (PFDA)	ND		0.20	0.028
2058-94-8	Perfluoroundecanoic acid (PFUnA)	ND		0.20	0.027
307-55-1	Perfluorododecanoic acid (PFDoA)	0.0275	J	0.20	0.025
72629-94-8	Perfluorotridecanoic acid (PFTriA)	0.0274	J	0.20	0.025
376-06-7	Perfluorotetradecanoic acid (PFTeA)	ND		0.20	0.026
375-73-5	Perfluorobutanesulfonic acid (PFBS)	ND		0.20	0.033
355-46-4	Perfluorohexanesulfonic acid (PFHxS)	ND		0.20	0.041
375-92-8	Perfluoroheptanesulfonic acid (PFHpS)	0.0238	J	0.20	0.023
1763-23-1	Perfluorooctanesulfonic acid (PFOS)	ND		0.20	0.11
335-77-3	Perfluorodecanesulfonic acid (PFDS)	0.0214	J	0.20	0.019
754-91-6	Perfluorooctanesulfonamide (PFOSA)	ND		0.20	0.034
2355-31-9	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.0	0.11
2991-50-6	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.0	0.083
27619-97-2	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.0	0.057
39108-34-4	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.0	0.037

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: FB_091222 Lab Sample ID: 480-201563-6

Lab Name: Eurofins Buffalo Job No.: 480-201563-1

SDG ID.:

Matrix: Water Date Sampled: 09/12/2022 00:00

Reporting Basis: WET Date Received: 09/13/2022 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	ND	0.20	0.060	mg/L			1	6010C
7440-36-0	Antimony	ND	0.020	0.0068	mg/L			1	6010C
7440-38-2	Arsenic	ND	0.015	0.0056	mg/L			1	6010C
7440-39-3	Barium	ND	0.0020	0.00070	mg/L			1	6010C
7440-41-7	Beryllium	ND	0.0020	0.00030	mg/L			1	6010C
7440-43-9	Cadmium	ND	0.0020	0.00050	mg/L			1	6010C
7440-70-2	Calcium	ND	0.50	0.10	mg/L			1	6010C
7440-47-3	Chromium	ND	0.0040	0.0010	mg/L			1	6010C
7440-48-4	Cobalt	ND	0.0040	0.00063	mg/L			1	6010C
7440-50-8	Copper	ND	0.010	0.0016	mg/L			1	6010C
7439-89-6	Iron	ND	0.050	0.019	mg/L			1	6010C
7439-92-1	Lead	ND	0.010	0.0030	mg/L			1	6010C
7439-95-4	Magnesium	ND	0.20	0.043	mg/L			1	6010C
7439-96-5	Manganese	ND	0.0030	0.00040	mg/L			1	6010C
7440-02-0	Nickel	ND	0.010	0.0013	mg/L			1	6010C
7440-09-7	Potassium	0.25	0.50	0.10	mg/L	J	B	1	6010C
7782-49-2	Selenium	ND	0.025	0.0087	mg/L			1	6010C
7440-22-4	Silver	ND	0.0060	0.0017	mg/L			1	6010C
7440-23-5	Sodium	ND	1.0	0.32	mg/L			1	6010C
7440-28-0	Thallium	ND	0.020	0.010	mg/L			1	6010C
7440-62-2	Vanadium	ND	0.0050	0.0015	mg/L			1	6010C
7440-66-6	Zinc	ND	0.010	0.0015	mg/L			1	6010C
7439-97-6	Mercury	ND	0.00020	0.000043	mg/L			1	7470A

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-201563-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-641529/6 09/14/2022 11:20		CCB 480-641529/19 09/14/2022 17:39		CCB 480-641529/24 09/14/2022 18:25		CCB 480-641529/36 09/14/2022 19:12	
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND		ND		ND		ND	
Antimony	0.020	ND		ND		ND		ND	
Arsenic	0.015	ND		ND		ND		ND	
Barium	0.0020	ND		ND		ND		ND	
Beryllium	0.0020	ND		ND		ND		ND	
Cadmium	0.0020	ND		ND		ND		ND	
Calcium	0.50	ND		ND		ND		ND	
Chromium	0.0040	ND		ND		ND		ND	
Cobalt	0.0040	ND		ND		ND		ND	
Copper	0.010	ND		ND		ND		ND	
Iron	0.050	ND		ND		ND		ND	
Lead	0.010	ND		ND		ND		ND	
Magnesium	0.20	ND		ND		ND		ND	
Manganese	0.0030	ND		ND		ND		0.000430	J
Nickel	0.010	ND		ND		ND		ND	
Potassium	0.50	ND		0.168	J	0.116	J	0.132	J
Selenium	0.025	ND		ND		ND		ND	
Silver	0.0060	ND		ND		ND		ND	
Sodium	1.0	ND		ND		ND		ND	
Thallium	0.020	ND		ND		ND		ND	
Vanadium	0.0050	ND		ND		ND		ND	
Zinc	0.010	ND		ND		ND		ND	

Italicized analytes were not requested for this

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-201563-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	CCB 480-641529/48 09/14/2022 19:59		CCB 480-641529/58 09/14/2022 20:45					
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND		ND					
Antimony	0.020	ND		ND					
Arsenic	0.015	ND		ND					
Barium	0.0020	ND		ND					
Beryllium	0.0020	ND		ND					
Cadmium	0.0020	ND		ND					
Calcium	0.50	ND		ND					
Chromium	0.0040	ND		ND					
Cobalt	0.0040	ND		ND					
Copper	0.010	ND		ND					
Iron	0.050	ND		ND					
Lead	0.010	ND		ND					
Magnesium	0.20	ND		ND					
Manganese	0.0030	ND		0.000420	J				
Nickel	0.010	ND		ND					
Potassium	0.50	ND		0.112	J				
Selenium	0.025	ND		ND					
Silver	0.0060	ND		ND					
Sodium	1.0	ND		ND					
Thallium	0.020	ND		ND					
Vanadium	0.0050	ND		ND					
Zinc	0.010	ND		ND					

Italicized analytes were not requested for this

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-201563-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-641700/6 09/15/2022 12:08		CCB 480-641700/16 09/15/2022 12:47		CCB 480-641700/28 09/15/2022 13:40		CCB 480-641700/40 09/15/2022 14:26	
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND		ND		ND		ND	
Antimony	0.020	ND		ND		ND		ND	
Arsenic	0.015	ND		ND		ND		ND	
Barium	0.0020	ND		ND		ND		ND	
Beryllium	0.0020	ND		ND		ND		ND	
Cadmium	0.0020	ND		ND		ND		ND	
Calcium	0.50	ND		ND		ND		ND	
Chromium	0.0040	ND		ND		ND		ND	
Cobalt	0.0040	ND		ND		ND		ND	
Copper	0.010	ND		ND		ND		ND	
Iron	0.050	ND		ND		ND		ND	
Lead	0.010	ND		ND		ND		ND	
Magnesium	0.20	ND		ND		ND		ND	
Manganese	0.0030	ND		ND		ND		ND	
Nickel	0.010	ND		ND		ND		ND	
Potassium	0.50	ND		ND		ND		ND	
Selenium	0.025	ND		ND		ND		ND	
Silver	0.0060	ND		ND		ND		ND	
Sodium	1.0	ND		ND		ND		ND	
Thallium	0.020	ND		ND		ND		ND	
Vanadium	0.0050	ND		ND		ND		ND	
Zinc	0.010	ND		ND		ND		ND	

Italicized analytes were not requested for this

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-201563-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	CCB 480-641700/51 09/15/2022 15:13							
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND							
Antimony	0.020	ND							
Arsenic	0.015	ND							
Barium	0.0020	ND							
Beryllium	0.0020	ND							
Cadmium	0.0020	ND							
Calcium	0.50	ND							
Chromium	0.0040	ND							
Cobalt	0.0040	ND							
Copper	0.010	ND							
Iron	0.050	ND							
Lead	0.010	ND							
Magnesium	0.20	ND							
Manganese	0.0030	ND							
Nickel	0.010	ND							
Potassium	0.50	ND							
Selenium	0.025	ND							
Silver	0.0060	ND							
Sodium	1.0	ND							
Thallium	0.020	ND							
Vanadium	0.0050	ND							
Zinc	0.010	ND							

Italicized analytes were not requested for this

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-201563-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-641878/6 09/16/2022 13:07		CCB 480-641878/18 09/16/2022 14:47		CCB 480-641878/30 09/16/2022 15:39		CCB 480-641878/42 09/16/2022 16:25	
		Found	C	Found	C	Found	C	Found	C
Chromium	0.0040	ND		ND		ND		ND	
Iron	0.050	ND		ND		ND		ND	
Lead	0.010	ND		ND		ND		ND	
Manganese	0.0030	ND		ND		ND		ND	
Nickel	0.010	ND		ND		ND		ND	
Selenium	0.025	ND		ND		ND		ND	
Vanadium	0.0050	ND		ND		ND		ND	
Aluminum	0.20	ND		ND		ND		ND	
Antimony	0.020	ND		ND		ND		ND	
Arsenic	0.015	ND		ND		ND		ND	
Barium	0.0020	ND		ND		ND		ND	
Beryllium	0.0020	ND		ND		ND		ND	
Cadmium	0.0020	ND		ND		ND		ND	
Calcium	0.50	ND		ND		ND		ND	
Cobalt	0.0040	ND		ND		ND		ND	
Copper	0.010	ND		ND		ND		ND	
Magnesium	0.20	ND		ND		ND		ND	
Potassium	0.50	ND		ND		ND		ND	
Silver	0.0060	ND		ND		ND		ND	
Sodium	1.0	ND		ND		ND		ND	
Thallium	0.020	ND		ND		ND		ND	
Zinc	0.010	ND		ND		ND		ND	

Italicized analytes were not requested for this

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-201563-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-641443/8 09/14/2022 14:07		CCB 480-641443/11 09/14/2022 14:11		CCB 480-641443/23 09/14/2022 14:40		CCB 480-641443/35 09/14/2022 14:56	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.00020	ND		ND		ND		ND	

Italicized analytes were not requested for this

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-201563-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	CCB 480-641443/47 09/14/2022 15:11							
		Found	C	Found	C	Found	C	Found	C
Mercury	0.00020	ND							

Italicized analytes were not requested for this

FORM III-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-201563-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-641616/8 09/15/2022 13:17		CCB 480-641616/11 09/15/2022 13:21		CCB 480-641616/18 09/15/2022 13:32		CCB 480-641616/30 09/15/2022 13:47	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.00020	ND		ND		ND		ND	

Italicized analytes were not requested for this

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-201563-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	CCB 480-641616/66 09/15/2022 14:36							
		Found	C	Found	C	Found	C	Found	C
Mercury	0.00020	ND							

Italicized analytes were not requested for this

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Buffalo Job No.: 480-201563-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: MB 480-641268/1-A

Instrument Code: ICAP1 Batch No.: 641529

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			6010C
7440-36-0	Antimony	ND			6010C
7440-38-2	Arsenic	ND			6010C
7440-39-3	Barium	ND			6010C
7440-41-7	Beryllium	ND			6010C
7440-43-9	Cadmium	ND			6010C
7440-70-2	Calcium	ND			6010C
7440-47-3	Chromium	ND			6010C
7440-48-4	Cobalt	ND			6010C
7440-50-8	Copper	ND			6010C
7439-89-6	Iron	ND			6010C
7439-92-1	Lead	ND			6010C
7439-95-4	Magnesium	ND			6010C
7439-96-5	Manganese	ND			6010C
7440-02-0	Nickel	ND			6010C
7440-09-7	Potassium	0.168	J		6010C
7782-49-2	Selenium	ND			6010C
7440-22-4	Silver	ND			6010C
7440-23-5	Sodium	ND			6010C
7440-28-0	Thallium	ND			6010C
7440-62-2	Vanadium	ND			6010C
7440-66-6	Zinc	0.00195	J		6010C

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Buffalo Job No.: 480-201563-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 480-641372/1-A

Instrument Code: ICAP1 Batch No.: 641700

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			6010C
7440-36-0	Antimony	ND			6010C
7440-38-2	Arsenic	ND			6010C
7440-39-3	Barium	ND			6010C
7440-41-7	Beryllium	ND			6010C
7440-43-9	Cadmium	ND			6010C
7440-70-2	Calcium	3.53	J		6010C
7440-47-3	Chromium	ND			6010C
7440-48-4	Cobalt	ND			6010C
7440-50-8	Copper	ND			6010C
7439-89-6	Iron	ND			6010C
7439-92-1	Lead	ND			6010C
7439-95-4	Magnesium	1.80	J		6010C
7439-96-5	Manganese	0.0455	J		6010C
7440-02-0	Nickel	ND			6010C
7440-09-7	Potassium	ND			6010C
7782-49-2	Selenium	ND			6010C
7440-22-4	Silver	ND			6010C
7440-23-5	Sodium	ND			6010C
7440-28-0	Thallium	ND			6010C
7440-62-2	Vanadium	ND			6010C
7440-66-6	Zinc	ND			6010C

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-201563-1

SDG No.:

Lab Sample ID: ICSA 480-641529/8 Instrument ID: ICAP1

Lab File ID: I1091422A-13.asc ICS Source: MEI_MSS_ICSA_00046

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**500**	**494**	**99**
Antimony		**-0.0121**	
Arsenic		**-0.0024**	
Barium	**0.0120**	**0.0137**	
Beryllium		**0.0000**	
Cadmium		**0.0005**	
Calcium	**500**	**471**	**94**
Chromium		**0.0017**	
Cobalt		**-0.0007**	
Copper		**0.0060**	
Iron	**200**	**191**	**95**
Lead		**0.0030**	
Magnesium	**500**	**515**	**103**
Manganese		**0.0021**	
Nickel		**0.0013**	
Potassium		**0.260**	
Selenium		**0.0001**	
Silver		**0.0006**	
Sodium		**0.151**	
Thallium		**-0.0010**	
Vanadium		**0.0001**	
Zinc		**0.0046**	
Boron		*-0.0023*	
Lithium		*0.0069*	
Molybdenum		*-0.0022*	
Silicon		*-0.0204*	
Sulfur		*-0.170*	
Tin		*-0.0025*	
Titanium		*0.0021*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-201563-1

SDG No.:

Lab Sample ID: ICSAB 480-641529/9 Instrument ID: ICAP1

Lab File ID: I1091422A-13.asc ICS Source: MEI_MSS_ICSAB_00041

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Aluminum	**500**	**494**	**99**
Antimony	**0.500**	**0.478**	**96**
Arsenic	**0.500**	**0.499**	**100**
Barium	**0.513**	**0.518**	**101**
Beryllium	**0.250**	**0.245**	**98**
Cadmium	**0.500**	**0.514**	**103**
Calcium	**500**	**468**	**94**
Chromium	**0.500**	**0.485**	**97**
Cobalt	**0.500**	**0.499**	**100**
Copper	**0.500**	**0.531**	**106**
Iron	**200**	**190**	**95**
Lead	**0.500**	**0.497**	**99**
Magnesium	**500**	**513**	**103**
Manganese	**0.501**	**0.496**	**99**
Nickel	**0.501**	**0.487**	**97**
Potassium	**5.00**	**5.17**	**103**
Selenium	**0.500**	**0.498**	**100**
Silver	**0.500**	**0.526**	**105**
Sodium	**5.00**	**5.15**	**103**
Thallium	**0.500**	**0.492**	**98**
Vanadium	**0.500**	**0.491**	**98**
Zinc	**0.501**	**0.463**	**92**
Boron	*5.00*	*4.77*	*95*
Lithium		*0.0071*	
Molybdenum	*0.500*	*0.482*	*96*
Silicon	*5.00*	*4.80*	*96*
Strontium	*0.500*	*0.499*	*100*
Sulfur		*-0.192*	
Tin	*0.500*	*0.494*	*99*
Titanium	*0.500*	*0.498*	*100*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-201563-1

SDG No.:

Lab Sample ID: ICSA 480-641529/60 Instrument ID: ICAP1

Lab File ID: I1091422A-13.asc ICS Source: MEI_MSS_ICSA_00046

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**500**	**482**	**96**
Antimony		**-0.0096**	
Arsenic		**0.0004**	
Barium	**0.0120**	**0.0135**	
Beryllium		**0.0001**	
Cadmium		**0.0003**	
Calcium	**500**	**460**	**92**
Chromium		**0.0017**	
Cobalt		**-0.0008**	
Copper		**0.0050**	
Iron	**200**	**189**	**95**
Lead		**0.0011**	
Magnesium	**500**	**510**	**102**
Manganese		**0.0020**	
Nickel		**0.0008**	
Potassium		**0.162**	
Selenium		**-0.0052**	
Silver		**0.0021**	
Sodium		**0.308**	
Thallium		**-0.0034**	
Vanadium		**0.0004**	
Zinc		**0.0043**	
Boron		*-0.0025*	
Lithium		*0.0100*	
Molybdenum		*-0.0024*	
Silicon		*-0.0178*	
Sulfur		*-0.141*	
Tin		*-0.0020*	
Titanium		*0.0024*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-201563-1

SDG No.:

Lab Sample ID: ICSAB 480-641529/61 Instrument ID: ICAP1

Lab File ID: I1091422A-13.asc ICS Source: MEI_MSS_ICSAB_00041

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Aluminum	**500**	**481**	**96**
Antimony	**0.500**	**0.458**	**92**
Arsenic	**0.500**	**0.500**	**100**
Barium	**0.513**	**0.514**	**100**
Beryllium	**0.250**	**0.239**	**96**
Cadmium	**0.500**	**0.511**	**102**
Calcium	**500**	**457**	**91**
Chromium	**0.500**	**0.475**	**95**
Cobalt	**0.500**	**0.493**	**99**
Copper	**0.500**	**0.525**	**105**
Iron	**200**	**189**	**95**
Lead	**0.500**	**0.494**	**99**
Magnesium	**500**	**514**	**103**
Manganese	**0.501**	**0.496**	**99**
Nickel	**0.501**	**0.483**	**96**
Potassium	**5.00**	**5.37**	**107**
Selenium	**0.500**	**0.481**	**96**
Silver	**0.500**	**0.520**	**104**
Sodium	**5.00**	**5.31**	**106**
Thallium	**0.500**	**0.485**	**97**
Vanadium	**0.500**	**0.486**	**97**
Zinc	**0.501**	**0.472**	**94**
Boron	*5.00*	*4.74*	*95*
Lithium		*0.0077*	
Molybdenum	*0.500*	*0.475*	*95*
Silicon	*5.00*	*4.76*	*95*
Strontium	*0.500*	*0.494*	*99*
Sulfur		*-0.167*	
Tin	*0.500*	*0.492*	*98*
Titanium	*0.500*	*0.490*	*98*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-201563-1

SDG No.:

Lab Sample ID: ICSA 480-641700/8 Instrument ID: ICAP1

Lab File ID: I1091522A-1.asc ICS Source: MEI_MSS_ICSA_00046

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**500**	**503**	**101**
Antimony		**-0.0039**	
Arsenic		**-0.0001**	
Barium	**0.0120**	**0.0137**	
Beryllium		**0.0001**	
Cadmium		**0.0008**	
Calcium	**500**	**479**	**96**
Chromium		**0.0022**	
Cobalt		**-0.0013**	
Copper		**0.0070**	
Iron	**200**	**190**	**95**
Lead		**0.0027**	
Magnesium	**500**	**515**	**103**
Manganese		**0.0020**	
Nickel		**0.0007**	
Potassium		**0.292**	
Selenium		**-0.0085**	
Silver		**0.0003**	
Sodium		**0.149**	
Thallium		**-0.0086**	
Vanadium		**0.0001**	
Zinc		**0.0051**	
Boron		*-0.0003*	
Lithium		*0.0062*	
Molybdenum		*-0.0024*	
Tin		*-0.0025*	
Titanium		*0.0031*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-201563-1

SDG No.:

Lab Sample ID: ICSAB 480-641700/9 Instrument ID: ICAP1

Lab File ID: I1091522A-1.asc ICS Source: MEI_MSS_ICSAB_00041

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Aluminum	**500**	**503**	**101**
Antimony	**0.500**	**0.492**	**98**
Arsenic	**0.500**	**0.507**	**101**
Barium	**0.513**	**0.518**	**101**
Beryllium	**0.250**	**0.248**	**99**
Cadmium	**0.500**	**0.513**	**103**
Calcium	**500**	**474**	**95**
Chromium	**0.500**	**0.489**	**98**
Cobalt	**0.500**	**0.497**	**99**
Copper	**0.500**	**0.517**	**103**
Iron	**200**	**190**	**95**
Lead	**0.500**	**0.496**	**99**
Magnesium	**500**	**514**	**103**
Manganese	**0.501**	**0.493**	**98**
Nickel	**0.501**	**0.483**	**97**
Potassium	**5.00**	**5.20**	**104**
Selenium	**0.500**	**0.502**	**100**
Silver	**0.500**	**0.529**	**106**
Sodium	**5.00**	**5.23**	**105**
Thallium	**0.500**	**0.482**	**96**
Vanadium	**0.500**	**0.488**	**98**
Zinc	**0.501**	**0.462**	**92**
Boron	*5.00*	*4.77*	*95*
Lithium		*0.0045*	
Molybdenum	*0.500*	*0.480*	*96*
Strontium	*0.500*	*0.501*	*100*
Tin	*0.500*	*0.489*	*98*
Titanium	*0.500*	*0.500*	*100*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-201563-1

SDG No.:

Lab Sample ID: ICSA 480-641878/8 Instrument ID: ICAP2

Lab File ID: I2091622A-1.asc ICS Source: MEI_MSS_ICSA_00046

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Chromium		**-0.0002**	
Iron	**200**	**192**	**96**
Lead		**0.0001**	
Manganese		**0.0029**	
Nickel		**0.0003**	
Selenium		**0.0133**	
Vanadium		**0.0000**	
Aluminum	*500*	*511*	*102*
Antimony		*0.0024*	
Arsenic		*-0.0007*	
Barium	*0.0120*	*0.0138*	
Beryllium		*0.0001*	
Boron		*-0.0016*	
Cadmium		*0.0003*	
Calcium	*500*	*484*	*97*
Cobalt		*0.0001*	
Copper		*-0.0021*	
Lithium		*0.0006*	
Magnesium	*500*	*520*	*104*
Molybdenum		*-0.0005*	
Potassium		*0.159*	
Silver		*-0.0016*	
Sodium		*0.0791*	
Thallium		*0.0008*	
Tin		*-0.0008*	
Titanium		*0.0033*	
Zinc		*0.0046*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-201563-1

SDG No.:

Lab Sample ID: ICSAB 480-641878/9 Instrument ID: ICAP2

Lab File ID: I2091622A-1.asc ICS Source: MEI_MSS_ICSAB_00041

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Chromium	**0.500**	**0.489**	**98**
Iron	**200**	**193**	**96**
Lead	**0.500**	**0.509**	**102**
Manganese	**0.501**	**0.501**	**100**
Nickel	**0.501**	**0.489**	**98**
Selenium	**0.500**	**0.516**	**103**
Vanadium	**0.500**	**0.492**	**98**
Aluminum	*500*	*514*	*103*
Antimony	*0.500*	*0.493*	*99*
Arsenic	*0.500*	*0.507*	*101*
Barium	*0.513*	*0.529*	*103*
Beryllium	*0.250*	*0.250*	*100*
Boron	*5.00*	*4.86*	*97*
Cadmium	*0.500*	*0.517*	*103*
Calcium	*500*	*484*	*97*
Cobalt	*0.500*	*0.505*	*101*
Copper	*0.500*	*0.529*	*106*
Lithium		*-0.0025*	
Magnesium	*500*	*521*	*104*
Molybdenum	*0.500*	*0.491*	*98*
Potassium	*5.00*	*5.30*	*106*
Silver	*0.500*	*0.527*	*105*
Sodium	*5.00*	*5.06*	*101*
Strontium	*0.500*	*0.506*	*101*
Thallium	*0.500*	*0.503*	*101*
Tin	*0.500*	*0.494*	*99*
Titanium	*0.500*	*0.511*	*102*
Zinc	*0.501*	*0.460*	*92*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: SS1 (0-2) MS
Lab ID: 480-201563-1 MS
Lab Name: Eurofins Buffalo
Job No.: 480-201563-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 82.2

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	16640		9000		2530	301	75-125	F1	6010C
Antimony	38.71		2.3	J	50.6	72	75-125	F1	6010C
Arsenic	56.97		9.9		50.8	93	75-125		6010C
Barium	155.9		86.9		50.6	136	75-125	F1	6010C
Beryllium	47.52		0.46		50.6	93	75-125		6010C
Cadmium	45.74		0.75		50.6	89	75-125		6010C
Calcium	5336		2810		2540	100	75-125		6010C
Chromium	63.32		14.2		50.6	97	75-125		6010C
Cobalt	57.64		7.0		50.6	100	75-125		6010C
Copper	66.80		20.5		50.6	91	75-125		6010C
Iron	24500		23100		2540	56	75-125	4	6010C
Lead	137.3		88.4		50.8	96	75-125		6010C
Magnesium	4812		2220		2530	102	75-125		6010C
Manganese	502.3		427		50.6	149	75-125	4	6010C
Nickel	66.93		16.2		50.6	100	75-125		6010C
Potassium	5864		1740		2540	163	75-125	F1	6010C
Selenium	46.44		1.0	J	50.6	90	75-125		6010C
Silver	11.56		ND		12.7	91	75-125		6010C
Sodium	2356		58.6	J	2530	91	75-125		6010C
Thallium	49.69		ND		50.6	98	75-125		6010C
Vanadium	69.33		15.8		50.8	105	75-125		6010C
Zinc	164.9		119		50.6	90	75-125		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: SS1 (0-2) MS
Lab ID: 480-201563-1 MS
Lab Name: Eurofins Buffalo
Job No.: 480-201563-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 82.2

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	16640		9000		2530	301	75-125	F1	6010C
Antimony	38.71		2.3	J	50.6	72	75-125	F1	6010C
Arsenic	56.97		9.9		50.8	93	75-125		6010C
Barium	155.9		86.9		50.6	136	75-125	F1	6010C
Beryllium	47.52		0.46		50.6	93	75-125		6010C
Cadmium	45.74		0.75		50.6	89	75-125		6010C
Calcium	5336		2810		2540	100	75-125		6010C
Chromium	63.32		14.2		50.6	97	75-125		6010C
Cobalt	57.64		7.0		50.6	100	75-125		6010C
Copper	66.80		20.5		50.6	91	75-125		6010C
Iron	24500		23100		2540	56	75-125	4	6010C
Lead	137.3		88.4		50.8	96	75-125		6010C
Magnesium	4812		2220		2530	102	75-125		6010C
Manganese	502.3		427		50.6	149	75-125	4	6010C
Nickel	66.93		16.2		50.6	100	75-125		6010C
Potassium	5864		1740		2540	163	75-125	F1	6010C
Selenium	46.44		1.0	J	50.6	90	75-125		6010C
Silver	11.56		ND		12.7	91	75-125		6010C
Sodium	2356		58.6	J	2530	91	75-125		6010C
Thallium	49.69		ND		50.6	98	75-125		6010C
Vanadium	69.33		15.8		50.8	105	75-125		6010C
Zinc	164.9		119		50.6	90	75-125		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: SS1 (0-2) MSD
Lab ID: 480-201563-1 MSD
Lab Name: Eurofins Buffalo
Job No.: 480-201563-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 82.2

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	16170		2320	309	75-125	3	20	F1	6010C
Antimony	36.03		46.4	73	75-125	7	20	F1	6010C
Arsenic	52.62		46.5	92	75-125	8	20		6010C
Barium	147.4		46.4	131	75-125	6	20	F1	6010C
Beryllium	44.79		46.4	96	75-125	6	20		6010C
Cadmium	42.93		46.4	91	75-125	6	20		6010C
Calcium	4773		2320	85	75-125	11	20		6010C
Chromium	60.37		46.4	100	75-125	5	20		6010C
Cobalt	54.22		46.4	102	75-125	6	20		6010C
Copper	63.08		46.4	92	75-125	6	20		6010C
Iron	23440		2320	15	75-125	4	20	4	6010C
Lead	133.8		46.5	98	75-125	3	20		6010C
Magnesium	4542		2320	100	75-125	6	20		6010C
Manganese	461.1		46.4	73	75-125	9	20	4	6010C
Nickel	62.90		46.4	101	75-125	6	20		6010C
Potassium	5639		2320	168	75-125	4	20	F1	6010C
Selenium	43.88		46.4	92	75-125	6	20		6010C
Silver	10.74		11.6	93	75-125	7	20		6010C
Sodium	2217		2320	93	75-125	6	20		6010C
Thallium	45.76		46.4	99	75-125	8	20		6010C
Vanadium	64.78		46.5	105	75-125	7	20		6010C
Zinc	157.8		46.4	83	75-125	4	20		6010C

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: SS1 (0-2) PDS | Lab ID: 480-201563-1 PDS

Lab Name: Eurofins Buffalo | Job No.: 480-201563-1

SDG No.:

Matrix: Solid | Concentration Units: mg/Kg

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	10670		9000		2490	67	80-120	W	6010C
Antimony	49.42		2.3	J	49.7	95	80-120		6010C
Arsenic	57.12		9.9		49.8	95	80-120		6010C
Barium	126.9		86.9		49.7	81	80-120		6010C
Beryllium	48.42		0.46		49.7	97	80-120		6010C
Cadmium	46.82		0.75		49.7	93	80-120		6010C
Calcium	4957		2810		2490	86	80-120		6010C
Chromium	59.64		14.2		49.7	92	80-120		6010C
Cobalt	57.61		7.0		49.7	102	80-120		6010C
Copper	66.70		20.5		49.7	93	80-120		6010C
Iron	24170		23100		2490	44	80-120	W	6010C
Lead	134.1		88.4		49.8	92	80-120		6010C
Magnesium	4381		2220		2480	87	80-120		6010C
Manganese	456.1		427		49.7	58	80-120	W	6010C
Nickel	65.85		16.2		49.7	100	80-120		6010C
Potassium	4003		1740		2490	91	80-120		6010C
Selenium	47.38		1.0	J	49.7	93	80-120		6010C
Silver	11.74		ND		12.4	95	80-120		6010C
Sodium	2354		58.6	J	2490	92	80-120		6010C
Thallium	50.34		ND		49.7	101	80-120		6010C
Vanadium	61.73		15.8		49.8	92	80-120		6010C
Zinc	160.7		119		49.7	84	80-120		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 480-201563-1

SDG No:

Lab Name: Eurofins Buffalo Job No: 480-201563-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	9000		9645		7.2		6010C
Antimony	2.3	J	ND		NC		6010C
Arsenic	9.9		11.54	J	NC		6010C
Barium	86.9		97.18		12	V	6010C
Beryllium	0.46		0.466	J	NC		6010C
Cadmium	0.75		0.739	J	NC		6010C
Calcium	2810		3045		8.4		6010C
Chromium	14.2		14.81		4.4		6010C
Cobalt	7.0		6.80		3.4		6010C
Copper	20.5		21.50		4.7		6010C
Iron	23100		25130		8.8		6010C
Lead	88.4		88.63		0.21		6010C
Magnesium	2220		2470		11	V	6010C
Manganese	427		468.7		9.8		6010C
Nickel	16.2		16.09	J	0.71		6010C
Potassium	1740		1838		5.7		6010C
Selenium	1.0	J	ND		NC		6010C
Silver	ND		ND		NC		6010C
Sodium	58.6	J	ND		NC		6010C
Thallium	ND		ND		NC		6010C
Vanadium	15.8		16.81		6.6		6010C
Zinc	119		131.0		9.9		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

Job Narrative
480-201615-1

Comments
No additional comments.

Receipt
The samples were received on 9/14/2022 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.4º C, 2.7º C and 3.9º C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-641452 recovered above the upper control limit for Isopropylbenzene, n-Butylbenzene, N-Propylbenzene, tert-Butylbenzene and Vinyl chloride. The sample(s) associated with this CCV were non-detects above the reporting limits for the affected analytes; therefore, the data have been reported. The associated sample is impacted: SS2 (0-6) (480-201615-2).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-641512 recovered above the upper control limit for Dibromochloromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: FB_091322 (480-201615-14) and TB_091322 (480-201615-15).

Method 8260C: Internal standard and/or surrogate responses for the following samples were outside control limits: SS2 (0-2) (480-201615-1), SS2 (0-2) (480-201615-1[MS]) and SS2 (0-2) (480-201615-1[MSD]). The samples confirm responses were outside control limits.

Method 8260C: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 480-641652 and analytical batch 480-641653 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected. The associated samples are: SS2 (0-2) (480-201615-1[MS]) and SS2 (0-2) (480-201615-1[MSD]).

Method 8260C: Internal standard and surrogate responses for the following samples were outside control limits: SS3 (0-2) (480-201615-5), SS3 (0-6) (480-201615-6), SS3 (6-12) (480-201615-7), SS3 (12-24) (480-201615-8), FDUP2_091322 (480-201615-9), SS4 (0-2) (480-201615-10), SS4 (0-6) (480-201615-11), SS4 (6-12) (480-201615-12) and SS4 (12-24) (480-201615-13). The samples were re-analyzed and responses were outside control limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270D: The following samples were diluted due to color, appearance, and viscosity: SS2 (0-2) (480-201615-1), SS2 (0-2) (480-201615-1[MS]), SS2 (0-2) (480-201615-1[MSD]), SS2 (0-6) (480-201615-2), SS2 (6-12) (480-201615-3), SS2 (6-12) (480-201615-3[MS]), SS2 (6-12) (480-201615-3[MSD]), SS3 (0-2) (480-201615-5), SS3 (0-6) (480-201615-6), SS3 (6-12) (480-201615-7), SS3 (12-24) (480-201615-8), FDUP2_091322 (480-201615-9), SS4 (0-2) (480-201615-10), SS4 (0-6) (480-201615-11), SS4 (6-12) (480-201615-12) and SS4 (12-24) (480-201615-13). Elevated reporting limits (RL) are provided.

Method 8270D: The following sample required a dilution due to the nature of the sample matrix: SS2 (0-2) (480-201615-1). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method 8270D: The method blank for preparation batch 480-641786 contained Diethyl phthalate above the reporting limit (RL). None of the samples associated with this method blank contained the target compound above the RL; therefore, re-extraction and/or re-analysis of samples were not performed.

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: SS2 (0-6) (480-201615-2). These results have been reported and qualified.

Method 8270D: The following samples were diluted due to the nature of the sample matrix: SS2 (0-2) (480-201615-1[MS]) and SS2 (0-2) (480-201615-1[MSD]). Because of this dilution, the surrogate spike and matrix spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method 8270D: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 480-641786 and analytical batch 480-642158 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected.

Method 8270D: The following compound has been spiked at a level above the upper range of the initial calibration: Benzaldehyde. The laboratory control sample (LCS) associated with preparation batch 480-641786 and analytical batch 480-642158 recovered within acceptable limits for this analyte and has been qualified with an "E" flag.

Method 8270D: The following sample was diluted due to the nature of the sample matrix: FB_091322 (480-201615-14). Elevated reporting limits (RLs) are provided.

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-642029 recovered outside acceptance criteria,

low biased, for 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 3-Nitroaniline and Hexachlorocyclopentadiene. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-642029 recovered above the upper control limit for Carbazole. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: FB_091322 (480-201615-14).

Method 8270D: The laboratory control sample (LCS) for preparation batch 480-641523 and analytical batch 480-642029 recovered outside control limits for the following analytes: Carbazole. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported: FB_091322 (480-201615-14).

Method 8270D: The laboratory control sample (LCS) for preparation batch 480-641523 and analytical batch 480-642029 recovered outside control limits for the following analytes: Diethyl phthalate. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported: FB_091322 (480-201615-14).

Method 8270D: The method blank for preparation batch 480-641523 contained Diethyl phthalate above the reporting limit (RL). None of the samples associated with this method blank contained the target compound above the reporting limit; therefore, re-extraction and/or re-analysis of sample was not performed: FB_091322 (480-201615-14).

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-642901 recovered outside acceptance criteria, low biased, for Hexachlorocyclopentadiene. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6010C: The method blank for preparation batch 480-641524 and analytical batch 480-641879 contained Total Aluminum, Iron, and Manganese above the reporting limits (RL). Associated samples SS2 (0-2) (480-201615-1), SS2 (0-6) (480-201615-2), SS2 (6-12) (480-201615-3), SS2 (12-24) (480-201615-4), SS3 (0-2) (480-201615-5), SS3 (0-6) (480-201615-6), SS3 (6-12) (480-201615-7), SS3 (12-24) (480-201615-8), FDUP2_091322 (480-201615-9), SS4 (0-2) (480-201615-10), SS4 (0-6) (480-201615-11), SS4 (6-12) (480-201615-12) and SS4 (12-24) (480-201615-13) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 6010C: The serial dilution and post spike (480-201615-A-1-C PDS) and (480-201615-A-1-C SD ^5), associated with batch 480-641524, exceeded the quality control limits for Total Iron, Manganese, and Zinc. Sample matrix is suspected, therefore, no corrective action was necessary.

Method 6010C: The serial dilution (480-201615-A-1-C SD ^5) associated with batch 480-641879, exhibited results outside the quality control limits for Total Barium, Calcium, Chromium, and Magnesium. However, the post digestion spike (PDS) was compliant, therefore no corrective action was necessary.

Method 6010C: The recovery of post spike, (480-201615-A-1-C PDS), associated with batch 480-641879, exhibited a result outside quality control limits for Total Aluminum. However, the serial dilution (SD) of this sample was compliant, therefore no corrective action was necessary.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): ZB-624 (30) ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
SS2 (0-2)	480-201615-1	103	108	126 S1+	78
SS2 (0-6)	480-201615-2	98	101	118	81
SS2 (6-12)	480-201615-3	99	106	108	89
SS2 (12-24)	480-201615-4	98	107	106	94
SS3 (0-2)	480-201615-5	105	109	133 S1+	74
SS3 (0-6)	480-201615-6	110	114	138 S1+ *3	70 S1- *3
SS3 (6-12)	480-201615-7	104	109	144 S1+ *3	66 S1- *3
SS3 (12-24)	480-201615-8	119	127 S1+	152 S1+ *3	63 S1- *3
FDUP2_091322	480-201615-9	127	129 S1+	155 S1+ *3	59 S1- *3
SS4 (0-2)	480-201615-10	104	108	133 S1+	73
SS4 (0-6)	480-201615-11	110	112	140 S1+ *3	69 S1- *3
SS4 (6-12)	480-201615-12	121	120	165 S1+ *3	64 S1- *3
SS4 (12-24)	480-201615-13	115	115	155 S1+ *3	67 S1- *3
	MB 480-641451/2-A	97	101	106	98
	MB 480-641652/2-A	97	103	107	98
	MB 480-641838/2-A	100	105	104	94
	LCS 480-641451/1-A	100	103	108	95
	LCS 480-641652/1-A	96	100	107	94
	LCS 480-641838/1-A	99	102	108	94
SS2 (0-2) MS	480-201615-1 MS	96	92	123	77
SS2 (6-12) MS	480-201615-3 MS	95	91	112	92
SS2 (0-2) MSD	480-201615-1 MSD	98	91	121	79
SS2 (6-12) MSD	480-201615-3 MSD	101	95	112	88

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	60-140
DCA = 1,2-Dichloroethane-d4 (Surr)	64-126
TOL = Toluene-d8 (Surr)	71-125
BFB = 4-Bromofluorobenzene (Surr)	72-126

Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: M06222.D

Lab ID: 480-201615-1 MS Client ID: SS2 (0-2) MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	64.0	ND	60.8	95	74-127	
1,1,1-Trichloroethane	64.0	ND	62.2	97	77-121	
1,1,2,2-Tetrachloroethane	64.0	ND	70.5	110	80-120	*3
1,1,2-Trichloro-1,2,2-trifluoroethane	64.0	ND	56.9	89	60-140	
1,1,2-Trichloroethane	64.0	ND	59.1	92	78-122	
1,1-Dichloroethane	64.0	ND	65.1	102	73-126	
1,1-Dichloroethene	64.0	ND	59.6	93	59-125	
1,2,4-Trichlorobenzene	64.0	ND	20.8	33	64-120	*3 F1
1,2,4-Trimethylbenzene	64.0	ND	75.1	117	74-120	*3
1,2-Dibromo-3-Chloropropane	64.0	ND	49.2	77	63-124	*3
1,2-Dibromoethane	64.0	ND	44.7	70	78-120	F1
1,2-Dichlorobenzene	64.0	ND	49.5	77	75-120	*3
1,2-Dichloroethane	64.0	ND	48.9	76	77-122	F1
1,2-Dichloropropane	64.0	ND	57.3	89	75-124	
1,3,5-Trimethylbenzene	64.0	ND	78.0	122	74-120	*3 F1
1,3-Dichlorobenzene	64.0	ND	52.2	82	74-120	*3
1,4-Dichlorobenzene	64.0	ND	49.2	77	73-120	*3
2-Butanone (MEK)	320	ND	168	53	70-134	F1
2-Hexanone	320	ND	179	56	59-130	F1
4-Methyl-2-pentanone (MIBK)	320	ND	242	76	65-133	
Acetone	320	ND	175	55	61-137	F1
Benzene	64.0	ND	59.0	92	79-127	
Bromodichloromethane	64.0	ND	46.8	73	80-122	F1
Bromoform	64.0	ND	35.6	56	68-126	F1
Bromomethane	64.0	ND	44.6	70	37-149	
Carbon disulfide	64.0	ND	47.8	75	64-131	
Carbon tetrachloride	64.0	ND	53.2	83	75-135	
Chlorobenzene	64.0	ND	54.7	85	76-124	
Chloroethane	64.0	ND	72.3	113	69-135	
Chloroform	64.0	0.45 J	59.4	92	80-120	
Chloromethane	64.0	ND	77.7	121	63-127	
cis-1,2-Dichloroethene	64.0	ND	52.9	83	80-120	
cis-1,3-Dichloropropene	64.0	ND	33.5	52	80-120	F1
Cyclohexane	64.0	ND	58.3	91	65-120	
Dibromochloromethane	64.0	ND	48.7	76	76-125	
Dichlorodifluoromethane	64.0	ND	72.6	113	57-142	
Ethylbenzene	64.0	ND	62.2	97	80-120	
Isopropylbenzene	64.0	ND	91.9	144	72-120	*3 F1
m,p-Xylene	64.0	ND	58.8	92	70-130	
Methyl acetate	128	ND	63.8	50	55-136	F1
Methyl tert-butyl ether	64.0	ND	52.6	82	63-125	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: M06222.D

Lab ID: 480-201615-1 MS Client ID: SS2 (0-2) MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Methylcyclohexane	64.0	ND	39.5	62	60-140	
Methylene Chloride	64.0	ND	60.9	95	61-127	
n-Butylbenzene	64.0	ND	44.5	69	70-120	*3 F1
N-Propylbenzene	64.0	ND	77.1	120	70-130	*3
o-Xylene	64.0	ND	58.3	91	70-130	
sec-Butylbenzene	64.0	ND	63.1	99	74-120	*3
Styrene	64.0	ND	46.0	72	80-120	F1
tert-Butylbenzene	64.0	ND	73.6	115	73-120	*3
Tetrachloroethene	64.0	ND	57.4	90	74-122	
Toluene	64.0	ND	67.0	105	74-128	
trans-1,2-Dichloroethene	64.0	ND	52.1	81	78-126	
trans-1,3-Dichloropropene	64.0	ND	40.7	64	73-123	F1
Trichloroethene	64.0	ND	50.2	78	77-129	
Trichlorofluoromethane	64.0	ND	71.1	111	65-146	
Vinyl chloride	64.0	ND	74.6	116	61-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: M06253.D

Lab ID: 480-201615-3 MS Client ID: SS2 (6-12) MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	42.8	ND	37.6	88	74-127	
1,1,1-Trichloroethane	42.8	ND	37.9	89	77-121	
1,1,2,2-Tetrachloroethane	42.8	ND	34.8	81	80-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	42.8	ND	35.1	82	60-140	
1,1,2-Trichloroethane	42.8	ND	36.5	85	78-122	
1,1-Dichloroethane	42.8	ND	40.2	94	73-126	
1,1-Dichloroethene	42.8	ND	37.5	88	59-125	
1,2,4-Trichlorobenzene	42.8	ND	23.3	54	64-120	F1
1,2,4-Trimethylbenzene	42.8	ND	41.8	98	74-120	
1,2-Dibromo-3-Chloropropane	42.8	ND	28.6	67	63-124	
1,2-Dibromoethane	42.8	ND	32.5	76	78-120	F1
1,2-Dichlorobenzene	42.8	ND	34.4	80	75-120	
1,2-Dichloroethane	42.8	ND	34.1	80	77-122	
1,2-Dichloropropane	42.8	ND	39.5	92	75-124	
1,3,5-Trimethylbenzene	42.8	ND	42.6	99	74-120	
1,3-Dichlorobenzene	42.8	ND	35.0	82	74-120	
1,4-Dichlorobenzene	42.8	ND	33.7	79	73-120	
2-Butanone (MEK)	214	ND	141	66	70-134	F1
2-Hexanone	214	ND	151	71	59-130	
4-Methyl-2-pentanone (MIBK)	214	ND	160	75	65-133	
Acetone	214	ND	134	63	61-137	
Benzene	42.8	ND	39.2	92	79-127	
Bromodichloromethane	42.8	ND	36.4	85	80-122	
Bromoform	42.8	ND	30.4	71	68-126	
Bromomethane	42.8	ND	43.9	102	37-149	
Carbon disulfide	42.8	ND	34.8	81	64-131	
Carbon tetrachloride	42.8	ND	36.9	86	75-135	
Chlorobenzene	42.8	ND	37.2	87	76-124	
Chloroethane	42.8	ND	46.8	109	69-135	
Chloroform	42.8	ND	37.0	86	80-120	
Chloromethane	42.8	ND	48.1	112	63-127	
cis-1,2-Dichloroethene	42.8	ND	36.3	85	80-120	
cis-1,3-Dichloropropene	42.8	ND	34.1	80	80-120	
Cyclohexane	42.8	ND	40.0	93	65-120	
Dibromochloromethane	42.8	ND	36.9	86	76-125	
Dichlorodifluoromethane	42.8	ND	39.8	93	57-142	
Ethylbenzene	42.8	ND	39.3	92	80-120	
Isopropylbenzene	42.8	ND	44.3	103	72-120	
m,p-Xylene	42.8	ND	38.3	89	70-130	
Methyl acetate	85.7	ND	67.7	79	55-136	
Methyl tert-butyl ether	42.8	ND	33.7	79	63-125	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: M06253.D

Lab ID: 480-201615-3 MS Client ID: SS2 (6-12) MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Methylcyclohexane	42.8	ND	35.8	84	60-140	
Methylene Chloride	42.8	ND	38.7	90	61-127	
n-Butylbenzene	42.8	ND	35.5	83	70-120	
N-Propylbenzene	42.8	ND	41.6	97	70-130	
o-Xylene	42.8	ND	38.0	89	70-130	
sec-Butylbenzene	42.8	ND	41.6	97	74-120	
Styrene	42.8	ND	35.6	83	80-120	
tert-Butylbenzene	42.8	ND	44.4	104	73-120	
Tetrachloroethene	42.8	ND	37.1	87	74-122	
Toluene	42.8	0.44 J	40.9	95	74-128	
trans-1,2-Dichloroethene	42.8	ND	36.0	84	78-126	
trans-1,3-Dichloropropene	42.8	ND	33.3	78	73-123	
Trichloroethene	42.8	ND	36.0	84	77-129	
Trichlorofluoromethane	42.8	ND	42.6	100	65-146	
Vinyl chloride	42.8	ND	45.0	105	61-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: M06223.D

Lab ID: 480-201615-1 MSD Client ID: SS2 (0-2) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	87.1	76.7	88	23	30	74-127	
1,1,1-Trichloroethane	87.1	77.0	88	21	30	77-121	
1,1,2,2-Tetrachloroethane	87.1	89.3	103	23	30	80-120	*3
1,1,2-Trichloro-1,2,2-trifluoroethane	87.1	60.5	70	6	30	60-140	
1,1,2-Trichloroethane	87.1	77.2	89	27	30	78-122	
1,1-Dichloroethane	87.1	83.3	96	24	30	73-126	
1,1-Dichloroethene	87.1	74.5	86	22	30	59-125	
1,2,4-Trichlorobenzene	87.1	26.3	30	23	30	64-120	*3 F1
1,2,4-Trimethylbenzene	87.1	91.3	105	19	30	74-120	*3
1,2-Dibromo-3-Chloropropane	87.1	62.7	72	24	30	63-124	*3
1,2-Dibromoethane	87.1	57.6	66	25	30	78-120	F1
1,2-Dichlorobenzene	87.1	62.6	72	23	30	75-120	*3 F1
1,2-Dichloroethane	87.1	66.7	77	31	30	77-122	F2
1,2-Dichloropropane	87.1	77.5	89	30	30	75-124	
1,3,5-Trimethylbenzene	87.1	94.6	109	19	30	74-120	*3
1,3-Dichlorobenzene	87.1	64.9	74	22	30	74-120	*3
1,4-Dichlorobenzene	87.1	62.3	72	23	30	73-120	*3 F1
2-Butanone (MEK)	435	221	51	27	30	70-134	F1
2-Hexanone	435	226	52	23	30	59-130	F1
4-Methyl-2-pentanone (MIBK)	435	308	71	24	30	65-133	
Acetone	435	223	51	24	30	61-137	F1
Benzene	87.1	76.2	88	25	30	79-127	
Bromodichloromethane	87.1	64.4	74	32	30	80-122	F1 F2
Bromoform	87.1	47.4	54	29	30	68-126	F1
Bromomethane	87.1	56.8	65	24	30	37-149	
Carbon disulfide	87.1	61.5	71	25	30	64-131	
Carbon tetrachloride	87.1	66.8	77	23	30	75-135	
Chlorobenzene	87.1	70.7	81	26	30	76-124	
Chloroethane	87.1	94.8	109	27	30	69-135	
Chloroform	87.1	77.5	89	26	30	80-120	
Chloromethane	87.1	101	116	26	30	63-127	
cis-1,2-Dichloroethene	87.1	68.9	79	26	30	80-120	F1
cis-1,3-Dichloropropene	87.1	43.3	50	26	30	80-120	F1
Cyclohexane	87.1	74.9	86	25	30	65-120	
Dibromochloromethane	87.1	65.1	75	29	30	76-125	F1
Dichlorodifluoromethane	87.1	93.5	107	25	30	57-142	
Ethylbenzene	87.1	77.6	89	22	30	80-120	
Isopropylbenzene	87.1	109	126	17	30	72-120	*3 F1
m,p-Xylene	87.1	73.2	84	22	30	70-130	
Methyl acetate	174	108	62	51	30	55-136	F2
Methyl tert-butyl ether	87.1	69.1	79	27	30	63-125	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: M06223.D

Lab ID: 480-201615-1 MSD Client ID: SS2 (0-2) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylcyclohexane	87.1	52.2	60	28	30	60-140	
Methylene Chloride	87.1	80.9	93	28	30	61-127	
n-Butylbenzene	87.1	56.0	64	23	30	70-120	*3 F1
N-Propylbenzene	87.1	93.6	107	19	30	70-130	*3
o-Xylene	87.1	73.3	84	23	30	70-130	
sec-Butylbenzene	87.1	78.0	90	21	30	74-120	*3
Styrene	87.1	57.8	66	23	30	80-120	F1
tert-Butylbenzene	87.1	88.3	101	18	30	73-120	*3
Tetrachloroethene	87.1	70.4	81	20	30	74-122	
Toluene	87.1	83.6	96	22	30	74-128	
trans-1,2-Dichloroethene	87.1	67.6	78	26	30	78-126	
trans-1,3-Dichloropropene	87.1	50.9	58	22	30	73-123	F1
Trichloroethene	87.1	65.3	75	26	30	77-129	F1
Trichlorofluoromethane	87.1	88.1	101	21	30	65-146	
Vinyl chloride	87.1	94.9	109	24	30	61-133	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: M06254.D

Lab ID: 480-201615-3 MSD Client ID: SS2 (6-12) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	61.7	54.5	88	37	30	74-127	F2
1,1,1-Trichloroethane	61.7	55.3	90	37	30	77-121	F2
1,1,2,2-Tetrachloroethane	61.7	53.0	86	41	30	80-120	F2
1,1,2-Trichloro-1,2,2-trifluoroethane	61.7	49.2	80	33	30	60-140	F2
1,1,2-Trichloroethane	61.7	51.6	84	34	30	78-122	F2
1,1-Dichloroethane	61.7	58.4	95	37	30	73-126	F2
1,1-Dichloroethene	61.7	51.9	84	32	30	59-125	F2
1,2,4-Trichlorobenzene	61.7	22.4	36	4	30	64-120	F1
1,2,4-Trimethylbenzene	61.7	56.8	92	30	30	74-120	
1,2-Dibromo-3-Chloropropane	61.7	42.0	68	38	30	63-124	F2
1,2-Dibromoethane	61.7	42.5	69	27	30	78-120	F1
1,2-Dichlorobenzene	61.7	43.6	71	24	30	75-120	F1
1,2-Dichloroethane	61.7	47.6	77	33	30	77-122	F2
1,2-Dichloropropane	61.7	54.6	88	32	30	75-124	F2
1,3,5-Trimethylbenzene	61.7	58.3	95	31	30	74-120	F2
1,3-Dichlorobenzene	61.7	42.7	69	20	30	74-120	F1
1,4-Dichlorobenzene	61.7	40.1	65	17	30	73-120	F1
2-Butanone (MEK)	308	203	66	36	30	70-134	F2 F1
2-Hexanone	308	192	62	23	30	59-130	
4-Methyl-2-pentanone (MIBK)	308	234	76	37	30	65-133	F2
Acetone	308	208	67	43	30	61-137	F2
Benzene	61.7	54.9	89	33	30	79-127	F2
Bromodichloromethane	61.7	51.5	84	34	30	80-122	F2
Bromoform	61.7	42.0	68	32	30	68-126	F2
Bromomethane	61.7	59.9	97	31	30	37-149	F2
Carbon disulfide	61.7	44.6	72	25	30	64-131	
Carbon tetrachloride	61.7	53.4	87	36	30	75-135	F2
Chlorobenzene	61.7	48.4	79	26	30	76-124	
Chloroethane	61.7	66.0	107	34	30	69-135	F2
Chloroform	61.7	53.6	87	37	30	80-120	F2
Chloromethane	61.7	70.4	114	38	30	63-127	F2
cis-1,2-Dichloroethene	61.7	49.6	80	31	30	80-120	F2
cis-1,3-Dichloropropene	61.7	42.0	68	21	30	80-120	F1
Cyclohexane	61.7	54.9	89	31	30	65-120	F2
Dibromochloromethane	61.7	50.1	81	30	30	76-125	
Dichlorodifluoromethane	61.7	60.2	98	41	30	57-142	F2
Ethylbenzene	61.7	52.1	85	28	30	80-120	
Isopropylbenzene	61.7	63.5	103	35	30	72-120	F2
m,p-Xylene	61.7	51.1	83	29	30	70-130	
Methyl acetate	123	101	81	39	30	55-136	F2
Methyl tert-butyl ether	61.7	49.8	81	39	30	63-125	F2

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: M06254.D

Lab ID: 480-201615-3 MSD Client ID: SS2 (6-12) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylcyclohexane	61.7	45.3	73	23	30	60-140	
Methylene Chloride	61.7	55.8	90	36	30	61-127	F2
n-Butylbenzene	61.7	38.5	62	8	30	70-120	F1
N-Propylbenzene	61.7	54.9	89	28	30	70-130	
o-Xylene	61.7	51.8	84	31	30	70-130	F2
sec-Butylbenzene	61.7	52.4	85	23	30	74-120	
Styrene	61.7	43.6	71	20	30	80-120	F1
tert-Butylbenzene	61.7	58.9	95	28	30	73-120	
Tetrachloroethene	61.7	48.6	79	27	30	74-122	
Toluene	61.7	55.5	89	30	30	74-128	
trans-1,2-Dichloroethene	61.7	46.9	76	26	30	78-126	F1
trans-1,3-Dichloropropene	61.7	39.5	64	17	30	73-123	F1
Trichloroethene	61.7	46.7	76	26	30	77-129	F1
Trichlorofluoromethane	61.7	62.0	100	37	30	65-146	F2
Vinyl chloride	61.7	64.7	105	36	30	61-133	F2

Column to be used to flag recovery and RPD values

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Sample No.: CCVIS 480-641653/4 Date Analyzed: 09/15/2022 19:39

Instrument ID: HP5977M GC Column: ZB-624 (30) VOA ID: 0.25(mm)

Lab File ID (Standard): M06199.D Heated Purge: (Y/N) Y

Calibration ID: 43905

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		413763	5.23	854777	8.22	833269	10.62
UPPER LIMIT		827526	5.73	1709554	8.72	1666538	11.12
LOWER LIMIT		206882	4.73	427389	7.72	416635	10.12
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 480-641653/5		398807	5.23	813959	8.22	824550	10.62
LCS 480-641652/1-A		402433	5.23	826466	8.22	830645	10.62
MB 480-641652/2-A		385737	5.23	798530	8.22	854805	10.62
480-201615-4	SS2 (12-24)	390420	5.23	823803	8.22	834939	10.62
480-201615-1	SS2 (0-2)	314044	5.23	515068	8.22	335477*3	10.62
480-201615-1 MS	SS2 (0-2) MS	334353	5.23	561336	8.22	367029*3	10.62
480-201615-1 MSD	SS2 (0-2) MSD	337228	5.23	602240	8.22	415834*3	10.62

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Sample No.: CCVIS 480-641839/4 Date Analyzed: 09/18/2022 19:20

Instrument ID: HP5977M GC Column: ZB-624 (30) VOA ID: 0.25(mm)

Lab File ID (Standard): M06229.D Heated Purge: (Y/N) Y

Calibration ID: 43905

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		381417	5.23	786857	8.21	785331	10.62
UPPER LIMIT		762834	5.73	1573714	8.71	1570662	11.12
LOWER LIMIT		190709	4.73	393429	7.71	392666	10.12
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 480-641839/5		362892	5.23	751657	8.22	772696	10.62
LCS 480-641838/1-A		378071	5.23	783931	8.22	791752	10.62
MB 480-641838/2-A		358340	5.23	759830	8.22	801145	10.62
480-201615-3	SS2 (6-12)	350111	5.23	714450	8.22	636630	10.62
480-201615-5	SS3 (0-2)	301074	5.23	463668	8.22	284320*3	10.62
480-201615-6	SS3 (0-6)	267485	5.23	378810*3	8.22	213727*3	10.62
480-201615-7	SS3 (6-12)	291890	5.23	377006*3	8.22	196680*3	10.62
480-201615-8	SS3 (12-24)	244344	5.23	289959*3	8.22	142807*3	10.62
480-201615-9	FDUP2_091322	213094	5.23	231846*3	8.22	107942*3	10.62
480-201615-10	SS4 (0-2)	305931	5.23	462387	8.22	272625*3	10.62
480-201615-11	SS4 (0-6)	252563	5.23	348434*3	8.22	199718*3	10.62
480-201615-12	SS4 (6-12)	200172	5.23	208213*3	8.22	107992*3	10.62
480-201615-13	SS4 (12-24)	227066	5.23	254041*3	8.22	132576*3	10.62
480-201615-3 MS	SS2 (6-12) MS	376023	5.23	766756	8.22	731415	10.62
480-201615-3 MSD	SS2 (6-12) MSD	355134	5.23	703686	8.22	611473	10.62

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Lab Sample ID: CCVIS 480-641512/4 Calibration Date: 09/15/2022 12:33

Instrument ID: HP5973N Calib Start Date: 08/29/2022 14:38

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 08/29/2022 17:19

Lab File ID: N0488.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.238	1.040	0.1000	21.0	25.0	-16.0	50.0
Chloromethane	Ave	1.917	1.762	0.1000	23.0	25.0	-8.1	20.0
Vinyl chloride	Ave	1.285	1.192	0.1000	23.2	25.0	-7.3	20.0
Butadiene	Ave	1.496	1.258		21.0	25.0	-15.9	20.0
Bromomethane	Ave	0.8631	0.8348	0.1000	24.2	25.0	-3.3	50.0
Chloroethane	Ave	0.9071	0.8103	0.1000	22.3	25.0	-10.7	50.0
Trichlorofluoromethane	Ave	1.880	1.738	0.1000	23.1	25.0	-7.5	20.0
Dichlorofluoromethane	Ave	2.302	2.131		23.1	25.0	-7.4	20.0
Ethyl ether	Ave	1.533	1.582		25.8	25.0	3.2	20.0
Acrolein	Ave	0.2173	0.2405		138	125	10.7	50.0
1,1-Dichloroethene	Ave	1.091	0.9881	0.1000	22.6	25.0	-9.4	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.142	1.053	0.1000	23.1	25.0	-7.8	20.0
Acetone	Ave	0.8887	1.066	0.1000	150	125	20.0	50.0
Iodomethane	Ave	1.983	1.794		22.6	25.0	-9.5	20.0
Carbon disulfide	Ave	3.509	3.291	0.1000	23.4	25.0	-6.2	20.0
Allyl chloride	Ave	2.644	2.555		24.2	25.0	-3.4	20.0
Methyl acetate	Ave	1.928	1.871	0.1000	48.5	50.0	-3.0	50.0
Methylene Chloride	Lin1		1.221	0.1000	24.4	25.0	-2.5	20.0
2-Methyl-2-propanol	Ave	0.2175	0.2356		271	250	8.3	50.0
Methyl tert-butyl ether	Ave	4.704	4.471	0.1000	23.8	25.0	-5.0	20.0
trans-1,2-Dichloroethene	Ave	1.339	1.176	0.1000	21.9	25.0	-12.2	20.0
Acrylonitrile	Ave	0.9736	0.9487		244	250	-2.6	20.0
Hexane	Ave	2.399	2.362		24.6	25.0	-1.5	20.0
1,1-Dichloroethane	Ave	2.809	2.645	0.2000	23.5	25.0	-5.8	20.0
Vinyl acetate	Ave	4.023	5.086		63.2	50.0	26.4*	20.0
2,2-Dichloropropane	Ave	1.391	1.389		25.0	25.0	-0.1	20.0
cis-1,2-Dichloroethene	Ave	1.530	1.411	0.1000	23.1	25.0	-7.7	20.0
2-Butanone (MEK)	Ave	1.316	1.404	0.1000	133	125	6.6	20.0
Chlorobromomethane	Ave	0.8167	0.8031		24.6	25.0	-1.7	20.0
Tetrahydrofuran	Ave	0.8393	0.8180		48.7	50.0	-2.5	20.0
Chloroform	Ave	2.625	2.494	0.2000	23.7	25.0	-5.0	20.0
1,1,1-Trichloroethane	Ave	2.035	1.972	0.1000	24.2	25.0	-3.1	20.0
Cyclohexane	Ave	2.738	2.662	0.1000	24.3	25.0	-2.8	20.0
Carbon tetrachloride	Ave	1.618	1.780	0.1000	27.5	25.0	10.0	20.0
1,1-Dichloropropene	Ave	1.819	1.809		24.9	25.0	-0.6	20.0
Benzene	Ave	5.363	5.331	0.5000	24.9	25.0	-0.6	20.0
Isobutyl alcohol	Ave	0.0889	0.1032		725	625	16.0	50.0
1,2-Dichloroethane	Ave	2.806	2.788	0.1000	24.8	25.0	-0.6	20.0
n-Heptane	Ave	3.120	2.902		23.3	25.0	-7.0	20.0
Trichloroethene	Ave	1.437	1.355	0.2000	23.6	25.0	-5.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Lab Sample ID: CCVIS 480-641512/4 Calibration Date: 09/15/2022 12:33

Instrument ID: HP5973N Calib Start Date: 08/29/2022 14:38

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 08/29/2022 17:19

Lab File ID: N0488.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.190	2.038	0.1000	23.3	25.0	-6.9	20.0
1,2-Dichloropropane	Ave	1.535	1.607	0.1000	26.2	25.0	4.7	20.0
Dibromomethane	Ave	1.025	1.034	0.1000	25.2	25.0	0.9	20.0
1,4-Dioxane	Ave	0.0046	0.0042		453	500	-9.3	50.0
Bromodichloromethane	Ave	1.858	1.939	0.2000	26.1	25.0	4.3	20.0
2-Chloroethyl vinyl ether	Ave	1.187	1.250		26.3	25.0	5.4	20.0
cis-1,3-Dichloropropene	Ave	2.142	2.364	0.2000	27.6	25.0	10.4	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.2447	0.2415	0.1000	123	125	-1.3	20.0
Toluene	Ave	0.9822	0.8612	0.4000	21.9	25.0	-12.3	20.0
trans-1,3-Dichloropropene	Ave	0.5340	0.5641	0.1000	26.4	25.0	5.6	20.0
Ethyl methacrylate	Ave	0.4612	0.5063		27.4	25.0	9.8	20.0
1,1,2-Trichloroethane	Ave	0.2897	0.2782	0.1000	24.0	25.0	-4.0	20.0
Tetrachloroethene	Ave	0.3928	0.3451	0.2000	22.0	25.0	-12.1	20.0
1,3-Dichloropropane	Ave	0.5874	0.5904		25.1	25.0	0.5	20.0
2-Hexanone	Ave	0.5167	0.5435	0.1000	131	125	5.2	20.0
Dibromochloromethane	Ave	0.3304	0.3988	0.1000	30.2	25.0	20.7*	20.0
1,2-Dibromoethane	Ave	0.3774	0.3723		24.7	25.0	-1.3	20.0
Chlorobenzene	Ave	1.097	0.9815	0.5000	22.4	25.0	-10.6	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3313	0.3659		27.6	25.0	10.4	20.0
Ethylbenzene	Ave	1.797	1.626	0.1000	22.6	25.0	-9.5	20.0
m,p-Xylene	Ave	0.6558	0.6414	0.1000	24.5	25.0	-2.2	20.0
o-Xylene	Ave	0.6638	0.6309	0.3000	23.8	25.0	-5.0	20.0
Styrene	Ave	1.139	1.133	0.3000	24.9	25.0	-0.5	20.0
Bromoform	Ave	0.2002	0.2790	0.1000	34.8	25.0	39.4	50.0
Isopropylbenzene	Ave	3.254	3.067	0.1000	23.6	25.0	-5.7	20.0
Bromobenzene	Ave	0.8862	0.8387		23.7	25.0	-5.4	20.0
1,1,2,2-Tetrachloroethane	Ave	0.9782	0.9114	0.3000	23.3	25.0	-6.8	20.0
N-Propylbenzene	Ave	3.929	3.700		23.5	25.0	-5.8	20.0
1,2,3-Trichloropropane	Ave	0.3302	0.2860		21.7	25.0	-13.4	20.0
trans-1,4-Dichloro-2-butene	Ave	0.3241	0.4420		34.1	25.0	36.4	50.0
2-Chlorotoluene	Ave	0.7860	0.7092		22.6	25.0	-9.8	20.0
1,3,5-Trimethylbenzene	Ave	2.778	2.620		23.6	25.0	-5.7	20.0
4-Chlorotoluene	Ave	2.647	2.364		22.3	25.0	-10.7	20.0
tert-Butylbenzene	Ave	0.5658	0.5455		24.1	25.0	-3.6	20.0
1,2,4-Trimethylbenzene	Ave	2.770	2.679		24.2	25.0	-3.3	20.0
sec-Butylbenzene	Ave	3.476	3.349		24.1	25.0	-3.7	20.0
1,3-Dichlorobenzene	Ave	1.594	1.554	0.6000	24.4	25.0	-2.5	20.0
4-Isopropyltoluene	Ave	3.041	2.919		24.0	25.0	-4.0	20.0
1,4-Dichlorobenzene	Ave	1.641	1.580	0.5000	24.1	25.0	-3.8	20.0
n-Butylbenzene	Ave	2.855	2.643		23.1	25.0	-7.4	20.0
1,2-Dichlorobenzene	Ave	1.583	1.481	0.4000	23.4	25.0	-6.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Lab Sample ID: ICV 480-639579/28 Calibration Date: 08/30/2022 07:38

Instrument ID: HP5977M Calib Start Date: 08/30/2022 00:22

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 08/30/2022 02:47

Lab File ID: M05811.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.313	0.998	0.1000	38.0	50.0	-24.0	50.0
Chloromethane	Ave	2.078	1.781	0.1000	42.9	50.0	-14.3	30.0
Vinyl chloride	Ave	1.370	1.098	0.1000	40.1	50.0	-19.9	30.0
Butadiene	Ave	1.464	1.118		38.2	50.0	-23.6	30.0
Bromomethane	Ave	0.7796	0.6612	0.1000	42.4	50.0	-15.2	50.0
Chloroethane	Ave	0.8148	0.6646	0.1000	40.8	50.0	-18.4	50.0
Trichlorofluoromethane	Ave	1.640	1.249	0.1000	38.1	50.0	-23.8	30.0
Dichlorofluoromethane	Ave	1.986	1.649		41.5	50.0	-17.0	30.0
Ethyl ether	Ave	1.161	1.041		44.8	50.0	-10.3	30.0
Acrolein	Ave	0.1617	0.1315		203	250	-18.7	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.195	0.9041	0.1000	37.8	50.0	-24.4	30.0
1,1-Dichloroethene	Ave	1.056	0.8127	0.1000	38.5	50.0	-23.0	30.0
Acetone	Ave	0.5369	0.4505	0.1000	210	250	-16.1	50.0
Iodomethane	Ave	2.117	1.810		42.8	50.0	-14.5	30.0
Carbon disulfide	Ave	3.898	3.081	0.1000	39.5	50.0	-21.0	30.0
Allyl chloride	Ave	2.312	1.891		40.9	50.0	-18.2	30.0
Methyl acetate	Ave	1.253	1.108	0.1000	88.5	100	-11.5	50.0
Methylene Chloride	Lin1		1.238	0.1000	45.9	50.0	-8.2	30.0
2-Methyl-2-propanol	Ave	0.2222	0.1923		433	500	-13.5	50.0
Methyl tert-butyl ether	Ave	4.094	3.694	0.1000	45.1	50.0	-9.8	30.0
trans-1,2-Dichloroethene	Ave	1.314	1.081	0.1000	41.1	50.0	-17.7	30.0
Acrylonitrile	Ave	0.6330	0.5593		442	500	-11.6	30.0
Hexane	Ave	2.219	1.603		36.1	50.0	-27.7	30.0
1,1-Dichloroethane	Ave	2.499	2.112	0.2000	42.2	50.0	-15.5	30.0
Vinyl acetate	Ave	3.316	2.710		81.7	100	-18.3	30.0
2,2-Dichloropropane	Ave	1.743	1.307		37.5	50.0	-25.0	30.0
cis-1,2-Dichloroethene	Ave	1.502	1.292	0.1000	43.0	50.0	-14.0	30.0
2-Butanone (MEK)	Ave	0.7873	0.7152	0.1000	227	250	-9.2	30.0
Chlorobromomethane	Ave	0.8222	0.7234		44.0	50.0	-12.0	30.0
Tetrahydrofuran	Ave	0.5465	0.4869		89.1	100	-10.9	30.0
Chloroform	Ave	2.413	2.012	0.2000	41.7	50.0	-16.6	30.0
Cyclohexane	Ave	2.643	1.935	0.1000	36.6	50.0	-26.8	30.0
1,1,1-Trichloroethane	Ave	2.002	1.533	0.1000	38.3	50.0	-23.4	30.0
Carbon tetrachloride	Ave	1.683	1.256	0.1000	37.3	50.0	-25.4	30.0
1,1-Dichloropropene	Ave	1.701	1.315		38.6	50.0	-22.7	30.0
Benzene	Ave	4.988	4.223	0.5000	42.3	50.0	-15.3	30.0
Isobutyl alcohol	Ave	0.0881	0.0798		1130	1250	-9.4	50.0
1,2-Dichloroethane	Ave	1.931	1.722	0.1000	44.6	50.0	-10.9	30.0
n-Heptane	Ave	2.322	1.714		36.9	50.0	-26.2	30.0
Trichloroethene	Ave	1.337	1.102	0.2000	41.2	50.0	-17.6	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Lab Sample ID: ICV 480-639579/28 Calibration Date: 08/30/2022 07:38

Instrument ID: HP5977M Calib Start Date: 08/30/2022 00:22

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 08/30/2022 02:47

Lab File ID: M05811.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.304	1.692	0.1000	36.7	50.0	-26.6	30.0
1,2-Dichloropropane	Ave	1.424	1.245	0.1000	43.7	50.0	-12.5	30.0
Dibromomethane	Ave	0.8519	0.7628	0.1000	44.8	50.0	-10.5	30.0
1,4-Dioxane	Ave	0.0083	0.0080		965	1000	-3.5	50.0
Bromodichloromethane	Ave	1.659	1.500	0.2000	45.2	50.0	-9.6	30.0
2-Chloroethyl vinyl ether	Ave	0.8250	0.7634		46.3	50.0	-7.5	30.0
cis-1,3-Dichloropropene	Ave	2.070	1.830	0.2000	44.2	50.0	-11.6	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7501	0.7346	0.1000	245	250	-2.1	30.0
Toluene	Ave	1.433	1.280	0.4000	44.7	50.0	-10.7	30.0
trans-1,3-Dichloropropene	Ave	0.8480	0.8126	0.1000	47.9	50.0	-4.2	30.0
Ethyl methacrylate	Ave	0.7499	0.7278		48.5	50.0	-2.9	30.0
1,1,2-Trichloroethane	Ave	0.4352	0.4211	0.1000	48.4	50.0	-3.2	30.0
Tetrachloroethene	Ave	0.6335	0.5219	0.2000	41.2	50.0	-17.6	30.0
1,3-Dichloropropane	Ave	0.8727	0.8459		48.5	50.0	-3.1	30.0
2-Hexanone	Ave	0.5096	0.4949	0.1000	243	250	-2.9	30.0
Dibromochloromethane	Ave	0.5654	0.5589	0.1000	49.4	50.0	-1.2	30.0
1,2-Dibromoethane	Ave	0.5557	0.5326		47.9	50.0	-4.1	30.0
Chlorobenzene	Ave	1.670	1.531	0.5000	45.8	50.0	-8.4	30.0
Ethylbenzene	Ave	2.682	2.330	0.1000	43.4	50.0	-13.1	30.0
1,1,1,2-Tetrachloroethane	Ave	0.6351	0.6154		48.5	50.0	-3.1	30.0
m,p-Xylene	Ave	1.082	0.9456	0.1000	43.7	50.0	-12.6	30.0
o-Xylene	Ave	1.123	0.998	0.3000	44.4	50.0	-11.1	30.0
Styrene	Ave	1.903	1.720	0.3000	45.2	50.0	-9.6	30.0
Bromoform	Ave	0.3734	0.3662	0.1000	49.0	50.0	-1.9	50.0
Isopropylbenzene	Ave	2.616	2.329	0.1000	44.5	50.0	-11.0	30.0
Bromobenzene	Ave	0.7081	0.6815		48.1	50.0	-3.8	30.0
1,1,2,2-Tetrachloroethane	Ave	0.7135	0.7019	0.3000	49.2	50.0	-1.6	30.0
N-Propylbenzene	Ave	3.014	2.650		44.0	50.0	-12.1	30.0
1,2,3-Trichloropropane	Ave	0.2255	0.2265		50.2	50.0	0.5	30.0
trans-1,4-Dichloro-2-butene	Ave	0.2475	0.2356		47.6	50.0	-4.8	50.0
2-Chlorotoluene	Ave	0.6595	0.6111		46.3	50.0	-7.3	30.0
1,3,5-Trimethylbenzene	Ave	2.253	2.023		44.9	50.0	-10.2	30.0
4-Chlorotoluene	Ave	0.6758	0.6178		45.7	50.0	-8.6	30.0
tert-Butylbenzene	Ave	0.4987	0.4361		43.7	50.0	-12.5	30.0
1,2,4-Trimethylbenzene	Ave	2.307	2.130		46.2	50.0	-7.7	30.0
sec-Butylbenzene	Ave	2.825	2.426		42.9	50.0	-14.1	30.0
1,3-Dichlorobenzene	Ave	1.369	1.271	0.6000	46.4	50.0	-7.2	30.0
4-Isopropyltoluene	Ave	2.532	2.190		43.2	50.0	-13.5	30.0
1,4-Dichlorobenzene	Ave	1.395	1.298	0.5000	46.5	50.0	-7.0	30.0
n-Butylbenzene	Ave	2.268	1.918		42.3	50.0	-15.4	30.0
1,2-Dichlorobenzene	Ave	1.379	1.303	0.4000	47.3	50.0	-5.5	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Lab Sample ID: CCVIS 480-641452/4 Calibration Date: 09/14/2022 19:09

Instrument ID: HP5977M Calib Start Date: 08/30/2022 00:22

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 08/30/2022 02:47

Lab File ID: M06168.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.313	1.597	0.1000	60.8	50.0	21.6	50.0
Chloromethane	Ave	2.078	2.484	0.1000	59.8	50.0	19.6	20.0
Vinyl chloride	Ave	1.370	1.691	0.1000	61.7	50.0	23.4*	20.0
Butadiene	Ave	1.464	1.784		60.9	50.0	21.9*	20.0
Bromomethane	Ave	0.7796	0.8964	0.1000	57.5	50.0	15.0	50.0
Chloroethane	Ave	0.8148	0.9623	0.1000	59.0	50.0	18.1	50.0
Trichlorofluoromethane	Ave	1.640	1.831	0.1000	55.8	50.0	11.6	20.0
Dichlorofluoromethane	Ave	1.986	2.256		56.8	50.0	13.6	20.0
Ethyl ether	Ave	1.161	1.209		52.1	50.0	4.2	20.0
Acrolein	Ave	0.1617	0.1495		231	250	-7.5	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.195	1.024	0.1000	42.8	50.0	-14.4	20.0
1,1-Dichloroethene	Ave	1.056	1.139	0.1000	53.9	50.0	7.9	20.0
Acetone	Ave	0.5369	0.5462	0.1000	254	250	1.7	50.0
Iodomethane	Ave	2.117	2.090		49.3	50.0	-1.3	20.0
Carbon disulfide	Ave	3.898	4.024	0.1000	51.6	50.0	3.2	20.0
Allyl chloride	Ave	2.312	2.511		54.3	50.0	8.6	20.0
Methyl acetate	Ave	1.253	1.161	0.1000	92.6	100	-7.4	50.0
Methylene Chloride	Lin1		1.393	0.1000	51.7	50.0	3.4	20.0
2-Methyl-2-propanol	Ave	0.2222	0.1950		439	500	-12.3	50.0
Methyl tert-butyl ether	Ave	4.094	3.822	0.1000	46.7	50.0	-6.6	20.0
trans-1,2-Dichloroethene	Ave	1.314	1.351	0.1000	51.4	50.0	2.8	20.0
Acrylonitrile	Ave	0.6330	0.6085		481	500	-3.9	20.0
Hexane	Ave	2.219	2.518		56.7	50.0	13.5	20.0
1,1-Dichloroethane	Ave	2.499	2.581	0.2000	51.6	50.0	3.3	20.0
Vinyl acetate	Ave	3.316	3.361		101	100	1.4	20.0
2,2-Dichloropropane	Ave	1.743	1.753		50.3	50.0	0.6	20.0
cis-1,2-Dichloroethene	Ave	1.502	1.454	0.1000	48.4	50.0	-3.2	20.0
2-Butanone (MEK)	Ave	0.7873	0.7825	0.1000	248	250	-0.6	20.0
Chlorobromomethane	Ave	0.8222	0.7620		46.3	50.0	-7.3	20.0
Tetrahydrofuran	Ave	0.5465	0.5158		94.4	100	-5.6	20.0
Chloroform	Ave	2.413	2.321	0.2000	48.1	50.0	-3.8	20.0
Cyclohexane	Ave	2.643	2.972	0.1000	56.2	50.0	12.4	20.0
1,1,1-Trichloroethane	Ave	2.002	2.052	0.1000	51.3	50.0	2.5	20.0
Carbon tetrachloride	Ave	1.683	1.723	0.1000	51.2	50.0	2.4	20.0
1,1-Dichloropropene	Ave	1.701	1.831		53.8	50.0	7.6	20.0
Benzene	Ave	4.988	5.070	0.5000	50.8	50.0	1.6	20.0
Isobutyl alcohol	Ave	0.0881	0.0806		1140	1250	-8.4	50.0
1,2-Dichloroethane	Ave	1.931	1.856	0.1000	48.0	50.0	-3.9	20.0
n-Heptane	Ave	2.322	2.735		58.9	50.0	17.8	20.0
Trichloroethene	Ave	1.337	1.406	0.2000	52.6	50.0	5.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Lab Sample ID: CCVIS 480-641452/4 Calibration Date: 09/14/2022 19:09

Instrument ID: HP5977M Calib Start Date: 08/30/2022 00:22

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 08/30/2022 02:47

Lab File ID: M06168.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1429	0.1542	0.0500	53.9	50.0	7.9	50.0
1,2,4-Trichlorobenzene	Ave	1.074	1.145	0.2000	53.3	50.0	6.7	20.0
Hexachlorobutadiene	Ave	0.4995	0.5606		56.1	50.0	12.2	20.0
Naphthalene	Ave	2.740	2.820		51.4	50.0	2.9	20.0
1,2,3-Trichlorobenzene	Ave	1.021	1.075		52.6	50.0	5.3	20.0
Dibromofluoromethane (Surr)	Ave	1.388	1.350		48.6	50.0	-2.8	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.7364	0.7356		49.9	50.0	-0.1	20.0
Toluene-d8 (Surr)	Ave	2.234	2.381		53.3	50.0	6.6	20.0
4-Bromofluorobenzene (Surr)	Ave	0.8035	0.7493		46.6	50.0	-6.8	20.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-201615-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-641451/2-A

Matrix: Solid | Lab File ID: M06172.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 09/14/2022 20:46

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (30) VOA ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) Y pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 641452 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		5.0	0.50
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.36
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.81
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.65
75-34-3	1,1-Dichloroethane	ND		5.0	0.61
75-35-4	1,1-Dichloroethene	ND		5.0	0.61
526-73-8	1,2,3-Trimethylbenzene	ND		5.0	1.0
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.30
95-63-6	1,2,4-Trimethylbenzene	ND		5.0	0.96
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	2.5
106-93-4	1,2-Dibromoethane	ND		5.0	0.64
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.39
107-06-2	1,2-Dichloroethane	ND		5.0	0.25
78-87-5	1,2-Dichloropropane	ND		5.0	2.5
108-67-8	1,3,5-Trimethylbenzene	ND		5.0	0.32
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.26
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.70
78-93-3	2-Butanone (MEK)	ND		25	1.8
591-78-6	2-Hexanone	ND		25	2.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		25	1.6
67-64-1	Acetone	ND		25	4.2
71-43-2	Benzene	ND		5.0	0.25
75-27-4	Bromodichloromethane	ND		5.0	0.67
75-25-2	Bromoform	ND		5.0	2.5
74-83-9	Bromomethane	ND		5.0	0.45
75-15-0	Carbon disulfide	ND		5.0	2.5
56-23-5	Carbon tetrachloride	ND		5.0	0.48
108-90-7	Chlorobenzene	ND		5.0	0.66
75-00-3	Chloroethane	ND		5.0	1.1
67-66-3	Chloroform	0.465	J	5.0	0.31
74-87-3	Chloromethane	ND		5.0	0.30
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.64

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-201615-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-641652/2-A

Matrix: Solid | Lab File ID: M06203.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 09/15/2022 21:15

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (30) VOA ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) Y pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 641653 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		5.0	0.50
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.36
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.81
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.65
75-34-3	1,1-Dichloroethane	ND		5.0	0.61
75-35-4	1,1-Dichloroethene	ND		5.0	0.61
526-73-8	1,2,3-Trimethylbenzene	ND		5.0	1.0
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.30
95-63-6	1,2,4-Trimethylbenzene	ND		5.0	0.96
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	2.5
106-93-4	1,2-Dibromoethane	ND		5.0	0.64
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.39
107-06-2	1,2-Dichloroethane	ND		5.0	0.25
78-87-5	1,2-Dichloropropane	ND		5.0	2.5
108-67-8	1,3,5-Trimethylbenzene	ND		5.0	0.32
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.26
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.70
78-93-3	2-Butanone (MEK)	ND		25	1.8
591-78-6	2-Hexanone	ND		25	2.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		25	1.6
67-64-1	Acetone	ND		25	4.2
71-43-2	Benzene	ND		5.0	0.25
75-27-4	Bromodichloromethane	ND		5.0	0.67
75-25-2	Bromoform	ND		5.0	2.5
74-83-9	Bromomethane	ND		5.0	0.45
75-15-0	Carbon disulfide	ND		5.0	2.5
56-23-5	Carbon tetrachloride	ND		5.0	0.48
108-90-7	Chlorobenzene	ND		5.0	0.66
75-00-3	Chloroethane	ND		5.0	1.1
67-66-3	Chloroform	0.559	J	5.0	0.31
74-87-3	Chloromethane	ND		5.0	0.30
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.64

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): Intuvo DB-5 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPHd14 #
SS2 (0-2)	480-201615-1	84	103	74	101	137 S1+	129
SS2 (0-6)	480-201615-2	56	61	52 S1-	76	90	103
SS2 (6-12)	480-201615-3	77	76	78	95	88	102
SS2 (12-24)	480-201615-4	78	82	79	91	107	108
SS3 (0-2)	480-201615-5	76	75	73	81	96	97
SS3 (0-6)	480-201615-6	69	69	67	77	92	93
SS3 (6-12)	480-201615-7	70	74	71	84	92	100
SS3 (12-24)	480-201615-8	76	81	76	89	86	105
FDUP2_091322	480-201615-9	78	88	80	94	93	111
SS4 (0-2)	480-201615-10	77	77	77	87	94	98
SS4 (0-6)	480-201615-11	79	79	82	83	96	105
SS4 (6-12)	480-201615-12	75	74	71	84	96	100
SS4 (12-24)	480-201615-13	74	72	73	82	93	98
	MB 480-641786/1-A	80	82	91	81	86	99
	MB 480-642833/1-A	97	97	99	105	104	112
	LCS 480-641786/2-A	75	79	74	81	90	89
	LCS 480-642833/2-A	69	77	77	84	93	98
SS2 (0-2) MS	480-201615-1 MS	74	103	77	101	146 S1+	128
SS2 (6-12) MS	480-201615-3 MS	52	63	57	73	105	109
SS2 (0-2) MSD	480-201615-1 MSD	44 S1-	70	44 S1-	70	120	97
SS2 (6-12) MSD	480-201615-3 MSD	72	84	75	95	100	106

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	52-120
PHL = Phenol-d5 (Surr)	54-120
NBZ = Nitrobenzene-d5 (Surr)	53-120
FBP = 2-Fluorobiphenyl (Surr)	60-120
TBP = 2,4,6-Tribromophenol (Surr)	54-120
TPHd14 = p-Terphenyl-d14 (Surr)	79-130

Column to be used to flag recovery values

FORM II 8270D

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-201615-1

SDG No.:

Client Sample ID: FB_091322 | Lab Sample ID: 480-201615-14

Matrix: Water | Lab File ID: W10021840.d

Analysis Method: 8270D | Date Collected: 09/13/2022 08:00

Extract. Method: 3510C | Date Extracted: 09/15/2022 09:21

Sample wt/vol: 250(mL) | Date Analyzed: 09/20/2022 17:09

Con. Extract Vol.: 1(mL) | Dilution Factor: 5

Injection Volume: 2(uL) | GC Column: RXI-5Sil MS ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor: | Level: (low/med) Low

Analysis Batch No.: 642029 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
191-24-2	Benzo[g,h,i]perylene	ND		25	1.8
207-08-9	Benzo[k]fluoranthene	ND		25	3.7
92-52-4	Biphenyl	ND		25	3.3
108-60-1	bis (2-chloroisopropyl) ether	ND		25	2.6
111-91-1	Bis(2-chloroethoxy)methane	ND		25	1.8
111-44-4	Bis(2-chloroethyl)ether	ND		25	2.0
117-81-7	Bis(2-ethylhexyl) phthalate	ND		25	11
85-68-7	Butyl benzyl phthalate	ND		25	5.0
105-60-2	Caprolactam	ND		25	11
86-74-8	Carbazole	ND	*+	25	1.5
218-01-9	Chrysene	ND		25	1.7
53-70-3	Dibenz(a,h)anthracene	ND		25	2.1
132-64-9	Dibenzofuran	ND		50	2.6
84-66-2	Diethyl phthalate	21	J B * +	25	1.1
131-11-3	Dimethyl phthalate	ND		25	1.8
84-74-2	Di-n-butyl phthalate	ND		25	1.6
117-84-0	Di-n-octyl phthalate	ND		25	2.4
206-44-0	Fluoranthene	ND		25	2.0
86-73-7	Fluorene	ND		25	1.8
118-74-1	Hexachlorobenzene	ND		25	2.6
87-68-3	Hexachlorobutadiene	ND		25	3.4
77-47-4	Hexachlorocyclopentadiene	ND		25	3.0
67-72-1	Hexachloroethane	ND		25	3.0
193-39-5	Indeno[1,2,3-cd]pyrene	ND		25	2.4
78-59-1	Isophorone	ND		25	2.2
91-20-3	Naphthalene	ND		25	3.8
98-95-3	Nitrobenzene	ND		25	1.5
621-64-7	N-Nitrosodi-n-propylamine	ND		25	2.7
86-30-6	N-Nitrosodiphenylamine	ND		25	2.6
87-86-5	Pentachlorophenol	ND		50	11
85-01-8	Phenanthrene	ND		25	2.2
108-95-2	Phenol	ND		25	2.0

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: Z0025706.D

Lab ID: 480-201615-1 MS Client ID: SS2 (0-2) MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
2,4,5-Trichlorophenol	2280	ND	2930 J	129	46-120	F1
2,4,6-Trichlorophenol	2280	ND	2870 J	126	41-123	F1
2,4-Dichlorophenol	2280	ND	2740 J	120	45-120	
2,4-Dimethylphenol	2280	ND	2430 J	107	52-120	
2,4-Dinitrophenol	4560	ND	ND	NC	41-146	
2,4-Dinitrotoluene	2280	ND	3370 J	148	63-125	F1
2,6-Dinitrotoluene	2280	ND	2970 J	130	66-120	F1
2-Chloronaphthalene	2280	ND	2310 J	101	57-120	
2-Chlorophenol	2280	ND	1910 J	84	43-120	
2-Methylnaphthalene	2280	ND	2090 J	92	55-120	
2-Methylphenol	2280	ND	2150 J	94	48-120	
2-Nitroaniline	2280	ND	3190 J	140	61-120	F1
2-Nitrophenol	2280	ND	2640 J	116	37-120	
3,3'-Dichlorobenzidine	4560	ND	5900 J	NC	37-126	
3-Nitroaniline	2280	ND	2970 J	130	48-120	F1
4,6-Dinitro-2-methylphenol	4560	ND	7680 J	NC	23-149	
4-Bromophenyl phenyl ether	2280	ND	2790 J	122	58-120	F1
4-Chloro-3-methylphenol	2280	ND	2990 J	131	49-125	F1
4-Chloroaniline	2280	ND	2020 J	89	38-120	
4-Chlorophenyl phenyl ether	2280	ND	2670 J	117	63-124	
4-Methylphenol	2280	ND	2520 J	111	50-120	
4-Nitroaniline	2280	ND	2930 J	NC	47-120	
4-Nitrophenol	4560	ND	7610 J	167	31-147	F1
Acenaphthene	2280	ND	2570 J	113	60-120	
Acenaphthylene	2280	920 J	3370 J	107	58-121	
Acetophenone	2280	ND	1850 J	81	47-120	
Anthracene	2280	ND	3150 J	138	62-120	F1
Atrazine	4560	ND	5900	129	60-150	
Benzaldehyde	4560	ND	ND	0	10-150	F1
Benzo[a]anthracene	2280	1200 J	3820 J	116	65-120	
Benzo[a]pyrene	2280	1900 J	4480 J	114	64-120	
Benzo[b]fluoranthene	2280	1700 J	4060 J	104	10-150	
Benzo[g,h,i]perylene	2280	1300 J	3810 J	111	45-145	
Benzo[k]fluoranthene	2280	620 J	3480 J	125	23-150	
Biphenyl	2280	ND	2330 J	102	58-120	
bis (2-chloroisopropyl) ether	2280	ND	1730 J	76	31-120	
Bis(2-chloroethoxy)methane	2280	ND	1970 J	86	52-120	
Bis(2-chloroethyl)ether	2280	ND	1620 J	71	45-120	
Bis(2-ethylhexyl) phthalate	2280	ND	3280 J	144	61-133	F1
Butyl benzyl phthalate	2280	ND	3410 J	150	61-120	F1
Caprolactam	4560	ND	5470	120	37-133	
Carbazole	2280	ND	2930 J	128	59-120	F1

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: Z0025706.D

Lab ID: 480-201615-1 MS Client ID: SS2 (0-2) MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Chrysene	2280	1200 J	3950 J	120	64-120	
Dibenz(a,h)anthracene	2280	ND	2860 J	125	54-132	
Dibenzofuran	2280	ND	2610 J	115	62-120	
Diethyl phthalate	2280	740 J	3630 J	126	66-120	F1
Dimethyl phthalate	2280	ND	2780 J	122	65-124	
Di-n-butyl phthalate	2280	ND	3050 J	134	58-130	F1
Di-n-octyl phthalate	2280	ND	3310 J	145	57-133	F1
Fluoranthene	2280	1300 J	3830 J	109	62-120	
Fluorene	2280	ND	2720 J	119	63-120	
Hexachlorobenzene	2280	ND	3000 J	131	60-120	F1
Hexachlorobutadiene	2280	ND	1840 J	80	45-120	
Hexachlorocyclopentadiene	2280	ND	1750 J	77	31-120	
Hexachloroethane	2280	ND	1340 J	59	21-120	
Indeno[1,2,3-cd]pyrene	2280	1100 J	3810 J	119	56-134	
Isophorone	2280	ND	2210 J	97	56-120	
Naphthalene	2280	ND	2080 J	91	46-120	
Nitrobenzene	2280	ND	1870 J	82	49-120	
N-Nitrosodi-n-propylamine	2280	ND	1980 J	87	46-120	
N-Nitrosodiphenylamine	2280	ND	ND	NC	20-128	
Pentachlorophenol	4560	ND	6110 J	NC	25-136	
Phenanthrene	2280	ND	3190 J	140	60-122	F1
Phenol	2280	ND	2220 J	97	50-120	
Pyrene	2280	1900 J	4390 J	111	61-133	

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: Z0025708.D

Lab ID: 480-201615-3 MS Client ID: SS2 (6-12) MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
2,4,5-Trichlorophenol	1800	ND	1760	98	46-120	
2,4,6-Trichlorophenol	1800	ND	1670	93	41-123	
2,4-Dichlorophenol	1800	ND	1350	75	45-120	
2,4-Dimethylphenol	1800	ND	1300	72	52-120	
2,4-Dinitrophenol	3610	ND	ND	NC	41-146	
2,4-Dinitrotoluene	1800	ND	1780	99	63-125	
2,6-Dinitrotoluene	1800	ND	1680	93	66-120	
2-Chloronaphthalene	1800	ND	1380	76	57-120	
2-Chlorophenol	1800	ND	1060 J	59	43-120	
2-Methylnaphthalene	1800	ND	1190	66	55-120	
2-Methylphenol	1800	ND	1200	66	48-120	
2-Nitroaniline	1800	ND	1620 J	90	61-120	
2-Nitrophenol	1800	ND	1290	72	37-120	
3,3'-Dichlorobenzidine	3610	ND	3510	97	37-126	
3-Nitroaniline	1800	ND	1630 J	90	48-120	
4,6-Dinitro-2-methylphenol	3610	ND	3690	102	23-149	
4-Bromophenyl phenyl ether	1800	ND	1760	98	58-120	
4-Chloro-3-methylphenol	1800	ND	1680	93	49-125	
4-Chloroaniline	1800	ND	1130	62	38-120	
4-Chlorophenyl phenyl ether	1800	ND	1670	93	63-124	
4-Methylphenol	1800	ND	1270 J	70	50-120	
4-Nitroaniline	1800	ND	1810	100	47-120	
4-Nitrophenol	3610	ND	3970	110	31-147	
Acenaphthene	1800	ND	1510	84	60-120	
Acenaphthylene	1800	230 J	1730	83	58-121	
Acetophenone	1800	ND	1080	60	47-120	
Anthracene	1800	ND	1910	106	62-120	
Atrazine	3610	ND	3760	104	60-150	
Benzaldehyde	3610	ND	1680	47	10-150	
Benzo[a]anthracene	1800	610 J	2450	103	65-120	
Benzo[a]pyrene	1800	770 J	2610	102	64-120	
Benzo[b]fluoranthene	1800	800 J	2610	100	10-150	
Benzo[g,h,i]perylene	1800	550 J	2310	97	45-145	
Benzo[k]fluoranthene	1800	290 J	2090	100	23-150	
Biphenyl	1800	ND	1380	77	58-120	
bis (2-chloroisopropyl) ether	1800	ND	1010	56	31-120	
Bis(2-chloroethoxy)methane	1800	ND	1110	62	52-120	
Bis(2-chloroethyl)ether	1800	ND	1000	56	45-120	
Bis(2-ethylhexyl) phthalate	1800	ND	1880	105	61-133	
Butyl benzyl phthalate	1800	ND	2040	113	61-120	
Caprolactam	3610	ND	3530	98	37-133	
Carbazole	1800	ND	1890	105	59-120	

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: Z0025708.D

Lab ID: 480-201615-3 MS Client ID: SS2 (6-12) MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Chrysene	1800	650 J	2400	97	64-120	
Dibenz(a,h)anthracene	1800	ND	1750	97	54-132	
Dibenzofuran	1800	ND	1620	90	62-120	
Diethyl phthalate	1800	760 J	2440	93	66-120	
Dimethyl phthalate	1800	ND	1650	91	65-124	
Di-n-butyl phthalate	1800	ND	1940	107	58-130	
Di-n-octyl phthalate	1800	ND	1840	102	57-133	
Fluoranthene	1800	920	2720	100	62-120	
Fluorene	1800	ND	1700	94	63-120	
Hexachlorobenzene	1800	ND	1840	102	60-120	
Hexachlorobutadiene	1800	ND	1060	59	45-120	
Hexachlorocyclopentadiene	1800	ND	847 J	47	31-120	
Hexachloroethane	1800	ND	809 J	45	21-120	
Indeno[1,2,3-cd]pyrene	1800	550 J	2360	101	56-134	
Isophorone	1800	ND	1210	67	56-120	
Naphthalene	1800	ND	1150	64	46-120	
Nitrobenzene	1800	ND	1040	58	49-120	
N-Nitrosodi-n-propylamine	1800	ND	1120	62	46-120	
N-Nitrosodiphenylamine	1800	ND	1770	98	20-128	
Pentachlorophenol	3610	ND	3450	96	25-136	
Phenanthrene	1800	290 J	2140	102	60-122	
Phenol	1800	ND	1130	63	50-120	
Pyrene	1800	1000	3030	111	61-133	

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: Z0025707.D

Lab ID: 480-201615-1 MSD Client ID: SS2 (0-2) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2,4,5-Trichlorophenol	2290	2520 J	110	15	18	46-120	
2,4,6-Trichlorophenol	2290	2430 J	106	17	19	41-123	
2,4-Dichlorophenol	2290	2070 J	90	28	19	45-120	F2
2,4-Dimethylphenol	2290	1580 J	69	42	42	52-120	
2,4-Dinitrophenol	4580	ND	NC	NC	22	41-146	
2,4-Dinitrotoluene	2290	2620 J	114	25	20	63-125	F2
2,6-Dinitrotoluene	2290	2350 J	103	23	15	66-120	F2
2-Chloronaphthalene	2290	1630 J	71	35	21	57-120	F2
2-Chlorophenol	2290	1160 J	51	48	25	43-120	F2
2-Methylnaphthalene	2290	1380 J	60	41	21	55-120	F2
2-Methylphenol	2290	1490 J	65	36	27	48-120	F2
2-Nitroaniline	2290	2630 J	115	19	15	61-120	F2
2-Nitrophenol	2290	1980 J	87	28	18	37-120	F2
3,3'-Dichlorobenzidine	4580	ND	NC	NC	25	37-126	
3-Nitroaniline	2290	2470 J	108	19	19	48-120	
4,6-Dinitro-2-methylphenol	4580	6650 J	NC	14	15	23-149	
4-Bromophenyl phenyl ether	2290	2230 J	97	22	15	58-120	F2
4-Chloro-3-methylphenol	2290	2370 J	103	23	27	49-125	
4-Chloroaniline	2290	1520 J	66	29	22	38-120	F2
4-Chlorophenyl phenyl ether	2290	2120 J	93	23	16	63-124	F2
4-Methylphenol	2290	1870 J	82	30	24	50-120	F2
4-Nitroaniline	2290	ND	NC	NC	24	47-120	
4-Nitrophenol	4580	6050 J	132	23	25	31-147	
Acenaphthene	2290	1910 J	83	29	35	60-120	
Acenaphthylene	2290	2590 J	73	26	18	58-121	F2
Acetophenone	2290	1100 J	48	51	20	47-120	F2
Anthracene	2290	2420 J	105	26	15	62-120	F2
Atrazine	4580	4490 J	98	27	20	60-150	F2
Benzaldehyde	4580	ND	0	NC	20	10-150	F1
Benzo[a]anthracene	2290	2960 J	78	25	15	65-120	F2
Benzo[a]pyrene	2290	3470 J	70	25	15	64-120	F2
Benzo[b]fluoranthene	2290	3250 J	68	22	15	10-150	F2
Benzo[g,h,i]perylene	2290	3580 J	100	6	15	45-145	
Benzo[k]fluoranthene	2290	2750 J	93	23	22	23-150	F2
Biphenyl	2290	1660 J	72	33	20	58-120	F2
bis (2-chloroisopropyl) ether	2290	1050 J	46	49	24	31-120	F2
Bis(2-chloroethoxy)methane	2290	1220 J	53	46	17	52-120	F2
Bis(2-chloroethyl)ether	2290	912 J	40	56	21	45-120	F1 F2
Bis(2-ethylhexyl) phthalate	2290	2620 J	114	22	15	61-133	F2
Butyl benzyl phthalate	2290	2870 J	125	17	16	61-120	F1 F2
Caprolactam	4580	4360 J	95	23	20	37-133	F2
Carbazole	2290	2280 J	99	25	20	59-120	F2

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: Z0025707.D

Lab ID: 480-201615-1 MSD Client ID: SS2 (0-2) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Chrysene	2290	2970 J	77	28	15	64-120	F2
Dibenz(a,h)anthracene	2290	2770 J	121	3	15	54-132	
Dibenzofuran	2290	2020 J	88	26	15	62-120	F2
Diethyl phthalate	2290	2570 J	80	34	15	66-120	F2
Dimethyl phthalate	2290	2100 J	92	28	15	65-124	F2
Di-n-butyl phthalate	2290	2180 J	95	33	15	58-130	F2
Di-n-octyl phthalate	2290	2670 J	117	21	16	57-133	F2
Fluoranthene	2290	2680 J	59	35	15	62-120	F1 F2
Fluorene	2290	2180 J	95	22	15	63-120	F2
Hexachlorobenzene	2290	2320 J	101	26	15	60-120	F2
Hexachlorobutadiene	2290	1180 J	51	44	44	45-120	
Hexachlorocyclopentadiene	2290	1320 J	58	28	49	31-120	
Hexachloroethane	2290	773 J	34	54	46	21-120	F2
Indeno[1,2,3-cd]pyrene	2290	3310 J	97	14	15	56-134	
Isophorone	2290	1510 J	66	37	17	56-120	F2
Naphthalene	2290	1250 J	54	50	29	46-120	F2
Nitrobenzene	2290	1030 J	45	58	24	49-120	F1 F2
N-Nitrosodi-n-propylamine	2290	1290 J	56	42	31	46-120	F2
N-Nitrosodiphenylamine	2290	ND	NC	NC	15	20-128	
Pentachlorophenol	4580	5080 J	NC	18	35	25-136	
Phenanthrene	2290	2470 J	108	25	15	60-122	F2
Phenol	2290	1370 J	60	47	35	50-120	F2
Pyrene	2290	3380 J	67	26	35	61-133	

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: Z0025709.D

Lab ID: 480-201615-3 MSD Client ID: SS2 (6-12) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2,4,5-Trichlorophenol	1780	2030	114	14	18	46-120	
2,4,6-Trichlorophenol	1780	1960	110	16	19	41-123	
2,4-Dichlorophenol	1780	1650	92	20	19	45-120	F2
2,4-Dimethylphenol	1780	1630	92	23	42	52-120	
2,4-Dinitrophenol	3570	ND	NC	NC	22	41-146	
2,4-Dinitrotoluene	1780	1860	104	4	20	63-125	
2,6-Dinitrotoluene	1780	1760	99	5	15	66-120	
2-Chloronaphthalene	1780	1700	95	21	21	57-120	
2-Chlorophenol	1780	1440 J	81	30	25	43-120	F2
2-Methylnaphthalene	1780	1510	85	24	21	55-120	F2
2-Methylphenol	1780	1580	89	28	27	48-120	F2
2-Nitroaniline	1780	1910	107	16	15	61-120	F2
2-Nitrophenol	1780	1570	88	19	18	37-120	F2
3,3'-Dichlorobenzidine	3570	3590	101	2	25	37-126	
3-Nitroaniline	1780	1650 J	93	1	19	48-120	
4,6-Dinitro-2-methylphenol	3570	3840	108	4	15	23-149	
4-Bromophenyl phenyl ether	1780	1810	101	3	15	58-120	
4-Chloro-3-methylphenol	1780	1880	106	11	27	49-125	
4-Chloroaniline	1780	1260	71	11	22	38-120	
4-Chlorophenyl phenyl ether	1780	1760	99	5	16	63-124	
4-Methylphenol	1780	1670 J	94	27	24	50-120	F2
4-Nitroaniline	1780	1830	102	1	24	47-120	
4-Nitrophenol	3570	4110	115	4	25	31-147	
Acenaphthene	1780	1660	93	10	35	60-120	
Acenaphthylene	1780	1980	98	13	18	58-121	
Acetophenone	1780	1470	82	30	20	47-120	F2
Anthracene	1780	1930	108	1	15	62-120	
Atrazine	3570	3860	108	3	20	60-150	
Benzaldehyde	3570	2270	64	30	20	10-150	F2
Benzo[a]anthracene	1780	2710	118	10	15	65-120	
Benzo[a]pyrene	1780	2870	118	10	15	64-120	
Benzo[b]fluoranthene	1780	2810	113	7	15	10-150	
Benzo[g,h,i]perylene	1780	2270	96	2	15	45-145	
Benzo[k]fluoranthene	1780	2090	101	0	22	23-150	
Biphenyl	1780	1730	97	23	20	58-120	F2
bis (2-chloroisopropyl) ether	1780	1420	80	34	24	31-120	F2
Bis(2-chloroethoxy)methane	1780	1450	81	26	17	52-120	F2
Bis(2-chloroethyl)ether	1780	1380	77	31	21	45-120	F2
Bis(2-ethylhexyl) phthalate	1780	2000	112	6	15	61-133	
Butyl benzyl phthalate	1780	2080	117	2	16	61-120	
Caprolactam	3570	3680	103	4	20	37-133	
Carbazole	1780	1890	106	0	20	59-120	

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: Z0025709.D

Lab ID: 480-201615-3 MSD Client ID: SS2 (6-12) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Chrysene	1780	2610	110	8	15	64-120	
Dibenz(a,h)anthracene	1780	1650	93	6	15	54-132	
Dibenzofuran	1780	1760	99	8	15	62-120	
Diethyl phthalate	1780	1920	65	24	15	66-120	F1 F2
Dimethyl phthalate	1780	1760	99	7	15	65-124	
Di-n-butyl phthalate	1780	2010	113	4	15	58-130	
Di-n-octyl phthalate	1780	2190	123	18	16	57-133	F2
Fluoranthene	1780	2880	110	6	15	62-120	
Fluorene	1780	1820	102	7	15	63-120	
Hexachlorobenzene	1780	1810	102	1	15	60-120	
Hexachlorobutadiene	1780	1380	77	26	44	45-120	
Hexachlorocyclopentadiene	1780	1130	63	29	49	31-120	
Hexachloroethane	1780	1270	71	44	46	21-120	
Indeno[1,2,3-cd]pyrene	1780	2260	96	4	15	56-134	
Isophorone	1780	1530	86	23	17	56-120	F2
Naphthalene	1780	1460	82	24	29	46-120	
Nitrobenzene	1780	1380	78	28	24	49-120	F2
N-Nitrosodi-n-propylamine	1780	1480	83	28	31	46-120	
N-Nitrosodiphenylamine	1780	1790	100	1	15	20-128	
Pentachlorophenol	3570	3440	97	0	35	25-136	
Phenanthrene	1780	2190	106	2	15	60-122	
Phenol	1780	1490	83	27	35	50-120	
Pyrene	1780	3170	120	4	35	61-133	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Lab Sample ID: CCVIS 480-642029/3 Calibration Date: 09/20/2022 10:44

Instrument ID: HP5973W Calib Start Date: 07/28/2022 16:59

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 07/28/2022 20:12

Lab File ID: W10021826.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Biphenyl	Ave	1.529	1.522	0.0100	3980	4000	-0.5	20.0
2-Chloronaphthalene	Ave	1.174	1.148	0.8000	3910	4000	-2.2	20.0
2-Nitroaniline	Lin2		0.3595	0.0100	4010	4000	0.2	20.0
Dimethyl phthalate	Ave	1.347	1.267	0.0100	3760	4000	-6.0	20.0
1,3-Dinitrobenzene	Lin2		0.1042	0.0100	3670	4000	-8.2	20.0
2,6-Dinitrotoluene	Lin2		0.2986	0.2000	3890	4000	-2.7	20.0
Acenaphthylene	Ave	1.735	1.767	0.9000	4070	4000	1.8	20.0
3-Nitroaniline	Lin2		0.2175	0.0100	3140	4000	-21.4*	20.0
Acenaphthene	Ave	1.221	1.237	0.9000	4050	4000	1.3	20.0
2,4-Dinitrophenol	Lin2		0.1132	0.0100	5940	8000	-25.8*	20.0
4-Nitrophenol	Lin2		0.1870	0.0100	7010	8000	-12.3	20.0
2,4-Dinitrotoluene	Lin2		0.3722	0.2000	3760	4000	-6.1	20.0
Dibenzofuran	Ave	1.634	1.575	0.8000	3860	4000	-3.6	20.0
2,3,4,6-Tetrachlorophenol	Lin2		0.2527	0.0100	3580	4000	-10.4	20.0
Diethyl phthalate	Ave	1.421	1.315	0.0100	3700	4000	-7.4	20.0
Hexadecane	Ave	0.8019	0.7849	0.0100	3910	4000	-2.1	20.0
4-Chlorophenyl phenyl ether	Ave	0.6160	0.5686	0.4000	3690	4000	-7.7	20.0
Fluorene	Ave	1.317	1.311	0.9000	3980	4000	-0.5	20.0
4-Nitroaniline	Lin2		0.2448	0.0100	3850	4000	-3.7	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.1075	0.0100	7180	8000	-10.3	20.0
Diphenylamine	Ave	0.6353	0.6602	0.0100	3550	3420	3.9	20.0
N-Nitrosodiphenylamine	Ave	0.5432	0.5645	0.0100	4160	4000	3.9	20.0
1,2-Diphenylhydrazine	Ave	1.424	1.478	0.0100	4150	4000	3.8	20.0
trans-Azobenzene	Ave	0.8272	0.9143	0.0100	4420	4000	10.5	20.0
4-Bromophenyl phenyl ether	Ave	0.2268	0.2189	0.1000	3860	4000	-3.5	20.0
Hexachlorobenzene	Ave	0.3013	0.2770	0.1000	3680	4000	-8.1	20.0
Atrazine	Ave	0.3655	0.3440	0.0100	7530	8000	-5.9	20.0
n-Octadecane	Ave	0.4838	0.4971	0.0100	4110	4000	2.7	20.0
Pentachlorophenol	Lin2		0.1343	0.0500	7160	8000	-10.5	20.0
Phenanthrene	Ave	1.139	1.173	0.7000	4120	4000	3.0	20.0
Anthracene	Ave	1.087	1.139	0.7000	4190	4000	4.8	20.0
Carbazole	Lin1		0.9751	0.0100	5530	4000	38.2*	20.0
Di-n-butyl phthalate	Ave	1.299	1.353	0.0100	4170	4000	4.2	20.0
Fluoranthene	Ave	1.100	1.161	0.6000	4220	4000	5.6	20.0
Benzidine	Lin1		0.2249	0.0100	4770	8000	-40.3	50.0
Pyrene	Ave	1.279	1.332	0.6000	4170	4000	4.2	20.0
Butyl benzyl phthalate	Ave	0.6585	0.6539	0.0100	3970	4000	-0.7	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.9649	0.995	0.0100	4130	4000	3.2	20.0
3,3'-Dichlorobenzidine	Ave	0.4243	0.3716	0.0100	7010	8000	-12.4	50.0
Benzo[a]anthracene	Ave	1.274	1.236	0.8000	3880	4000	-3.0	20.0
Chrysene	Ave	1.185	1.175	0.7000	3970	4000	-0.9	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Lab Sample ID: CCVIS 480-642901/4 Calibration Date: 09/27/2022 11:33

Instrument ID: HP5977Z Calib Start Date: 09/09/2022 12:36

GC Column: Intuvo DB-5MS ID: 0.18(mm) Calib End Date: 09/09/2022 14:35

Lab File ID: Z0025830.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin2		0.4191	0.0100	48000	50000	-4.0	20.0
N-Nitrosodimethylamine	Ave	0.6138	0.5822	0.0100	47400	50000	-5.2	50.0
Pyridine	Ave	0.8973	0.7856	0.0100	87500	100000	-12.5	50.0
Benzaldehyde	Ave	0.9919	0.8385	0.0100	42300	50000	-15.5	50.0
Phenol	Ave	1.324	1.293	0.8000	48800	50000	-2.4	20.0
Aniline	Ave	1.658	1.585	0.0100	47800	50000	-4.4	20.0
Bis(2-chloroethyl)ether	Ave	1.102	1.045	0.7000	47400	50000	-5.2	20.0
2-Chlorophenol	Ave	1.166	1.148	0.8000	49200	50000	-1.5	20.0
n-Decane	Ave	1.543	1.374	0.0100	44500	50000	-10.9	20.0
1,3-Dichlorobenzene	Ave	1.487	1.439	0.0100	48400	50000	-3.3	20.0
1,4-Dichlorobenzene	Ave	1.498	1.460	0.0100	48800	50000	-2.5	20.0
Benzyl alcohol	Lin2		0.7320	0.0100	48300	50000	-3.4	20.0
1,2-Dichlorobenzene	Ave	1.437	1.392	0.0100	48400	50000	-3.2	20.0
2-Methylphenol	Ave	1.014	0.9807	0.7000	48400	50000	-3.3	20.0
Indene	Ave	0.6384	0.6421	0.0100	151000	150000	0.6	20.0
bis (2-chloroisopropyl) ether	Ave	1.893	1.633	0.0100	43100	50000	-13.7	20.0
Acetophenone	Ave	1.735	1.657	0.0100	47800	50000	-4.4	20.0
4-Methylphenol	Lin2		1.001	0.6000	47400	50000	-5.2	20.0
N-Nitrosodi-n-propylamine	Ave	0.6781	0.6419	0.5000	47300	50000	-5.3	20.0
Hexachloroethane	Ave	0.5204	0.4867	0.3000	46800	50000	-6.5	20.0
Nitrobenzene	Ave	0.3252	0.3182	0.2000	48900	50000	-2.1	20.0
Isophorone	Ave	0.6254	0.5967	0.4000	47700	50000	-4.6	20.0
2-Nitrophenol	Lin2		0.1475	0.1000	53600	50000	7.2	20.0
2,4-Dimethylphenol	Ave	0.3166	0.3134	0.2000	49500	50000	-1.0	20.0
Bis(2-chloroethoxy)methane	Ave	0.3956	0.3865	0.3000	48900	50000	-2.3	20.0
2,4-Dichlorophenol	Lin2		0.3167	0.2000	51500	50000	3.0	20.0
Benzoic acid	Lin1		0.2451	0.0100	165000	150000	9.7	50.0
1,2,4-Trichlorobenzene	Ave	0.3848	0.3858	0.0100	50100	50000	0.3	20.0
Naphthalene	Ave	1.004	0.9736	0.7000	48500	50000	-3.1	20.0
4-Chloroaniline	Lin2		0.4025	0.0100	49400	50000	-1.1	20.0
2,6-Dichlorophenol	Ave	0.2927	0.3083	0.0100	52700	50000	5.3	20.0
Hexachlorobutadiene	Ave	0.2413	0.2423	0.0100	50200	50000	0.4	20.0
Caprolactam	Lin2		0.0716	0.0100	48900	50000	-2.2	50.0
4-Chloro-3-methylphenol	Lin2		0.2768	0.2000	50400	50000	0.7	20.0
2-Methylnaphthalene	Ave	0.6718	0.6749	0.4000	50200	50000	0.5	20.0
1-Methylnaphthalene	Ave	0.6559	0.6508	0.0100	49600	50000	-0.8	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.7032	0.7071	0.0100	50300	50000	0.5	20.0
Hexachlorocyclopentadiene	Lin2		0.1666	0.0500	21700	50000	-56.5*	20.0
2,4,6-Trichlorophenol	Lin2		0.4206	0.2000	52200	50000	4.4	20.0
2,4,5-Trichlorophenol	Lin2		0.4631	0.2000	50400	50000	0.9	20.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-201615-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-641523/1-A

Matrix: Water | Lab File ID: W10021828.d

Analysis Method: 8270D | Date Collected:

Extract. Method: 3510C | Date Extracted: 09/15/2022 09:21

Sample wt/vol: 250(mL) | Date Analyzed: 09/20/2022 11:38

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: RXI-5Sil MS ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor: | Level: (low/med) Low

Analysis Batch No.: 642029 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
191-24-2	Benzo[g,h,i]perylene	ND		5.0	0.35
207-08-9	Benzo[k]fluoranthene	ND		5.0	0.73
92-52-4	Biphenyl	ND		5.0	0.65
108-60-1	bis (2-chloroisopropyl) ether	ND		5.0	0.52
111-91-1	Bis(2-chloroethoxy)methane	ND		5.0	0.35
111-44-4	Bis(2-chloroethyl)ether	ND		5.0	0.40
117-81-7	Bis(2-ethylhexyl) phthalate	ND		5.0	2.2
85-68-7	Butyl benzyl phthalate	ND		5.0	1.0
105-60-2	Caprolactam	ND		5.0	2.2
86-74-8	Carbazole	ND		5.0	0.30
218-01-9	Chrysene	ND		5.0	0.33
53-70-3	Dibenz(a,h)anthracene	ND		5.0	0.42
132-64-9	Dibenzofuran	ND		10	0.51
84-66-2	Diethyl phthalate	11.7		5.0	0.22
131-11-3	Dimethyl phthalate	ND		5.0	0.36
84-74-2	Di-n-butyl phthalate	ND		5.0	0.31
117-84-0	Di-n-octyl phthalate	ND		5.0	0.47
206-44-0	Fluoranthene	ND		5.0	0.40
86-73-7	Fluorene	ND		5.0	0.36
118-74-1	Hexachlorobenzene	ND		5.0	0.51
87-68-3	Hexachlorobutadiene	ND		5.0	0.68
77-47-4	Hexachlorocyclopentadiene	ND		5.0	0.59
67-72-1	Hexachloroethane	ND		5.0	0.59
193-39-5	Indeno[1,2,3-cd]pyrene	ND		5.0	0.47
78-59-1	Isophorone	ND		5.0	0.43
91-20-3	Naphthalene	ND		5.0	0.76
98-95-3	Nitrobenzene	ND		5.0	0.29
621-64-7	N-Nitrosodi-n-propylamine	ND		5.0	0.54
86-30-6	N-Nitrosodiphenylamine	ND		5.0	0.51
87-86-5	Pentachlorophenol	ND		10	2.2
85-01-8	Phenanthrene	ND		5.0	0.44
108-95-2	Phenol	ND		5.0	0.39

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-201615-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-641786/1-A

Matrix: Solid | Lab File ID: Z0025704.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3550C | Date Extracted: 09/16/2022 15:42

Sample wt/vol: 30.76(g) | Date Analyzed: 09/21/2022 10:53

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Intuvo DB-5MS ID: 0.18(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor: | Level: (low/med) Low

Analysis Batch No.: 642158 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
191-24-2	Benzo[g,h,i]perylene	ND		170	18
207-08-9	Benzo[k]fluoranthene	ND		170	21
92-52-4	Biphenyl	ND		170	24
108-60-1	bis (2-chloroisopropyl) ether	ND		170	33
111-91-1	Bis(2-chloroethoxy)methane	ND		170	35
111-44-4	Bis(2-chloroethyl)ether	ND		170	21
117-81-7	Bis(2-ethylhexyl) phthalate	ND		170	57
85-68-7	Butyl benzyl phthalate	29.5	J	170	27
105-60-2	Caprolactam	ND		170	50
86-74-8	Carbazole	ND		170	20
218-01-9	Chrysene	ND		170	37
53-70-3	Dibenz(a,h)anthracene	ND		170	29
132-64-9	Dibenzofuran	ND		170	20
84-66-2	Diethyl phthalate	364		170	21
131-11-3	Dimethyl phthalate	ND		170	20
84-74-2	Di-n-butyl phthalate	ND		170	28
117-84-0	Di-n-octyl phthalate	22.2	J	170	20
206-44-0	Fluoranthene	ND		170	18
86-73-7	Fluorene	ND		170	20
118-74-1	Hexachlorobenzene	ND		170	22
87-68-3	Hexachlorobutadiene	ND		170	24
77-47-4	Hexachlorocyclopentadiene	ND		170	22
67-72-1	Hexachloroethane	ND		170	21
193-39-5	Indeno[1,2,3-cd]pyrene	ND		170	20
78-59-1	Isophorone	ND		170	35
91-20-3	Naphthalene	ND		170	21
98-95-3	Nitrobenzene	ND		170	19
621-64-7	N-Nitrosodi-n-propylamine	ND		170	28
86-30-6	N-Nitrosodiphenylamine	ND		170	130
87-86-5	Pentachlorophenol	ND		320	170
85-01-8	Phenanthrene	ND		170	24
108-95-2	Phenol	ND		170	25

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-201615-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-642833/1-A

Matrix: Solid | Lab File ID: Z0025832.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3550C | Date Extracted: 09/26/2022 15:42

Sample wt/vol: 30.34(g) | Date Analyzed: 09/27/2022 12:08

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Intuvo DB-5MS ID: 0.18(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor: | Level: (low/med) Low

Analysis Batch No.: 642901 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
191-24-2	Benzo[g,h,i]perylene	ND		170	18
207-08-9	Benzo[k]fluoranthene	ND		170	22
92-52-4	Biphenyl	ND		170	25
108-60-1	bis (2-chloroisopropyl) ether	ND		170	34
111-91-1	Bis(2-chloroethoxy)methane	ND		170	36
111-44-4	Bis(2-chloroethyl)ether	ND		170	22
117-81-7	Bis(2-ethylhexyl) phthalate	ND		170	57
85-68-7	Butyl benzyl phthalate	ND		170	28
105-60-2	Caprolactam	ND		170	50
86-74-8	Carbazole	ND		170	20
218-01-9	Chrysene	ND		170	38
53-70-3	Dibenz(a,h)anthracene	ND		170	30
132-64-9	Dibenzofuran	ND		170	20
84-66-2	Diethyl phthalate	123	J	170	22
131-11-3	Dimethyl phthalate	ND		170	20
84-74-2	Di-n-butyl phthalate	ND		170	29
117-84-0	Di-n-octyl phthalate	ND		170	20
206-44-0	Fluoranthene	ND		170	18
86-73-7	Fluorene	ND		170	20
118-74-1	Hexachlorobenzene	ND		170	23
87-68-3	Hexachlorobutadiene	ND		170	25
77-47-4	Hexachlorocyclopentadiene	ND		170	23
67-72-1	Hexachloroethane	ND		170	22
193-39-5	Indeno[1,2,3-cd]pyrene	ND		170	21
78-59-1	Isophorone	ND		170	36
91-20-3	Naphthalene	ND		170	22
98-95-3	Nitrobenzene	ND		170	19
621-64-7	N-Nitrosodi-n-propylamine	ND		170	29
86-30-6	N-Nitrosodiphenylamine	ND		170	140
87-86-5	Pentachlorophenol	ND		330	170
85-01-8	Phenanthrene	ND		170	25
108-95-2	Phenol	ND		170	26

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: FB_091322 Lab Sample ID: 480-201615-14

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG ID.:

Matrix: Water Date Sampled: 09/13/2022 08:00

Reporting Basis: WET Date Received: 09/14/2022 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	ND	0.20	0.060	mg/L			1	6010C
7440-36-0	Antimony	ND	0.020	0.0068	mg/L			1	6010C
7440-38-2	Arsenic	ND	0.015	0.0056	mg/L			1	6010C
7440-39-3	Barium	ND	0.0020	0.00070	mg/L			1	6010C
7440-41-7	Beryllium	ND	0.0020	0.00030	mg/L			1	6010C
7440-43-9	Cadmium	ND	0.0020	0.00050	mg/L			1	6010C
7440-70-2	Calcium	ND	0.50	0.10	mg/L			1	6010C
7440-47-3	Chromium	0.015	0.0040	0.0010	mg/L			1	6010C
7440-48-4	Cobalt	ND	0.0040	0.00063	mg/L			1	6010C
7440-50-8	Copper	ND	0.010	0.0016	mg/L			1	6010C
7439-89-6	Iron	ND	0.050	0.019	mg/L			1	6010C
7439-92-1	Lead	ND	0.010	0.0030	mg/L			1	6010C
7439-95-4	Magnesium	ND	0.20	0.043	mg/L			1	6010C
7439-96-5	Manganese	ND	0.0030	0.00040	mg/L			1	6010C
7440-02-0	Nickel	ND	0.010	0.0013	mg/L			1	6010C
7440-09-7	Potassium	ND	0.50	0.10	mg/L			1	6010C
7782-49-2	Selenium	ND	0.025	0.0087	mg/L			1	6010C
7440-22-4	Silver	ND	0.0060	0.0017	mg/L			1	6010C
7440-23-5	Sodium	ND	1.0	0.32	mg/L			1	6010C
7440-28-0	Thallium	ND	0.020	0.010	mg/L			1	6010C
7440-62-2	Vanadium	ND	0.0050	0.0015	mg/L			1	6010C
7440-66-6	Zinc	0.0015	0.010	0.0015	mg/L	J		1	6010C
7439-97-6	Mercury	ND	0.00020	0.000043	mg/L			1	7470A

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Buffalo Job No.: 480-201615-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 480-641524/1-A

Instrument Code: ICAP2 Batch No.: 641879

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	13.39			6010C
7440-36-0	Antimony	ND			6010C
7440-38-2	Arsenic	ND			6010C
7440-39-3	Barium	0.118	J		6010C
7440-41-7	Beryllium	0.0345	J		6010C
7440-43-9	Cadmium	0.0394	J		6010C
7440-70-2	Calcium	7.25	J		6010C
7440-47-3	Chromium	ND			6010C
7440-48-4	Cobalt	ND			6010C
7440-50-8	Copper	ND			6010C
7439-89-6	Iron	15.62			6010C
7439-92-1	Lead	ND			6010C
7439-95-4	Magnesium	5.08	J		6010C
7439-96-5	Manganese	0.367			6010C
7440-02-0	Nickel	ND			6010C
7440-09-7	Potassium	ND			6010C
7782-49-2	Selenium	ND			6010C
7440-22-4	Silver	ND			6010C
7440-23-5	Sodium	ND			6010C
7440-28-0	Thallium	ND			6010C
7440-62-2	Vanadium	ND			6010C
7440-66-6	Zinc	ND			6010C

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 480-201615-1

SDG No:

Lab Name: Eurofins Buffalo Job No: 480-201615-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	11500		12680		10		6010C
Antimony	2.0	J	ND		NC		6010C
Arsenic	9.3		10.85	J	NC		6010C
Barium	103		116.8		14	V	6010C
Beryllium	0.54		0.637	J	NC		6010C
Cadmium	0.33		0.318	J	NC		6010C
Calcium	3870		4402		14	V	6010C
Chromium	15.2		16.77		11	V	6010C
Cobalt	8.3		8.35		0.36		6010C
Copper	21.3		23.22		8.8		6010C
Iron	21900		24590		12	V	6010C
Lead	116		117.1		1.4		6010C
Magnesium	2800		3133		12	V	6010C
Manganese	513		576.8		12	V	6010C
Nickel	19.2		19.29	J	0.23		6010C
Potassium	2200		2375		8.2		6010C
Selenium	1.1	J	ND		NC		6010C
Silver	ND		ND		NC		6010C
Sodium	73.0	J	ND		NC		6010C
Thallium	ND		ND		NC		6010C
Vanadium	19.0		20.41		7.3		6010C
Zinc	98.9		110.3		12	V	6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: SS2 (0-2) MS
Lab ID: 480-201615-1 MS
Lab Name: Eurofins Buffalo
Job No.: 480-201615-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 71.7

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	21820		11500		2880	359	75-125	4	6010C
Antimony	42.16		2.0	J	57.4	70	75-125	F1	6010C
Arsenic	64.13		9.3		57.6	95	75-125		6010C
Barium	193.8		103		57.4	159	75-125	F1	6010C
Beryllium	55.42		0.54		57.4	96	75-125		6010C
Cadmium	53.19		0.33		57.4	92	75-125		6010C
Calcium	7981		3870		2880	143	75-125	F1	6010C
Chromium	73.52		15.2		57.4	102	75-125		6010C
Cobalt	67.12		8.3		57.4	102	75-125		6010C
Copper	79.02		21.3		57.4	100	75-125		6010C
Iron	26180		21900		2880	147	75-125	4	6010C
Lead	179.6		116		57.6	111	75-125		6010C
Magnesium	6409		2800		2870	126	75-125	F1	6010C
Manganese	586.7		513		57.4	128	75-125	4	6010C
Nickel	77.61		19.2		57.4	102	75-125		6010C
Potassium	7864		2200		2880	197	75-125	F1	6010C
Selenium	54.56		1.1	J	57.4	93	75-125		6010C
Silver	13.04		ND		14.4	91	75-125		6010C
Sodium	2664		73.0	J	2880	90	75-125		6010C
Thallium	57.80		ND		57.4	101	75-125		6010C
Vanadium	82.51		19.0		57.6	110	75-125		6010C
Zinc	154.7		98.9		57.4	97	75-125		6010C
Mercury	0.498		0.055		0.469	94	80-120		7471B

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: SS2 (6-12) MS
Lab ID: 480-201615-3 MS
Lab Name: Eurofins Buffalo
Job No.: 480-201615-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 91.5

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	23760		12600		2270	494	75-125	4	6010C
Antimony	22.75		1.5	J	45.3	47	75-125	F1	6010C
Arsenic	48.75		9.3		45.4	87	75-125		6010C
Barium	212.0		129		45.3	184	75-125	F1	6010C
Beryllium	38.59		0.55		45.3	84	75-125		6010C
Cadmium	37.25		0.19	J	45.3	82	75-125		6010C
Calcium	7263		4060		2270	141	75-125	F1	6010C
Chromium	59.07		15.0		45.3	97	75-125		6010C
Cobalt	55.15		11.0		45.3	97	75-125		6010C
Copper	72.20		31.8		45.3	89	75-125		6010C
Iron	30230		26500		2270	162	75-125	4	6010C
Lead	86.35		47.9		45.4	85	75-125		6010C
Magnesium	6194		3920		2260	100	75-125		6010C
Manganese	481.4		406		45.3	166	75-125	4	6010C
Nickel	69.96		26.2		45.3	97	75-125		6010C
Potassium	6727		1700		2270	222	75-125	F1	6010C
Selenium	37.61		0.70	J	45.3	82	75-125		6010C
Silver	9.59		ND		11.3	85	75-125		6010C
Sodium	2039		63.3	J	2270	87	75-125		6010C
Thallium	41.31		ND		45.3	91	75-125		6010C
Vanadium	70.15		18.9		45.4	113	75-125		6010C
Zinc	122.0		76.7		45.3	100	75-125		6010C
Mercury	0.371		0.026		0.347	99	80-120		7471B

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: SS2 (0-2) MSD
Lab ID: 480-201615-1 MSD
Lab Name: Eurofins Buffalo
Job No.: 480-201615-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 72.0

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	21520		2670	375	75-125	1	20	4	6010C
Antimony	37.32		53.4	66	75-125	12	20	F1	6010C
Arsenic	58.84		53.5	93	75-125	9	20		6010C
Barium	188.1		53.4	160	75-125	3	20	F1	6010C
Beryllium	49.99		53.4	93	75-125	10	20		6010C
Cadmium	48.54		53.4	90	75-125	9	20		6010C
Calcium	6141		2670	85	75-125	26	20	F2	6010C
Chromium	69.16		53.4	101	75-125	6	20		6010C
Cobalt	62.88		53.4	102	75-125	7	20		6010C
Copper	73.16		53.4	97	75-125	8	20		6010C
Iron	26420		2670	167	75-125	1	20	4	6010C
Lead	180.2		53.5	121	75-125	0	20		6010C
Magnesium	5444		2670	99	75-125	16	20		6010C
Manganese	555.2		53.4	79	75-125	6	20	4	6010C
Nickel	73.07		53.4	101	75-125	6	20		6010C
Potassium	7704		2670	206	75-125	2	20	F1	6010C
Selenium	49.76		53.4	91	75-125	9	20		6010C
Silver	11.86		13.3	89	75-125	9	20		6010C
Sodium	2425		2670	88	75-125	9	20		6010C
Thallium	53.53		53.4	100	75-125	8	20		6010C
Vanadium	78.19		53.5	111	75-125	5	20		6010C
Zinc	144.2		53.4	85	75-125	7	20		6010C
Mercury	0.475		0.457	92	80-120	5	20		7471B

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: SS2 (6-12) MSD
Lab ID: 480-201615-3 MSD
Lab Name: Eurofins Buffalo
Job No.: 480-201615-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 91.5

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	24000		2140	535	75-125	1	20	4	6010C
Antimony	22.58		42.7	49	75-125	1	20	F1	6010C
Arsenic	50.07		42.8	95	75-125	3	20		6010C
Barium	212.3		42.7	196	75-125	0	20	F1	6010C
Beryllium	38.03		42.7	88	75-125	1	20		6010C
Cadmium	37.58		42.7	88	75-125	1	20		6010C
Calcium	8103		2140	189	75-125	11	20	F1	6010C
Chromium	58.17		42.7	101	75-125	2	20		6010C
Cobalt	54.83		42.7	103	75-125	1	20		6010C
Copper	71.83		42.7	94	75-125	1	20		6010C
Iron	30910		2140	204	75-125	2	20	4	6010C
Lead	105.1		42.8	134	75-125	20	20	F1	6010C
Magnesium	7730		2130	178	75-125	22	20	F1 F2	6010C
Manganese	463.4		42.7	134	75-125	4	20	4	6010C
Nickel	70.59		42.7	104	75-125	1	20		6010C
Potassium	6919		2140	244	75-125	3	20	F1	6010C
Selenium	38.51		42.7	89	75-125	2	20		6010C
Silver	9.12		10.7	86	75-125	5	20		6010C
Sodium	1941		2140	88	75-125	5	20		6010C
Thallium	41.39		42.7	97	75-125	0	20		6010C
Vanadium	68.92		42.8	117	75-125	2	20		6010C
Zinc	120.6		42.7	103	75-125	1	20		6010C
Mercury	0.403		0.370	102	80-120	8	20		7471B

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: SS2 (0-2) PDS | Lab ID: 480-201615-1 PDS

Lab Name: Eurofins Buffalo | Job No.: 480-201615-1

SDG No.:

Matrix: Solid | Concentration Units: mg/Kg

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	13640		11500		2830	75	80-120	W	6010C
Antimony	55.94		2.0	J	56.6	95	80-120		6010C
Arsenic	63.69		9.3		56.8	96	80-120		6010C
Barium	152.1		103		56.6	87	80-120		6010C
Beryllium	55.47		0.54		56.6	97	80-120		6010C
Cadmium	53.85		0.33		56.6	95	80-120		6010C
Calcium	6487		3870		2840	92	80-120		6010C
Chromium	66.19		15.2		56.6	90	80-120		6010C
Cobalt	66.19		8.3		56.6	102	80-120		6010C
Copper	75.52		21.3		56.6	96	80-120		6010C
Iron	23690		21900		2840	61	80-120	W	6010C
Lead	168.5		116		56.8	93	80-120		6010C
Magnesium	5130		2800		2830	82	80-120		6010C
Manganese	533.3		513		56.6	35	80-120	W	6010C
Nickel	75.66		19.2		56.6	100	80-120		6010C
Potassium	4900		2200		2840	95	80-120		6010C
Selenium	55.32		1.1	J	56.6	96	80-120		6010C
Silver	12.84		ND		14.2	91	80-120		6010C
Sodium	2608		73.0	J	2830	89	80-120		6010C
Thallium	58.25		ND		56.6	103	80-120		6010C
Vanadium	69.64		19.0		56.8	89	80-120		6010C
Zinc	143.7		98.9		56.6	79	80-120	W	6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VB - IN

Job Narrative
480-201707-1

Comments
No additional comments.

Receipt
The samples were received on 9/16/2022 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.6º C, 2.4º C and 2.4º C.

Receipt Exceptions

Volume for PFC method received. However, method was not selected on the COC. The method was assigned: FB_091422 (480-201707-4), ERB1_091422 (480-201707-7) and ERB2_091422 (480-201707-8).

GC/MS VOA
Method 8260C: Internal standard and/or surrogate responses for the following sample was outside control limits: SB2 (0-0.5) (480-201707-1). The sample(s) were re-analyzed and responses were outside control limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270D: The following compound has been spiked at a level above the upper range of the initial calibration: Benzaldehyde. The laboratory control sample (LCS) associated with preparation batch 480-641854 and analytical batch 480-642351 recovered within acceptable limits for this analyte and has been qualified with an "E" flag.

Method 8270D: The following samples were diluted due to color, appearance, and viscosity: SB4 (0-0.5) (480-201707-10), SB4 (0.5-1) (480-201707-11) and SB4 (1-2) (480-201712-1). Elevated reporting limits (RL) are provided.

Method 8270D: The method blank for preparation batch 480-641854 contained Diethyl phthalate above the reporting limit (RL). None of the samples associated with this method blank contained the target compound above the RL; therefore, re-extraction and/or re-analysis of samples were not performed: SB2 (0-0.5) (480-201707-1), SB2 (0.5-1) (480-201707-2), SB2 (1-2) (480-201707-3), FDUP_091422 (480-201707-5), SB2 (13.5-15.5) (480-201707-6), SB4 (0-0.5) (480-201707-10), SB4 (0.5-1) (480-201707-11) and SB4 (1-2) (480-201712-1).

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: SB2 (0-0.5) (480-201707-1), SB2 (13.5-15.5) (480-201707-6) and SB4 (1-2) (480-201712-1). These results have been reported and qualified.

Method 8270D: Surrogate recovery for the following sample was outside control limits: FDUP_091422 (480-201707-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 480-641992 and analytical batch 480-642153 recovered outside control limits for the following analytes: Diethyl phthalate: FB_091422 (480-201707-4), ERB1_091422 (480-201707-7), ERB2_091422 (480-201707-8) and FB_091522 (480-201707-9).

Method 8270D: The laboratory control sample (LCS) for preparation batch 480-641992 and analytical batch 480-642153 recovered outside control limits for the following analytes: Diethyl phthalate. The associated sample(s) was re-prepared and/or re-analyzed outside holding time. Both sets of data have been reported: FB_091422 (480-201707-4), ERB1_091422 (480-201707-7), ERB2_091422 (480-201707-8) and FB_091522 (480-201707-9).

Method 8270D: The method blank (MB) for preparation batch 480-641992 and analytical batch 480-642153 recovered above the reporting limit (RL) for the following analytes: Diethyl phthalate. The associated sample(s) was re-prepared and/or re-analyzed outside holding time. Both sets of data have been reported: FB_091422 (480-201707-4), ERB1_091422 (480-201707-7), ERB2_091422 (480-201707-8) and FB_091522 (480-201707-9).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

LCMS
Method 537 (modified): The method blank for preparation batch 200-183718 and analytical batch 200-183779 contained Perfluorododecanoic acid (PFDoA) and Perfluorodecanesulfonic acid (PFDS) above the method detection limit. This target analyte concentration was less than half the reporting limit (1/2RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 537 (modified): Method 537 (modified): The “I” qualifier associated with samples SB2 (1-2) (480-201707-3), FDUP_091422 (480-201707-5) and (MB 200-183718/1-A) is applied because the transition mass ratio for the indicated analyte(s) was outside of the

established ratio limits. The qualitative identification has some degree of uncertainty, however analyst judgment was used to positively identify the analyte(s).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-641992.

Method 3510C: The following samples were re-prepared outside of preparation holding time due to high diethyl phthalate recovery in the MB, LCS, and samples: FB_091422 (480-201707-4), ERB1_091422 (480-201707-7), ERB2_091422 (480-201707-8) and FB_091522 (480-201707-9).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-201707-1

SDG No.: 201707

Matrix: Solid Level: Low

GC Column (1): ZB-624 (30) ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
SB2 (0-0.5)	480-201707-1	106	110	137 S1+	69 S1-
SB2 (0.5-1)	480-201707-2	97	104	123	79
SB2 (1-2)	480-201707-3	108	115	114	86
FDUP_091422	480-201707-5	101	111	122	80
SB2 (13.5-15.5)	480-201707-6	98	107	106	94
SB4 (0-0.5)	480-201707-10	101	108	117	83
SB4 (0.5-1)	480-201707-11	99	105	119	83
SB4 (1-2)	480-201712-1	102	110	121	82
	MB 480-641842/2-A	101	105	105	97
	MB 480-642124/2-A	97	103	106	96
	LCS 480-641842/1-A	98	102	108	95
	LCS 480-642124/1-A	96	100	104	91

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	60-140
DCA = 1,2-Dichloroethane-d4 (Surr)	64-126
TOL = Toluene-d8 (Surr)	71-125
BFB = 4-Bromofluorobenzene (Surr)	72-126

Column to be used to flag recovery values

FORM II 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-201707-1

SDG No.: 201707

Sample No.: CCVIS 480-642126/4 Date Analyzed: 09/20/2022 21:08

Instrument ID: HP5977M GC Column: ZB-624 (30) VOA ID: 0.25(mm)

Lab File ID (Standard): M06290.D Heated Purge: (Y/N) Y

Calibration ID: 43905

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		392317	5.23	823407	8.22	819814	10.62
UPPER LIMIT		784634	5.73	1646814	8.72	1639628	11.12
LOWER LIMIT		196159	4.73	411704	7.72	409907	10.12
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 480-642126/5		380139	5.23	788528	8.22	808443	10.62
LCS 480-642124/1-A		391171	5.23	825970	8.22	811764	10.62
MB 480-642124/2-A		383894	5.23	810298	8.22	850322	10.62
480-201707-1	SB2 (0-0.5)	309892	5.23	469082	8.22	272799*3	10.62

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-201707-1

SDG No.: 201707

Client Sample ID: FB_091422 | Lab Sample ID: 480-201707-4

Matrix: Water | Lab File ID: N0552.d

Analysis Method: 8260C | Date Collected: 09/14/2022 18:05

Sample wt/vol: 5(mL) | Date Analyzed: 09/19/2022 13:24

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (20) ID: 0.18(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) N pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 641871 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		1.0	0.35
71-55-6	1,1,1-Trichloroethane	ND		1.0	0.82
79-34-5	1,1,2,2-Tetrachloroethane	ND		1.0	0.21
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31
79-00-5	1,1,2-Trichloroethane	ND		1.0	0.23
75-34-3	1,1-Dichloroethane	ND		1.0	0.38
75-35-4	1,1-Dichloroethene	ND		1.0	0.29
526-73-8	1,2,3-Trimethylbenzene	ND		1.0	0.26
120-82-1	1,2,4-Trichlorobenzene	ND		1.0	0.41
95-63-6	1,2,4-Trimethylbenzene	ND		1.0	0.75
96-12-8	1,2-Dibromo-3-Chloropropane	ND		1.0	0.39
106-93-4	1,2-Dibromoethane	ND		1.0	0.73
95-50-1	1,2-Dichlorobenzene	ND		1.0	0.79
107-06-2	1,2-Dichloroethane	ND		1.0	0.21
78-87-5	1,2-Dichloropropane	ND		1.0	0.72
108-67-8	1,3,5-Trimethylbenzene	ND		1.0	0.77
541-73-1	1,3-Dichlorobenzene	ND		1.0	0.78
106-46-7	1,4-Dichlorobenzene	ND		1.0	0.84
78-93-3	2-Butanone (MEK)	ND		10	1.3
591-78-6	2-Hexanone	ND		5.0	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1
67-64-1	Acetone	ND		10	3.0
71-43-2	Benzene	ND		1.0	0.41
75-27-4	Bromodichloromethane	ND		1.0	0.39
75-25-2	Bromoform	ND		1.0	0.26
74-83-9	Bromomethane	ND		1.0	0.69
75-15-0	Carbon disulfide	ND		1.0	0.19
56-23-5	Carbon tetrachloride	ND		1.0	0.27
108-90-7	Chlorobenzene	ND		1.0	0.75
75-00-3	Chloroethane	ND		1.0	0.32
67-66-3	Chloroform	ND		1.0	0.34
74-87-3	Chloromethane	0.54	J	1.0	0.35
156-59-2	cis-1,2-Dichloroethene	ND		1.0	0.81

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-201707-1

SDG No.: 201707

Client Sample ID: | Lab Sample ID: MB 480-641842/2-A

Matrix: Solid | Lab File ID: M06262.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 09/19/2022 10:15

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (30) VOA ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) Y pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 641850 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		5.0	0.50
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.36
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.81
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.65
75-34-3	1,1-Dichloroethane	ND		5.0	0.61
75-35-4	1,1-Dichloroethene	ND		5.0	0.61
526-73-8	1,2,3-Trimethylbenzene	ND		5.0	1.0
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.30
95-63-6	1,2,4-Trimethylbenzene	ND		5.0	0.96
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	2.5
106-93-4	1,2-Dibromoethane	ND		5.0	0.64
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.39
107-06-2	1,2-Dichloroethane	ND		5.0	0.25
78-87-5	1,2-Dichloropropane	ND		5.0	2.5
108-67-8	1,3,5-Trimethylbenzene	ND		5.0	0.32
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.26
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.70
78-93-3	2-Butanone (MEK)	ND		25	1.8
591-78-6	2-Hexanone	ND		25	2.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		25	1.6
67-64-1	Acetone	ND		25	4.2
71-43-2	Benzene	ND		5.0	0.25
75-27-4	Bromodichloromethane	ND		5.0	0.67
75-25-2	Bromoform	ND		5.0	2.5
74-83-9	Bromomethane	ND		5.0	0.45
75-15-0	Carbon disulfide	ND		5.0	2.5
56-23-5	Carbon tetrachloride	ND		5.0	0.48
108-90-7	Chlorobenzene	ND		5.0	0.66
75-00-3	Chloroethane	ND		5.0	1.1
67-66-3	Chloroform	0.442	J	5.0	0.31
74-87-3	Chloromethane	ND		5.0	0.30
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.64

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-201707-1

SDG No.: 201707

Lab Sample ID: ICV 480-639579/28 Calibration Date: 08/30/2022 07:38

Instrument ID: HP5977M Calib Start Date: 08/30/2022 00:22

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 08/30/2022 02:47

Lab File ID: M05811.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.313	0.998	0.1000	38.0	50.0	-24.0	50.0
Chloromethane	Ave	2.078	1.781	0.1000	42.9	50.0	-14.3	30.0
Vinyl chloride	Ave	1.370	1.098	0.1000	40.1	50.0	-19.9	30.0
Butadiene	Ave	1.464	1.118		38.2	50.0	-23.6	30.0
Bromomethane	Ave	0.7796	0.6612	0.1000	42.4	50.0	-15.2	50.0
Chloroethane	Ave	0.8148	0.6646	0.1000	40.8	50.0	-18.4	50.0
Trichlorofluoromethane	Ave	1.640	1.249	0.1000	38.1	50.0	-23.8	30.0
Dichlorofluoromethane	Ave	1.986	1.649		41.5	50.0	-17.0	30.0
Ethyl ether	Ave	1.161	1.041		44.8	50.0	-10.3	30.0
Acrolein	Ave	0.1617	0.1315		203	250	-18.7	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.195	0.9041	0.1000	37.8	50.0	-24.4	30.0
1,1-Dichloroethene	Ave	1.056	0.8127	0.1000	38.5	50.0	-23.0	30.0
Acetone	Ave	0.5369	0.4505	0.1000	210	250	-16.1	50.0
Iodomethane	Ave	2.117	1.810		42.8	50.0	-14.5	30.0
Carbon disulfide	Ave	3.898	3.081	0.1000	39.5	50.0	-21.0	30.0
Allyl chloride	Ave	2.312	1.891		40.9	50.0	-18.2	30.0
Methyl acetate	Ave	1.253	1.108	0.1000	88.5	100	-11.5	50.0
Methylene Chloride	Lin1		1.238	0.1000	45.9	50.0	-8.2	30.0
2-Methyl-2-propanol	Ave	0.2222	0.1923		433	500	-13.5	50.0
Methyl tert-butyl ether	Ave	4.094	3.694	0.1000	45.1	50.0	-9.8	30.0
trans-1,2-Dichloroethene	Ave	1.314	1.081	0.1000	41.1	50.0	-17.7	30.0
Acrylonitrile	Ave	0.6330	0.5593		442	500	-11.6	30.0
Hexane	Ave	2.219	1.603		36.1	50.0	-27.7	30.0
1,1-Dichloroethane	Ave	2.499	2.112	0.2000	42.2	50.0	-15.5	30.0
Vinyl acetate	Ave	3.316	2.710		81.7	100	-18.3	30.0
2,2-Dichloropropane	Ave	1.743	1.307		37.5	50.0	-25.0	30.0
cis-1,2-Dichloroethene	Ave	1.502	1.292	0.1000	43.0	50.0	-14.0	30.0
2-Butanone (MEK)	Ave	0.7873	0.7152	0.1000	227	250	-9.2	30.0
Chlorobromomethane	Ave	0.8222	0.7234		44.0	50.0	-12.0	30.0
Tetrahydrofuran	Ave	0.5465	0.4869		89.1	100	-10.9	30.0
Chloroform	Ave	2.413	2.012	0.2000	41.7	50.0	-16.6	30.0
Cyclohexane	Ave	2.643	1.935	0.1000	36.6	50.0	-26.8	30.0
1,1,1-Trichloroethane	Ave	2.002	1.533	0.1000	38.3	50.0	-23.4	30.0
Carbon tetrachloride	Ave	1.683	1.256	0.1000	37.3	50.0	-25.4	30.0
1,1-Dichloropropene	Ave	1.701	1.315		38.6	50.0	-22.7	30.0
Benzene	Ave	4.988	4.223	0.5000	42.3	50.0	-15.3	30.0
Isobutyl alcohol	Ave	0.0881	0.0798		1130	1250	-9.4	50.0
1,2-Dichloroethane	Ave	1.931	1.722	0.1000	44.6	50.0	-10.9	30.0
n-Heptane	Ave	2.322	1.714		36.9	50.0	-26.2	30.0
Trichloroethene	Ave	1.337	1.102	0.2000	41.2	50.0	-17.6	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-201707-1

SDG No.: 201707

Lab Sample ID: ICV 480-639579/28 Calibration Date: 08/30/2022 07:38

Instrument ID: HP5977M Calib Start Date: 08/30/2022 00:22

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 08/30/2022 02:47

Lab File ID: M05811.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.304	1.692	0.1000	36.7	50.0	-26.6	30.0
1,2-Dichloropropane	Ave	1.424	1.245	0.1000	43.7	50.0	-12.5	30.0
Dibromomethane	Ave	0.8519	0.7628	0.1000	44.8	50.0	-10.5	30.0
1,4-Dioxane	Ave	0.0083	0.0080		965	1000	-3.5	50.0
Bromodichloromethane	Ave	1.659	1.500	0.2000	45.2	50.0	-9.6	30.0
2-Chloroethyl vinyl ether	Ave	0.8250	0.7634		46.3	50.0	-7.5	30.0
cis-1,3-Dichloropropene	Ave	2.070	1.830	0.2000	44.2	50.0	-11.6	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7501	0.7346	0.1000	245	250	-2.1	30.0
Toluene	Ave	1.433	1.280	0.4000	44.7	50.0	-10.7	30.0
trans-1,3-Dichloropropene	Ave	0.8480	0.8126	0.1000	47.9	50.0	-4.2	30.0
Ethyl methacrylate	Ave	0.7499	0.7278		48.5	50.0	-2.9	30.0
1,1,2-Trichloroethane	Ave	0.4352	0.4211	0.1000	48.4	50.0	-3.2	30.0
Tetrachloroethene	Ave	0.6335	0.5219	0.2000	41.2	50.0	-17.6	30.0
1,3-Dichloropropane	Ave	0.8727	0.8459		48.5	50.0	-3.1	30.0
2-Hexanone	Ave	0.5096	0.4949	0.1000	243	250	-2.9	30.0
Dibromochloromethane	Ave	0.5654	0.5589	0.1000	49.4	50.0	-1.2	30.0
1,2-Dibromoethane	Ave	0.5557	0.5326		47.9	50.0	-4.1	30.0
Chlorobenzene	Ave	1.670	1.531	0.5000	45.8	50.0	-8.4	30.0
Ethylbenzene	Ave	2.682	2.330	0.1000	43.4	50.0	-13.1	30.0
1,1,1,2-Tetrachloroethane	Ave	0.6351	0.6154		48.5	50.0	-3.1	30.0
m,p-Xylene	Ave	1.082	0.9456	0.1000	43.7	50.0	-12.6	30.0
o-Xylene	Ave	1.123	0.998	0.3000	44.4	50.0	-11.1	30.0
Styrene	Ave	1.903	1.720	0.3000	45.2	50.0	-9.6	30.0
Bromoform	Ave	0.3734	0.3662	0.1000	49.0	50.0	-1.9	50.0
Isopropylbenzene	Ave	2.616	2.329	0.1000	44.5	50.0	-11.0	30.0
Bromobenzene	Ave	0.7081	0.6815		48.1	50.0	-3.8	30.0
1,1,2,2-Tetrachloroethane	Ave	0.7135	0.7019	0.3000	49.2	50.0	-1.6	30.0
N-Propylbenzene	Ave	3.014	2.650		44.0	50.0	-12.1	30.0
1,2,3-Trichloropropane	Ave	0.2255	0.2265		50.2	50.0	0.5	30.0
trans-1,4-Dichloro-2-butene	Ave	0.2475	0.2356		47.6	50.0	-4.8	50.0
2-Chlorotoluene	Ave	0.6595	0.6111		46.3	50.0	-7.3	30.0
1,3,5-Trimethylbenzene	Ave	2.253	2.023		44.9	50.0	-10.2	30.0
4-Chlorotoluene	Ave	0.6758	0.6178		45.7	50.0	-8.6	30.0
tert-Butylbenzene	Ave	0.4987	0.4361		43.7	50.0	-12.5	30.0
1,2,4-Trimethylbenzene	Ave	2.307	2.130		46.2	50.0	-7.7	30.0
sec-Butylbenzene	Ave	2.825	2.426		42.9	50.0	-14.1	30.0
1,3-Dichlorobenzene	Ave	1.369	1.271	0.6000	46.4	50.0	-7.2	30.0
4-Isopropyltoluene	Ave	2.532	2.190		43.2	50.0	-13.5	30.0
1,4-Dichlorobenzene	Ave	1.395	1.298	0.5000	46.5	50.0	-7.0	30.0
n-Butylbenzene	Ave	2.268	1.918		42.3	50.0	-15.4	30.0
1,2-Dichlorobenzene	Ave	1.379	1.303	0.4000	47.3	50.0	-5.5	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-201707-1

SDG No.: 201707

Lab Sample ID: ICV 480-639579/28 Calibration Date: 08/30/2022 07:38

Instrument ID: HP5977M Calib Start Date: 08/30/2022 00:22

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 08/30/2022 02:47

Lab File ID: M05811.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.1429	0.1435	0.0500	50.2	50.0	0.4	50.0
1,2,4-Trichlorobenzene	Ave	1.074	0.998	0.2000	46.5	50.0	-7.1	30.0
Hexachlorobutadiene	Ave	0.4995	0.4152		41.6	50.0	-16.9	30.0
Naphthalene	Ave	2.740	2.721		49.6	50.0	-0.7	30.0
1,2,3-Trichlorobenzene	Ave	1.021	0.9816		48.1	50.0	-3.9	30.0
Dibromofluoromethane (Surr)	Ave	1.388	1.410		50.8	50.0	1.6	30.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.7364	0.7550		51.3	50.0	2.5	30.0
Toluene-d8 (Surr)	Ave	2.234	2.396		53.6	50.0	7.2	30.0
4-Bromofluorobenzene (Surr)	Ave	0.8035	0.7814		48.6	50.0	-2.8	30.0

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-201707-1

SDG No.: 201707

Matrix: Solid Level: Low

GC Column (1): Intuvo DB-5 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPHd14 #
SB2 (0-0.5)	480-201707-1	62	62	62	69	74	76 S1-
SB2 (0.5-1)	480-201707-2	83	86	91	97	111	108
SB2 (1-2)	480-201707-3	89	91	100	105	108	113
FDUP_091422	480-201707-5	110	112	116	121 S1+	134 S1+	134 S1+
SB2 (13.5-15.5)	480-201707-6	100	100	106	106	126 S1+	118
SB4 (0-0.5)	480-201707-10	93	96	93	102	110	112
SB4 (0.5-1)	480-201707-11	89	87	97	96	97	107
SB4 (1-2)	480-201712-1	93	97	98	110	113	134 S1+
	MB 480-641854/1-A	57	60	63	66	63	79
	LCS 480-641854/2-A	64	70	68	74	85	81

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	52-120
PHL = Phenol-d5 (Surr)	54-120
NBZ = Nitrobenzene-d5 (Surr)	53-120
FBP = 2-Fluorobiphenyl (Surr)	60-120
TBP = 2,4,6-Tribromophenol (Surr)	54-120
TPHd14 = p-Terphenyl-d14 (Surr)	79-130

Column to be used to flag recovery values

FORM II 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-201707-1

SDG No.: 201707

Matrix: Water Level: Low Lab File ID: Y0283620.D

Lab ID: LCS 480-641992/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chrysene	32.0	34.1	107	69-120	
Dibenz(a,h)anthracene	32.0	34.9	109	65-135	
Dibenzofuran	32.0	30.5	95	66-120	
Diethyl phthalate	32.0	67.0	210	59-127	E *+
Dimethyl phthalate	32.0	34.4	108	68-120	
Di-n-butyl phthalate	32.0	35.7	111	69-131	
Di-n-octyl phthalate	32.0	33.0	103	63-140	
Fluoranthene	32.0	35.7	112	69-126	
Fluorene	32.0	31.8	99	66-120	
Hexachlorobenzene	32.0	35.5	111	61-120	
Hexachlorobutadiene	32.0	20.8	65	35-120	
Hexachlorocyclopentadiene	32.0	21.6	68	31-120	
Hexachloroethane	32.0	18.4	58	43-120	
Indeno[1,2,3-cd]pyrene	32.0	34.3	107	69-146	
Isophorone	32.0	30.6	96	55-120	
Naphthalene	32.0	27.7	87	57-120	
Nitrobenzene	32.0	28.4	89	53-123	
N-Nitrosodi-n-propylamine	32.0	30.3	95	32-140	
N-Nitrosodiphenylamine	32.0	36.2	113	61-120	
Pentachlorophenol	64.0	77.2	121	29-136	
Phenanthrene	32.0	34.6	108	68-120	
Phenol	32.0	15.4	48	17-120	
Pyrene	32.0	34.6	108	70-125	

Column to be used to flag recovery and RPD values

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-201707-1

SDG No.: 201707

Client Sample ID: FB_091422 | Lab Sample ID: 480-201707-4

Matrix: Water | Lab File ID: Y0283629.D

Analysis Method: 8270D | Date Collected: 09/14/2022 18:05

Extract. Method: 3510C | Date Extracted: 09/20/2022 08:49

Sample wt/vol: 250(mL) | Date Analyzed: 09/21/2022 16:40

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: RXI-5Sil MS ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor: | Level: (low/med) Low

Analysis Batch No.: 642153 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
95-95-4	2,4,5-Trichlorophenol	ND		5.0	0.48
88-06-2	2,4,6-Trichlorophenol	ND		5.0	0.61
120-83-2	2,4-Dichlorophenol	ND		5.0	0.51
105-67-9	2,4-Dimethylphenol	ND		5.0	0.50
51-28-5	2,4-Dinitrophenol	ND		10	2.2
121-14-2	2,4-Dinitrotoluene	ND		5.0	0.45
606-20-2	2,6-Dinitrotoluene	ND		5.0	0.40
91-58-7	2-Chloronaphthalene	ND		5.0	0.46
95-57-8	2-Chlorophenol	ND		5.0	0.53
91-57-6	2-Methylnaphthalene	ND		5.0	0.60
95-48-7	2-Methylphenol	ND		5.0	0.40
88-74-4	2-Nitroaniline	ND		10	0.42
88-75-5	2-Nitrophenol	ND		5.0	0.48
91-94-1	3,3'-Dichlorobenzidine	ND		5.0	0.40
99-09-2	3-Nitroaniline	ND		10	0.48
534-52-1	4,6-Dinitro-2-methylphenol	ND		10	2.2
101-55-3	4-Bromophenyl phenyl ether	ND		5.0	0.45
59-50-7	4-Chloro-3-methylphenol	ND		5.0	0.45
106-47-8	4-Chloroaniline	ND		5.0	0.59
7005-72-3	4-Chlorophenyl phenyl ether	ND		5.0	0.35
106-44-5	4-Methylphenol	ND		10	0.36
100-01-6	4-Nitroaniline	ND		10	0.25
100-02-7	4-Nitrophenol	ND		10	1.5
83-32-9	Acenaphthene	ND		5.0	0.41
208-96-8	Acenaphthylene	ND		5.0	0.38
98-86-2	Acetophenone	ND		5.0	0.54
120-12-7	Anthracene	ND		5.0	0.28
1912-24-9	Atrazine	ND		5.0	0.46
100-52-7	Benzaldehyde	ND		5.0	0.27
56-55-3	Benzo[a]anthracene	ND		5.0	0.36
50-32-8	Benzo[a]pyrene	ND		5.0	0.47
205-99-2	Benzo[b]fluoranthene	ND		5.0	0.34

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-201707-1

SDG No.: 201707

Client Sample ID: ERB1_091422 | Lab Sample ID: 480-201707-7

Matrix: Water | Lab File ID: Y0283630.D

Analysis Method: 8270D | Date Collected: 09/14/2022 18:30

Extract. Method: 3510C | Date Extracted: 09/20/2022 08:49

Sample wt/vol: 240(mL) | Date Analyzed: 09/21/2022 17:08

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: RXI-5Sil MS ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor: | Level: (low/med) Low

Analysis Batch No.: 642153 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
191-24-2	Benzo[g,h,i]perylene	ND		5.2	0.36
207-08-9	Benzo[k]fluoranthene	ND		5.2	0.76
92-52-4	Biphenyl	ND		5.2	0.68
108-60-1	bis (2-chloroisopropyl) ether	ND		5.2	0.54
111-91-1	Bis(2-chloroethoxy)methane	ND		5.2	0.36
111-44-4	Bis(2-chloroethyl)ether	ND		5.2	0.42
117-81-7	Bis(2-ethylhexyl) phthalate	ND		5.2	2.3
85-68-7	Butyl benzyl phthalate	ND		5.2	1.0
105-60-2	Caprolactam	ND		5.2	2.3
86-74-8	Carbazole	ND		5.2	0.31
218-01-9	Chrysene	ND		5.2	0.34
53-70-3	Dibenz(a,h)anthracene	ND		5.2	0.44
132-64-9	Dibenzofuran	ND		10	0.53
84-66-2	Diethyl phthalate	19	B *+ *1	5.2	0.23
131-11-3	Dimethyl phthalate	ND		5.2	0.38
84-74-2	Di-n-butyl phthalate	ND		5.2	0.32
117-84-0	Di-n-octyl phthalate	ND		5.2	0.49
206-44-0	Fluoranthene	ND		5.2	0.42
86-73-7	Fluorene	ND		5.2	0.38
118-74-1	Hexachlorobenzene	ND		5.2	0.53
87-68-3	Hexachlorobutadiene	ND		5.2	0.71
77-47-4	Hexachlorocyclopentadiene	ND		5.2	0.61
67-72-1	Hexachloroethane	ND		5.2	0.61
193-39-5	Indeno[1,2,3-cd]pyrene	ND		5.2	0.49
78-59-1	Isophorone	ND		5.2	0.45
91-20-3	Naphthalene	ND		5.2	0.79
98-95-3	Nitrobenzene	ND		5.2	0.30
621-64-7	N-Nitrosodi-n-propylamine	ND		5.2	0.56
86-30-6	N-Nitrosodiphenylamine	ND		5.2	0.53
87-86-5	Pentachlorophenol	ND		10	2.3
85-01-8	Phenanthrene	ND		5.2	0.46
108-95-2	Phenol	ND		5.2	0.41

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-201707-1

SDG No.: 201707

Client Sample ID: ERB1_091422 RE | Lab Sample ID: 480-201707-7 RE

Matrix: Water | Lab File ID: Y0283708.D

Analysis Method: 8270D | Date Collected: 09/14/2022 18:30

Extract. Method: 3510C | Date Extracted: 09/24/2022 09:45

Sample wt/vol: 250(mL) | Date Analyzed: 09/26/2022 21:09

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: RXI-5Sil MS ID: 0.25(mm)

% Moisture: | % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor: | Level: (low/med) Low

Analysis Batch No.: 642720 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
129-00-0	Pyrene	ND	H	5.0	0.34

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	81		41-120
321-60-8	2-Fluorobiphenyl (Surr)	97		48-120
367-12-4	2-Fluorophenol (Surr)	63		35-120
4165-60-0	Nitrobenzene-d5 (Surr)	80		46-120
4165-62-2	Phenol-d5 (Surr)	48		22-120
1718-51-0	p-Terphenyl-d14 (Surr)	107		60-148

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-201707-1

SDG No.: 201707

Client Sample ID: ERB2_091422 | Lab Sample ID: 480-201707-8

Matrix: Water | Lab File ID: Y0283631.D

Analysis Method: 8270D | Date Collected: 09/14/2022 18:45

Extract. Method: 3510C | Date Extracted: 09/20/2022 08:49

Sample wt/vol: 240(mL) | Date Analyzed: 09/21/2022 17:35

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: RXI-5Sil MS ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor: | Level: (low/med) Low

Analysis Batch No.: 642153 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
191-24-2	Benzo[g,h,i]perylene	ND		5.2	0.36
207-08-9	Benzo[k]fluoranthene	ND		5.2	0.76
92-52-4	Biphenyl	ND		5.2	0.68
108-60-1	bis (2-chloroisopropyl) ether	ND		5.2	0.54
111-91-1	Bis(2-chloroethoxy)methane	ND		5.2	0.36
111-44-4	Bis(2-chloroethyl)ether	ND		5.2	0.42
117-81-7	Bis(2-ethylhexyl) phthalate	ND		5.2	2.3
85-68-7	Butyl benzyl phthalate	ND		5.2	1.0
105-60-2	Caprolactam	ND		5.2	2.3
86-74-8	Carbazole	ND		5.2	0.31
218-01-9	Chrysene	ND		5.2	0.34
53-70-3	Dibenz(a,h)anthracene	ND		5.2	0.44
132-64-9	Dibenzofuran	ND		10	0.53
84-66-2	Diethyl phthalate	28	B *+ *1	5.2	0.23
131-11-3	Dimethyl phthalate	ND		5.2	0.38
84-74-2	Di-n-butyl phthalate	ND		5.2	0.32
117-84-0	Di-n-octyl phthalate	ND		5.2	0.49
206-44-0	Fluoranthene	ND		5.2	0.42
86-73-7	Fluorene	ND		5.2	0.38
118-74-1	Hexachlorobenzene	ND		5.2	0.53
87-68-3	Hexachlorobutadiene	ND		5.2	0.71
77-47-4	Hexachlorocyclopentadiene	ND		5.2	0.61
67-72-1	Hexachloroethane	ND		5.2	0.61
193-39-5	Indeno[1,2,3-cd]pyrene	ND		5.2	0.49
78-59-1	Isophorone	ND		5.2	0.45
91-20-3	Naphthalene	ND		5.2	0.79
98-95-3	Nitrobenzene	ND		5.2	0.30
621-64-7	N-Nitrosodi-n-propylamine	ND		5.2	0.56
86-30-6	N-Nitrosodiphenylamine	ND		5.2	0.53
87-86-5	Pentachlorophenol	ND		10	2.3
85-01-8	Phenanthrene	ND		5.2	0.46
108-95-2	Phenol	ND		5.2	0.41

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-201707-1

SDG No.: 201707

Client Sample ID: ERB2_091422 RE | Lab Sample ID: 480-201707-8 RE

Matrix: Water | Lab File ID: Y0283709.D

Analysis Method: 8270D | Date Collected: 09/14/2022 18:45

Extract. Method: 3510C | Date Extracted: 09/24/2022 09:45

Sample wt/vol: 250(mL) | Date Analyzed: 09/26/2022 21:37

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: RXI-5Sil MS ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor: | Level: (low/med) Low

Analysis Batch No.: 642720 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
191-24-2	Benzo[g,h,i]perylene	ND	H	5.0	0.35
207-08-9	Benzo[k]fluoranthene	ND	H	5.0	0.73
92-52-4	Biphenyl	ND	H	5.0	0.65
108-60-1	bis (2-chloroisopropyl) ether	ND	H	5.0	0.52
111-91-1	Bis(2-chloroethoxy)methane	ND	H	5.0	0.35
111-44-4	Bis(2-chloroethyl)ether	ND	H	5.0	0.40
117-81-7	Bis(2-ethylhexyl) phthalate	ND	H	5.0	2.2
85-68-7	Butyl benzyl phthalate	ND	H	5.0	1.0
105-60-2	Caprolactam	ND	H	5.0	2.2
86-74-8	Carbazole	ND	H	5.0	0.30
218-01-9	Chrysene	ND	H	5.0	0.33
53-70-3	Dibenz(a,h)anthracene	ND	H	5.0	0.42
132-64-9	Dibenzofuran	ND	H	10	0.51
84-66-2	Diethyl phthalate	19	H	5.0	0.22
131-11-3	Dimethyl phthalate	ND	H	5.0	0.36
84-74-2	Di-n-butyl phthalate	ND	H	5.0	0.31
117-84-0	Di-n-octyl phthalate	ND	H	5.0	0.47
206-44-0	Fluoranthene	ND	H	5.0	0.40
86-73-7	Fluorene	ND	H	5.0	0.36
118-74-1	Hexachlorobenzene	ND	H	5.0	0.51
87-68-3	Hexachlorobutadiene	ND	H	5.0	0.68
77-47-4	Hexachlorocyclopentadiene	ND	H	5.0	0.59
67-72-1	Hexachloroethane	ND	H	5.0	0.59
193-39-5	Indeno[1,2,3-cd]pyrene	ND	H	5.0	0.47
78-59-1	Isophorone	ND	H	5.0	0.43
91-20-3	Naphthalene	ND	H	5.0	0.76
98-95-3	Nitrobenzene	ND	H	5.0	0.29
621-64-7	N-Nitrosodi-n-propylamine	ND	H	5.0	0.54
86-30-6	N-Nitrosodiphenylamine	ND	H	5.0	0.51
87-86-5	Pentachlorophenol	ND	H	10	2.2
85-01-8	Phenanthrene	ND	H	5.0	0.44
108-95-2	Phenol	ND	H	5.0	0.39

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-201707-1

SDG No.: 201707

Client Sample ID: FB_091522 | Lab Sample ID: 480-201707-9

Matrix: Water | Lab File ID: Y0283632.D

Analysis Method: 8270D | Date Collected: 09/15/2022 07:20

Extract. Method: 3510C | Date Extracted: 09/20/2022 08:49

Sample wt/vol: 250(mL) | Date Analyzed: 09/21/2022 18:03

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: RXI-5Sil MS ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor: | Level: (low/med) Low

Analysis Batch No.: 642153 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
191-24-2	Benzo[g,h,i]perylene	ND		5.0	0.35
207-08-9	Benzo[k]fluoranthene	ND		5.0	0.73
92-52-4	Biphenyl	ND		5.0	0.65
108-60-1	bis (2-chloroisopropyl) ether	ND		5.0	0.52
111-91-1	Bis(2-chloroethoxy)methane	ND		5.0	0.35
111-44-4	Bis(2-chloroethyl)ether	ND		5.0	0.40
117-81-7	Bis(2-ethylhexyl) phthalate	ND		5.0	2.2
85-68-7	Butyl benzyl phthalate	ND		5.0	1.0
105-60-2	Caprolactam	ND		5.0	2.2
86-74-8	Carbazole	ND		5.0	0.30
218-01-9	Chrysene	ND		5.0	0.33
53-70-3	Dibenz(a,h)anthracene	ND		5.0	0.42
132-64-9	Dibenzofuran	ND		10	0.51
84-66-2	Diethyl phthalate	30	B *+ *1	5.0	0.22
131-11-3	Dimethyl phthalate	ND		5.0	0.36
84-74-2	Di-n-butyl phthalate	ND		5.0	0.31
117-84-0	Di-n-octyl phthalate	ND		5.0	0.47
206-44-0	Fluoranthene	ND		5.0	0.40
86-73-7	Fluorene	ND		5.0	0.36
118-74-1	Hexachlorobenzene	ND		5.0	0.51
87-68-3	Hexachlorobutadiene	ND		5.0	0.68
77-47-4	Hexachlorocyclopentadiene	ND		5.0	0.59
67-72-1	Hexachloroethane	ND		5.0	0.59
193-39-5	Indeno[1,2,3-cd]pyrene	ND		5.0	0.47
78-59-1	Isophorone	ND		5.0	0.43
91-20-3	Naphthalene	ND		5.0	0.76
98-95-3	Nitrobenzene	ND		5.0	0.29
621-64-7	N-Nitrosodi-n-propylamine	ND		5.0	0.54
86-30-6	N-Nitrosodiphenylamine	ND		5.0	0.51
87-86-5	Pentachlorophenol	ND		10	2.2
85-01-8	Phenanthrene	ND		5.0	0.44
108-95-2	Phenol	ND		5.0	0.39

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-201707-1

SDG No.: 201707

Lab Sample ID: CCVIS 480-642351/4 Calibration Date: 09/22/2022 13:35

Instrument ID: HP5977Z Calib Start Date: 09/09/2022 12:36

GC Column: Intuvo DB-5MS ID: 0.18(mm) Calib End Date: 09/09/2022 14:35

Lab File ID: Z0025756.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin2		0.4099	0.0100	47000	50000	-6.1	20.0
N-Nitrosodimethylamine	Ave	0.6138	0.5940	0.0100	48400	50000	-3.2	50.0
Pyridine	Ave	0.8973	0.8192	0.0100	91300	100000	-8.7	50.0
Benzaldehyde	Ave	0.9919	0.8801	0.0100	44400	50000	-11.3	50.0
Phenol	Ave	1.324	1.412	0.8000	53300	50000	6.6	20.0
Aniline	Ave	1.658	1.712	0.0100	51600	50000	3.2	20.0
Bis(2-chloroethyl)ether	Ave	1.102	1.112	0.7000	50500	50000	0.9	20.0
2-Chlorophenol	Ave	1.166	1.219	0.8000	52300	50000	4.6	20.0
n-Decane	Ave	1.543	1.492	0.0100	48300	50000	-3.3	20.0
1,3-Dichlorobenzene	Ave	1.487	1.494	0.0100	50200	50000	0.4	20.0
1,4-Dichlorobenzene	Ave	1.498	1.508	0.0100	50300	50000	0.7	20.0
Benzyl alcohol	Lin2		0.7795	0.0100	51400	50000	2.8	20.0
1,2-Dichlorobenzene	Ave	1.437	1.446	0.0100	50300	50000	0.6	20.0
2-Methylphenol	Ave	1.014	1.058	0.7000	52200	50000	4.3	20.0
Indene	Ave	0.6384	0.6882	0.0100	162000	150000	7.8	20.0
bis (2-chloroisopropyl) ether	Ave	1.893	1.827	0.0100	48300	50000	-3.5	20.0
Acetophenone	Ave	1.735	1.760	0.0100	50700	50000	1.5	20.0
4-Methylphenol	Lin2		1.082	0.6000	51200	50000	2.3	20.0
N-Nitrosodi-n-propylamine	Ave	0.6781	0.6872	0.5000	50700	50000	1.3	20.0
Hexachloroethane	Ave	0.5204	0.5209	0.3000	50000	50000	0.0	20.0
Nitrobenzene	Ave	0.3252	0.3677	0.2000	56500	50000	13.1	20.0
Isophorone	Ave	0.6254	0.6819	0.4000	54500	50000	9.0	20.0
2-Nitrophenol	Lin2		0.1666	0.1000	60400	50000	20.8*	20.0
2,4-Dimethylphenol	Ave	0.3166	0.3438	0.2000	54300	50000	8.6	20.0
Bis(2-chloroethoxy)methane	Ave	0.3956	0.4123	0.3000	52100	50000	4.2	20.0
2,4-Dichlorophenol	Lin2		0.3253	0.2000	52900	50000	5.7	20.0
Benzoic acid	Lin1		0.2677	0.0100	179000	150000	19.4	50.0
1,2,4-Trichlorobenzene	Ave	0.3848	0.3916	0.0100	50900	50000	1.8	20.0
Naphthalene	Ave	1.004	0.998	0.7000	49700	50000	-0.6	20.0
4-Chloroaniline	Lin2		0.4208	0.0100	51700	50000	3.3	20.0
2,6-Dichlorophenol	Ave	0.2927	0.3191	0.0100	54500	50000	9.0	20.0
Hexachlorobutadiene	Ave	0.2413	0.2444	0.0100	50600	50000	1.3	20.0
Caprolactam	Lin2		0.0787	0.0100	53700	50000	7.4	50.0
4-Chloro-3-methylphenol	Lin2		0.2957	0.2000	53800	50000	7.5	20.0
2-Methylnaphthalene	Ave	0.6718	0.6948	0.4000	51700	50000	3.4	20.0
1-Methylnaphthalene	Ave	0.6559	0.6604	0.0100	50300	50000	0.7	20.0
Hexachlorocyclopentadiene	Lin2		0.3345	0.0500	42700	50000	-14.6	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.7032	0.7160	0.0100	50900	50000	1.8	20.0
2,4,6-Trichlorophenol	Lin2		0.4444	0.2000	55100	50000	10.3	20.0
2,4,5-Trichlorophenol	Lin2		0.4811	0.2000	52400	50000	4.8	20.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-201707-1

SDG No.: 201707

Client Sample ID: | Lab Sample ID: MB 480-641854/1-A

Matrix: Solid | Lab File ID: Z0025758.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3550C | Date Extracted: 09/19/2022 08:19

Sample wt/vol: 30.22(g) | Date Analyzed: 09/22/2022 14:09

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: Intuvo DB-5MS ID: 0.18(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor: | Level: (low/med) Low

Analysis Batch No.: 642351 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
191-24-2	Benzo[g,h,i]perylene	ND		170	18
207-08-9	Benzo[k]fluoranthene	ND		170	22
92-52-4	Biphenyl	ND		170	25
108-60-1	bis (2-chloroisopropyl) ether	ND		170	34
111-91-1	Bis(2-chloroethoxy)methane	ND		170	36
111-44-4	Bis(2-chloroethyl)ether	ND		170	22
117-81-7	Bis(2-ethylhexyl) phthalate	ND		170	58
85-68-7	Butyl benzyl phthalate	ND		170	28
105-60-2	Caprolactam	ND		170	51
86-74-8	Carbazole	ND		170	20
218-01-9	Chrysene	ND		170	38
53-70-3	Dibenz(a,h)anthracene	ND		170	30
132-64-9	Dibenzofuran	ND		170	20
84-66-2	Diethyl phthalate	186		170	22
131-11-3	Dimethyl phthalate	ND		170	20
84-74-2	Di-n-butyl phthalate	ND		170	29
117-84-0	Di-n-octyl phthalate	ND		170	20
206-44-0	Fluoranthene	ND		170	18
86-73-7	Fluorene	ND		170	20
118-74-1	Hexachlorobenzene	ND		170	23
87-68-3	Hexachlorobutadiene	ND		170	25
77-47-4	Hexachlorocyclopentadiene	ND		170	23
67-72-1	Hexachloroethane	ND		170	22
193-39-5	Indeno[1,2,3-cd]pyrene	ND		170	21
78-59-1	Isophorone	ND		170	36
91-20-3	Naphthalene	ND		170	22
98-95-3	Nitrobenzene	ND		170	19
621-64-7	N-Nitrosodi-n-propylamine	ND		170	29
86-30-6	N-Nitrosodiphenylamine	ND		170	140
87-86-5	Pentachlorophenol	ND		330	170
85-01-8	Phenanthrene	ND		170	25
108-95-2	Phenol	ND		170	26

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-201707-1

SDG No.: 201707

Client Sample ID: | Lab Sample ID: MB 480-641992/1-A

Matrix: Water | Lab File ID: Y0283619.D

Analysis Method: 8270D | Date Collected:

Extract. Method: 3510C | Date Extracted: 09/20/2022 08:49

Sample wt/vol: 250(mL) | Date Analyzed: 09/21/2022 12:06

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: RXI-5Sil MS ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor: | Level: (low/med) Low

Analysis Batch No.: 642153 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
191-24-2	Benzo[g,h,i]perylene	ND		5.0	0.35
207-08-9	Benzo[k]fluoranthene	ND		5.0	0.73
92-52-4	Biphenyl	ND		5.0	0.65
108-60-1	bis (2-chloroisopropyl) ether	ND		5.0	0.52
111-91-1	Bis(2-chloroethoxy)methane	ND		5.0	0.35
111-44-4	Bis(2-chloroethyl)ether	ND		5.0	0.40
117-81-7	Bis(2-ethylhexyl) phthalate	ND		5.0	2.2
85-68-7	Butyl benzyl phthalate	ND		5.0	1.0
105-60-2	Caprolactam	ND		5.0	2.2
86-74-8	Carbazole	ND		5.0	0.30
218-01-9	Chrysene	ND		5.0	0.33
53-70-3	Dibenz(a,h)anthracene	ND		5.0	0.42
132-64-9	Dibenzofuran	ND		10	0.51
84-66-2	Diethyl phthalate	16.5		5.0	0.22
131-11-3	Dimethyl phthalate	ND		5.0	0.36
84-74-2	Di-n-butyl phthalate	ND		5.0	0.31
117-84-0	Di-n-octyl phthalate	ND		5.0	0.47
206-44-0	Fluoranthene	ND		5.0	0.40
86-73-7	Fluorene	ND		5.0	0.36
118-74-1	Hexachlorobenzene	ND		5.0	0.51
87-68-3	Hexachlorobutadiene	ND		5.0	0.68
77-47-4	Hexachlorocyclopentadiene	ND		5.0	0.59
67-72-1	Hexachloroethane	ND		5.0	0.59
193-39-5	Indeno[1,2,3-cd]pyrene	ND		5.0	0.47
78-59-1	Isophorone	ND		5.0	0.43
91-20-3	Naphthalene	ND		5.0	0.76
98-95-3	Nitrobenzene	ND		5.0	0.29
621-64-7	N-Nitrosodi-n-propylamine	ND		5.0	0.54
86-30-6	N-Nitrosodiphenylamine	ND		5.0	0.51
87-86-5	Pentachlorophenol	ND		10	2.2
85-01-8	Phenanthrene	ND		5.0	0.44
108-95-2	Phenol	ND		5.0	0.39

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-201707-1

SDG No.: 201707

Client Sample ID: ERB1_091422 | Lab Sample ID: 480-201707-7

Matrix: Water | Lab File ID: U331670950.d

Analysis Method: 8270D SIM ID | Date Collected: 09/14/2022 18:30

Extract. Method: 3510C | Date Extracted: 09/19/2022 16:25

Sample wt/vol: 250(mL) | Date Analyzed: 09/27/2022 00:58

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 1(uL) | GC Column: RXI-5Sil MS(0.5 ID: 0.25(mm)

% Moisture: | % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor: | Level: (low/med) Low

Analysis Batch No.: 642776 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
123-91-1	1,4-Dioxane	0.51		0.20	0.10

CAS NO.	ISOTOPE DILUTION	%REC	Q	LIMITS
17647-74-4	1,4-Dioxane-d8	51		15-110

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 480-201707-1

SDG No.: 201707

Lab Sample ID: CCVLIS 200-183694/5 Calibration Date: 09/19/2022 16:41

Instrument ID: LC812 Calib Start Date: 09/14/2022 10:33

GC Column: C-18 ID: 4.60(mm) Calib End Date: 09/14/2022 11:14

Lab File ID: PA220919A05.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorotridecanoic acid (PFTriA)	AveID	0.9793	0.9672		0.0494	0.0500	-1.2	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.1555	0.1370		0.0440	0.0500	-11.9	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L1ID		1.076		0.0334	0.0500	-33.2	50.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7228	0.6375		0.0441	0.0500	-11.8	50.0
13C4 PFBA	Ave	1.220	1.160		1.19	1.25	-4.9	
13C5 PFPeA	Ave	0.9597	0.9147		1.19	1.25	-4.7	
13C3 PFBS	Ave	0.9722	0.9280		1.11	1.16	-4.6	
M2-4:2 FTS	Ave	0.0881	0.0859		1.14	1.17	-2.6	
13C2 PFHxA	Ave	0.9758	0.9688		1.24	1.25	-0.7	
13C3 HFPO-DA	Ave	0.1832	0.1849		1.26	1.25	0.9	
18O2 PFHxS	Ave	0.6942	0.6649		1.13	1.18	-4.2	
13C4 PFHpA	Ave	0.9588	0.9125		1.19	1.25	-4.8	
M2-6:2 FTS	Ave	0.1186	0.1195		1.20	1.19	0.8	
13C4 PFOA	Ave	1.025	1.038		1.27	1.25	1.3	
13C4 PFOS	Ave	0.4574	0.4448		1.16	1.20	-2.7	
13C5 PFNA	Ave	1.009	0.9537		1.18	1.25	-5.4	
13C2 PFDA	Ave	0.9801	0.998		1.27	1.25	1.8	
M2-8:2 FTS	Ave	0.1402	0.1310		1.12	1.20	-6.5	
13C8 FOSA	Ave	0.7983	0.7957		1.25	1.25	-0.3	
d3-NMeFOSAA	Ave	0.1380	0.1377		1.25	1.25	-0.2	
13C2 PFUnA	Ave	0.8025	0.8192		1.28	1.25	2.1	
d5-NEtFOSAA	Ave	0.1370	0.1232		1.12	1.25	-10.0	
13C2 PFDoA	Ave	0.7827	0.8166		1.30	1.25	4.3	
13C2 PFTeDA	Ave	0.6687	0.7143		1.34	1.25	6.8	
13C2 PFHxDA	Ave	0.7383	0.7822		1.32	1.25	6.0	

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS

Client Sample ID: FB_091422 | Lab Sample ID: 480-201707-4

Lab Name: Eurofins Buffalo | Job No.: 480-201707-1

SDG ID.: 201707

Matrix: Water | Date Sampled: 09/14/2022 18:05

Reporting Basis: WET | Date Received: 09/16/2022 10:00

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7429-90-5	Aluminum	ND	0.20	0.060	mg/L			1	6010C
7440-36-0	Antimony	ND	0.020	0.0068	mg/L			1	6010C
7440-38-2	Arsenic	ND	0.015	0.0056	mg/L			1	6010C
7440-39-3	Barium	ND	0.0020	0.00070	mg/L			1	6010C
7440-41-7	Beryllium	ND	0.0020	0.00030	mg/L			1	6010C
7440-43-9	Cadmium	ND	0.0020	0.00050	mg/L			1	6010C
7440-70-2	Calcium	ND	0.50	0.10	mg/L			1	6010C
7440-47-3	Chromium	ND	0.0040	0.0010	mg/L			1	6010C
7440-48-4	Cobalt	ND	0.0040	0.00063	mg/L			1	6010C
7440-50-8	Copper	ND	0.010	0.0016	mg/L			1	6010C
7439-89-6	Iron	ND	0.050	0.019	mg/L			1	6010C
7439-92-1	Lead	0.0034	0.010	0.0030	mg/L	J		1	6010C
7439-95-4	Magnesium	ND	0.20	0.043	mg/L			1	6010C
7439-96-5	Manganese	ND	0.0030	0.00040	mg/L			1	6010C
7440-02-0	Nickel	ND	0.010	0.0013	mg/L			1	6010C
7440-09-7	Potassium	0.13	0.50	0.10	mg/L	J		1	6010C
7782-49-2	Selenium	ND	0.025	0.0087	mg/L			1	6010C
7440-22-4	Silver	ND	0.0060	0.0017	mg/L			1	6010C
7440-23-5	Sodium	ND	1.0	0.32	mg/L			1	6010C
7440-28-0	Thallium	ND	0.020	0.010	mg/L			1	6010C
7440-62-2	Vanadium	ND	0.0050	0.0015	mg/L			1	6010C
7440-66-6	Zinc	ND	0.010	0.0015	mg/L			1	6010C
7439-97-6	Mercury	ND	0.00020	0.000043	mg/L			1	7470A

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Buffalo Job No.: 480-201707-1

SDG No.: 201707

Concentration Units: mg/Kg Lab Sample ID: MB 480-642057/1-A

Instrument Code: ICAP1 Batch No.: 642370

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			6010C
7440-36-0	Antimony	ND			6010C
7440-38-2	Arsenic	ND			6010C
7440-39-3	Barium	ND			6010C
7440-41-7	Beryllium	ND			6010C
7440-43-9	Cadmium	ND			6010C
7440-70-2	Calcium	ND			6010C
7440-47-3	Chromium	ND			6010C
7440-48-4	Cobalt	ND			6010C
7440-50-8	Copper	ND			6010C
7439-89-6	Iron	ND			6010C
7439-92-1	Lead	ND			6010C
7439-95-4	Magnesium	1.78	J		6010C
7439-96-5	Manganese	ND			6010C
7440-02-0	Nickel	ND			6010C
7440-09-7	Potassium	ND			6010C
7782-49-2	Selenium	ND			6010C
7440-22-4	Silver	ND			6010C
7440-23-5	Sodium	ND			6010C
7440-28-0	Thallium	ND			6010C
7440-62-2	Vanadium	ND			6010C
7440-66-6	Zinc	ND			6010C

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 480-201707-1

SDG No.: 201707

Instrument ID: LC812 Start Date: 09/14/2022 10:00

Analysis Batch Number: 183540 End Date: 09/14/2022 11:39

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		09/14/2022 10:00	1		C-18 4.6(mm)
ZZZZZ		09/14/2022 10:09	1		C-18 4.6(mm)
ZZZZZ		09/14/2022 10:17	1		C-18 4.6(mm)
ZZZZZ		09/14/2022 10:25	1		C-18 4.6(mm)
IC 200-183540/5		09/14/2022 10:33	1	PA220914ICAL05.d	C-18 4.6(mm)
IC 200-183540/6		09/14/2022 10:41	1	PA220914ICAL06.d	C-18 4.6(mm)
IC 200-183540/7		09/14/2022 10:50	1	PA220914ICAL07.d	C-18 4.6(mm)
ICIS 200-183540/8		09/14/2022 10:58	1	PA220914ICAL08.d	C-18 4.6(mm)
IC 200-183540/9		09/14/2022 11:06	1	PA220914ICAL09.d	C-18 4.6(mm)
IC 200-183540/10		09/14/2022 11:14	1	PA220914ICAL10.d	C-18 4.6(mm)
ICB 200-183540/11		09/14/2022 11:22	1	PA220914ICAL11.d	C-18 4.6(mm)
ICV 200-183540/12		09/14/2022 11:30	1	PA220914ICAL12.d	C-18 4.6(mm)
ZZZZZ		09/14/2022 11:39	1		C-18 4.6(mm)

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 480-201707-1

SDG No.: 201707

Instrument ID: LC812 Start Date: 09/19/2022 16:08

Analysis Batch Number: 183694 End Date: 09/19/2022 21:27

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		09/19/2022 16:08	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 16:16	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 16:24	1		C-18 4.6(mm)
CCB 200-183694/4		09/19/2022 16:32	1	PA220919A04.d	C-18 4.6(mm)
CCVLIS 200-183694/5		09/19/2022 16:41	1	PA220919A05.d	C-18 4.6(mm)
ZZZZZ		09/19/2022 16:49	5		C-18 4.6(mm)
ZZZZZ		09/19/2022 16:57	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 17:05	5		C-18 4.6(mm)
ZZZZZ		09/19/2022 17:13	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 17:21	1		C-18 4.6(mm)
MB 200-183671/1-A		09/19/2022 17:30	1	PA220919A11.d	C-18 4.6(mm)
LCS 200-183671/2-A		09/19/2022 17:38	1	PA220919A12.d	C-18 4.6(mm)
LCSD 200-183671/3-A		09/19/2022 17:46	1	PA220919A13.d	C-18 4.6(mm)
ZZZZZ		09/19/2022 17:54	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 18:02	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 18:11	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 18:19	1		C-18 4.6(mm)
CCV 200-183694/18		09/19/2022 18:27	1	PA220919A18.d	C-18 4.6(mm)
ZZZZZ		09/19/2022 18:35	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 18:43	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 18:51	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 19:00	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 19:08	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 19:16	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 19:24	100		C-18 4.6(mm)
480-201707-4	FB_091422	09/19/2022 19:32	1	PA220919A26.d	C-18 4.6(mm)
480-201707-7	ERB1_091422	09/19/2022 19:40	1	PA220919A27.d	C-18 4.6(mm)
480-201707-8	ERB2_091422	09/19/2022 19:49	1	PA220919A28.d	C-18 4.6(mm)
CCV 200-183694/29		09/19/2022 19:57	1	PA220919A29.d	C-18 4.6(mm)
ZZZZZ		09/19/2022 20:05	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 20:13	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 20:21	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 20:30	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 20:38	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 20:46	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 20:54	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 21:02	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 21:10	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 21:19	1		C-18 4.6(mm)
CCV 200-183694/40		09/19/2022 21:27	1		C-18 4.6(mm)

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 480-201707-1

SDG No.: 201707

Instrument ID: LC812 Start Date: 09/21/2022 11:43

Analysis Batch Number: 183773 End Date: 09/21/2022 15:08

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		09/21/2022 11:43	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 11:51	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 12:00	1		C-18 4.6(mm)
CCB 200-183773/4		09/21/2022 12:08	1	PA220921A04.d	C-18 4.6(mm)
CCVLIS 200-183773/5		09/21/2022 12:16	1	PA220921A05.d	C-18 4.6(mm)
ZZZZZ		09/21/2022 12:24	10		C-18 4.6(mm)
ZZZZZ		09/21/2022 12:32	10		C-18 4.6(mm)
ZZZZZ		09/21/2022 12:41	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 12:49	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 12:57	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 13:05	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 13:13	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 13:21	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 13:30	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 13:38	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 13:46	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 13:54	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 14:02	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 14:10	1		C-18 4.6(mm)
CCV 200-183773/20		09/21/2022 14:19	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 14:27	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 14:35	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 14:43	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 14:51	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 15:00	1		C-18 4.6(mm)
CCV 200-183773/26		09/21/2022 15:08	1		C-18 4.6(mm)

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 480-201707-1

SDG No.: 201707

Instrument ID: LC812 Start Date: 09/21/2022 15:16

Analysis Batch Number: 183779 End Date: 09/21/2022 18:57

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 200-183779/1		09/21/2022 15:16	1	PA220921B01.d	C-18 4.6(mm)
MB 200-183718/1-A		09/21/2022 15:24	1	PA220921B02.d	C-18 4.6(mm)
LCS 200-183718/2-A		09/21/2022 15:32	1	PA220921B03.d	C-18 4.6(mm)
ZZZZZ		09/21/2022 15:40	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 15:49	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 15:57	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 16:05	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 16:13	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 16:21	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 16:30	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 16:38	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 16:46	1		C-18 4.6(mm)
CCV 200-183779/13		09/21/2022 16:54	1	PA220921B13.d	C-18 4.6(mm)
ZZZZZ		09/21/2022 17:02	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 17:11	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 17:19	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 17:27	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 17:35	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 17:43	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 17:51	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 18:00	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 18:08	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 18:16	10		C-18 4.6(mm)
ZZZZZ		09/21/2022 18:24	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 18:32	1		C-18 4.6(mm)
480-201707-3	SB2 (1-2)	09/21/2022 18:41	1	PA220921B26.d	C-18 4.6(mm)
480-201707-5	FDUP_091422	09/21/2022 18:49	1	PA220921B27.d	C-18 4.6(mm)
CCV 200-183779/28		09/21/2022 18:57	1	PA220921B28.d	C-18 4.6(mm)

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-201707-1

SDG No.: 201707

Concentration Units: mg/L

Analyte	RL	CCB 480-642370/47 09/21/2022 16:54							
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND							
Antimony	0.020	ND							
Arsenic	0.015	ND							
Barium	0.0020	ND							
Beryllium	0.0020	ND							
Cadmium	0.0020	ND							
Calcium	0.50	ND							
Chromium	0.0040	ND							
Cobalt	0.0040	ND							
Copper	0.010	ND							
Iron	0.050	0.0295	J						
Lead	0.010	ND							
Magnesium	0.20	ND							
Manganese	0.0030	ND							
Nickel	0.010	ND							
Potassium	0.50	ND							
Selenium	0.025	ND							
Silver	0.0060	ND							
Sodium	1.0	ND							
Thallium	0.020	ND							
Vanadium	0.0050	ND							
Zinc	0.010	ND							

Italicized analytes were not requested for this

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-201707-1

SDG No.: 201707

Concentration Units: mg/L

Analyte	RL	ICB 480-642173/6 09/20/2022 15:32		CCB 480-642173/16 09/20/2022 16:12		CCB 480-642173/28 09/20/2022 17:11		CCB 480-642173/40 09/20/2022 17:58	
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND		ND		ND		ND	
Antimony	0.020	ND		ND		ND		ND	
Arsenic	0.015	ND		ND		ND		ND	
Barium	0.0020	ND		ND		ND		ND	
Beryllium	0.0020	ND		ND		ND		ND	
Cadmium	0.0020	ND		ND		ND		ND	
Calcium	0.50	ND		ND		ND		ND	
Chromium	0.0040	ND		ND		ND		ND	
Cobalt	0.0040	ND		ND		ND		ND	
Copper	0.010	ND		ND		ND		ND	
Iron	0.050	ND		ND		ND		ND	
Lead	0.010	0.00315	J	ND		ND		ND	
Magnesium	0.20	ND		ND		ND		ND	
Manganese	0.0030	ND		ND		ND		ND	
Nickel	0.010	ND		ND		ND		ND	
Potassium	0.50	ND		ND		ND		0.180	J
Selenium	0.025	ND		ND		ND		ND	
Silver	0.0060	ND		ND		ND		ND	
Sodium	1.0	ND		ND		ND		ND	
Thallium	0.020	ND		ND		ND		ND	
Vanadium	0.0050	ND		ND		ND		ND	
Zinc	0.010	ND		ND		ND		ND	

Italicized analytes were not requested for this

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-201707-1

SDG No.: 201707

Concentration Units: mg/L

Analyte	RL	CCB 480-642173/52 09/20/2022 18:44							
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND							
Antimony	0.020	ND							
Arsenic	0.015	ND							
Barium	0.0020	ND							
Beryllium	0.0020	ND							
Cadmium	0.0020	ND							
Calcium	0.50	ND							
Chromium	0.0040	ND							
Cobalt	0.0040	ND							
Copper	0.010	ND							
Iron	0.050	ND							
Lead	0.010	ND							
Magnesium	0.20	ND							
Manganese	0.0030	ND							
Nickel	0.010	ND							
Potassium	0.50	0.123	J						
Selenium	0.025	ND							
Silver	0.0060	ND							
Sodium	1.0	ND							
Thallium	0.020	ND							
Vanadium	0.0050	ND							
Zinc	0.010	ND							

Italicized analytes were not requested for this

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: SB2 (0-0.5) MS
Lab ID: 480-201707-1 MS
Lab Name: Eurofins Buffalo
Job No.: 480-201707-1
SDG No.: 201707
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 75.4

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	0.327		0.066		0.441	59	80-120	F1	7471B

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: SB2 (0-0.5) MSD
Lab ID: 480-201707-1 MSD
Lab Name: Eurofins Buffalo
Job No.: 480-201707-1
SDG No.: 201707
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 75.4

Analyte	(SDR) C		Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	0.308		0.432	56	80-120	6	20	F1	7471B

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

09/28/2022

Job Narrative
480-201707-1

Comments
No additional comments.

Receipt
The samples were received on 9/16/2022 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.6º C, 2.4º C and 2.4º C.

Receipt Exceptions

Volume for PFC method received. However, method was not selected on the COC. The method was assigned: FB_091422 (480-201707-4), ERB1_091422 (480-201707-7) and ERB2_091422 (480-201707-8).

GC/MS VOA
Method 8260C: Internal standard and/or surrogate responses for the following sample was outside control limits: SB2 (0-0.5) (480-201707-1). The sample(s) were re-analyzed and responses were outside control limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270D: The following compound has been spiked at a level above the upper range of the initial calibration: Benzaldehyde. The laboratory control sample (LCS) associated with preparation batch 480-641854 and analytical batch 480-642351 recovered within acceptable limits for this analyte and has been qualified with an "E" flag.

Method 8270D: The following samples were diluted due to color, appearance, and viscosity: SB4 (0-0.5) (480-201707-10), SB4 (0.5-1) (480-201707-11) and SB4 (1-2) (480-201712-1). Elevated reporting limits (RL) are provided.

Method 8270D: The method blank for preparation batch 480-641854 contained Diethyl phthalate above the reporting limit (RL). None of the samples associated with this method blank contained the target compound above the RL; therefore, re-extraction and/or re-analysis of samples were not performed: SB2 (0-0.5) (480-201707-1), SB2 (0.5-1) (480-201707-2), SB2 (1-2) (480-201707-3), FDUP_091422 (480-201707-5), SB2 (13.5-15.5) (480-201707-6), SB4 (0-0.5) (480-201707-10), SB4 (0.5-1) (480-201707-11) and SB4 (1-2) (480-201712-1).

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: SB2 (0-0.5) (480-201707-1), SB2 (13.5-15.5) (480-201707-6) and SB4 (1-2) (480-201712-1). These results have been reported and qualified.

Method 8270D: Surrogate recovery for the following sample was outside control limits: FDUP_091422 (480-201707-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 480-641992 and analytical batch 480-642153 recovered outside control limits for the following analytes: Diethyl phthalate: FB_091422 (480-201707-4), ERB1_091422 (480-201707-7), ERB2_091422 (480-201707-8) and FB_091522 (480-201707-9).

Method 8270D: The laboratory control sample (LCS) for preparation batch 480-641992 and analytical batch 480-642153 recovered outside control limits for the following analytes: Diethyl phthalate. The associated sample(s) was re-prepared and/or re-analyzed outside holding time. Both sets of data have been reported: FB_091422 (480-201707-4), ERB1_091422 (480-201707-7), ERB2_091422 (480-201707-8) and FB_091522 (480-201707-9).

Method 8270D: The method blank (MB) for preparation batch 480-641992 and analytical batch 480-642153 recovered above the reporting limit (RL) for the following analytes: Diethyl phthalate. The associated sample(s) was re-prepared and/or re-analyzed outside holding time. Both sets of data have been reported: FB_091422 (480-201707-4), ERB1_091422 (480-201707-7), ERB2_091422 (480-201707-8) and FB_091522 (480-201707-9).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

LCMS
Method 537 (modified): The method blank for preparation batch 200-183718 and analytical batch 200-183779 contained Perfluorododecanoic acid (PFDoA) and Perfluorodecanesulfonic acid (PFDS) above the method detection limit. This target analyte concentration was less than half the reporting limit (1/2RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 537 (modified): Method 537 (modified): The “I” qualifier associated with samples SB2 (1-2) (480-201707-3), FDUP_091422 (480-201707-5) and (MB 200-183718/1-A) is applied because the transition mass ratio for the indicated analyte(s) was outside of the

established ratio limits. The qualitative identification has some degree of uncertainty, however analyst judgment was used to positively identify the analyte(s).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-641992.

Method 3510C: The following samples were re-prepared outside of preparation holding time due to high diethyl phthalate recovery in the MB, LCS, and samples: FB_091422 (480-201707-4), ERB1_091422 (480-201707-7), ERB2_091422 (480-201707-8) and FB_091522 (480-201707-9).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Client Sample ID: SB2 (1-2) (Continued) — Lab Sample ID: 480-201707-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.28		0.25	0.037	mg/Kg	1	☼	6010C	Total/NA
Calcium	1970		62.1	4.1	mg/Kg	1	☼	6010C	Total/NA
Chromium	17.5		0.62	0.25	mg/Kg	1	☼	6010C	Total/NA
Cobalt	8.2		0.62	0.062	mg/Kg	1	☼	6010C	Total/NA
Copper	46.6		1.2	0.26	mg/Kg	1	☼	6010C	Total/NA
Iron	32000		12.4	4.3	mg/Kg	1	☼	6010C	Total/NA
Lead	70.3		1.2	0.30	mg/Kg	1	☼	6010C	Total/NA
Magnesium	1470	B	24.8	1.2	mg/Kg	1	☼	6010C	Total/NA
Manganese	377		0.25	0.040	mg/Kg	1	☼	6010C	Total/NA
Nickel	50.4		6.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Potassium	1650		37.2	24.8	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.62	J	5.0	0.50	mg/Kg	1	☼	6010C	Total/NA
Silver	0.25	J	0.74	0.25	mg/Kg	1	☼	6010C	Total/NA
Sodium	181		174	16.1	mg/Kg	1	☼	6010C	Total/NA
Thallium	0.91	J	7.4	0.37	mg/Kg	1	☼	6010C	Total/NA
Vanadium	27.7		0.62	0.14	mg/Kg	1	☼	6010C	Total/NA
Zinc	68.6		2.5	0.79	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.050		0.024	0.0056	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: FB_091422 — Lab Sample ID: 480-201707-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloromethane	0.54	J	1.0	0.35	ug/L	1		8260C	Total/NA
1,4-Dioxane	0.40		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA
Diethyl phthalate	44	B *+ *1	5.0	0.22	ug/L	1		8270D	Total/NA
Diethyl phthalate - RE	21	H	5.4	0.24	ug/L	1		8270D	Total/NA
Lead	0.0034	J	0.010	0.0030	mg/L	1		6010C	Total/NA
Potassium	0.13	J	0.50	0.10	mg/L	1		6010C	Total/NA

Client Sample ID: FDUP_091422 — Lab Sample ID: 480-201707-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	17	J	31	2.2	ug/Kg	1	☼	8260C	Total/NA
Acetone	28	J	31	5.2	ug/Kg	1	☼	8260C	Total/NA
Carbon disulfide	3.4	J	6.1	3.1	ug/Kg	1	☼	8260C	Total/NA
Ethylbenzene	1.0	J	6.1	0.42	ug/Kg	1	☼	8260C	Total/NA
Methylcyclohexane	1.6	J	6.1	0.93	ug/Kg	1	☼	8260C	Total/NA
N-Propylbenzene	0.87	J	6.1	0.49	ug/Kg	1	☼	8260C	Total/NA
Toluene	1.2	J	6.1	0.46	ug/Kg	1	☼	8260C	Total/NA
Benzo[a]anthracene	190	J	200	20	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	240		200	29	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	300		200	31	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	150	J	200	21	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	120	J	200	25	ug/Kg	1	☼	8270D	Total/NA
Butyl benzyl phthalate	32	J	200	32	ug/Kg	1	☼	8270D	Total/NA
Carbazole	30	J	200	23	ug/Kg	1	☼	8270D	Total/NA
Chrysene	280		200	44	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	40	J	200	35	ug/Kg	1	☼	8270D	Total/NA
Diethyl phthalate	190	J B	200	25	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	410		200	21	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	180	J	200	24	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	280		200	29	ug/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Client Sample ID: ERB1_091422 — Lab Sample ID: 480-201707-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.51		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA
Diethyl phthalate	19	B *+ *1	5.2	0.23	ug/L	1		8270D	Total/NA
Diethyl phthalate - RE	18	H	5.0	0.22	ug/L	1		8270D	Total/NA

Client Sample ID: ERB2_091422 — Lab Sample ID: 480-201707-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl phthalate	28	B *+ *1	5.2	0.23	ug/L	1		8270D	Total/NA
Diethyl phthalate - RE	19	H	5.0	0.22	ug/L	1		8270D	Total/NA

Client Sample ID: FB_091522 — Lab Sample ID: 480-201707-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl phthalate	30	B *+ *1	5.0	0.22	ug/L	1		8270D	Total/NA
Diethyl phthalate - RE	39	H	5.4	0.24	ug/L	1		8270D	Total/NA

Client Sample ID: SB4 (0-0.5) — Lab Sample ID: 480-201707-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	380	J	900	120	ug/Kg	5	☼	8270D	Total/NA
Anthracene	270	J	900	220	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	2800		900	90	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	3700		900	130	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	5200		900	140	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	2200		900	95	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	2400		900	120	ug/Kg	5	☼	8270D	Total/NA
Carbazole	130	J	900	110	ug/Kg	5	☼	8270D	Total/NA
Chrysene	2500		900	200	ug/Kg	5	☼	8270D	Total/NA
Dibenz(a,h)anthracene	670	J	900	160	ug/Kg	5	☼	8270D	Total/NA
Dibenzofuran	130	J	900	110	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	3000		900	95	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	3400		900	110	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	1200		900	130	ug/Kg	5	☼	8270D	Total/NA
Pyrene	2100		900	110	ug/Kg	5	☼	8270D	Total/NA
Aluminum	6350		10.7	4.7	mg/Kg	1	☼	6010C	Total/NA
Antimony	3.5	J	16.1	0.43	mg/Kg	1	☼	6010C	Total/NA
Arsenic	22.1		2.1	0.43	mg/Kg	1	☼	6010C	Total/NA
Barium	62.4		0.54	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.38		0.21	0.030	mg/Kg	1	☼	6010C	Total/NA
Cadmium	2.5		0.21	0.032	mg/Kg	1	☼	6010C	Total/NA
Calcium	5960		53.7	3.5	mg/Kg	1	☼	6010C	Total/NA
Chromium	13.8		0.54	0.21	mg/Kg	1	☼	6010C	Total/NA
Cobalt	8.2		0.54	0.054	mg/Kg	1	☼	6010C	Total/NA
Copper	43.0		1.1	0.23	mg/Kg	1	☼	6010C	Total/NA
Iron	34100		10.7	3.8	mg/Kg	1	☼	6010C	Total/NA
Lead	697		1.1	0.26	mg/Kg	1	☼	6010C	Total/NA
Magnesium	1550	B	21.5	0.99	mg/Kg	1	☼	6010C	Total/NA
Manganese	349		0.21	0.034	mg/Kg	1	☼	6010C	Total/NA
Nickel	17.7		5.4	0.25	mg/Kg	1	☼	6010C	Total/NA
Potassium	1470		32.2	21.5	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.84	J	4.3	0.43	mg/Kg	1	☼	6010C	Total/NA
Sodium	345		150	14.0	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-201707-1

SDG No.: 201707

Matrix: Solid Level: Low

GC Column (1): ZB-624 (30) ID: 0.25(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
SB2 (0-0.5)	480-201707-1	106	110	137 S1+	69 S1-
SB2 (0.5-1)	480-201707-2	97	104	123	79
SB2 (1-2)	480-201707-3	108	115	114	86
FDUP_091422	480-201707-5	101	111	122	80
SB2 (13.5-15.5)	480-201707-6	98	107	106	94
SB4 (0-0.5)	480-201707-10	101	108	117	83
SB4 (0.5-1)	480-201707-11	99	105	119	83
SB4 (1-2)	480-201712-1	102	110	121	82
	MB 480-641842/2-A	101	105	105	97
	MB 480-642124/2-A	97	103	106	96
	LCS 480-641842/1-A	98	102	108	95
	LCS 480-642124/1-A	96	100	104	91

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	60-140
DCA = 1,2-Dichloroethane-d4 (Surr)	64-126
TOL = Toluene-d8 (Surr)	71-125
BFB = 4-Bromofluorobenzene (Surr)	72-126

Column to be used to flag recovery values

FORM II 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-201707-1

SDG No.: 201707

Sample No.: CCVIS 480-642126/4 Date Analyzed: 09/20/2022 21:08

Instrument ID: HP5977M GC Column: ZB-624 (30) VOA ID: 0.25(mm)

Lab File ID (Standard): M06290.D Heated Purge: (Y/N) Y

Calibration ID: 43905

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		392317	5.23	823407	8.22	819814	10.62
UPPER LIMIT		784634	5.73	1646814	8.72	1639628	11.12
LOWER LIMIT		196159	4.73	411704	7.72	409907	10.12
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 480-642126/5		380139	5.23	788528	8.22	808443	10.62
LCS 480-642124/1-A		391171	5.23	825970	8.22	811764	10.62
MB 480-642124/2-A		383894	5.23	810298	8.22	850322	10.62
480-201707-1	SB2 (0-0.5)	309892	5.23	469082	8.22	272799*3	10.62

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-201707-1

SDG No.: 201707

Lab Sample ID: ICV 480-639579/28 Calibration Date: 08/30/2022 07:38

Instrument ID: HP5977M Calib Start Date: 08/30/2022 00:22

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 08/30/2022 02:47

Lab File ID: M05811.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.313	0.998	0.1000	38.0	50.0	-24.0	50.0
Chloromethane	Ave	2.078	1.781	0.1000	42.9	50.0	-14.3	30.0
Vinyl chloride	Ave	1.370	1.098	0.1000	40.1	50.0	-19.9	30.0
Butadiene	Ave	1.464	1.118		38.2	50.0	-23.6	30.0
Bromomethane	Ave	0.7796	0.6612	0.1000	42.4	50.0	-15.2	50.0
Chloroethane	Ave	0.8148	0.6646	0.1000	40.8	50.0	-18.4	50.0
Trichlorofluoromethane	Ave	1.640	1.249	0.1000	38.1	50.0	-23.8	30.0
Dichlorofluoromethane	Ave	1.986	1.649		41.5	50.0	-17.0	30.0
Ethyl ether	Ave	1.161	1.041		44.8	50.0	-10.3	30.0
Acrolein	Ave	0.1617	0.1315		203	250	-18.7	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.195	0.9041	0.1000	37.8	50.0	-24.4	30.0
1,1-Dichloroethene	Ave	1.056	0.8127	0.1000	38.5	50.0	-23.0	30.0
Acetone	Ave	0.5369	0.4505	0.1000	210	250	-16.1	50.0
Iodomethane	Ave	2.117	1.810		42.8	50.0	-14.5	30.0
Carbon disulfide	Ave	3.898	3.081	0.1000	39.5	50.0	-21.0	30.0
Allyl chloride	Ave	2.312	1.891		40.9	50.0	-18.2	30.0
Methyl acetate	Ave	1.253	1.108	0.1000	88.5	100	-11.5	50.0
Methylene Chloride	Lin1		1.238	0.1000	45.9	50.0	-8.2	30.0
2-Methyl-2-propanol	Ave	0.2222	0.1923		433	500	-13.5	50.0
Methyl tert-butyl ether	Ave	4.094	3.694	0.1000	45.1	50.0	-9.8	30.0
trans-1,2-Dichloroethene	Ave	1.314	1.081	0.1000	41.1	50.0	-17.7	30.0
Acrylonitrile	Ave	0.6330	0.5593		442	500	-11.6	30.0
Hexane	Ave	2.219	1.603		36.1	50.0	-27.7	30.0
1,1-Dichloroethane	Ave	2.499	2.112	0.2000	42.2	50.0	-15.5	30.0
Vinyl acetate	Ave	3.316	2.710		81.7	100	-18.3	30.0
2,2-Dichloropropane	Ave	1.743	1.307		37.5	50.0	-25.0	30.0
cis-1,2-Dichloroethene	Ave	1.502	1.292	0.1000	43.0	50.0	-14.0	30.0
2-Butanone (MEK)	Ave	0.7873	0.7152	0.1000	227	250	-9.2	30.0
Chlorobromomethane	Ave	0.8222	0.7234		44.0	50.0	-12.0	30.0
Tetrahydrofuran	Ave	0.5465	0.4869		89.1	100	-10.9	30.0
Chloroform	Ave	2.413	2.012	0.2000	41.7	50.0	-16.6	30.0
Cyclohexane	Ave	2.643	1.935	0.1000	36.6	50.0	-26.8	30.0
1,1,1-Trichloroethane	Ave	2.002	1.533	0.1000	38.3	50.0	-23.4	30.0
Carbon tetrachloride	Ave	1.683	1.256	0.1000	37.3	50.0	-25.4	30.0
1,1-Dichloropropene	Ave	1.701	1.315		38.6	50.0	-22.7	30.0
Benzene	Ave	4.988	4.223	0.5000	42.3	50.0	-15.3	30.0
Isobutyl alcohol	Ave	0.0881	0.0798		1130	1250	-9.4	50.0
1,2-Dichloroethane	Ave	1.931	1.722	0.1000	44.6	50.0	-10.9	30.0
n-Heptane	Ave	2.322	1.714		36.9	50.0	-26.2	30.0
Trichloroethene	Ave	1.337	1.102	0.2000	41.2	50.0	-17.6	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-201707-1

SDG No.: 201707

Lab Sample ID: ICV 480-639579/28 Calibration Date: 08/30/2022 07:38

Instrument ID: HP5977M Calib Start Date: 08/30/2022 00:22

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 08/30/2022 02:47

Lab File ID: M05811.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.304	1.692	0.1000	36.7	50.0	-26.6	30.0
1,2-Dichloropropane	Ave	1.424	1.245	0.1000	43.7	50.0	-12.5	30.0
Dibromomethane	Ave	0.8519	0.7628	0.1000	44.8	50.0	-10.5	30.0
1,4-Dioxane	Ave	0.0083	0.0080		965	1000	-3.5	50.0
Bromodichloromethane	Ave	1.659	1.500	0.2000	45.2	50.0	-9.6	30.0
2-Chloroethyl vinyl ether	Ave	0.8250	0.7634		46.3	50.0	-7.5	30.0
cis-1,3-Dichloropropene	Ave	2.070	1.830	0.2000	44.2	50.0	-11.6	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.7501	0.7346	0.1000	245	250	-2.1	30.0
Toluene	Ave	1.433	1.280	0.4000	44.7	50.0	-10.7	30.0
trans-1,3-Dichloropropene	Ave	0.8480	0.8126	0.1000	47.9	50.0	-4.2	30.0
Ethyl methacrylate	Ave	0.7499	0.7278		48.5	50.0	-2.9	30.0
1,1,2-Trichloroethane	Ave	0.4352	0.4211	0.1000	48.4	50.0	-3.2	30.0
Tetrachloroethene	Ave	0.6335	0.5219	0.2000	41.2	50.0	-17.6	30.0
1,3-Dichloropropane	Ave	0.8727	0.8459		48.5	50.0	-3.1	30.0
2-Hexanone	Ave	0.5096	0.4949	0.1000	243	250	-2.9	30.0
Dibromochloromethane	Ave	0.5654	0.5589	0.1000	49.4	50.0	-1.2	30.0
1,2-Dibromoethane	Ave	0.5557	0.5326		47.9	50.0	-4.1	30.0
Chlorobenzene	Ave	1.670	1.531	0.5000	45.8	50.0	-8.4	30.0
Ethylbenzene	Ave	2.682	2.330	0.1000	43.4	50.0	-13.1	30.0
1,1,1,2-Tetrachloroethane	Ave	0.6351	0.6154		48.5	50.0	-3.1	30.0
m,p-Xylene	Ave	1.082	0.9456	0.1000	43.7	50.0	-12.6	30.0
o-Xylene	Ave	1.123	0.998	0.3000	44.4	50.0	-11.1	30.0
Styrene	Ave	1.903	1.720	0.3000	45.2	50.0	-9.6	30.0
Bromoform	Ave	0.3734	0.3662	0.1000	49.0	50.0	-1.9	50.0
Isopropylbenzene	Ave	2.616	2.329	0.1000	44.5	50.0	-11.0	30.0
Bromobenzene	Ave	0.7081	0.6815		48.1	50.0	-3.8	30.0
1,1,2,2-Tetrachloroethane	Ave	0.7135	0.7019	0.3000	49.2	50.0	-1.6	30.0
N-Propylbenzene	Ave	3.014	2.650		44.0	50.0	-12.1	30.0
1,2,3-Trichloropropane	Ave	0.2255	0.2265		50.2	50.0	0.5	30.0
trans-1,4-Dichloro-2-butene	Ave	0.2475	0.2356		47.6	50.0	-4.8	50.0
2-Chlorotoluene	Ave	0.6595	0.6111		46.3	50.0	-7.3	30.0
1,3,5-Trimethylbenzene	Ave	2.253	2.023		44.9	50.0	-10.2	30.0
4-Chlorotoluene	Ave	0.6758	0.6178		45.7	50.0	-8.6	30.0
tert-Butylbenzene	Ave	0.4987	0.4361		43.7	50.0	-12.5	30.0
1,2,4-Trimethylbenzene	Ave	2.307	2.130		46.2	50.0	-7.7	30.0
sec-Butylbenzene	Ave	2.825	2.426		42.9	50.0	-14.1	30.0
1,3-Dichlorobenzene	Ave	1.369	1.271	0.6000	46.4	50.0	-7.2	30.0
4-Isopropyltoluene	Ave	2.532	2.190		43.2	50.0	-13.5	30.0
1,4-Dichlorobenzene	Ave	1.395	1.298	0.5000	46.5	50.0	-7.0	30.0
n-Butylbenzene	Ave	2.268	1.918		42.3	50.0	-15.4	30.0
1,2-Dichlorobenzene	Ave	1.379	1.303	0.4000	47.3	50.0	-5.5	30.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-201707-1

SDG No.: 201707

Client Sample ID: | Lab Sample ID: MB 480-641842/2-A

Matrix: Solid | Lab File ID: M06262.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 09/19/2022 10:15

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (30) VOA ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) Y pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 641850 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		5.0	0.50
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.36
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.81
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.65
75-34-3	1,1-Dichloroethane	ND		5.0	0.61
75-35-4	1,1-Dichloroethene	ND		5.0	0.61
526-73-8	1,2,3-Trimethylbenzene	ND		5.0	1.0
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.30
95-63-6	1,2,4-Trimethylbenzene	ND		5.0	0.96
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	2.5
106-93-4	1,2-Dibromoethane	ND		5.0	0.64
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.39
107-06-2	1,2-Dichloroethane	ND		5.0	0.25
78-87-5	1,2-Dichloropropane	ND		5.0	2.5
108-67-8	1,3,5-Trimethylbenzene	ND		5.0	0.32
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.26
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.70
78-93-3	2-Butanone (MEK)	ND		25	1.8
591-78-6	2-Hexanone	ND		25	2.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		25	1.6
67-64-1	Acetone	ND		25	4.2
71-43-2	Benzene	ND		5.0	0.25
75-27-4	Bromodichloromethane	ND		5.0	0.67
75-25-2	Bromoform	ND		5.0	2.5
74-83-9	Bromomethane	ND		5.0	0.45
75-15-0	Carbon disulfide	ND		5.0	2.5
56-23-5	Carbon tetrachloride	ND		5.0	0.48
108-90-7	Chlorobenzene	ND		5.0	0.66
75-00-3	Chloroethane	ND		5.0	1.1
67-66-3	Chloroform	0.442	J	5.0	0.31
74-87-3	Chloromethane	ND		5.0	0.30
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.64

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Buffalo Job No.: 480-201707-1 Analy Batch No.: 638067

SDG No.: 201707

Instrument ID: HP5973V GC Column: RXI-5Sil MS ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/18/2022 16:53 Calibration End Date: 08/18/2022 19:44 Calibration ID: 43862

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
2,4-Dinitrophenol	0.1276	+++++ 0.1416	0.0158 0.1550	0.0656	0.1107	Lin2	-1.274	0.1343			0.0100	18.0			0.9680	*	0.9900
4-Nitrophenol	0.1711	0.0862 0.1788	0.1021 0.1769	0.1373	0.1678	Lin2	-0.474	0.1693			0.0100	9.1			0.9910		0.9900
Dibenzofuran	1.6796 1.5497	1.6883 1.5041	1.5963 1.4440	1.6460	1.6592	Ave		1.5959			0.8000	5.6		20.0			
2,4-Dinitrotoluene	0.3993	0.2536 0.3943	0.2894 0.4023	0.3574	0.4066	Lin2	-0.397	0.3971			0.2000	4.8			0.9970		0.9900
2,3,4,6-Tetrachlorophenol	0.2662	0.1420 0.2678	0.1643 0.2820	0.2195	0.2637	Lin2	-0.349	0.2641			0.0100	8.4			0.9920		0.9900
Diethyl phthalate	1.3236	1.2863 1.3055	1.2513 1.3100	1.3217	1.3552	Ave		1.3077			0.0100	2.5		20.0			
Hexadecane	0.9994	1.0061 0.9834	0.9044 0.9827	0.9989	1.0386	Ave		0.9877			0.0100	4.2		20.0			
Fluorene	1.4503 1.2623	1.3004 1.2218	1.2630 1.2086	1.3091	1.3356	Ave		1.2939			0.9000	5.9		20.0			
4-Chlorophenyl phenyl ether	0.6116	0.6510 0.5848	0.6260 0.5744	0.6411	0.6419	Ave		0.6187			0.4000	4.8		20.0			
4-Nitroaniline	0.3328	0.2526 0.3356	0.2705 0.3444	0.3197	0.3398	Lin2	-0.236	0.3372			0.0100	3.4			0.9990		0.9900
4,6-Dinitro-2-methylphenol	0.1079	+++++ 0.1151	0.0412 0.1192	0.0718	0.1032	Lin1	-1.008	0.1180			0.0100	13.9			0.9960		0.9900
Diphenylamine	0.6385	0.6427 0.6333	0.6070 0.6286	0.6602	0.6854	Ave		0.6422			0.0100	3.9		20.0			
N-Nitrosodiphenylamine	0.5459	0.5495 0.5415	0.5190 0.5374	0.5645	0.5860	Ave		0.5491			0.0100	3.9		20.0			
1,2-Diphenylhydrazine	1.5449	1.5109 1.5264	1.4399 1.5436	1.5876	1.6007	Ave		1.5363			0.0100	3.5		20.0			
trans-Azobenzene	0.9002	0.9025 0.8930	0.8430 0.9095	0.9290	0.9585	Ave		0.9051			0.0100	3.9		20.0			
4-Bromophenyl phenyl ether	0.2017	0.2113 0.1986	0.1933 0.2010	0.2115	0.2140	Ave		0.2045			0.1000	3.8		20.0			
Hexachlorobenzene	0.2176	0.2260 0.2135	0.2115 0.2148	0.2247	0.2303	Ave		0.2198			0.1000	3.3		20.0			
Atrazine	0.3678	0.3587 0.3520	0.3702 0.3450	0.3751	0.3889	Ave		0.3654			0.0100	4.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-201707-1

SDG No.: 201707

Lab Sample ID: CCVIS 480-642351/4 Calibration Date: 09/22/2022 13:35

Instrument ID: HP5977Z Calib Start Date: 09/09/2022 12:36

GC Column: Intuvo DB-5MS ID: 0.18(mm) Calib End Date: 09/09/2022 14:35

Lab File ID: Z0025756.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin2		0.4099	0.0100	47000	50000	-6.1	20.0
N-Nitrosodimethylamine	Ave	0.6138	0.5940	0.0100	48400	50000	-3.2	50.0
Pyridine	Ave	0.8973	0.8192	0.0100	91300	100000	-8.7	50.0
Benzaldehyde	Ave	0.9919	0.8801	0.0100	44400	50000	-11.3	50.0
Phenol	Ave	1.324	1.412	0.8000	53300	50000	6.6	20.0
Aniline	Ave	1.658	1.712	0.0100	51600	50000	3.2	20.0
Bis(2-chloroethyl)ether	Ave	1.102	1.112	0.7000	50500	50000	0.9	20.0
2-Chlorophenol	Ave	1.166	1.219	0.8000	52300	50000	4.6	20.0
n-Decane	Ave	1.543	1.492	0.0100	48300	50000	-3.3	20.0
1,3-Dichlorobenzene	Ave	1.487	1.494	0.0100	50200	50000	0.4	20.0
1,4-Dichlorobenzene	Ave	1.498	1.508	0.0100	50300	50000	0.7	20.0
Benzyl alcohol	Lin2		0.7795	0.0100	51400	50000	2.8	20.0
1,2-Dichlorobenzene	Ave	1.437	1.446	0.0100	50300	50000	0.6	20.0
2-Methylphenol	Ave	1.014	1.058	0.7000	52200	50000	4.3	20.0
Indene	Ave	0.6384	0.6882	0.0100	162000	150000	7.8	20.0
bis (2-chloroisopropyl) ether	Ave	1.893	1.827	0.0100	48300	50000	-3.5	20.0
Acetophenone	Ave	1.735	1.760	0.0100	50700	50000	1.5	20.0
4-Methylphenol	Lin2		1.082	0.6000	51200	50000	2.3	20.0
N-Nitrosodi-n-propylamine	Ave	0.6781	0.6872	0.5000	50700	50000	1.3	20.0
Hexachloroethane	Ave	0.5204	0.5209	0.3000	50000	50000	0.0	20.0
Nitrobenzene	Ave	0.3252	0.3677	0.2000	56500	50000	13.1	20.0
Isophorone	Ave	0.6254	0.6819	0.4000	54500	50000	9.0	20.0
2-Nitrophenol	Lin2		0.1666	0.1000	60400	50000	20.8*	20.0
2,4-Dimethylphenol	Ave	0.3166	0.3438	0.2000	54300	50000	8.6	20.0
Bis(2-chloroethoxy)methane	Ave	0.3956	0.4123	0.3000	52100	50000	4.2	20.0
2,4-Dichlorophenol	Lin2		0.3253	0.2000	52900	50000	5.7	20.0
Benzoic acid	Lin1		0.2677	0.0100	179000	150000	19.4	50.0
1,2,4-Trichlorobenzene	Ave	0.3848	0.3916	0.0100	50900	50000	1.8	20.0
Naphthalene	Ave	1.004	0.998	0.7000	49700	50000	-0.6	20.0
4-Chloroaniline	Lin2		0.4208	0.0100	51700	50000	3.3	20.0
2,6-Dichlorophenol	Ave	0.2927	0.3191	0.0100	54500	50000	9.0	20.0
Hexachlorobutadiene	Ave	0.2413	0.2444	0.0100	50600	50000	1.3	20.0
Caprolactam	Lin2		0.0787	0.0100	53700	50000	7.4	50.0
4-Chloro-3-methylphenol	Lin2		0.2957	0.2000	53800	50000	7.5	20.0
2-Methylnaphthalene	Ave	0.6718	0.6948	0.4000	51700	50000	3.4	20.0
1-Methylnaphthalene	Ave	0.6559	0.6604	0.0100	50300	50000	0.7	20.0
Hexachlorocyclopentadiene	Lin2		0.3345	0.0500	42700	50000	-14.6	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.7032	0.7160	0.0100	50900	50000	1.8	20.0
2,4,6-Trichlorophenol	Lin2		0.4444	0.2000	55100	50000	10.3	20.0
2,4,5-Trichlorophenol	Lin2		0.4811	0.2000	52400	50000	4.8	20.0

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 480-201707-1

SDG No.: 201707

Lab Sample ID: CCVLIS 200-183694/5 Calibration Date: 09/19/2022 16:41

Instrument ID: LC812 Calib Start Date: 09/14/2022 10:33

GC Column: C-18 ID: 4.60(mm) Calib End Date: 09/14/2022 11:14

Lab File ID: PA220919A05.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorotridecanoic acid (PFTriA)	AveID	0.9793	0.9672		0.0494	0.0500	-1.2	50.0
Perfluorotetradecanoic acid (PFTeA)	AveID	0.1555	0.1370		0.0440	0.0500	-11.9	50.0
Perfluoro-n-hexadecanoic acid (PFHxDA)	L1ID		1.076		0.0334	0.0500	-33.2	50.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.7228	0.6375		0.0441	0.0500	-11.8	50.0
13C4 PFBA	Ave	1.220	1.160		1.19	1.25	-4.9	
13C5 PFPeA	Ave	0.9597	0.9147		1.19	1.25	-4.7	
13C3 PFBS	Ave	0.9722	0.9280		1.11	1.16	-4.6	
M2-4:2 FTS	Ave	0.0881	0.0859		1.14	1.17	-2.6	
13C2 PFHxA	Ave	0.9758	0.9688		1.24	1.25	-0.7	
13C3 HFPO-DA	Ave	0.1832	0.1849		1.26	1.25	0.9	
18O2 PFHxS	Ave	0.6942	0.6649		1.13	1.18	-4.2	
13C4 PFHpA	Ave	0.9588	0.9125		1.19	1.25	-4.8	
M2-6:2 FTS	Ave	0.1186	0.1195		1.20	1.19	0.8	
13C4 PFOA	Ave	1.025	1.038		1.27	1.25	1.3	
13C4 PFOS	Ave	0.4574	0.4448		1.16	1.20	-2.7	
13C5 PFNA	Ave	1.009	0.9537		1.18	1.25	-5.4	
13C2 PFDA	Ave	0.9801	0.998		1.27	1.25	1.8	
M2-8:2 FTS	Ave	0.1402	0.1310		1.12	1.20	-6.5	
13C8 FOSA	Ave	0.7983	0.7957		1.25	1.25	-0.3	
d3-NMeFOSAA	Ave	0.1380	0.1377		1.25	1.25	-0.2	
13C2 PFUnA	Ave	0.8025	0.8192		1.28	1.25	2.1	
d5-NEtFOSAA	Ave	0.1370	0.1232		1.12	1.25	-10.0	
13C2 PFDoA	Ave	0.7827	0.8166		1.30	1.25	4.3	
13C2 PFTeDA	Ave	0.6687	0.7143		1.34	1.25	6.8	
13C2 PFHxDA	Ave	0.7383	0.7822		1.32	1.25	6.0	

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 480-201707-1

SDG No.: 201707

Instrument ID: LC812 Start Date: 09/19/2022 16:08

Analysis Batch Number: 183694 End Date: 09/19/2022 21:27

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		09/19/2022 16:08	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 16:16	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 16:24	1		C-18 4.6(mm)
CCB 200-183694/4		09/19/2022 16:32	1	PA220919A04.d	C-18 4.6(mm)
CCVLIS 200-183694/5		09/19/2022 16:41	1	PA220919A05.d	C-18 4.6(mm)
ZZZZZ		09/19/2022 16:49	5		C-18 4.6(mm)
ZZZZZ		09/19/2022 16:57	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 17:05	5		C-18 4.6(mm)
ZZZZZ		09/19/2022 17:13	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 17:21	1		C-18 4.6(mm)
MB 200-183671/1-A		09/19/2022 17:30	1	PA220919A11.d	C-18 4.6(mm)
LCS 200-183671/2-A		09/19/2022 17:38	1	PA220919A12.d	C-18 4.6(mm)
LCSD 200-183671/3-A		09/19/2022 17:46	1	PA220919A13.d	C-18 4.6(mm)
ZZZZZ		09/19/2022 17:54	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 18:02	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 18:11	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 18:19	1		C-18 4.6(mm)
CCV 200-183694/18		09/19/2022 18:27	1	PA220919A18.d	C-18 4.6(mm)
ZZZZZ		09/19/2022 18:35	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 18:43	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 18:51	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 19:00	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 19:08	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 19:16	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 19:24	100		C-18 4.6(mm)
480-201707-4	FB_091422	09/19/2022 19:32	1	PA220919A26.d	C-18 4.6(mm)
480-201707-7	ERB1_091422	09/19/2022 19:40	1	PA220919A27.d	C-18 4.6(mm)
480-201707-8	ERB2_091422	09/19/2022 19:49	1	PA220919A28.d	C-18 4.6(mm)
CCV 200-183694/29		09/19/2022 19:57	1	PA220919A29.d	C-18 4.6(mm)
ZZZZZ		09/19/2022 20:05	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 20:13	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 20:21	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 20:30	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 20:38	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 20:46	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 20:54	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 21:02	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 21:10	1		C-18 4.6(mm)
ZZZZZ		09/19/2022 21:19	1		C-18 4.6(mm)
CCV 200-183694/40		09/19/2022 21:27	1		C-18 4.6(mm)

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 480-201707-1

SDG No.: 201707

Instrument ID: LC812 Start Date: 09/21/2022 11:43

Analysis Batch Number: 183773 End Date: 09/21/2022 15:08

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		09/21/2022 11:43	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 11:51	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 12:00	1		C-18 4.6(mm)
CCB 200-183773/4		09/21/2022 12:08	1	PA220921A04.d	C-18 4.6(mm)
CCVLIS 200-183773/5		09/21/2022 12:16	1	PA220921A05.d	C-18 4.6(mm)
ZZZZZ		09/21/2022 12:24	10		C-18 4.6(mm)
ZZZZZ		09/21/2022 12:32	10		C-18 4.6(mm)
ZZZZZ		09/21/2022 12:41	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 12:49	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 12:57	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 13:05	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 13:13	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 13:21	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 13:30	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 13:38	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 13:46	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 13:54	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 14:02	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 14:10	1		C-18 4.6(mm)
CCV 200-183773/20		09/21/2022 14:19	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 14:27	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 14:35	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 14:43	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 14:51	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 15:00	1		C-18 4.6(mm)
CCV 200-183773/26		09/21/2022 15:08	1		C-18 4.6(mm)

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 480-201707-1

SDG No.: 201707

Instrument ID: LC812 Start Date: 09/21/2022 15:16

Analysis Batch Number: 183779 End Date: 09/21/2022 18:57

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCV 200-183779/1		09/21/2022 15:16	1	PA220921B01.d	C-18 4.6(mm)
MB 200-183718/1-A		09/21/2022 15:24	1	PA220921B02.d	C-18 4.6(mm)
LCS 200-183718/2-A		09/21/2022 15:32	1	PA220921B03.d	C-18 4.6(mm)
ZZZZZ		09/21/2022 15:40	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 15:49	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 15:57	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 16:05	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 16:13	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 16:21	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 16:30	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 16:38	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 16:46	1		C-18 4.6(mm)
CCV 200-183779/13		09/21/2022 16:54	1	PA220921B13.d	C-18 4.6(mm)
ZZZZZ		09/21/2022 17:02	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 17:11	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 17:19	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 17:27	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 17:35	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 17:43	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 17:51	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 18:00	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 18:08	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 18:16	10		C-18 4.6(mm)
ZZZZZ		09/21/2022 18:24	1		C-18 4.6(mm)
ZZZZZ		09/21/2022 18:32	1		C-18 4.6(mm)
480-201707-3	SB2 (1-2)	09/21/2022 18:41	1	PA220921B26.d	C-18 4.6(mm)
480-201707-5	FDUP_091422	09/21/2022 18:49	1	PA220921B27.d	C-18 4.6(mm)
CCV 200-183779/28		09/21/2022 18:57	1	PA220921B28.d	C-18 4.6(mm)

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-201707-1

SDG No.: 201707

Concentration Units: mg/L

Analyte	RL	CCB 480-642370/47 09/21/2022 16:54							
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND							
Antimony	0.020	ND							
Arsenic	0.015	ND							
Barium	0.0020	ND							
Beryllium	0.0020	ND							
Cadmium	0.0020	ND							
Calcium	0.50	ND							
Chromium	0.0040	ND							
Cobalt	0.0040	ND							
Copper	0.010	ND							
Iron	0.050	0.0295	J						
Lead	0.010	ND							
Magnesium	0.20	ND							
Manganese	0.0030	ND							
Nickel	0.010	ND							
Potassium	0.50	ND							
Selenium	0.025	ND							
Silver	0.0060	ND							
Sodium	1.0	ND							
Thallium	0.020	ND							
Vanadium	0.0050	ND							
Zinc	0.010	ND							

Italicized analytes were not requested for this

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-201707-1

SDG No.: 201707

Concentration Units: mg/L

Analyte	RL	ICB 480-642173/6 09/20/2022 15:32		CCB 480-642173/16 09/20/2022 16:12		CCB 480-642173/28 09/20/2022 17:11		CCB 480-642173/40 09/20/2022 17:58	
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND		ND		ND		ND	
Antimony	0.020	ND		ND		ND		ND	
Arsenic	0.015	ND		ND		ND		ND	
Barium	0.0020	ND		ND		ND		ND	
Beryllium	0.0020	ND		ND		ND		ND	
Cadmium	0.0020	ND		ND		ND		ND	
Calcium	0.50	ND		ND		ND		ND	
Chromium	0.0040	ND		ND		ND		ND	
Cobalt	0.0040	ND		ND		ND		ND	
Copper	0.010	ND		ND		ND		ND	
Iron	0.050	ND		ND		ND		ND	
Lead	0.010	0.00315	J	ND		ND		ND	
Magnesium	0.20	ND		ND		ND		ND	
Manganese	0.0030	ND		ND		ND		ND	
Nickel	0.010	ND		ND		ND		ND	
Potassium	0.50	ND		ND		ND		0.180	J
Selenium	0.025	ND		ND		ND		ND	
Silver	0.0060	ND		ND		ND		ND	
Sodium	1.0	ND		ND		ND		ND	
Thallium	0.020	ND		ND		ND		ND	
Vanadium	0.0050	ND		ND		ND		ND	
Zinc	0.010	ND		ND		ND		ND	

Italicized analytes were not requested for this

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-201707-1

SDG No.: 201707

Concentration Units: mg/L

Analyte	RL	CCB 480-642173/52 09/20/2022 18:44							
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND							
Antimony	0.020	ND							
Arsenic	0.015	ND							
Barium	0.0020	ND							
Beryllium	0.0020	ND							
Cadmium	0.0020	ND							
Calcium	0.50	ND							
Chromium	0.0040	ND							
Cobalt	0.0040	ND							
Copper	0.010	ND							
Iron	0.050	ND							
Lead	0.010	ND							
Magnesium	0.20	ND							
Manganese	0.0030	ND							
Nickel	0.010	ND							
Potassium	0.50	0.123	J						
Selenium	0.025	ND							
Silver	0.0060	ND							
Sodium	1.0	ND							
Thallium	0.020	ND							
Vanadium	0.0050	ND							
Zinc	0.010	ND							

Italicized analytes were not requested for this

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Buffalo Job No.: 480-201707-1

SDG No.: 201707

Concentration Units: mg/Kg Lab Sample ID: MB 480-642057/1-A

Instrument Code: ICAP1 Batch No.: 642370

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			6010C
7440-36-0	Antimony	ND			6010C
7440-38-2	Arsenic	ND			6010C
7440-39-3	Barium	ND			6010C
7440-41-7	Beryllium	ND			6010C
7440-43-9	Cadmium	ND			6010C
7440-70-2	Calcium	ND			6010C
7440-47-3	Chromium	ND			6010C
7440-48-4	Cobalt	ND			6010C
7440-50-8	Copper	ND			6010C
7439-89-6	Iron	ND			6010C
7439-92-1	Lead	ND			6010C
7439-95-4	Magnesium	1.78	J		6010C
7439-96-5	Manganese	ND			6010C
7440-02-0	Nickel	ND			6010C
7440-09-7	Potassium	ND			6010C
7782-49-2	Selenium	ND			6010C
7440-22-4	Silver	ND			6010C
7440-23-5	Sodium	ND			6010C
7440-28-0	Thallium	ND			6010C
7440-62-2	Vanadium	ND			6010C
7440-66-6	Zinc	ND			6010C

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: SB2 (0-0.5) MS
Lab ID: 480-201707-1 MS
Lab Name: Eurofins Buffalo
Job No.: 480-201707-1
SDG No.: 201707
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 75.4

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Mercury	0.327		0.066		0.441	59	80-120	F1	7471B

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: SB2 (0-0.5) MSD
Lab ID: 480-201707-1 MSD
Lab Name: Eurofins Buffalo
Job No.: 480-201707-1
SDG No.: 201707
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 75.4

Analyte	(SDR) C		Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Mercury	0.308		0.432	56	80-120	6	20	F1	7471B

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VD - IN

09/28/2022

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-201707-1

SDG No.: 201707

Matrix: Water Level: Low Lab File ID: Y0283620.D

Lab ID: LCS 480-641992/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chrysene	32.0	34.1	107	69-120	
Dibenz(a,h)anthracene	32.0	34.9	109	65-135	
Dibenzofuran	32.0	30.5	95	66-120	
Diethyl phthalate	32.0	67.0	210	59-127	E *+
Dimethyl phthalate	32.0	34.4	108	68-120	
Di-n-butyl phthalate	32.0	35.7	111	69-131	
Di-n-octyl phthalate	32.0	33.0	103	63-140	
Fluoranthene	32.0	35.7	112	69-126	
Fluorene	32.0	31.8	99	66-120	
Hexachlorobenzene	32.0	35.5	111	61-120	
Hexachlorobutadiene	32.0	20.8	65	35-120	
Hexachlorocyclopentadiene	32.0	21.6	68	31-120	
Hexachloroethane	32.0	18.4	58	43-120	
Indeno[1,2,3-cd]pyrene	32.0	34.3	107	69-146	
Isophorone	32.0	30.6	96	55-120	
Naphthalene	32.0	27.7	87	57-120	
Nitrobenzene	32.0	28.4	89	53-123	
N-Nitrosodi-n-propylamine	32.0	30.3	95	32-140	
N-Nitrosodiphenylamine	32.0	36.2	113	61-120	
Pentachlorophenol	64.0	77.2	121	29-136	
Phenanthrene	32.0	34.6	108	68-120	
Phenol	32.0	15.4	48	17-120	
Pyrene	32.0	34.6	108	70-125	

Column to be used to flag recovery and RPD values

Detection Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-202448-1

Client Sample ID: TB-100522 — Lab Sample ID: 480-202448-1

No Detections.

Client Sample ID: FB-100522 — Lab Sample ID: 480-202448-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl phthalate	4.0	J B	5.0	0.22	ug/L	1		8270D	Total/NA
Manganese	0.00095	J B	0.0030	0.00040	mg/L	1		6010C	Total/NA

Client Sample ID: MW1-100522 — Lab Sample ID: 480-202448-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	2.3		1.0	0.46	ug/L	1		8260C	Total/NA
Diethyl phthalate	2.4	J B	5.2	0.23	ug/L	1		8270D	Total/NA
Perfluorobutanoic acid (PFBA)	1.2	J	4.5	1.1	ng/L	1		537 IDA	Total/NA
Perfluorooctanoic acid (PFOA)	0.68	J	1.8	0.68	ng/L	1		537 IDA	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.2		1.8	0.76	ng/L	1		537 IDA	Total/NA
Aluminum	0.20		0.20	0.060	mg/L	1		6010C	Total/NA
Barium	0.11		0.0020	0.00070	mg/L	1		6010C	Total/NA
Calcium	47.9		0.50	0.10	mg/L	1		6010C	Total/NA
Iron	0.21		0.050	0.019	mg/L	1		6010C	Total/NA
Lead	0.0031	J	0.010	0.0030	mg/L	1		6010C	Total/NA
Magnesium	8.1		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	0.56	B ^+	0.0030	0.00040	mg/L	1		6010C	Total/NA
Potassium	3.5		0.50	0.10	mg/L	1		6010C	Total/NA
Sodium	136		1.0	0.32	mg/L	1		6010C	Total/NA
Zinc	0.0016	J	0.010	0.0015	mg/L	1		6010C	Total/NA
Barium, Dissolved	0.088		0.0020	0.00070	mg/L	1		6010C	Dissolved
Calcium, Dissolved	41.0		0.50	0.10	mg/L	1		6010C	Dissolved
Copper, Dissolved	0.0017	J	0.010	0.0016	mg/L	1		6010C	Dissolved
Magnesium, Dissolved	7.0		0.20	0.043	mg/L	1		6010C	Dissolved
Manganese, Dissolved	0.44	B	0.0030	0.00040	mg/L	1		6010C	Dissolved
Potassium, Dissolved	3.0		0.50	0.10	mg/L	1		6010C	Dissolved
Sodium, Dissolved	124		1.0	0.32	mg/L	1		6010C	Dissolved

Client Sample ID: MW5-100522 — Lab Sample ID: 480-202448-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.60	J	1.0	0.38	ug/L	1		8260C	Total/NA
Diethyl phthalate	3.1	J B	6.0	0.26	ug/L	1		8270D	Total/NA
Aluminum	0.41		0.20	0.060	mg/L	1		6010C	Total/NA
Barium	0.15		0.0020	0.00070	mg/L	1		6010C	Total/NA
Calcium	149		0.50	0.10	mg/L	1		6010C	Total/NA
Cobalt	0.0012	J	0.0040	0.00063	mg/L	1		6010C	Total/NA
Copper	0.0087	J	0.010	0.0016	mg/L	1		6010C	Total/NA
Iron	0.77		0.050	0.019	mg/L	1		6010C	Total/NA
Lead	0.0046	J	0.010	0.0030	mg/L	1		6010C	Total/NA
Magnesium	14.8		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	4.7	B ^+	0.0030	0.00040	mg/L	1		6010C	Total/NA
Nickel	0.0025	J	0.010	0.0013	mg/L	1		6010C	Total/NA
Potassium	6.1		0.50	0.10	mg/L	1		6010C	Total/NA
Sodium	53.1		1.0	0.32	mg/L	1		6010C	Total/NA
Zinc	0.011		0.010	0.0015	mg/L	1		6010C	Total/NA
Barium, Dissolved	0.13		0.0020	0.00070	mg/L	1		6010C	Dissolved
Calcium, Dissolved	143		0.50	0.10	mg/L	1		6010C	Dissolved

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-202448-1

Client Sample ID: MW5-100522 (Continued)

Lab Sample ID: 480-202448-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt, Dissolved	0.0011	J	0.0040	0.00063	mg/L	1		6010C	Dissolved
Copper, Dissolved	0.0036	J	0.010	0.0016	mg/L	1		6010C	Dissolved
Iron, Dissolved	0.39		0.050	0.019	mg/L	1		6010C	Dissolved
Magnesium, Dissolved	14.4		0.20	0.043	mg/L	1		6010C	Dissolved
Manganese, Dissolved	4.7	B	0.0030	0.00040	mg/L	1		6010C	Dissolved
Nickel, Dissolved	0.0025	J	0.010	0.0013	mg/L	1		6010C	Dissolved
Potassium, Dissolved	5.5		0.50	0.10	mg/L	1		6010C	Dissolved
Sodium, Dissolved	54.9		1.0	0.32	mg/L	1		6010C	Dissolved
Zinc, Dissolved	0.0065	J	0.010	0.0015	mg/L	1		6010C	Dissolved

Client Sample ID: FDUP-100522

Lab Sample ID: 480-202448-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	2.1		1.0	0.46	ug/L	1		8260C	Total/NA
Diethyl phthalate	3.1	J B	5.2	0.23	ug/L	1		8270D	Total/NA
Perfluorobutanoic acid (PFBA)	1.3	J	4.8	1.1	ng/L	1		537 IDA	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.0		1.9	0.81	ng/L	1		537 IDA	Total/NA
Barium	0.097		0.0020	0.00070	mg/L	1		6010C	Total/NA
Calcium	41.5		0.50	0.10	mg/L	1		6010C	Total/NA
Magnesium	7.1		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	0.45	B ^+	0.0030	0.00040	mg/L	1		6010C	Total/NA
Potassium	3.3		0.50	0.10	mg/L	1		6010C	Total/NA
Sodium	131		1.0	0.32	mg/L	1		6010C	Total/NA
Barium, Dissolved	0.087		0.0020	0.00070	mg/L	1		6010C	Dissolved
Calcium, Dissolved	40.8		0.50	0.10	mg/L	1		6010C	Dissolved
Copper, Dissolved	0.0021	J	0.010	0.0016	mg/L	1		6010C	Dissolved
Magnesium, Dissolved	7.2		0.20	0.043	mg/L	1		6010C	Dissolved
Manganese, Dissolved	0.45	B	0.0030	0.00040	mg/L	1		6010C	Dissolved
Potassium, Dissolved	3.1		0.50	0.10	mg/L	1		6010C	Dissolved
Sodium, Dissolved	123		1.0	0.32	mg/L	1		6010C	Dissolved
Zinc, Dissolved	0.0016	J	0.010	0.0015	mg/L	1		6010C	Dissolved

Client Sample ID: ERB-100522

Lab Sample ID: 480-202448-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl phthalate	1.3	J B	5.0	0.22	ug/L	1		8270D	Total/NA
Manganese	0.0014	J B	0.0030	0.00040	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-202448-1

SDG No.:

Lab Sample ID: ICV 480-644313/35 Calibration Date: 10/07/2022 00:39

Instrument ID: HP5975T Calib Start Date: 10/06/2022 16:50

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 10/06/2022 19:27

Lab File ID: T1430.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	3.696	4.326	0.1000	29.3	25.0	17.1	30.0
1,2-Dichloropropane	Ave	2.378	2.728	0.1000	28.7	25.0	14.7	30.0
Dibromomethane	Ave	1.399	1.683	0.1000	30.1	25.0	20.3	30.0
1,4-Dioxane	Lin1		0.0069		485	500	-2.9	50.0
Bromodichloromethane	Ave	2.541	2.913	0.2000	28.7	25.0	14.6	30.0
2-Chloroethyl vinyl ether	Ave	1.227	1.645		33.5	25.0	34.1*	30.0
cis-1,3-Dichloropropene	Ave	3.172	3.637	0.2000	28.7	25.0	14.6	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.9478	1.076	0.1000	142	125	13.6	30.0
Toluene	Ave	1.456	1.656	0.4000	28.4	25.0	13.7	30.0
trans-1,3-Dichloropropene	Ave	0.7559	0.8742	0.1000	28.9	25.0	15.6	30.0
Ethyl methacrylate	Ave	0.7221	0.8630		29.9	25.0	19.5	30.0
1,1,2-Trichloroethane	Ave	0.4371	0.5033	0.1000	28.8	25.0	15.1	30.0
Tetrachloroethene	Ave	0.6581	0.7345	0.2000	27.9	25.0	11.6	30.0
1,3-Dichloropropane	Ave	0.8813	1.025		29.1	25.0	16.3	30.0
2-Hexanone	Ave	0.6168	0.7328	0.1000	149	125	18.8	30.0
Dibromochloromethane	Ave	0.4870	0.5634	0.1000	28.9	25.0	15.7	30.0
1,2-Dibromoethane	Ave	0.5455	0.6395		29.3	25.0	17.2	30.0
Chlorobenzene	Ave	1.585	1.789	0.5000	28.2	25.0	12.9	30.0
Ethylbenzene	Ave	2.768	3.100	0.1000	28.0	25.0	12.0	30.0
1,1,1,2-Tetrachloroethane	Ave	0.5390	0.6163		28.6	25.0	14.3	30.0
m,p-Xylene	Ave	1.085	1.238	0.1000	28.5	25.0	14.1	30.0
o-Xylene	Ave	1.068	1.210	0.3000	28.3	25.0	13.3	30.0
Styrene	Ave	1.756	2.022	0.3000	28.8	25.0	15.2	30.0
Bromoform	Ave	0.2963	0.3302	0.1000	27.9	25.0	11.4	50.0
Isopropylbenzene	Ave	5.281	6.392	0.1000	30.3	25.0	21.0	30.0
Bromobenzene	Ave	1.272	1.482		29.1	25.0	16.5	30.0
1,1,2,2-Tetrachloroethane	Ave	1.443	1.741	0.3000	30.2	25.0	20.7	30.0
N-Propylbenzene	Ave	6.062	7.271		30.0	25.0	19.9	30.0
1,2,3-Trichloropropane	Ave	0.5000	0.5918		29.6	25.0	18.4	30.0
trans-1,4-Dichloro-2-butene	Lin1		0.5207		27.1	25.0	8.6	50.0
2-Chlorotoluene	Ave	1.218	1.483		30.4	25.0	21.7	30.0
1,3,5-Trimethylbenzene	Ave	4.539	5.377		29.6	25.0	18.5	30.0
4-Chlorotoluene	Ave	3.820	4.465		29.2	25.0	16.9	30.0
tert-Butylbenzene	Ave	0.999	1.228		30.7	25.0	23.0	30.0
1,2,4-Trimethylbenzene	Ave	4.616	5.426		29.4	25.0	17.5	30.0
sec-Butylbenzene	Ave	5.768	6.939		30.1	25.0	20.3	30.0
4-Isopropyltoluene	Ave	5.042	6.159		30.5	25.0	22.1	30.0
1,3-Dichlorobenzene	Ave	2.532	2.946	0.6000	29.1	25.0	16.4	30.0
1,4-Dichlorobenzene	Ave	2.530	2.958	0.5000	29.2	25.0	16.9	30.0
n-Butylbenzene	Ave	4.546	5.311		29.2	25.0	16.8	30.0
1,2-Dichlorobenzene	Ave	2.552	2.882	0.4000	28.2	25.0	12.9	30.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-202448-1

SDG No.:

Lab Sample ID: CCVIS 480-644817/6 Calibration Date: 10/11/2022 11:15

Instrument ID: HP5975T Calib Start Date: 10/06/2022 16:50

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 10/06/2022 19:27

Lab File ID: T1651.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	2.772	2.522	0.1000	22.7	25.0	-9.0	50.0
Chloromethane	Ave	4.127	3.657	0.1000	22.1	25.0	-11.4	20.0
Vinyl chloride	Ave	2.637	2.403	0.1000	22.8	25.0	-8.9	20.0
Butadiene	Ave	3.285	2.926		22.3	25.0	-10.9	20.0
Bromomethane	Ave	1.616	1.312	0.1000	20.3	25.0	-18.8	50.0
Chloroethane	Ave	1.626	1.424	0.1000	21.9	25.0	-12.4	50.0
Dichlorofluoromethane	Ave	3.715	3.240		21.8	25.0	-12.8	20.0
Trichlorofluoromethane	Ave	3.093	2.912	0.1000	23.5	25.0	-5.8	20.0
Ethyl ether	Ave	2.305	1.853		20.1	25.0	-19.6	20.0
Acrolein	Ave	0.3675	0.3248		110	125	-11.6	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	2.081	1.754	0.1000	21.1	25.0	-15.7	20.0
1,1-Dichloroethene	Ave	1.971	1.630	0.1000	20.7	25.0	-17.3	20.0
Acetone	Ave	1.283	1.074	0.1000	105	125	-16.3	50.0
Iodomethane	Ave	3.632	3.047		21.0	25.0	-16.1	20.0
Carbon disulfide	Ave	6.524	5.320	0.1000	20.4	25.0	-18.5	20.0
Allyl chloride	Ave	4.246	3.467		20.4	25.0	-18.4	20.0
Methyl acetate	Ave	2.676	2.104	0.1000	39.3	50.0	-21.4	50.0
Methylene Chloride	Lin1		1.916	0.1000	21.2	25.0	-15.4	20.0
2-Methyl-2-propanol	Ave	0.4176	0.3089		185	250	-26.0	50.0
Methyl tert-butyl ether	Ave	6.765	5.799	0.1000	21.4	25.0	-14.3	20.0
trans-1,2-Dichloroethene	Ave	2.240	1.919	0.1000	21.4	25.0	-14.3	20.0
Acrylonitrile	Ave	1.381	1.180		214	250	-14.6	20.0
Hexane	Ave	3.846	3.244		21.1	25.0	-15.6	20.0
1,1-Dichloroethane	Ave	4.372	3.576	0.2000	20.5	25.0	-18.2	20.0
Vinyl acetate	Ave	5.169	4.154		40.2	50.0	-19.6	20.0
2,2-Dichloropropane	Ave	2.728	2.196		20.1	25.0	-19.5	20.0
cis-1,2-Dichloroethene	Ave	2.446	2.052	0.1000	21.0	25.0	-16.1	20.0
2-Butanone (MEK)	Ave	1.773	1.484	0.1000	105	125	-16.3	20.0
Chlorobromomethane	Ave	1.314	1.100		20.9	25.0	-16.3	20.0
Tetrahydrofuran	Ave	1.151	0.9941		43.2	50.0	-13.6	20.0
Chloroform	Ave	4.046	3.221	0.2000	19.9	25.0	-20.4*	20.0
Cyclohexane	Ave	4.843	4.117	0.1000	21.2	25.0	-15.0	20.0
1,1,1-Trichloroethane	Ave	3.376	2.575	0.1000	19.1	25.0	-23.7*	20.0
Carbon tetrachloride	Ave	2.799	2.100	0.1000	18.8	25.0	-25.0*	20.0
1,1-Dichloropropene	Ave	2.979	2.491		20.9	25.0	-16.4	20.0
Benzene	Ave	8.640	7.137	0.5000	20.7	25.0	-17.4	20.0
Isobutyl alcohol	Ave	0.1430	0.1145		501	625	-19.9	50.0
1,2-Dichloroethane	Ave	3.442	2.786	0.1000	20.2	25.0	-19.1	20.0
n-Heptane	Ave	4.431	3.699		20.9	25.0	-16.5	20.0
Trichloroethene	Ave	2.247	1.890	0.2000	21.0	25.0	-15.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-202448-1

SDG No.:

Lab Sample ID: CCVIS 480-644817/6 Calibration Date: 10/11/2022 11:15

Instrument ID: HP5975T Calib Start Date: 10/06/2022 16:50

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 10/06/2022 19:27

Lab File ID: T1651.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	3.696	3.117	0.1000	21.1	25.0	-15.7	20.0
1,2-Dichloropropane	Ave	2.378	1.983	0.1000	20.9	25.0	-16.6	20.0
Dibromomethane	Ave	1.399	1.203	0.1000	21.5	25.0	-14.0	20.0
1,4-Dioxane	Lin1		0.0072		505	500	1.0	50.0
Bromodichloromethane	Ave	2.541	1.987	0.2000	19.5	25.0	-21.8*	20.0
2-Chloroethyl vinyl ether	Ave	1.227	1.066		21.7	25.0	-13.1	20.0
cis-1,3-Dichloropropene	Ave	3.172	2.694	0.2000	21.2	25.0	-15.1	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.9478	0.8322	0.1000	110	125	-12.2	20.0
Toluene	Ave	1.456	1.254	0.4000	21.5	25.0	-13.9	20.0
trans-1,3-Dichloropropene	Ave	0.7559	0.6453	0.1000	21.3	25.0	-14.6	20.0
Ethyl methacrylate	Ave	0.7221	0.6067		21.0	25.0	-16.0	20.0
1,1,2-Trichloroethane	Ave	0.4371	0.3731	0.1000	21.3	25.0	-14.6	20.0
Tetrachloroethene	Ave	0.6581	0.5558	0.2000	21.1	25.0	-15.5	20.0
1,3-Dichloropropane	Ave	0.8813	0.7626		21.6	25.0	-13.5	20.0
2-Hexanone	Ave	0.6168	0.5851	0.1000	119	125	-5.1	20.0
Dibromochloromethane	Ave	0.4870	0.3975	0.1000	20.4	25.0	-18.4	20.0
1,2-Dibromoethane	Ave	0.5455	0.4740		21.7	25.0	-13.1	20.0
Chlorobenzene	Ave	1.585	1.348	0.5000	21.3	25.0	-14.9	20.0
Ethylbenzene	Ave	2.768	2.340	0.1000	21.1	25.0	-15.5	20.0
1,1,1,2-Tetrachloroethane	Ave	0.5390	0.4471		20.7	25.0	-17.1	20.0
m,p-Xylene	Ave	1.085	0.9248	0.1000	21.3	25.0	-14.8	20.0
o-Xylene	Ave	1.068	0.9166	0.3000	21.5	25.0	-14.2	20.0
Styrene	Ave	1.756	1.528	0.3000	21.7	25.0	-13.0	20.0
Bromoform	Ave	0.2963	0.2148	0.1000	18.1	25.0	-27.5	50.0
Isopropylbenzene	Ave	5.281	4.961	0.1000	23.5	25.0	-6.1	20.0
Bromobenzene	Ave	1.272	1.115		21.9	25.0	-12.3	20.0
1,1,2,2-Tetrachloroethane	Ave	1.443	1.346	0.3000	23.3	25.0	-6.7	20.0
N-Propylbenzene	Ave	6.062	5.601		23.1	25.0	-7.6	20.0
1,2,3-Trichloropropane	Ave	0.5000	0.4343		21.7	25.0	-13.1	20.0
trans-1,4-Dichloro-2-butene	Lin1		0.4177		21.9	25.0	-12.4	50.0
2-Chlorotoluene	Ave	1.218	1.160		23.8	25.0	-4.8	20.0
1,3,5-Trimethylbenzene	Ave	4.539	4.279		23.6	25.0	-5.7	20.0
4-Chlorotoluene	Ave	3.820	3.390		22.2	25.0	-11.3	20.0
tert-Butylbenzene	Ave	0.999	0.9366		23.4	25.0	-6.2	20.0
1,2,4-Trimethylbenzene	Ave	4.616	4.297		23.3	25.0	-6.9	20.0
sec-Butylbenzene	Ave	5.768	5.381		23.3	25.0	-6.7	20.0
4-Isopropyltoluene	Ave	5.042	4.865		24.1	25.0	-3.5	20.0
1,3-Dichlorobenzene	Ave	2.532	2.347	0.6000	23.2	25.0	-7.3	20.0
1,4-Dichlorobenzene	Ave	2.530	2.374	0.5000	23.5	25.0	-6.2	20.0
n-Butylbenzene	Ave	4.546	4.257		23.4	25.0	-6.4	20.0
1,2-Dichlorobenzene	Ave	2.552	2.326	0.4000	22.8	25.0	-8.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-202448-1

SDG No.:

Lab Sample ID: CCVIS 480-644728/4 Calibration Date: 10/10/2022 22:20

Instrument ID: HP5977L Calib Start Date: 10/06/2022 16:35

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 10/06/2022 19:21

Lab File ID: L20735.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.487	1.517	0.1000	25.5	25.0	2.0	50.0
Chloromethane	Ave	1.699	1.920	0.1000	28.2	25.0	13.0	20.0
Vinyl chloride	Ave	1.292	1.541	0.1000	29.8	25.0	19.3	20.0
Butadiene	Ave	1.254	1.452		29.0	25.0	15.8	20.0
Bromomethane	Ave	0.9794	1.098	0.1000	28.0	25.0	12.1	50.0
Chloroethane	Ave	0.9471	1.059	0.1000	28.0	25.0	11.8	50.0
Trichlorofluoromethane	Lin1		1.914	0.1000	27.7	25.0	11.0	20.0
Dichlorofluoromethane	Lin1		2.423		29.1	25.0	16.6	20.0
Ethyl ether	Ave	1.279	1.380		27.0	25.0	7.9	20.0
Acrolein	Ave	0.1586	0.1787		141	125	12.6	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Lin1		0.9286	0.1000	20.3	25.0	-19.0	20.0
1,1-Dichloroethene	Ave	1.231	1.109	0.1000	22.5	25.0	-10.0	20.0
Acetone	Ave	0.4293	0.4084	0.1000	119	125	-4.9	50.0
Iodomethane	Ave	1.968	2.016		25.6	25.0	2.5	20.0
Carbon disulfide	Ave	3.730	3.519	0.1000	23.6	25.0	-5.7	20.0
Allyl chloride	Ave	1.811	1.685		23.3	25.0	-7.0	20.0
Methyl acetate	Ave	1.145	1.346	0.1000	58.8	50.0	17.5	50.0
Methylene Chloride	Lin1		1.336	0.1000	23.3	25.0	-6.7	20.0
2-Methyl-2-propanol	Ave	0.1735	0.1141		165	250	-34.2	50.0
Methyl tert-butyl ether	Ave	3.970	3.894	0.1000	24.5	25.0	-1.9	20.0
trans-1,2-Dichloroethene	Ave	1.382	1.296	0.1000	23.4	25.0	-6.2	20.0
Acrylonitrile	Ave	0.6750	0.7415		275	250	9.9	20.0
Hexane	Ave	2.021	1.824		22.6	25.0	-9.8	20.0
1,1-Dichloroethane	Ave	2.451	2.207	0.2000	22.5	25.0	-10.0	20.0
Vinyl acetate	Ave	3.145	3.449		54.8	50.0	9.6	20.0
2,2-Dichloropropane	Ave	1.522	1.172		19.3	25.0	-23.0*	20.0
cis-1,2-Dichloroethene	Ave	1.541	1.465	0.1000	23.8	25.0	-4.9	20.0
2-Butanone (MEK)	Ave	0.8310	0.9346	0.1000	141	125	12.5	20.0
Chlorobromomethane	Ave	0.7830	0.7995		25.5	25.0	2.1	20.0
Tetrahydrofuran	Ave	0.5318	0.6027		56.7	50.0	13.3	20.0
Chloroform	Ave	2.485	2.164	0.2000	21.8	25.0	-12.9	20.0
1,1,1-Trichloroethane	Ave	1.995	1.754	0.1000	22.0	25.0	-12.1	20.0
Cyclohexane	Ave	2.195	2.050	0.1000	23.4	25.0	-6.6	20.0
Carbon tetrachloride	Ave	1.668	1.577	0.1000	23.6	25.0	-5.5	20.0
1,1-Dichloropropene	Ave	1.798	1.609		22.4	25.0	-10.5	20.0
Isobutyl alcohol	Ave	0.0778	0.1113		895	625	43.1	50.0
Benzene	Ave	5.547	4.833	0.5000	21.8	25.0	-12.9	20.0
1,2-Dichloroethane	Ave	2.005	1.811	0.1000	22.6	25.0	-9.6	20.0
n-Heptane	Ave	2.089	2.000		23.9	25.0	-4.3	20.0
Trichloroethene	Ave	1.454	1.297	0.2000	22.3	25.0	-10.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo | Job No.: 480-202448-1

SDG No.:

Lab Sample ID: CCVIS 480-644728/4 | Calibration Date: 10/10/2022 22:20

Instrument ID: HP5977L | Calib Start Date: 10/06/2022 16:35

GC Column: ZB-624 (30) VOA ID: 0.25(mm) | Calib End Date: 10/06/2022 19:21

Lab File ID: L20735.D | Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.364	2.129	0.1000	22.5	25.0	-9.9	20.0
1,2-Dichloropropane	Ave	1.503	1.358	0.1000	22.6	25.0	-9.6	20.0
1,4-Dioxane	Lin1		0.0043		597	500	19.4	50.0
Dibromomethane	Ave	0.997	0.9392	0.1000	23.5	25.0	-5.8	20.0
Bromodichloromethane	Ave	1.958	1.711	0.2000	21.8	25.0	-12.6	20.0
2-Chloroethyl vinyl ether	Ave	1.241	1.152		23.2	25.0	-7.1	20.0
cis-1,3-Dichloropropene	Ave	2.429	2.112	0.2000	21.7	25.0	-13.1	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.4799	0.5102	0.1000	133	125	6.3	20.0
Toluene	Ave	0.9579	0.7676	0.4000	20.0	25.0	-19.9	20.0
trans-1,3-Dichloropropene	Ave	0.5964	0.4792	0.1000	20.1	25.0	-19.7	20.0
Ethyl methacrylate	Ave	0.6216	0.4953		19.9	25.0	-20.3*	20.0
1,1,2-Trichloroethane	Ave	0.3352	0.2569	0.1000	19.2	25.0	-23.4*	20.0
Tetrachloroethene	Ave	0.3625	0.3226	0.2000	22.2	25.0	-11.0	20.0
1,3-Dichloropropane	Ave	0.6355	0.5244		20.6	25.0	-17.5	20.0
2-Hexanone	Ave	0.3515	0.3802	0.1000	135	125	8.2	20.0
Dibromochloromethane	Ave	0.3895	0.3601	0.1000	23.1	25.0	-7.5	20.0
1,2-Dibromoethane	Ave	0.4069	0.3586		22.0	25.0	-11.9	20.0
Chlorobenzene	Ave	1.075	0.8868	0.5000	20.6	25.0	-17.5	20.0
Ethylbenzene	Ave	1.773	1.411	0.1000	19.9	25.0	-20.4*	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3897	0.3328		21.3	25.0	-14.6	20.0
m,p-Xylene	Ave	0.6996	0.5568	0.1000	19.9	25.0	-20.4*	20.0
o-Xylene	Ave	0.6897	0.5656	0.3000	20.5	25.0	-18.0	20.0
Styrene	Ave	1.216	1.002	0.3000	20.6	25.0	-17.6	20.0
Bromoform	Ave	0.2785	0.2751	0.1000	24.7	25.0	-1.2	50.0
Isopropylbenzene	Ave	3.491	2.787	0.1000	20.0	25.0	-20.2*	20.0
Bromobenzene	Ave	0.8745	0.7372		21.1	25.0	-15.7	20.0
1,1,2,2-Tetrachloroethane	Ave	1.143	0.9732	0.3000	21.3	25.0	-14.8	20.0
N-Propylbenzene	Ave	4.133	3.195		19.3	25.0	-22.7*	20.0
trans-1,4-Dichloro-2-butene	Ave	0.3106	0.2629		21.2	25.0	-15.4	50.0
1,2,3-Trichloropropane	Ave	0.3700	0.3359		22.7	25.0	-9.2	20.0
2-Chlorotoluene	Ave	0.8068	0.6540		20.3	25.0	-18.9	20.0
1,3,5-Trimethylbenzene	Ave	2.991	2.311		19.3	25.0	-22.7*	20.0
4-Chlorotoluene	Ave	2.547	1.934		19.0	25.0	-24.1*	20.0
tert-Butylbenzene	Ave	0.6237	0.5378		21.6	25.0	-13.8	20.0
1,2,4-Trimethylbenzene	Ave	3.107	2.398		19.3	25.0	-22.8*	20.0
sec-Butylbenzene	Ave	3.720	2.914		19.6	25.0	-21.7*	20.0
4-Isopropyltoluene	Ave	3.257	2.575		19.8	25.0	-20.9*	20.0
1,3-Dichlorobenzene	Ave	1.683	1.357	0.6000	20.2	25.0	-19.4	20.0
1,4-Dichlorobenzene	Ave	1.725	1.418	0.5000	20.6	25.0	-17.8	20.0
n-Butylbenzene	Ave	2.952	2.217		18.8	25.0	-24.9*	20.0
1,2-Dichlorobenzene	Ave	1.674	1.385	0.4000	20.7	25.0	-17.3	20.0

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-202448-1

SDG No.:

Matrix: Water Level: Low Lab File ID: W10022303.d

Lab ID: LCS 480-644800/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
2,4,5-Trichlorophenol	32.0	28.4	89	65-126	
2,4,6-Trichlorophenol	32.0	27.6	86	64-120	
2,4-Dichlorophenol	32.0	27.5	86	63-120	
2,4-Dimethylphenol	32.0	26.1	81	47-120	
2,4-Dinitrophenol	64.0	58.6	92	31-137	
2,4-Dinitrotoluene	32.0	30.8	96	69-120	
2,6-Dinitrotoluene	32.0	30.1	94	68-120	
2-Chloronaphthalene	32.0	25.3	79	58-120	
2-Chlorophenol	32.0	25.9	81	48-120	
2-Methylnaphthalene	32.0	22.1	69	59-120	
2-Methylphenol	32.0	29.9	94	39-120	
2-Nitroaniline	32.0	31.1	97	54-127	
2-Nitrophenol	32.0	28.2	88	52-125	
3,3'-Dichlorobenzidine	64.0	64.0	100	49-135	
3-Nitroaniline	32.0	29.5	92	51-120	
4,6-Dinitro-2-methylphenol	64.0	64.6	101	46-136	
4-Bromophenyl phenyl ether	32.0	28.0	88	65-120	
4-Chloro-3-methylphenol	32.0	26.3	82	61-123	
4-Chloroaniline	32.0	21.7	68	30-120	
4-Chlorophenyl phenyl ether	32.0	25.9	81	62-120	
4-Methylphenol	32.0	26.6	83	29-131	
4-Nitroaniline	32.0	36.6	114	65-120	
4-Nitrophenol	64.0	42.7	67	45-120	
Acenaphthene	32.0	27.4	86	60-120	
Acenaphthylene	32.0	28.9	90	63-120	
Acetophenone	32.0	27.6	86	45-120	
Anthracene	32.0	32.8	102	67-120	
Atrazine	64.0	64.1	100	71-130	
Benzaldehyde	64.0	55.1	86	10-140	
Benzo[a]anthracene	32.0	32.4	101	70-121	
Benzo[a]pyrene	32.0	32.4	101	60-123	
Benzo[b]fluoranthene	32.0	34.5	108	66-126	
Benzo[g,h,i]perylene	32.0	31.8	99	66-150	
Benzo[k]fluoranthene	32.0	31.9	100	65-124	
Biphenyl	32.0	26.2	82	59-120	
bis (2-chloroisopropyl) ether	32.0	32.8	103	21-136	
Bis(2-chloroethoxy)methane	32.0	28.6	89	50-128	
Bis(2-chloroethyl)ether	32.0	28.3	89	44-120	
Bis(2-ethylhexyl) phthalate	32.0	34.4	107	63-139	
Butyl benzyl phthalate	32.0	35.5	111	70-129	
Caprolactam	64.0	25.1	39	22-120	
Carbazole	32.0	51.0	159	66-123	*+

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-202448-1

SDG No.:

Matrix: Water Level: Low Lab File ID: W10022304.d

Lab ID: 480-202448-3 MS Client ID: MW1-100522 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
2,4,5-Trichlorophenol	33.3	ND	27.7	83	65-126	
2,4,6-Trichlorophenol	33.3	ND	28.0	84	64-120	
2,4-Dichlorophenol	33.3	ND	26.5	80	48-132	
2,4-Dimethylphenol	33.3	ND	24.5	74	39-130	
2,4-Dinitrophenol	66.7	ND	64.0	96	21-150	
2,4-Dinitrotoluene	33.3	ND	33.1	99	54-138	
2,6-Dinitrotoluene	33.3	ND	31.1	93	17-150	
2-Chloronaphthalene	33.3	ND	24.9	75	52-124	
2-Chlorophenol	33.3	ND	25.3	76	48-120	
2-Methylnaphthalene	33.3	ND	21.5	65	34-140	
2-Methylphenol	33.3	ND	28.0	84	46-120	
2-Nitroaniline	33.3	ND	31.6	95	44-136	
2-Nitrophenol	33.3	ND	26.9	81	38-141	
3,3'-Dichlorobenzidine	66.7	ND	65.5	98	10-150	
3-Nitroaniline	33.3	ND	29.4	88	32-150	
4,6-Dinitro-2-methylphenol	66.7	ND	69.1	104	38-150	
4-Bromophenyl phenyl ether	33.3	ND	28.9	87	63-126	
4-Chloro-3-methylphenol	33.3	ND	26.5	80	64-127	
4-Chloroaniline	33.3	ND	22.4	67	16-124	
4-Chlorophenyl phenyl ether	33.3	ND	27.7	83	61-120	
4-Methylphenol	33.3	ND	25.3	76	36-120	
4-Nitroaniline	33.3	ND	34.4	103	32-150	
4-Nitrophenol	66.7	ND	44.7	67	23-132	
Acenaphthene	33.3	ND	28.2	84	48-120	
Acenaphthylene	33.3	ND	29.7	89	63-120	
Acetophenone	33.3	ND	26.0	78	53-120	
Anthracene	33.3	ND	35.5	107	65-122	
Atrazine	66.7	ND	65.7	99	50-150	
Benzaldehyde	66.7	ND	50.0	75	10-150	
Benzo[a]anthracene	33.3	ND	32.5	97	43-124	
Benzo[a]pyrene	33.3	ND	33.1	99	23-125	
Benzo[b]fluoranthene	33.3	ND	33.0	99	27-127	
Benzo[g,h,i]perylene	33.3	ND	32.4	97	16-147	
Benzo[k]fluoranthene	33.3	ND	33.9	102	20-124	
Biphenyl	33.3	ND	26.2	79	57-120	
bis (2-chloroisopropyl) ether	33.3	ND	30.7	92	28-121	
Bis(2-chloroethoxy)methane	33.3	ND	27.6	83	44-128	
Bis(2-chloroethyl)ether	33.3	ND	27.7	83	45-120	
Bis(2-ethylhexyl) phthalate	33.3	ND	35.2	106	16-150	
Butyl benzyl phthalate	33.3	ND	36.4	109	51-140	
Caprolactam	66.7	ND	26.5	40	10-120	
Carbazole	33.3	ND	52.5	158	16-148	F1

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-202448-1

SDG No.:

Matrix: Water Level: Low Lab File ID: W10022305.d

Lab ID: 480-202448-3 MSD Client ID: MW1-100522 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2,4,5-Trichlorophenol	34.8	31.6	91	13	18	65-126	
2,4,6-Trichlorophenol	34.8	30.5	88	8	19	64-120	
2,4-Dichlorophenol	34.8	30.1	86	12	19	48-132	
2,4-Dimethylphenol	34.8	27.8	80	13	42	39-130	
2,4-Dinitrophenol	69.6	65.2	94	2	22	21-150	
2,4-Dinitrotoluene	34.8	33.3	96	1	20	54-138	
2,6-Dinitrotoluene	34.8	32.7	94	5	15	17-150	
2-Chloronaphthalene	34.8	28.9	83	15	21	52-124	
2-Chlorophenol	34.8	28.1	81	11	25	48-120	
2-Methylnaphthalene	34.8	25.6	73	17	21	34-140	
2-Methylphenol	34.8	32.3	93	14	27	46-120	
2-Nitroaniline	34.8	32.1	92	1	15	44-136	
2-Nitrophenol	34.8	29.6	85	10	18	38-141	
3,3'-Dichlorobenzidine	69.6	62.2	89	5	25	10-150	
3-Nitroaniline	34.8	30.8	89	5	19	32-150	
4,6-Dinitro-2-methylphenol	69.6	67.6	97	2	15	38-150	
4-Bromophenyl phenyl ether	34.8	30.7	88	6	15	63-126	
4-Chloro-3-methylphenol	34.8	28.1	81	6	27	64-127	
4-Chloroaniline	34.8	23.0	66	3	22	16-124	
4-Chlorophenyl phenyl ether	34.8	28.4	82	3	16	61-120	
4-Methylphenol	34.8	29.8	86	16	24	36-120	
4-Nitroaniline	34.8	36.4	105	6	24	32-150	
4-Nitrophenol	69.6	48.2	69	8	48	23-132	
Acenaphthene	34.8	31.1	89	10	24	48-120	
Acenaphthylene	34.8	32.2	92	8	18	63-120	
Acetophenone	34.8	29.6	85	13	20	53-120	
Anthracene	34.8	34.6	99	3	15	65-122	
Atrazine	69.6	65.5	94	0	20	50-150	
Benzaldehyde	69.6	59.1	85	17	20	10-150	
Benzo[a]anthracene	34.8	32.9	94	1	15	43-124	
Benzo[a]pyrene	34.8	33.7	97	2	15	23-125	
Benzo[b]fluoranthene	34.8	33.2	96	1	15	27-127	
Benzo[g,h,i]perylene	34.8	33.0	95	2	15	16-147	
Benzo[k]fluoranthene	34.8	35.2	101	4	22	20-124	
Biphenyl	34.8	30.1	87	14	20	57-120	
bis (2-chloroisopropyl) ether	34.8	35.4	102	14	24	28-121	
Bis(2-chloroethoxy)methane	34.8	31.1	90	12	17	44-128	
Bis(2-chloroethyl)ether	34.8	30.8	89	11	21	45-120	
Bis(2-ethylhexyl) phthalate	34.8	34.7	100	2	15	16-150	
Butyl benzyl phthalate	34.8	35.9	103	1	16	51-140	
Caprolactam	69.6	27.8	40	5	20	10-120	
Carbazole	34.8	51.8	149	1	20	16-148	F1

Column to be used to flag recovery and RPD values

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo | Job No.: 480-202448-1

SDG No.:

Lab Sample ID: CCVIS 480-644815/3 | Calibration Date: 10/12/2022 12:18

Instrument ID: HP5973W | Calib Start Date: 07/28/2022 16:59

GC Column: RXI-5Sil MS ID: 0.25(mm) | Calib End Date: 07/28/2022 20:12

Lab File ID: W10022286.d | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.4966	0.5192	0.0100	4180	4000	4.6	20.0
N-Nitrosodimethylamine	Ave	0.8184	0.8707	0.0100	4260	4000	6.4	50.0
Pyridine	Ave	0.8176	0.8111	0.0100	7940	8000	-0.8	50.0
Benzaldehyde	Ave	1.104	1.081	0.0100	7830	8000	-2.1	50.0
Phenol	Ave	1.573	1.618	0.8000	4110	4000	2.8	20.0
Aniline	Ave	1.721	1.759	0.0100	4090	4000	2.2	20.0
Bis(2-chloroethyl)ether	Ave	1.301	1.349	0.7000	4150	4000	3.7	20.0
2-Chlorophenol	Ave	1.349	1.368	0.8000	4060	4000	1.5	20.0
n-Decane	Ave	1.417	1.452	0.0100	4100	4000	2.5	20.0
1,3-Dichlorobenzene	Ave	1.591	1.541	0.0100	3880	4000	-3.1	20.0
1,4-Dichlorobenzene	Ave	1.602	1.592	0.0100	3970	4000	-0.7	20.0
Benzyl alcohol	Ave	0.8266	0.7373	0.0100	3570	4000	-10.8	20.0
1,2-Dichlorobenzene	Ave	1.516	1.487	0.0100	3920	4000	-1.9	20.0
2-Methylphenol	Ave	1.207	1.296	0.7000	4300	4000	7.4	20.0
bis (2-chloroisopropyl) ether	Ave	1.706	2.163	0.0100	5070	4000	26.8*	20.0
Indene	Lin2		0.7228	0.0100	24100	20000	20.7*	20.0
N-Nitrosodi-n-propylamine	Ave	0.8973	0.9106	0.5000	4060	4000	1.5	20.0
4-Methylphenol	Ave	1.254	1.258	0.6000	4010	4000	0.3	20.0
Acetophenone	Ave	1.913	1.841	0.0100	3850	4000	-3.8	20.0
Hexachloroethane	Ave	0.6344	0.6665	0.3000	4200	4000	5.1	20.0
Nitrobenzene	Ave	0.3845	0.3743	0.2000	3890	4000	-2.6	20.0
Isophorone	Ave	0.6532	0.6399	0.4000	3920	4000	-2.0	20.0
2-Nitrophenol	Lin2		0.1904	0.1000	3920	4000	-1.9	20.0
2,4-Dimethylphenol	Ave	0.3802	0.3407	0.2000	3580	4000	-10.4	20.0
Bis(2-chloroethoxy)methane	Ave	0.3747	0.3872	0.3000	4130	4000	3.3	20.0
Benzoic acid	Lin2		0.1800	0.0100	16700	20000	-16.3	50.0
2,4-Dichlorophenol	Ave	0.2873	0.2788	0.2000	3880	4000	-2.9	20.0
1,2,4-Trichlorobenzene	Ave	0.3170	0.2888	0.0100	3640	4000	-8.9	20.0
Naphthalene	Ave	1.026	1.034	0.7000	4030	4000	0.7	20.0
4-Chloroaniline	Ave	0.3667	0.3860	0.0100	4210	4000	5.2	20.0
2,6-Dichlorophenol	Ave	0.2919	0.2765	0.0100	3790	4000	-5.3	20.0
Hexachlorobutadiene	Ave	0.1875	0.1531	0.0100	3270	4000	-18.3	20.0
Caprolactam	Ave	0.0999	0.0986	0.0100	7900	8000	-1.3	50.0
4-Chloro-3-methylphenol	Ave	0.3083	0.2764	0.2000	3590	4000	-10.4	20.0
2-Methylnaphthalene	Ave	0.7053	0.6870	0.4000	3900	4000	-2.6	20.0
1-Methylnaphthalene	Ave	0.6639	0.6674	0.0100	4020	4000	0.5	20.0
Hexachlorocyclopentadiene	Lin2		0.2137	0.0500	2490	4000	-37.6*	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5462	0.4898	0.0100	3590	4000	-10.3	20.0
2,4,6-Trichlorophenol	Ave	0.3631	0.3288	0.2000	3620	4000	-9.4	20.0
2,4,5-Trichlorophenol	Lin2		0.3575	0.2000	3790	4000	-5.2	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-202448-1

SDG No.:

Lab Sample ID: CCVIS 480-644815/3 Calibration Date: 10/12/2022 12:18

Instrument ID: HP5973W Calib Start Date: 07/28/2022 16:59

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 07/28/2022 20:12

Lab File ID: W10022286.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Biphenyl	Ave	1.529	1.562	0.0100	4090	4000	2.1	20.0
2-Chloronaphthalene	Ave	1.174	1.135	0.8000	3870	4000	-3.3	20.0
2-Nitroaniline	Lin2		0.3537	0.0100	3950	4000	-1.4	20.0
Dimethyl phthalate	Ave	1.347	1.287	0.0100	3820	4000	-4.5	20.0
1,3-Dinitrobenzene	Lin2		0.1115	0.0100	3920	4000	-2.0	20.0
2,6-Dinitrotoluene	Lin2		0.3017	0.2000	3930	4000	-1.7	20.0
Acenaphthylene	Ave	1.735	1.797	0.9000	4140	4000	3.5	20.0
3-Nitroaniline	Lin2		0.2947	0.0100	4260	4000	6.5	20.0
Acenaphthene	Ave	1.221	1.222	0.9000	4000	4000	0.0	20.0
2,4-Dinitrophenol	Lin2		0.1237	0.0100	6430	8000	-19.6	20.0
4-Nitrophenol	Lin2		0.1666	0.0100	6280	8000	-21.5*	20.0
2,4-Dinitrotoluene	Lin2		0.3827	0.2000	3860	4000	-3.5	20.0
Dibenzofuran	Ave	1.634	1.636	0.8000	4000	4000	0.1	20.0
2,3,4,6-Tetrachlorophenol	Lin2		0.2429	0.0100	3450	4000	-13.8	20.0
Hexadecane	Ave	0.8019	0.8661	0.0100	4320	4000	8.0	20.0
Diethyl phthalate	Ave	1.421	1.391	0.0100	3920	4000	-2.1	20.0
4-Chlorophenyl phenyl ether	Ave	0.6160	0.5684	0.4000	3690	4000	-7.7	20.0
Fluorene	Ave	1.317	1.357	0.9000	4120	4000	3.0	20.0
4-Nitroaniline	Lin2		0.3067	0.0100	4850	4000	21.3*	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.1069	0.0100	7130	8000	-10.8	20.0
Diphenylamine	Ave	0.6353	0.6649	0.0100	3580	3420	4.7	20.0
N-Nitrosodiphenylamine	Ave	0.5432	0.5685	0.0100	4190	4000	4.7	20.0
1,2-Diphenylhydrazine	Ave	1.424	1.536	0.0100	4320	4000	7.9	20.0
trans-Azobenzene	Ave	0.8272	0.9409	0.0100	4550	4000	13.7	20.0
4-Bromophenyl phenyl ether	Ave	0.2268	0.2111	0.1000	3720	4000	-6.9	20.0
Hexachlorobenzene	Ave	0.3013	0.2606	0.1000	3460	4000	-13.5	20.0
Atrazine	Ave	0.3655	0.3325	0.0100	7280	8000	-9.0	20.0
n-Octadecane	Ave	0.4838	0.5339	0.0100	4410	4000	10.4	20.0
Pentachlorophenol	Lin2		0.1219	0.0500	6540	8000	-18.3	20.0
Phenanthrene	Ave	1.139	1.198	0.7000	4210	4000	5.1	20.0
Anthracene	Ave	1.087	1.160	0.7000	4270	4000	6.7	20.0
Carbazole	Lin1		0.9132	0.0100	5150	4000	28.8*	20.0
Di-n-butyl phthalate	Ave	1.299	1.388	0.0100	4270	4000	6.8	20.0
Fluoranthene	Ave	1.100	1.153	0.6000	4190	4000	4.9	20.0
Benzidine	Lin1		0.3296	0.0100	7080	8000	-11.5	50.0
Pyrene	Ave	1.279	1.362	0.6000	4260	4000	6.5	20.0
Butyl benzyl phthalate	Ave	0.6585	0.6906	0.0100	4190	4000	4.9	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.9649	0.9910	0.0100	4110	4000	2.7	20.0
3,3'-Dichlorobenzidine	Ave	0.4243	0.4070	0.0100	7670	8000	-4.1	50.0
Benzo[a]anthracene	Ave	1.274	1.251	0.8000	3930	4000	-1.8	20.0
Chrysene	Ave	1.185	1.149	0.7000	3880	4000	-3.1	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo | Job No.: 480-202448-1

SDG No.:

Lab Sample ID: CCVIS 480-645033/3 | Calibration Date: 10/13/2022 01:16

Instrument ID: HP5973W | Calib Start Date: 07/28/2022 16:59

GC Column: RXI-5Sil MS ID: 0.25(mm) | Calib End Date: 07/28/2022 20:12

Lab File ID: W10022314.d | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.4966	0.5286	0.0100	4260	4000	6.4	20.0
N-Nitrosodimethylamine	Ave	0.8184	0.8633	0.0100	4220	4000	5.5	50.0
Pyridine	Ave	0.8176	0.8215	0.0100	8040	8000	0.5	50.0
Benzaldehyde	Ave	1.104	1.069	0.0100	7750	8000	-3.1	50.0
Phenol	Ave	1.573	1.661	0.8000	4220	4000	5.6	20.0
Aniline	Ave	1.721	1.765	0.0100	4100	4000	2.6	20.0
Bis(2-chloroethyl)ether	Ave	1.301	1.397	0.7000	4300	4000	7.4	20.0
2-Chlorophenol	Ave	1.349	1.351	0.8000	4010	4000	0.2	20.0
n-Decane	Ave	1.417	1.476	0.0100	4170	4000	4.1	20.0
1,3-Dichlorobenzene	Ave	1.591	1.561	0.0100	3920	4000	-1.9	20.0
1,4-Dichlorobenzene	Ave	1.602	1.618	0.0100	4040	4000	1.0	20.0
Benzyl alcohol	Ave	0.8266	0.7612	0.0100	3680	4000	-7.9	20.0
1,2-Dichlorobenzene	Ave	1.516	1.501	0.0100	3960	4000	-1.0	20.0
2-Methylphenol	Ave	1.207	1.289	0.7000	4270	4000	6.8	20.0
bis (2-chloroisopropyl) ether	Ave	1.706	2.128	0.0100	4990	4000	24.8*	20.0
Indene	Lin2		0.7184	0.0100	24000	20000	20.0	20.0
N-Nitrosodi-n-propylamine	Ave	0.8973	0.9229	0.5000	4110	4000	2.8	20.0
4-Methylphenol	Ave	1.254	1.271	0.6000	4050	4000	1.4	20.0
Acetophenone	Ave	1.913	1.866	0.0100	3900	4000	-2.5	20.0
Hexachloroethane	Ave	0.6344	0.6612	0.3000	4170	4000	4.2	20.0
Nitrobenzene	Ave	0.3845	0.3680	0.2000	3830	4000	-4.3	20.0
Isophorone	Ave	0.6532	0.6431	0.4000	3940	4000	-1.5	20.0
2-Nitrophenol	Lin2		0.1801	0.1000	3710	4000	-7.2	20.0
2,4-Dimethylphenol	Ave	0.3802	0.3341	0.2000	3520	4000	-12.1	20.0
Bis(2-chloroethoxy)methane	Ave	0.3747	0.3793	0.3000	4050	4000	1.2	20.0
Benzoic acid	Lin2		0.1695	0.0100	15800	20000	-20.8	50.0
2,4-Dichlorophenol	Ave	0.2873	0.2710	0.2000	3770	4000	-5.7	20.0
1,2,4-Trichlorobenzene	Ave	0.3170	0.2935	0.0100	3700	4000	-7.4	20.0
Naphthalene	Ave	1.026	1.023	0.7000	3990	4000	-0.3	20.0
4-Chloroaniline	Ave	0.3667	0.3954	0.0100	4310	4000	7.8	20.0
2,6-Dichlorophenol	Ave	0.2919	0.2730	0.0100	3740	4000	-6.5	20.0
Hexachlorobutadiene	Ave	0.1875	0.1513	0.0100	3230	4000	-19.3	20.0
Caprolactam	Ave	0.0999	0.0950	0.0100	7610	8000	-4.9	50.0
4-Chloro-3-methylphenol	Ave	0.3083	0.2725	0.2000	3540	4000	-11.6	20.0
2-Methylnaphthalene	Ave	0.7053	0.6768	0.4000	3840	4000	-4.0	20.0
1-Methylnaphthalene	Ave	0.6639	0.6539	0.0100	3940	4000	-1.5	20.0
Hexachlorocyclopentadiene	Lin2		0.1864	0.0500	2190	4000	-45.2*	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5462	0.4731	0.0100	3460	4000	-13.4	20.0
2,4,6-Trichlorophenol	Ave	0.3631	0.3353	0.2000	3690	4000	-7.6	20.0
2,4,5-Trichlorophenol	Lin2		0.3182	0.2000	3380	4000	-15.6	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo | Job No.: 480-202448-1

SDG No.:

Lab Sample ID: CCVIS 480-645033/3 | Calibration Date: 10/13/2022 01:16

Instrument ID: HP5973W | Calib Start Date: 07/28/2022 16:59

GC Column: RXI-5Sil MS ID: 0.25(mm) | Calib End Date: 07/28/2022 20:12

Lab File ID: W10022314.d | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Biphenyl	Ave	1.529	1.514	0.0100	3960	4000	-1.0	20.0
2-Chloronaphthalene	Ave	1.174	1.122	0.8000	3820	4000	-4.4	20.0
2-Nitroaniline	Lin2		0.3421	0.0100	3820	4000	-4.5	20.0
Dimethyl phthalate	Ave	1.347	1.260	0.0100	3740	4000	-6.4	20.0
1,3-Dinitrobenzene	Lin2		0.1102	0.0100	3880	4000	-3.1	20.0
2,6-Dinitrotoluene	Lin2		0.2889	0.2000	3770	4000	-5.8	20.0
Acenaphthylene	Ave	1.735	1.737	0.9000	4000	4000	0.0	20.0
3-Nitroaniline	Lin2		0.2963	0.0100	4280	4000	7.0	20.0
Acenaphthene	Ave	1.221	1.221	0.9000	4000	4000	-0.0	20.0
2,4-Dinitrophenol	Lin2		0.0996	0.0100	5300	8000	-33.7*	20.0
4-Nitrophenol	Lin2		0.1533	0.0100	5800	8000	-27.5*	20.0
2,4-Dinitrotoluene	Lin2		0.3962	0.2000	3990	4000	-0.2	20.0
Dibenzofuran	Ave	1.634	1.611	0.8000	3940	4000	-1.4	20.0
2,3,4,6-Tetrachlorophenol	Lin2		0.2347	0.0100	3340	4000	-16.6	20.0
Hexadecane	Ave	0.8019	0.8458	0.0100	4220	4000	5.5	20.0
Diethyl phthalate	Ave	1.421	1.378	0.0100	3880	4000	-3.0	20.0
4-Chlorophenyl phenyl ether	Ave	0.6160	0.5545	0.4000	3600	4000	-10.0	20.0
Fluorene	Ave	1.317	1.317	0.9000	4000	4000	-0.0	20.0
4-Nitroaniline	Lin2		0.2854	0.0100	4510	4000	12.7	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.1066	0.0100	7110	8000	-11.1	20.0
Diphenylamine	Ave	0.6353	0.6696	0.0100	3600	3420	5.4	20.0
N-Nitrosodiphenylamine	Ave	0.5432	0.5725	0.0100	4220	4000	5.4	20.0
1,2-Diphenylhydrazine	Ave	1.424	1.535	0.0100	4310	4000	7.8	20.0
trans-Azobenzene	Ave	0.8272	0.9652	0.0100	4670	4000	16.7	20.0
4-Bromophenyl phenyl ether	Ave	0.2268	0.2105	0.1000	3710	4000	-7.2	20.0
Hexachlorobenzene	Ave	0.3013	0.2637	0.1000	3500	4000	-12.5	20.0
Atrazine	Ave	0.3655	0.3339	0.0100	7310	8000	-8.6	20.0
n-Octadecane	Ave	0.4838	0.5400	0.0100	4460	4000	11.6	20.0
Pentachlorophenol	Lin2		0.1153	0.0500	6210	8000	-22.3*	20.0
Phenanthrene	Ave	1.139	1.219	0.7000	4280	4000	7.0	20.0
Anthracene	Ave	1.087	1.144	0.7000	4210	4000	5.3	20.0
Carbazole	Lin1		0.9918	0.0100	5630	4000	40.8*	20.0
Di-n-butyl phthalate	Ave	1.299	1.407	0.0100	4330	4000	8.3	20.0
Fluoranthene	Ave	1.100	1.142	0.6000	4160	4000	3.9	20.0
Benzidine	Lin1		0.3933	0.0100	8480	8000	6.0	50.0
Pyrene	Ave	1.279	1.394	0.6000	4360	4000	9.0	20.0
Butyl benzyl phthalate	Ave	0.6585	0.7107	0.0100	4320	4000	7.9	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.9649	1.026	0.0100	4250	4000	6.3	20.0
3,3'-Dichlorobenzidine	Ave	0.4243	0.3980	0.0100	7500	8000	-6.2	50.0
Benzo[a]anthracene	Ave	1.274	1.278	0.8000	4010	4000	0.3	20.0
Chrysene	Ave	1.185	1.175	0.7000	3970	4000	-0.9	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo | Job No.: 480-202448-1

SDG No.:

Lab Sample ID: CCVIS 480-645318/3 | Calibration Date: 10/13/2022 16:11

Instrument ID: HP5973W | Calib Start Date: 07/28/2022 16:59

GC Column: RXI-5Sil MS ID: 0.25(mm) | Calib End Date: 07/28/2022 20:12

Lab File ID: W10022327.d | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.4966	0.5139	0.0100	4140	4000	3.5	20.0
N-Nitrosodimethylamine	Ave	0.8184	0.8490	0.0100	4150	4000	3.7	50.0
Pyridine	Ave	0.8176	0.8138	0.0100	7960	8000	-0.5	50.0
Benzaldehyde	Ave	1.104	1.065	0.0100	7720	8000	-3.5	50.0
Phenol	Ave	1.573	1.613	0.8000	4100	4000	2.5	20.0
Aniline	Ave	1.721	1.767	0.0100	4110	4000	2.7	20.0
Bis(2-chloroethyl)ether	Ave	1.301	1.373	0.7000	4220	4000	5.5	20.0
2-Chlorophenol	Ave	1.349	1.354	0.8000	4020	4000	0.4	20.0
n-Decane	Ave	1.417	1.428	0.0100	4030	4000	0.8	20.0
1,3-Dichlorobenzene	Ave	1.591	1.548	0.0100	3890	4000	-2.7	20.0
1,4-Dichlorobenzene	Ave	1.602	1.597	0.0100	3990	4000	-0.4	20.0
Benzyl alcohol	Ave	0.8266	0.7361	0.0100	3560	4000	-10.9	20.0
1,2-Dichlorobenzene	Ave	1.516	1.508	0.0100	3980	4000	-0.5	20.0
2-Methylphenol	Ave	1.207	1.324	0.7000	4390	4000	9.7	20.0
bis (2-chloroisopropyl) ether	Ave	1.706	2.155	0.0100	5050	4000	26.3*	20.0
Indene	Lin2		0.7254	0.0100	24200	20000	21.1*	20.0
N-Nitrosodi-n-propylamine	Ave	0.8973	0.9096	0.5000	4050	4000	1.4	20.0
4-Methylphenol	Ave	1.254	1.258	0.6000	4010	4000	0.3	20.0
Acetophenone	Ave	1.913	1.903	0.0100	3980	4000	-0.5	20.0
Hexachloroethane	Ave	0.6344	0.6785	0.3000	4280	4000	6.9	20.0
Nitrobenzene	Ave	0.3845	0.3721	0.2000	3870	4000	-3.2	20.0
Isophorone	Ave	0.6532	0.6414	0.4000	3930	4000	-1.8	20.0
2-Nitrophenol	Lin2		0.1874	0.1000	3860	4000	-3.4	20.0
2,4-Dimethylphenol	Ave	0.3802	0.3506	0.2000	3690	4000	-7.8	20.0
Bis(2-chloroethoxy)methane	Ave	0.3747	0.3860	0.3000	4120	4000	3.0	20.0
Benzoic acid	Lin2		0.1688	0.0100	15800	20000	-21.2	50.0
2,4-Dichlorophenol	Ave	0.2873	0.2791	0.2000	3890	4000	-2.8	20.0
1,2,4-Trichlorobenzene	Ave	0.3170	0.2972	0.0100	3750	4000	-6.2	20.0
Naphthalene	Ave	1.026	1.032	0.7000	4020	4000	0.6	20.0
4-Chloroaniline	Ave	0.3667	0.4018	0.0100	4380	4000	9.6	20.0
2,6-Dichlorophenol	Ave	0.2919	0.2741	0.0100	3760	4000	-6.1	20.0
Hexachlorobutadiene	Ave	0.1875	0.1500	0.0100	3200	4000	-20.0	20.0
Caprolactam	Ave	0.0999	0.0980	0.0100	7840	8000	-1.9	50.0
4-Chloro-3-methylphenol	Ave	0.3083	0.2763	0.2000	3580	4000	-10.4	20.0
2-Methylnaphthalene	Ave	0.7053	0.6939	0.4000	3930	4000	-1.6	20.0
1-Methylnaphthalene	Ave	0.6639	0.6709	0.0100	4040	4000	1.1	20.0
Hexachlorocyclopentadiene	Lin2		0.1962	0.0500	2300	4000	-42.5*	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.5462	0.4733	0.0100	3470	4000	-13.3	20.0
2,4,6-Trichlorophenol	Ave	0.3631	0.3216	0.2000	3540	4000	-11.4	20.0
2,4,5-Trichlorophenol	Lin2		0.3330	0.2000	3530	4000	-11.7	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-202448-1

SDG No.:

Lab Sample ID: CCVIS 480-645318/3 Calibration Date: 10/13/2022 16:11

Instrument ID: HP5973W Calib Start Date: 07/28/2022 16:59

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 07/28/2022 20:12

Lab File ID: W10022327.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Biphenyl	Ave	1.529	1.528	0.0100	4000	4000	-0.0	20.0
2-Chloronaphthalene	Ave	1.174	1.101	0.8000	3750	4000	-6.2	20.0
2-Nitroaniline	Lin2		0.3355	0.0100	3750	4000	-6.4	20.0
Dimethyl phthalate	Ave	1.347	1.276	0.0100	3790	4000	-5.3	20.0
1,3-Dinitrobenzene	Lin2		0.1089	0.0100	3830	4000	-4.2	20.0
2,6-Dinitrotoluene	Lin2		0.2895	0.2000	3780	4000	-5.6	20.0
Acenaphthylene	Ave	1.735	1.755	0.9000	4050	4000	1.2	20.0
3-Nitroaniline	Lin2		0.3032	0.0100	4380	4000	9.6	20.0
Acenaphthene	Ave	1.221	1.205	0.9000	3950	4000	-1.3	20.0
2,4-Dinitrophenol	Lin2		0.1170	0.0100	6120	8000	-23.5*	20.0
4-Nitrophenol	Lin2		0.1469	0.0100	5570	8000	-30.4*	20.0
2,4-Dinitrotoluene	Lin2		0.3801	0.2000	3830	4000	-4.2	20.0
Dibenzofuran	Ave	1.634	1.574	0.8000	3850	4000	-3.7	20.0
2,3,4,6-Tetrachlorophenol	Lin2		0.2378	0.0100	3380	4000	-15.5	20.0
Hexadecane	Ave	0.8019	0.8304	0.0100	4140	4000	3.5	20.0
Diethyl phthalate	Ave	1.421	1.351	0.0100	3800	4000	-4.9	20.0
4-Chlorophenyl phenyl ether	Ave	0.6160	0.5576	0.4000	3620	4000	-9.5	20.0
Fluorene	Ave	1.317	1.301	0.9000	3950	4000	-1.2	20.0
4-Nitroaniline	Lin2		0.2473	0.0100	3890	4000	-2.7	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.1131	0.0100	7520	8000	-6.0	20.0
Diphenylamine	Ave	0.6353	0.6694	0.0100	3600	3420	5.4	20.0
N-Nitrosodiphenylamine	Ave	0.5432	0.5724	0.0100	4210	4000	5.4	20.0
1,2-Diphenylhydrazine	Ave	1.424	1.487	0.0100	4180	4000	4.5	20.0
trans-Azobenzene	Ave	0.8272	0.9387	0.0100	4540	4000	13.5	20.0
4-Bromophenyl phenyl ether	Ave	0.2268	0.2093	0.1000	3690	4000	-7.7	20.0
Hexachlorobenzene	Ave	0.3013	0.2610	0.1000	3470	4000	-13.4	20.0
Atrazine	Ave	0.3655	0.3210	0.0100	7030	8000	-12.2	20.0
n-Octadecane	Ave	0.4838	0.5374	0.0100	4440	4000	11.1	20.0
Pentachlorophenol	Lin2		0.1183	0.0500	6360	8000	-20.5*	20.0
Phenanthrene	Ave	1.139	1.197	0.7000	4200	4000	5.1	20.0
Anthracene	Ave	1.087	1.189	0.7000	4380	4000	9.4	20.0
Carbazole	Lin1		0.9783	0.0100	5550	4000	38.7*	20.0
Di-n-butyl phthalate	Ave	1.299	1.413	0.0100	4350	4000	8.8	20.0
Fluoranthene	Ave	1.100	1.153	0.6000	4200	4000	4.9	20.0
Benzidine	Lin1		0.3735	0.0100	8050	8000	0.6	50.0
Pyrene	Ave	1.279	1.368	0.6000	4280	4000	7.0	20.0
Butyl benzyl phthalate	Ave	0.6585	0.7095	0.0100	4310	4000	7.7	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.9649	1.008	0.0100	4180	4000	4.5	20.0
3,3'-Dichlorobenzidine	Ave	0.4243	0.3857	0.0100	7270	8000	-9.1	50.0
Benzo[a]anthracene	Ave	1.274	1.274	0.8000	4000	4000	-0.0	20.0
Chrysene	Ave	1.185	1.166	0.7000	3940	4000	-1.6	20.0

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-202448-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-644800/1-A

Matrix: Water | Lab File ID: W10022302.d

Analysis Method: 8270D | Date Collected:

Extract. Method: 3510C | Date Extracted: 10/11/2022 08:43

Sample wt/vol: 250(mL) | Date Analyzed: 10/12/2022 19:43

Con. Extract Vol.: 1(mL) | Dilution Factor: 1

Injection Volume: 2(uL) | GC Column: RXI-5Sil MS ID: 0.25(mm)

% Moisture: % Solids: | GPC Cleanup:(Y/N) N

Cleanup Factor: | Level: (low/med) Low

Analysis Batch No.: 644815 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
191-24-2	Benzo[g,h,i]perylene	ND		5.0	0.35
207-08-9	Benzo[k]fluoranthene	ND		5.0	0.73
92-52-4	Biphenyl	ND		5.0	0.65
108-60-1	bis (2-chloroisopropyl) ether	ND		5.0	0.52
111-91-1	Bis(2-chloroethoxy)methane	ND		5.0	0.35
111-44-4	Bis(2-chloroethyl)ether	ND		5.0	0.40
117-81-7	Bis(2-ethylhexyl) phthalate	ND		5.0	2.2
85-68-7	Butyl benzyl phthalate	ND		5.0	1.0
105-60-2	Caprolactam	ND		5.0	2.2
86-74-8	Carbazole	ND		5.0	0.30
218-01-9	Chrysene	ND		5.0	0.33
53-70-3	Dibenz(a,h)anthracene	ND		5.0	0.42
132-64-9	Dibenzofuran	ND		10	0.51
84-66-2	Diethyl phthalate	4.29	J	5.0	0.22
131-11-3	Dimethyl phthalate	ND		5.0	0.36
84-74-2	Di-n-butyl phthalate	ND		5.0	0.31
117-84-0	Di-n-octyl phthalate	ND		5.0	0.47
206-44-0	Fluoranthene	ND		5.0	0.40
86-73-7	Fluorene	ND		5.0	0.36
118-74-1	Hexachlorobenzene	ND		5.0	0.51
87-68-3	Hexachlorobutadiene	ND		5.0	0.68
77-47-4	Hexachlorocyclopentadiene	ND		5.0	0.59
67-72-1	Hexachloroethane	ND		5.0	0.59
193-39-5	Indeno[1,2,3-cd]pyrene	ND		5.0	0.47
78-59-1	Isophorone	ND		5.0	0.43
91-20-3	Naphthalene	ND		5.0	0.76
98-95-3	Nitrobenzene	ND		5.0	0.29
621-64-7	N-Nitrosodi-n-propylamine	ND		5.0	0.54
86-30-6	N-Nitrosodiphenylamine	ND		5.0	0.51
87-86-5	Pentachlorophenol	ND		10	2.2
85-01-8	Phenanthrene	ND		5.0	0.44
108-95-2	Phenol	ND		5.0	0.39

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 480-202448-1

SDG No.:

Instrument ID: LC812 Start Date: 10/17/2022 13:42

Analysis Batch Number: 184763 End Date: 10/17/2022 18:45

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		10/17/2022 13:42	1		C-18 4.6(mm)
ZZZZZ		10/17/2022 13:51	1		C-18 4.6(mm)
ZZZZZ		10/17/2022 13:59	1		C-18 4.6(mm)
CCB 200-184763/4		10/17/2022 14:07	1	PA221017A04.d	C-18 4.6(mm)
CCVLIS 200-184763/5		10/17/2022 14:15	1	PA221017A05.d	C-18 4.6(mm)
MB 200-184709/1-A		10/17/2022 14:23	1	PA221017A06.d	C-18 4.6(mm)
LLCS 200-184709/2-A		10/17/2022 14:31	1	PA221017A07.d	C-18 4.6(mm)
480-202448-2	FB-100522	10/17/2022 14:40	1	PA221017A08.d	C-18 4.6(mm)
480-202448-3	MW1-100522	10/17/2022 14:48	1	PA221017A09.d	C-18 4.6(mm)
480-202448-3 MS	MW1-100522 MS	10/17/2022 14:56	1	PA221017A10.d	C-18 4.6(mm)
480-202448-3 MSD	MW1-100522 MSD	10/17/2022 15:04	1	PA221017A11.d	C-18 4.6(mm)
480-202448-5	FDUP-100522	10/17/2022 15:12	1	PA221017A12.d	C-18 4.6(mm)
480-202448-6	ERB-100522	10/17/2022 15:20	1	PA221017A13.d	C-18 4.6(mm)
ZZZZZ		10/17/2022 15:29	1		C-18 4.6(mm)
ZZZZZ		10/17/2022 15:37	1		C-18 4.6(mm)
ZZZZZ		10/17/2022 15:45	1		C-18 4.6(mm)
ZZZZZ		10/17/2022 15:53	1		C-18 4.6(mm)
ZZZZZ		10/17/2022 16:01	1		C-18 4.6(mm)
ZZZZZ		10/17/2022 16:09	1		C-18 4.6(mm)
CCV 200-184763/20		10/17/2022 16:18	1	PA221017A20.d	C-18 4.6(mm)
ZZZZZ		10/17/2022 16:26	1		C-18 4.6(mm)
ZZZZZ		10/17/2022 16:34	20		C-18 4.6(mm)
ZZZZZ		10/17/2022 16:42	1		C-18 4.6(mm)
ZZZZZ		10/17/2022 16:50	5		C-18 4.6(mm)
ZZZZZ		10/17/2022 16:59	1		C-18 4.6(mm)
ZZZZZ		10/17/2022 17:07	20		C-18 4.6(mm)
ZZZZZ		10/17/2022 17:15	1		C-18 4.6(mm)
ZZZZZ		10/17/2022 17:23	1		C-18 4.6(mm)
ZZZZZ		10/17/2022 17:31	1		C-18 4.6(mm)
ZZZZZ		10/17/2022 17:39	1		C-18 4.6(mm)
CCV 200-184763/31		10/17/2022 17:48	1		C-18 4.6(mm)
ZZZZZ		10/17/2022 17:56	1		C-18 4.6(mm)
ZZZZZ		10/17/2022 18:04	1		C-18 4.6(mm)
ZZZZZ		10/17/2022 18:12	1		C-18 4.6(mm)
ZZZZZ		10/17/2022 18:20	1		C-18 4.6(mm)
ZZZZZ		10/17/2022 18:28	1		C-18 4.6(mm)
ZZZZZ		10/17/2022 18:37	1		C-18 4.6(mm)
CCV 200-184763/38		10/17/2022 18:45	1		C-18 4.6(mm)

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-202448-1

SDG No.:

ICV Source: MEI_10_CCVL_00471 Concentration Units: mg/L

CCV Source: MEI_10_CCVL_00471

Analyte	CCVL 480-645252/39 10/12/2022 18:54				CCVL 480-645252/51 10/12/2022 19:41							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	0.199	J	0.200	99	0.215		0.200	108				
Antimony	0.0183	J	0.0200	92	0.0189	J	0.0200	94				
Arsenic	0.0147	J	0.0150	98	0.0147	J	0.0150	98				
Barium	0.00221		0.00200	111	0.00221		0.00200	111				
Beryllium	0.00192	J	0.00200	96	0.00195	J	0.00200	98				
Cadmium	0.00185	J	0.00200	93	0.00182	J	0.00200	91				
Calcium	0.497	J	0.500	99	0.499	J	0.500	100				
Chromium	0.00369	J	0.00400	92	0.00381	J	0.00400	95				
Cobalt	0.00363	J	0.00400	91	0.00375	J	0.00400	94				
Copper	0.0103		0.0100	103	0.00942	J	0.0100	94				
Iron	0.0528		0.0500	106	0.0520		0.0500	104				
Lead					0.00932	J	0.0100	93				
Magnesium	0.200		0.200	100	0.199	J	0.200	99				
Manganese	0.00358		0.00300	119	0.00823		0.00300	274				
Nickel	0.00939	J	0.0100	94	0.00926	J	0.0100	93				
Potassium	0.535		0.500	107	0.612		0.500	122				
Selenium	0.0237	J	0.0250	95	0.0252		0.0250	101				
Silver	0.00579	J	0.00600	97	0.00605		0.00600	101				
Sodium	1.04		1.01	103	1.08		1.01	107				
Thallium	0.0183	J	0.0200	91	0.0185	J	0.0200	92				
Vanadium	0.00460	J	0.00500	92	0.00476	J	0.00500	95				
Zinc	0.00961	J	0.0100	96	0.00972	J	0.0100	97				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-202448-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-644854/6 10/10/2022 16:22		CCB 480-644854/20 10/10/2022 23:41		CCB 480-644854/32 10/11/2022 00:26			
		Found	C	Found	C	Found	C	Found	C
Aluminum, Dissolved	0.20	ND		ND		ND			
Antimony, Dissolved	0.020	ND		ND		ND			
Arsenic, Dissolved	0.015	ND		ND		ND			
Barium, Dissolved	0.0020	ND		ND		ND			
Cadmium, Dissolved	0.0020	ND		ND		ND			
Calcium, Dissolved	0.50	ND		ND		ND			
Chromium, Dissolved	0.0040	ND		ND		ND			
Cobalt, Dissolved	0.0040	ND		ND		ND			
Copper, Dissolved	0.010	ND		ND		0.00197	J		
Iron, Dissolved	0.050	ND		ND		ND			
Lead, Dissolved	0.010	ND		ND		ND			
Nickel, Dissolved	0.010	ND		ND		ND			
Potassium, Dissolved	0.50	ND		ND		ND			
Selenium, Dissolved	0.025	ND		ND		ND			
Sodium, Dissolved	1.0	ND		ND		ND			
Thallium, Dissolved	0.020	ND		ND		ND			
Vanadium, Dissolved	0.0050	ND		ND		ND			
Zinc, Dissolved	0.010	ND		ND		ND			
Beryllium	0.0020	ND		ND		ND			
Magnesium	0.20	ND		ND		ND			
Manganese	0.0030	ND		ND		ND			
Silver	0.0060	ND		ND		ND			

Italicized analytes were not requested for this

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins Buffalo Job No.: 480-202448-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: MB 480-644516/1-A

Instrument Code: ICAP2 Batch No.: 645159

CAS No.	Analyte	Concentration	C	Q	Method
7440-41-7	Beryllium, Dissolved	ND			6010C
7439-95-4	Magnesium, Dissolved	ND			6010C
7439-96-5	Manganese, Dissolved	0.00107	J		6010C
7782-49-2	Selenium, Dissolved	ND			6010C
7440-22-4	Silver, Dissolved	ND			6010C

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Buffalo Job No.: 480-202448-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: MB 480-644708/1-A

Instrument Code: ICAP2 Batch No.: 645252

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			6010C
7440-36-0	Antimony	ND			6010C
7440-38-2	Arsenic	ND			6010C
7440-39-3	Barium	ND			6010C
7440-41-7	Beryllium	ND			6010C
7440-43-9	Cadmium	ND			6010C
7440-70-2	Calcium	ND			6010C
7440-47-3	Chromium	ND			6010C
7440-48-4	Cobalt	ND			6010C
7440-50-8	Copper	ND			6010C
7439-89-6	Iron	ND			6010C
7439-92-1	Lead	ND			6010C
7439-95-4	Magnesium	ND			6010C
7439-96-5	Manganese	0.000540	J		6010C
7440-02-0	Nickel	ND			6010C
7440-09-7	Potassium	ND			6010C
7782-49-2	Selenium	ND			6010C
7440-22-4	Silver	ND			6010C
7440-23-5	Sodium	ND			6010C
7440-28-0	Thallium	ND			6010C
7440-62-2	Vanadium	ND			6010C
7440-66-6	Zinc	ND			6010C

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: MW1-100522 MS
Lab ID: 480-202448-3 MS
Lab Name: Eurofins Buffalo
Job No.: 480-202448-1
SDG No.:
Matrix: Water
Concentration Units: mg/L
% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	10.43		0.20		10.0	102	75-125		6010C
Antimony	0.213		ND		0.200	106	75-125		6010C
Arsenic	0.214		ND		0.201	107	75-125		6010C
Barium	0.320		0.11		0.200	106	75-125		6010C
Beryllium	0.220		ND		0.200	110	75-125		6010C
Cadmium	0.205		ND		0.200	103	75-125		6010C
Calcium	58.07		47.9		10.0	102	75-125	4	6010C
Chromium	0.204		ND		0.200	102	75-125		6010C
Cobalt	0.207		ND		0.200	104	75-125		6010C
Copper	0.211		ND		0.200	105	75-125		6010C
Iron	10.44		0.21		10.0	102	75-125		6010C
Lead	0.221		0.0031	J	0.201	108	75-125		6010C
Magnesium	17.84		8.1		10.0	97	75-125		6010C
Manganese	0.752		0.56		0.200	97	75-125	^+	6010C
Nickel	0.205		ND		0.200	103	75-125		6010C
Potassium	13.98		3.5		10.0	105	75-125		6010C
Selenium	0.212		ND		0.200	106	75-125		6010C
Silver	0.0531		ND		0.0500	106	75-125		6010C
Sodium	146.4		136		10.0	100	75-125	4	6010C
Thallium	0.202		ND		0.200	101	75-125		6010C
Vanadium	0.204		ND		0.201	102	75-125		6010C
Zinc	0.204		0.0016	J	0.200	101	75-125		6010C
Mercury	0.00677		ND		0.00667	101	80-120		7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: MW1-100522 MS
Lab ID: 480-202448-3 MS
Lab Name: Eurofins Buffalo
Job No.: 480-202448-1
SDG No.:
Matrix: Water
Concentration Units: mg/L
% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum, Dissolved	10.47		ND		10.0	105	75-125		6010C
Antimony, Dissolved	0.208		ND		0.200	104	75-125		6010C
Arsenic, Dissolved	0.211		ND		0.201	105	75-125		6010C
Barium, Dissolved	0.286		0.088		0.200	99	75-125		6010C
Beryllium, Dissolved	0.224		ND		0.200	112	75-125		6010C
Cadmium, Dissolved	0.200		ND		0.200	100	75-125		6010C
Calcium, Dissolved	51.43		41.0		10.0	104	75-125	4	6010C
Chromium, Dissolved	0.207		ND		0.200	104	75-125		6010C
Cobalt, Dissolved	0.205		ND		0.200	102	75-125		6010C
Copper, Dissolved	0.216		0.0017	J	0.200	107	75-125		6010C
Iron, Dissolved	10.58		ND		10.0	106	75-125		6010C
Lead, Dissolved	0.192		ND		0.201	96	75-125		6010C
Magnesium, Dissolved	17.25		7.0		10.0	102	75-125		6010C
Manganese, Dissolved	0.667		0.44		0.200	111	75-125		6010C
Nickel, Dissolved	0.207		ND		0.200	104	75-125		6010C
Potassium, Dissolved	12.94		3.0		10.0	99	75-125		6010C
Selenium, Dissolved	0.186		ND		0.200	93	75-125		6010C
Silver, Dissolved	0.0532		ND		0.0500	106	75-125		6010C
Sodium, Dissolved	133.3		124		10.0	93	75-125	4	6010C
Thallium, Dissolved	0.188		ND		0.200	94	75-125		6010C
Vanadium, Dissolved	0.210		ND		0.201	105	75-125		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: MW1-100522 MS
Lab ID: 480-202448-3 MS
Lab Name: Eurofins Buffalo
Job No.: 480-202448-1
SDG No.:
Matrix: Water
Concentration Units: mg/L
% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Zinc, Dissolved	0.213		ND		0.200	106	75-125		6010C
Mercury, Dissolved	0.00677		ND		0.00667	101	80-120		7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: MW1-100522 MSD
Lab ID: 480-202448-3 MSD
Lab Name: Eurofins Buffalo
Job No.: 480-202448-1
SDG No.:
Matrix: Water
Concentration Units: mg/L
% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	10.38		10.0	102	75-125	0	20		6010C
Antimony	0.208		0.200	104	75-125	3	20		6010C
Arsenic	0.210		0.201	105	75-125	2	20		6010C
Barium	0.320		0.200	106	75-125	0	20		6010C
Beryllium	0.216		0.200	108	75-125	2	20		6010C
Cadmium	0.202		0.200	101	75-125	2	20		6010C
Calcium	57.42		10.0	95	75-125	1	20	4	6010C
Chromium	0.200		0.200	100	75-125	2	20		6010C
Cobalt	0.202		0.200	101	75-125	2	20		6010C
Copper	0.206		0.200	103	75-125	2	20		6010C
Iron	10.26		10.0	100	75-125	2	20		6010C
Lead	0.216		0.201	106	75-125	2	20		6010C
Magnesium	17.64		10.0	95	75-125	1	20		6010C
Manganese	0.748		0.200	95	75-125	0	20	^+	6010C
Nickel	0.201		0.200	100	75-125	2	20		6010C
Potassium	13.84		10.0	104	75-125	1	20		6010C
Selenium	0.199		0.200	100	75-125	6	20		6010C
Silver	0.0525		0.0500	105	75-125	1	20		6010C
Sodium	147.6		10.0	113	75-125	1	20	4	6010C
Thallium	0.197		0.200	98	75-125	2	20		6010C
Vanadium	0.201		0.201	100	75-125	2	20		6010C
Zinc	0.200		0.200	99	75-125	2	20		6010C
Mercury	0.00667		0.00667	100	80-120	1	20		7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: MW1-100522 MSD
Lab ID: 480-202448-3 MSD
Lab Name: Eurofins Buffalo
Job No.: 480-202448-1
SDG No.:
Matrix: Water
Concentration Units: mg/L
% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum, Dissolved	10.48		10.0	105	75-125	0	20		6010C
Antimony, Dissolved	0.207		0.200	104	75-125	1	20		6010C
Arsenic, Dissolved	0.209		0.201	104	75-125	1	20		6010C
Barium, Dissolved	0.280		0.200	96	75-125	2	20		6010C
Beryllium, Dissolved	0.228		0.200	114	75-125	2	20		6010C
Cadmium, Dissolved	0.199		0.200	99	75-125	0	20		6010C
Calcium, Dissolved	48.81		10.0	78	75-125	5	20	4	6010C
Chromium, Dissolved	0.208		0.200	104	75-125	0	20		6010C
Cobalt, Dissolved	0.203		0.200	102	75-125	1	20		6010C
Copper, Dissolved	0.217		0.200	108	75-125	1	20		6010C
Iron, Dissolved	10.59		10.0	106	75-125	0	20		6010C
Lead, Dissolved	0.191		0.201	95	75-125	1	20		6010C
Magnesium, Dissolved	16.86		10.0	98	75-125	2	20		6010C
Manganese, Dissolved	0.630		0.200	93	75-125	6	20		6010C
Nickel, Dissolved	0.206		0.200	103	75-125	1	20		6010C
Potassium, Dissolved	12.85		10.0	98	75-125	1	20		6010C
Selenium, Dissolved	0.184		0.200	92	75-125	1	20		6010C
Silver, Dissolved	0.0528		0.0500	106	75-125	1	20		6010C
Sodium, Dissolved	131.1		10.0	72	75-125	2	20	4	6010C
Thallium, Dissolved	0.186		0.200	93	75-125	1	20		6010C
Vanadium, Dissolved	0.209		0.201	104	75-125	0	20		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

Job Narrative
480-204989-1

Comments
No additional comments.

Receipt
The samples were received on 12/22/2022 11:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.6º C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-654333 recovered above the upper control limit for 2-Hexanone and 4-Methyl-2-pentanone. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: FB_122122 (480-204989-1) and TB_122122 (480-204989-2).

Method 8260C: Due to the coelution of Ethyl Acetate with 2-Butanone (MEK) in the full spike solution, these analytes exceeded control limits in the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) associated with batch 480-654333 . The following samples were affected : FB_122122 (480-204989-1) and TB_122122 (480-204989-2).

Method 8260C: Internal standard (ISTD) response for the following sample was outside of acceptance limits: FDUP_122122 (480-204989-7). The sample(s) was not re-analyzed due to insufficient volume.

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-654942 recovered above the upper control limit for Cyclohexane, Methylcyclohexane, n-Butylbenzene, N-Propylbenzene, sec-Butylbenzene, tert-Butylbenzene, Trichlorofluoromethane and Vinyl chloride. The samples associated with this CCV were non-detects above the reporting limits for the affected analytes; therefore, the data have been reported. The associated samples are impacted: SB-2 (0-0.5) (480-204989-3), SB-2 (0.5-1) (480-204989-4), SB-2 (1-2) (480-204989-5), SB-2 (20.4-22.4) (480-204989-6) and FDUP_122122 (480-204989-7).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270D: The continuing calibration verification (CCV) associated with batch 480-654446 recovered above the upper control limit for Atrazine. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: FB_122122 (480-204989-1).

Method 8270D: The continuing calibration verification (CCV) analyzed in batch 480-654446 was outside the method criteria for the following analyte(s): Phenol-d5 (Surr). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-654446 recovered outside acceptance criteria, low biased, for 4-Methylphenol, 4-Nitrophenol, bis (2-chloroisopropyl) ether, Hexachlorocyclopentadiene and Pentachlorophenol. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270D: The minimum response factor (RF) criteria for the continuing calibration verification (CCV) analyzed in batch 480-654446 was outside criteria for the following analyte(s): Bis(2-chloroethoxy)methane. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered estimated.

Method 8270D: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 480-654335 and analytical batch 480-654446 recovered outside control limits for the following analytes: Atrazine. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 480-654335 and analytical batch 480-654446 recovered outside control limits for the following analytes: 2,4,5-Trichlorophenol.

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: FB_122122 (480-204989-1) and (LCSD 480-654335/3-A). These results have been reported and qualified.

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-654983 recovered above the upper control limit for 2,4-Dinitrophenol and 2,4-Dinitrotoluene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: SB-2 (1-2) (480-204989-5).

Method 8270D: The following samples were diluted due color, appearance, and viscosity: SB-2 (0-0.5) (480-204989-3), SB-2 (0.5-1) (480-204989-4), SB-2 (1-2) (480-204989-5), SB-2 (1-2) (480-204989-5[MS]), SB-2 (1-2) (480-204989-5[MSD]) and FDUP_122122 (480-204989-7). Elevated reporting limits (RL) are provided.

Method 8270D: The following samples were diluted due to the nature of the sample matrix: SB-2 (1-2) (480-204989-5[MS]) and SB-2 (1-2) (480-204989-5[MSD]). Because of this dilution, the surrogate spike and matrix spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method 8270D: The following samples were diluted due to the nature of the sample matrix: SB-2 (1-2) (480-204989-5) and FDUP_122122 (480-204989-7). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-654983 recovered above the upper control limit for 2,4-Dinitrophenol and 2,4-Dinitrotoluene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: SB-2 (0-0.5) (480-204989-3), SB-2 (0.5-1) (480-204989-4), SB-2 (20.4-22.4) (480-204989-6) and FDUP_122122 (480-204989-7).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6010C: The low level continuing calibration verification (CCVL 480-654754/39) recovered above the upper control limit for Total Iron. The samples associated with this CCVL were either less than the reporting limit (RL) for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of samples SB-2 (0.5-1) (480-204989-4), SB-2 (20.4-22.4) (480-204989-6) and FDUP_122122 (480-204989-7) was not performed.

Method 6010C: The serial dilution and post spike (480-204989-B-5-A PDS) and (480-204989-B-5-A SD ^5), associated with batch 480-654477, exceeded the quality control limits for Total Aluminum, Barium, and Zinc. Sample matrix is suspected, therefore, no corrective action was necessary.

Method 6010C: The serial dilution (480-204989-B-5-A SD ^5) associated with batch 480-654754, exhibited results outside the quality control limits for Total Arsenic, Calcium, Magnesium, and Manganese. However, the post digestion spike (PDS) was compliant, therefore no corrective action was necessary.

Method 6010C: The following samples were diluted due to the presence of Total Iron which interferes with Silver, Cadmium, Nickel, Lead, Antimony, and Vanadium: SB-2 (1-2) (480-204989-5), SB-2 (1-2) (480-204989-5[MS]), SB-2 (1-2) (480-204989-5[MSD]), (480-204989-B-5-A PDS ^2) and (480-204989-B-5-A SD ^10). Elevated reporting limits (RLs) are provided.

Method 6010C: The serial dilution and post spike (480-204989-B-5-A PDS ^2) and (480-204989-B-5-A SD ^10), associated with batch 480-654477, exceeded the quality control limits for Total Nickel and Lead. Sample matrix is suspected, therefore, no corrective action was necessary.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

LCMS

Method 537 (modified): Method 537 (modified): The “I” qualifier associated with sample FDUP_122122 (480-204989-7) is applied because the transition mass ratio for the indicated analyte(s) was outside of the established ratio limits. The qualitative identification has some degree of uncertainty, however analyst judgment was used to positively identify the analyte(s).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-654335.

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-654366.

Method 3550C: Due to the matrix, the following samples could not be concentrated to the final method required volume: SB-2 (1-2) (480-204989-5[MS]) and FDUP_122122 (480-204989-7). The reporting limits (RLs) are elevated proportionately.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Integral Consulting Inc
Job ID: 480-204989-1
Project/Site: Integral Consulting - EF1017 - Refractor

Client Sample ID: FB_122122
Lab Sample ID: 480-204989-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	0.27		0.050	0.019	mg/L	1		6010C	Total/NA
Manganese	0.00070	J B	0.0030	0.00040	mg/L	1		6010C	Total/NA
Nickel	0.0022	J B	0.010	0.0013	mg/L	1		6010C	Total/NA

Client Sample ID: TB_122122
Lab Sample ID: 480-204989-2

No Detections.

Client Sample ID: SB-2 (0-0.5)
Lab Sample ID: 480-204989-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.55	J B	6.5	0.40	ug/Kg	1	☼	8260C	Total/NA
Ethylbenzene	0.73	J	6.5	0.45	ug/Kg	1	☼	8260C	Total/NA
m,p-Xylene	1.8	J	13	1.1	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	2.9	J B	6.5	0.88	ug/Kg	1	☼	8260C	Total/NA
Xylenes, Total	1.8	J	13	1.1	ug/Kg	1	☼	8260C	Total/NA
Benzo[a]anthracene	140	J	1000	100	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	150	J	1000	150	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	120	J	1000	110	ug/Kg	5	☼	8270D	Total/NA
Butyl benzyl phthalate	250	J	1000	170	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	240	J	1000	110	ug/Kg	5	☼	8270D	Total/NA
Pyrene	200	J	1000	120	ug/Kg	5	☼	8270D	Total/NA
Aluminum	10700	B	12.4	5.5	mg/Kg	1	☼	6010C	Total/NA
Arsenic	7.2		2.5	0.50	mg/Kg	1	☼	6010C	Total/NA
Barium	87.5		0.62	0.14	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.54		0.25	0.035	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.20	J	0.25	0.037	mg/Kg	1	☼	6010C	Total/NA
Calcium	3270	B	62.1	4.1	mg/Kg	1	☼	6010C	Total/NA
Chromium	17.3		0.62	0.25	mg/Kg	1	☼	6010C	Total/NA
Cobalt	8.5		0.62	0.062	mg/Kg	1	☼	6010C	Total/NA
Copper	19.5		1.2	0.26	mg/Kg	1	☼	6010C	Total/NA
Iron	19700	B	12.4	4.3	mg/Kg	1	☼	6010C	Total/NA
Lead	26.5		1.2	0.30	mg/Kg	1	☼	6010C	Total/NA
Magnesium	3450	B	24.8	1.2	mg/Kg	1	☼	6010C	Total/NA
Manganese	508	B	0.25	0.040	mg/Kg	1	☼	6010C	Total/NA
Nickel	21.3		6.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Potassium	1920		37.2	24.8	mg/Kg	1	☼	6010C	Total/NA
Selenium	1.3	J	5.0	0.50	mg/Kg	1	☼	6010C	Total/NA
Silver	0.64	J	0.74	0.25	mg/Kg	1	☼	6010C	Total/NA
Sodium	60.7	J	174	16.1	mg/Kg	1	☼	6010C	Total/NA
Vanadium	16.1		0.62	0.14	mg/Kg	1	☼	6010C	Total/NA
Zinc	77.7		2.5	0.79	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.030		0.024	0.0054	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-2 (0.5-1)
Lab Sample ID: 480-204989-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.56	J B	6.6	0.41	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	2.1	J B	6.6	0.88	ug/Kg	1	☼	8260C	Total/NA
Fluoranthene	120	J	930	99	ug/Kg	5	☼	8270D	Total/NA
Aluminum	13000	B	11.3	5.0	mg/Kg	1	☼	6010C	Total/NA
Arsenic	9.2		2.3	0.45	mg/Kg	1	☼	6010C	Total/NA
Barium	63.8		0.57	0.12	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Matrix: Water Level: Low Lab File ID: D7454.d

Lab ID: LCS 480-654333/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	25.0	24.1	97	80-120	
1,1,1-Trichloroethane	25.0	26.6	106	73-126	
1,1,2,2-Tetrachloroethane	25.0	24.9	100	76-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.0	108	61-148	
1,1,2-Trichloroethane	25.0	23.8	95	76-122	
1,1-Dichloroethane	25.0	25.7	103	77-120	
1,1-Dichloroethene	25.0	23.9	95	66-127	
1,2,4-Trichlorobenzene	25.0	26.0	104	79-122	
1,2,4-Trimethylbenzene	25.0	25.0	100	76-121	
1,2-Dibromo-3-Chloropropane	25.0	28.7	115	56-134	
1,2-Dibromoethane	25.0	24.0	96	77-120	
1,2-Dichlorobenzene	25.0	23.8	95	80-124	
1,2-Dichloroethane	25.0	26.1	105	75-120	
1,2-Dichloropropane	25.0	24.6	99	76-120	
1,3,5-Trimethylbenzene	25.0	24.8	99	77-121	
1,3-Dichlorobenzene	25.0	23.7	95	77-120	
1,4-Dichlorobenzene	25.0	23.3	93	80-120	
2-Butanone (MEK)	125	261	209	57-140	*+
2-Hexanone	125	150	120	65-127	
4-Methyl-2-pentanone (MIBK)	125	147	118	71-125	
Acetone	125	144	115	56-142	
Benzene	25.0	23.7	95	71-124	
Bromodichloromethane	25.0	26.5	106	80-122	
Bromoform	25.0	29.9	120	61-132	
Bromomethane	25.0	25.7	103	55-144	
Carbon disulfide	25.0	26.3	105	59-134	
Carbon tetrachloride	25.0	27.7	111	72-134	
Chlorobenzene	25.0	22.8	91	80-120	
Chloroethane	25.0	24.2	97	69-136	
Chloroform	25.0	24.6	98	73-127	
Chloromethane	25.0	28.8	115	68-124	
cis-1,2-Dichloroethene	25.0	24.0	96	74-124	
cis-1,3-Dichloropropene	25.0	26.3	105	74-124	
Cyclohexane	25.0	27.2	109	59-135	
Dibromochloromethane	25.0	26.4	106	75-125	
Dichlorodifluoromethane	25.0	32.2	129	59-135	
Ethylbenzene	25.0	23.8	95	77-123	
Isopropylbenzene	25.0	23.7	95	77-122	
m,p-Xylene	25.0	23.4	94	76-122	
Methyl acetate	50.0	64.9	130	74-133	
Methyl tert-butyl ether	25.0	25.2	101	77-120	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Matrix: Water Level: Low Lab File ID: D7455.d

Lab ID: LCSD 480-654333/6 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	25.0	23.5	94	3	20	80-120	
1,1,1-Trichloroethane	25.0	25.1	101	6	15	73-126	
1,1,2,2-Tetrachloroethane	25.0	24.9	100	0	15	76-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	25.8	103	5	20	61-148	
1,1,2-Trichloroethane	25.0	24.1	96	1	15	76-122	
1,1-Dichloroethane	25.0	24.8	99	4	20	77-120	
1,1-Dichloroethene	25.0	23.0	92	4	16	66-127	
1,2,4-Trichlorobenzene	25.0	25.8	103	1	20	79-122	
1,2,4-Trimethylbenzene	25.0	24.3	97	3	20	76-121	
1,2-Dibromo-3-Chloropropane	25.0	29.0	116	1	15	56-134	
1,2-Dibromoethane	25.0	24.0	96	0	15	77-120	
1,2-Dichlorobenzene	25.0	23.4	93	2	20	80-124	
1,2-Dichloroethane	25.0	25.5	102	2	20	75-120	
1,2-Dichloropropane	25.0	23.9	96	3	20	76-120	
1,3,5-Trimethylbenzene	25.0	23.8	95	4	20	77-121	
1,3-Dichlorobenzene	25.0	22.6	91	5	20	77-120	
1,4-Dichlorobenzene	25.0	22.9	92	2	20	80-120	
2-Butanone (MEK)	125	259	207	1	20	57-140	*+
2-Hexanone	125	150	120	0	15	65-127	
4-Methyl-2-pentanone (MIBK)	125	148	118	1	35	71-125	
Acetone	125	144	115	0	15	56-142	
Benzene	25.0	22.6	91	5	13	71-124	
Bromodichloromethane	25.0	26.0	104	2	15	80-122	
Bromoform	25.0	30.1	120	1	15	61-132	
Bromomethane	25.0	24.2	97	6	15	55-144	
Carbon disulfide	25.0	25.2	101	4	15	59-134	
Carbon tetrachloride	25.0	26.4	106	5	15	72-134	
Chlorobenzene	25.0	22.1	88	3	25	80-120	
Chloroethane	25.0	23.3	93	4	15	69-136	
Chloroform	25.0	23.8	95	4	20	73-127	
Chloromethane	25.0	26.6	107	8	15	68-124	
cis-1,2-Dichloroethene	25.0	23.7	95	1	15	74-124	
cis-1,3-Dichloropropene	25.0	25.4	101	4	15	74-124	
Cyclohexane	25.0	26.1	105	4	20	59-135	
Dibromochloromethane	25.0	26.5	106	0	15	75-125	
Dichlorodifluoromethane	25.0	29.9	120	7	20	59-135	
Ethylbenzene	25.0	23.0	92	3	15	77-123	
Isopropylbenzene	25.0	22.8	91	4	20	77-122	
m,p-Xylene	25.0	22.4	89	5	16	76-122	
Methyl acetate	50.0	61.8	124	5	20	74-133	
Methyl tert-butyl ether	25.0	25.2	101	0	37	77-120	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: M08081.D

Lab ID: 480-204989-5 MS Client ID: SB-2 (1-2) MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	38.8	ND	32.6	84	74-127	
1,1,1-Trichloroethane	38.8	ND	40.9	105	77-121	
1,1,2,2-Tetrachloroethane	38.8	ND	39.5	102	80-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	38.8	ND	41.3	106	60-140	
1,1,2-Trichloroethane	38.8	ND	35.2	91	78-122	
1,1-Dichloroethane	38.8	ND	45.4	117	73-126	
1,1-Dichloroethene	38.8	ND	40.6	105	59-125	
1,2,4-Trichlorobenzene	38.8	ND	18.8	48	64-120	F1
1,2,4-Trimethylbenzene	38.8	ND	45.2	117	74-120	
1,2-Dibromo-3-Chloropropane	38.8	ND	26.1	67	63-124	
1,2-Dibromoethane	38.8	ND	30.6	79	78-120	
1,2-Dichlorobenzene	38.8	ND	34.3	88	75-120	
1,2-Dichloroethane	38.8	ND	38.5	99	77-122	
1,2-Dichloropropane	38.8	ND	42.0	108	75-124	
1,3,5-Trimethylbenzene	38.8	ND	46.8	121	74-120	F1
1,3-Dichlorobenzene	38.8	ND	35.6	92	74-120	
1,4-Dichlorobenzene	38.8	ND	33.0	85	73-120	
2-Butanone (MEK)	194	ND	143	74	70-134	
2-Hexanone	194	ND	145	75	59-130	
4-Methyl-2-pentanone (MIBK)	194	ND	163	84	65-133	
Acetone	194	ND	127	65	61-137	
Benzene	38.8	ND	42.6	110	79-127	
Bromodichloromethane	38.8	ND	36.6	94	80-122	
Bromoform	38.8	ND	21.6	56	68-126	F1
Bromomethane	38.8	ND	46.9	121	37-149	
Carbon disulfide	38.8	ND	37.4	96	64-131	
Carbon tetrachloride	38.8	ND	34.3	88	75-135	
Chlorobenzene	38.8	ND	35.9	93	76-124	
Chloroethane	38.8	ND	48.1	124	69-135	
Chloroform	38.8	0.37 J	40.8	104	80-120	
Chloromethane	38.8	ND	39.2	101	63-127	
cis-1,2-Dichloroethene	38.8	ND	40.7	105	80-120	
cis-1,3-Dichloropropene	38.8	ND	33.9	87	80-120	
Cyclohexane	38.8	ND	42.0	108	65-120	
Dibromochloromethane	38.8	ND	29.7	77	76-125	
Dichlorodifluoromethane	38.8	ND	37.2	96	57-142	
Ethylbenzene	38.8	ND	39.7	102	80-120	
Isopropylbenzene	38.8	ND	51.3	132	72-120	F1
m,p-Xylene	38.8	ND	37.3	96	70-130	
Methyl acetate	77.6	ND	76.7	99	55-136	
Methyl tert-butyl ether	38.8	ND	36.3	94	63-125	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: M08081.D

Lab ID: 480-204989-5 MS Client ID: SB-2 (1-2) MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Methylcyclohexane	38.8	ND	34.6	89	60-140	
Methylene Chloride	38.8	ND	43.2	111	61-127	
n-Butylbenzene	38.8	ND	35.7	92	70-120	
N-Propylbenzene	38.8	ND	47.2	122	70-130	
o-Xylene	38.8	ND	37.7	97	70-130	
sec-Butylbenzene	38.8	ND	43.4	112	74-120	
Styrene	38.8	ND	32.5	84	80-120	
tert-Butylbenzene	38.8	ND	46.9	121	73-120	F1
Tetrachloroethene	38.8	1.7 J	38.2	94	74-122	
Toluene	38.8	ND	40.9	105	74-128	
trans-1,2-Dichloroethene	38.8	ND	39.6	102	78-126	
trans-1,3-Dichloropropene	38.8	ND	30.2	78	73-123	
Trichloroethene	38.8	ND	40.1	103	77-129	
Trichlorofluoromethane	38.8	ND	44.7	115	65-146	
Vinyl chloride	38.8	ND	48.5	125	61-133	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: M08082.D

Lab ID: 480-204989-5 MSD Client ID: SB-2 (1-2) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	46.2	35.9	78	10	30	74-127	
1,1,1-Trichloroethane	46.2	41.6	90	2	30	77-121	
1,1,2,2-Tetrachloroethane	46.2	50.6	110	25	30	80-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	46.2	39.2	85	5	30	60-140	
1,1,2-Trichloroethane	46.2	41.6	90	17	30	78-122	
1,1-Dichloroethane	46.2	48.1	104	6	30	73-126	
1,1-Dichloroethene	46.2	41.3	89	2	30	59-125	
1,2,4-Trichlorobenzene	46.2	14.4	31	26	30	64-120	F1
1,2,4-Trimethylbenzene	46.2	44.7	97	1	30	74-120	
1,2-Dibromo-3-Chloropropane	46.2	32.3	70	21	30	63-124	
1,2-Dibromoethane	46.2	36.5	79	18	30	78-120	
1,2-Dichlorobenzene	46.2	33.7	73	2	30	75-120	F1
1,2-Dichloroethane	46.2	43.4	94	12	30	77-122	
1,2-Dichloropropane	46.2	45.9	99	9	30	75-124	
1,3,5-Trimethylbenzene	46.2	46.6	101	0	30	74-120	
1,3-Dichlorobenzene	46.2	34.3	74	4	30	74-120	
1,4-Dichlorobenzene	46.2	32.8	71	1	30	73-120	F1
2-Butanone (MEK)	231	173	75	19	30	70-134	
2-Hexanone	231	188	82	26	30	59-130	
4-Methyl-2-pentanone (MIBK)	231	208	90	24	30	65-133	
Acetone	231	151	65	17	30	61-137	
Benzene	46.2	45.0	97	5	30	79-127	
Bromodichloromethane	46.2	41.2	89	12	30	80-122	
Bromoform	46.2	26.0	56	18	30	68-126	F1
Bromomethane	46.2	50.6	110	8	30	37-149	
Carbon disulfide	46.2	37.0	80	1	30	64-131	
Carbon tetrachloride	46.2	34.6	75	1	30	75-135	
Chlorobenzene	46.2	37.2	81	3	30	76-124	
Chloroethane	46.2	51.2	111	6	30	69-135	
Chloroform	46.2	43.4	93	6	30	80-120	
Chloromethane	46.2	41.9	91	7	30	63-127	
cis-1,2-Dichloroethene	46.2	42.3	92	4	30	80-120	
cis-1,3-Dichloropropene	46.2	38.4	83	12	30	80-120	
Cyclohexane	46.2	37.5	81	11	30	65-120	
Dibromochloromethane	46.2	34.7	75	15	30	76-125	F1
Dichlorodifluoromethane	46.2	39.7	86	6	30	57-142	
Ethylbenzene	46.2	40.5	88	2	30	80-120	
Isopropylbenzene	46.2	53.9	117	5	30	72-120	
m,p-Xylene	46.2	37.9	82	2	30	70-130	
Methyl acetate	92.3	95.6	104	22	30	55-136	
Methyl tert-butyl ether	46.2	42.2	91	15	30	63-125	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: M08082.D

Lab ID: 480-204989-5 MSD Client ID: SB-2 (1-2) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methylcyclohexane	46.2	25.3	55	31	30	60-140	F1 F2
Methylene Chloride	46.2	46.5	101	7	30	61-127	
n-Butylbenzene	46.2	27.7	60	25	30	70-120	F1
N-Propylbenzene	46.2	47.1	102	0	30	70-130	
o-Xylene	46.2	37.7	82	0	30	70-130	
sec-Butylbenzene	46.2	37.9	82	13	30	74-120	
Styrene	46.2	32.4	70	0	30	80-120	F1
tert-Butylbenzene	46.2	44.1	95	6	30	73-120	
Tetrachloroethene	46.2	38.3	79	0	30	74-122	
Toluene	46.2	44.7	97	9	30	74-128	
trans-1,2-Dichloroethene	46.2	40.0	87	1	30	78-126	
trans-1,3-Dichloropropene	46.2	36.0	78	18	30	73-123	
Trichloroethene	46.2	40.2	87	0	30	77-129	
Trichlorofluoromethane	46.2	45.1	98	1	30	65-146	
Vinyl chloride	46.2	49.5	107	2	30	61-133	

Column to be used to flag recovery and RPD values

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Sample No.: CCVIS 480-654942/29 Date Analyzed: 01/03/2023 19:45

Instrument ID: HP5977M GC Column: ZB-624 (30) VOA ID: 0.25(mm)

Lab File ID (Standard): M08069.D Heated Purge: (Y/N) Y

Calibration ID: 44376

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		542648	5.23	1093811	8.21	1062114	10.62
UPPER LIMIT		1085296	5.73	2187622	8.71	2124228	11.12
LOWER LIMIT		271324	4.73	546906	7.71	531057	10.12
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 480-654699/1-A		557609	5.23	1164466	8.22	1115722	10.62
MB 480-654699/2-A		499897	5.23	1011013	8.22	1037072	10.62
480-204989-3	SB-2 (0-0.5)	457833	5.23	813914	8.22	571135	10.62
480-204989-4	SB-2 (0.5-1)	506623	5.23	1033600	8.22	964698	10.62
480-204989-5	SB-2 (1-2)	500694	5.23	926072	8.22	649700	10.62
480-204989-6	SB-2 (20.4-22.4)	492754	5.23	1016435	8.22	1021295	10.62
480-204989-7	FDUP_122122	415851	5.23	586694	8.22	325154*3	10.62
480-204989-5 MS	SB-2 (1-2) MS	482898	5.23	935495	8.22	709215	10.62
480-204989-5 MSD	SB-2 (1-2) MSD	489854	5.23	894661	8.22	591173	10.62

FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

*3=ISTD response or retention time outside acceptable limits.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Lab Sample ID: CCVIS 480-654942/29 Calibration Date: 01/03/2023 19:45

Instrument ID: HP5977M Calib Start Date: 12/13/2022 01:18

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 12/13/2022 03:45

Lab File ID: M08069.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.374	1.415	0.1000	51.5	50.0	2.9	50.0
Chloromethane	Ave	1.751	1.878	0.1000	53.6	50.0	7.2	20.0
Vinyl chloride	Ave	1.302	1.788	0.1000	68.7	50.0	37.4*	20.0
Butadiene	Ave	1.426	1.864		65.4	50.0	30.7*	20.0
Bromomethane	Ave	0.7383	0.8668	0.1000	58.7	50.0	17.4	50.0
Chloroethane	Ave	0.8348	1.079	0.1000	64.6	50.0	29.2	50.0
Trichlorofluoromethane	Ave	1.532	1.966	0.1000	64.2	50.0	28.3*	20.0
Dichlorofluoromethane	Ave	2.003	2.401		59.9	50.0	19.9	20.0
Ethyl ether	Ave	1.189	1.295		54.4	50.0	8.9	20.0
Acrolein	Ave	0.0936	0.0969		259	250	3.5	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.088	1.299	0.1000	59.7	50.0	19.4	20.0
1,1-Dichloroethene	Ave	0.9453	1.086	0.1000	57.4	50.0	14.9	20.0
Acetone	Ave	0.4751	0.4744	0.1000	250	250	-0.1	50.0
Iodomethane	Ave	1.834	1.895		51.7	50.0	3.3	20.0
Carbon disulfide	Ave	3.407	3.938	0.1000	57.8	50.0	15.6	20.0
Allyl chloride	Ave	1.958	2.393		61.1	50.0	22.2*	20.0
Methyl acetate	Ave	1.049	1.130	0.1000	108	100	7.7	50.0
Methylene Chloride	Lin1		1.318	0.1000	56.3	50.0	12.5	20.0
2-Methyl-2-propanol	Ave	0.2144	0.1728		403	500	-19.4	50.0
Methyl tert-butyl ether	Ave	3.743	3.834	0.1000	51.2	50.0	2.4	20.0
trans-1,2-Dichloroethene	Ave	1.121	1.284	0.1000	57.3	50.0	14.5	20.0
Acrylonitrile	Ave	0.5461	0.5869		537	500	7.5	20.0
Hexane	Ave	1.832	2.305		62.9	50.0	25.8*	20.0
1,1-Dichloroethane	Ave	2.145	2.552	0.2000	59.5	50.0	19.0	20.0
Vinyl acetate	Ave	2.713	2.792		103	100	2.9	20.0
2,2-Dichloropropane	Ave	1.310	1.464		55.9	50.0	11.7	20.0
cis-1,2-Dichloroethene	Ave	1.276	1.413	0.1000	55.4	50.0	10.8	20.0
2-Butanone (MEK)	Ave	0.6529	0.7268	0.1000	278	250	11.3	20.0
Chlorobromomethane	Ave	0.6601	0.6596		50.0	50.0	-0.0	20.0
Tetrahydrofuran	Ave	0.4506	0.4939		110	100	9.6	20.0
Chloroform	Ave	2.148	2.297	0.2000	53.5	50.0	6.9	20.0
Cyclohexane	Ave	2.233	2.898	0.1000	64.9	50.0	29.8*	20.0
1,1,1-Trichloroethane	Ave	1.627	1.829	0.1000	56.2	50.0	12.5	20.0
Carbon tetrachloride	Ave	1.347	1.359	0.1000	50.4	50.0	0.8	20.0
1,1-Dichloropropene	Ave	1.427	1.781		62.4	50.0	24.8*	20.0
Benzene	Ave	4.227	4.912	0.5000	58.1	50.0	16.2	20.0
Isobutyl alcohol	Ave	0.0763	0.0638		1050	1250	-16.4	50.0
1,2-Dichloroethane	Ave	1.683	1.871	0.1000	55.6	50.0	11.2	20.0
n-Heptane	Ave	1.735	2.303		66.4	50.0	32.7*	20.0
Trichloroethene	Ave	1.083	1.289	0.2000	59.5	50.0	19.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Lab Sample ID: CCVIS 480-654942/29 Calibration Date: 01/03/2023 19:45

Instrument ID: HP5977M Calib Start Date: 12/13/2022 01:18

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 12/13/2022 03:45

Lab File ID: M08069.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	1.953	2.390	0.1000	61.2	50.0	22.4*	20.0
1,2-Dichloropropane	Ave	1.193	1.344	0.1000	56.3	50.0	12.6	20.0
Dibromomethane	Ave	0.7110	0.7485	0.1000	52.6	50.0	5.3	20.0
1,4-Dioxane	Ave	0.0065	0.0064		995	1000	-0.5	50.0
Bromodichloromethane	Ave	1.446	1.539	0.2000	53.2	50.0	6.4	20.0
2-Chloroethyl vinyl ether	Ave	0.7117	0.7424		52.2	50.0	4.3	20.0
cis-1,3-Dichloropropene	Ave	1.778	1.856	0.2000	52.2	50.0	4.4	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6673	0.7491	0.1000	281	250	12.3	20.0
Toluene	Ave	1.305	1.452	0.4000	55.6	50.0	11.2	20.0
trans-1,3-Dichloropropene	Ave	0.8056	0.7619	0.1000	47.3	50.0	-5.4	20.0
Ethyl methacrylate	Ave	0.7200	0.6262		43.5	50.0	-13.0	20.0
1,1,2-Trichloroethane	Ave	0.4096	0.4212	0.1000	51.4	50.0	2.8	20.0
Tetrachloroethene	Ave	0.5237	0.5954	0.2000	56.8	50.0	13.7	20.0
1,3-Dichloropropane	Ave	0.8278	0.8477		51.2	50.0	2.4	20.0
2-Hexanone	Ave	0.4499	0.4709	0.1000	262	250	4.7	20.0
Dibromochloromethane	Ave	0.5176	0.4637	0.1000	44.8	50.0	-10.4	20.0
1,2-Dibromoethane	Ave	0.4994	0.4776		47.8	50.0	-4.4	20.0
Chlorobenzene	Ave	1.493	1.571	0.5000	52.6	50.0	5.2	20.0
Ethylbenzene	Ave	2.464	2.765	0.1000	56.1	50.0	12.2	20.0
1,1,1,2-Tetrachloroethane	Ave	0.5626	0.5119		45.5	50.0	-9.0	20.0
m,p-Xylene	Ave	0.9863	1.068	0.1000	54.1	50.0	8.3	20.0
o-Xylene	Ave	1.043	1.123	0.3000	53.8	50.0	7.6	20.0
Styrene	Ave	1.713	1.761	0.3000	51.4	50.0	2.8	20.0
Bromoform	Ave	0.3381	0.2651	0.1000	39.2	50.0	-21.6	50.0
Isopropylbenzene	Ave	2.517	3.011	0.1000	59.8	50.0	19.7	20.0
Bromobenzene	Ave	0.6675	0.6713		50.3	50.0	0.6	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7394	0.7650	0.3000	51.7	50.0	3.5	20.0
N-Propylbenzene	Ave	2.985	3.587		60.1	50.0	20.2*	20.0
1,2,3-Trichloropropane	Ave	0.2244	0.2232		49.7	50.0	-0.5	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2477	0.2359		47.6	50.0	-4.8	50.0
2-Chlorotoluene	Ave	0.6348	0.7123		56.1	50.0	12.2	20.0
1,3,5-Trimethylbenzene	Ave	2.245	2.624		58.4	50.0	16.9	20.0
4-Chlorotoluene	Ave	0.6485	0.7029		54.2	50.0	8.4	20.0
tert-Butylbenzene	Ave	0.4754	0.5740		60.4	50.0	20.7*	20.0
1,2,4-Trimethylbenzene	Ave	2.372	2.714		57.2	50.0	14.4	20.0
sec-Butylbenzene	Ave	2.818	3.432		60.9	50.0	21.8*	20.0
1,3-Dichlorobenzene	Ave	1.326	1.389	0.6000	52.4	50.0	4.7	20.0
4-Isopropyltoluene	Ave	2.499	2.976		59.5	50.0	19.1	20.0
1,4-Dichlorobenzene	Ave	1.369	1.404	0.5000	51.3	50.0	2.5	20.0
n-Butylbenzene	Ave	2.340	2.856		61.0	50.0	22.1*	20.0
1,2-Dichlorobenzene	Ave	1.345	1.402	0.4000	52.1	50.0	4.3	20.0

Report Date: 22-Dec-2022 16:12:44 Chrom Revision: 2.3 01-Dec-2022 08:01:02

Eurofins Buffalo
Recovery Report

Data File: \\chromfs\Buffalo\ChromData\HP5975D\20221222-109511.b\D7457.d
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 22-Dec-2022 13:01:30 ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 5.000 mL Dil. Factor: 1.0000
Sample Info: MB
Misc. Info.: 480-0109511-008
Operator ID: AK Instrument ID: HP5975D

Method: \\chromfs\Buffalo\ChromData\HP5975D\20221222-109511.b\D-8260.m
Limit Group: MV - 8260C ICAL
Last Update: 22-Dec-2022 16:12:44 Calib Date: 01-Nov-2022 20:27:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Buffalo\ChromData\HP5975D\20221101-108575.b\D5449.d

Column 1 : ZB-624 (0.18 mm) Det: MS SCAN
Process Host: CTX1648

First Level Reviewer: R3QB Date: 22-Dec-2022 16:12:44

Compound	Amount Added	Amount Recovered	% Rec.
$ 148 Dibromofluoromethane (Surr)	25.0	24.2	96.93
$ 4 1,2-Dichloroethane-d4 (Surr)	25.0	26.2	105.00
$ 5 Toluene-d8 (Surr)	25.0	22.7	90.85
$ 6 4-Bromofluorobenzene (Surr)	25.0	24.1	96.38

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-204989-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-654699/2-A

Matrix: Solid | Lab File ID: M08073.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 01/03/2023 21:23

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (30) VOA ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) Y pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 654942 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		5.0	0.50
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.36
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.81
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.65
75-34-3	1,1-Dichloroethane	ND		5.0	0.61
75-35-4	1,1-Dichloroethene	ND		5.0	0.61
526-73-8	1,2,3-Trimethylbenzene	ND		5.0	1.0
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.30
95-63-6	1,2,4-Trimethylbenzene	ND		5.0	0.96
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	2.5
106-93-4	1,2-Dibromoethane	ND		5.0	0.64
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.39
107-06-2	1,2-Dichloroethane	ND		5.0	0.25
78-87-5	1,2-Dichloropropane	ND		5.0	2.5
108-67-8	1,3,5-Trimethylbenzene	ND		5.0	0.32
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.26
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.70
78-93-3	2-Butanone (MEK)	ND		25	1.8
591-78-6	2-Hexanone	ND		25	2.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		25	1.6
67-64-1	Acetone	ND		25	4.2
71-43-2	Benzene	ND		5.0	0.25
75-27-4	Bromodichloromethane	ND		5.0	0.67
75-25-2	Bromoform	ND		5.0	2.5
74-83-9	Bromomethane	ND		5.0	0.45
75-15-0	Carbon disulfide	ND		5.0	2.5
56-23-5	Carbon tetrachloride	ND		5.0	0.48
108-90-7	Chlorobenzene	ND		5.0	0.66
75-00-3	Chloroethane	ND		5.0	1.1
67-66-3	Chloroform	0.535	J	5.0	0.31
74-87-3	Chloromethane	ND		5.0	0.30
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.64

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Matrix: Solid Level: Low

GC Column (1): RXI-5Sil MS ID: 0.25(mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPHd14 #
SB-2 (0-0.5)	480-204989-3	68	69	69	80	78	99
SB-2 (0.5-1)	480-204989-4	72	71	70	84	77	97
SB-2 (1-2)	480-204989-5	0 S1-	0 S1-	0 S1-	74	0 S1-	94
SB-2 (20.4-22.4)	480-204989-6	83	87	92	97	92	130
FDUP_122122	480-204989-7	0 S1-	0 S1-	0 S1-	86	0 S1-	104
	MB 480-654928/1-A	70	72	72	78	68	111
	LCS 480-654928/2-A	71	73	79	90	111	117
SB-2 (1-2) MS	480-204989-5 MS	0 S1-	81	86	83	0 S1-	109
SB-2 (1-2) MSD	480-204989-5 MSD	74	62	74	63	0 S1-	81

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	52-120
PHL = Phenol-d5 (Surr)	54-120
NBZ = Nitrobenzene-d5 (Surr)	53-120
FBP = 2-Fluorobiphenyl (Surr)	60-120
TBP = 2,4,6-Tribromophenol (Surr)	54-120
TPHd14 = p-Terphenyl-d14 (Surr)	79-130

Column to be used to flag recovery values

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RXI-5Sil MS ID: 0.25(mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPHd14 #
FB_122122	480-204989-1	65	39	97	121 S1+	80	108
	MB 480-654335/1-A	63	42	99	119	72	114
	LCS 480-654335/2-A	68	55	90	108	101	108
	LCSD 480-654335/3-A	76	59	92	123 S1+	108	103

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	35-120
PHL = Phenol-d5 (Surr)	22-120
NBZ = Nitrobenzene-d5 (Surr)	46-120
FBP = 2-Fluorobiphenyl (Surr)	48-120
TBP = 2,4,6-Tribromophenol (Surr)	41-120
TPHd14 = p-Terphenyl-d14 (Surr)	60-148

Column to be used to flag recovery values

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Matrix: Water Level: Low Lab File ID: Y029839.D

Lab ID: LCS 480-654335/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
2,4,5-Trichlorophenol	32.0	26.3	82	65-126	
2,4,6-Trichlorophenol	32.0	31.4	98	64-120	
2,4-Dichlorophenol	32.0	29.6	93	63-120	
2,4-Dimethylphenol	32.0	28.2	88	47-120	
2,4-Dinitrophenol	64.0	65.7	103	31-137	
2,4-Dinitrotoluene	32.0	33.6	105	69-120	
2,6-Dinitrotoluene	32.0	31.1	97	68-120	
2-Chloronaphthalene	32.0	33.2	104	58-120	
2-Chlorophenol	32.0	28.3	89	48-120	
2-Methylnaphthalene	32.0	28.5	89	59-120	
2-Methylphenol	32.0	27.9	87	39-120	
2-Nitroaniline	32.0	31.9	100	54-127	
2-Nitrophenol	32.0	26.6	83	52-125	
3,3'-Dichlorobenzidine	64.0	56.0	87	49-135	
3-Nitroaniline	32.0	22.8	71	51-120	
4,6-Dinitro-2-methylphenol	64.0	70.9	111	46-136	
4-Bromophenyl phenyl ether	32.0	33.2	104	65-120	
4-Chloro-3-methylphenol	32.0	28.8	90	61-123	
4-Chloroaniline	32.0	21.5	67	30-120	
4-Chlorophenyl phenyl ether	32.0	34.9	109	62-120	
4-Methylphenol	32.0	26.6	83	29-131	
4-Nitroaniline	32.0	30.7	96	65-120	
4-Nitrophenol	64.0	56.0	88	45-120	
Acenaphthene	32.0	31.4	98	60-120	
Acenaphthylene	32.0	31.1	97	63-120	
Acetophenone	32.0	31.1	97	45-120	
Anthracene	32.0	30.4	95	67-120	
Atrazine	64.0	84.9	133	71-130	*+
Benzaldehyde	64.0	60.9	95	10-140	
Benzo[a]anthracene	32.0	31.0	97	70-121	
Benzo[a]pyrene	32.0	30.3	95	60-123	
Benzo[b]fluoranthene	32.0	30.8	96	66-126	
Benzo[g,h,i]perylene	32.0	31.0	97	66-150	
Benzo[k]fluoranthene	32.0	30.3	95	65-124	
Biphenyl	32.0	31.3	98	59-120	
bis (2-chloroisopropyl) ether	32.0	26.3	82	21-136	
Bis(2-chloroethoxy)methane	32.0	24.8	77	50-128	
Bis(2-chloroethyl)ether	32.0	26.6	83	44-120	
Bis(2-ethylhexyl) phthalate	32.0	28.5	89	63-139	
Butyl benzyl phthalate	32.0	31.9	100	70-129	
Caprolactam	64.0	20.9	33	22-120	
Carbazole	32.0	33.1	103	66-123	

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Matrix: Water Level: Low Lab File ID: Y029840.D

Lab ID: LCSD 480-654335/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2,4,5-Trichlorophenol	32.0	36.9	115	34	18	65-126	*1
2,4,6-Trichlorophenol	32.0	35.1	110	11	19	64-120	
2,4-Dichlorophenol	32.0	32.1	100	8	19	63-120	
2,4-Dimethylphenol	32.0	31.1	97	10	42	47-120	
2,4-Dinitrophenol	64.0	72.9	114	10	22	31-137	
2,4-Dinitrotoluene	32.0	36.9	115	9	20	69-120	
2,6-Dinitrotoluene	32.0	34.7	108	11	15	68-120	
2-Chloronaphthalene	32.0	36.3	113	9	21	58-120	
2-Chlorophenol	32.0	29.5	92	4	25	48-120	
2-Methylnaphthalene	32.0	30.2	94	6	21	59-120	
2-Methylphenol	32.0	28.1	88	1	27	39-120	
2-Nitroaniline	32.0	32.7	102	3	15	54-127	
2-Nitrophenol	32.0	31.5	99	17	18	52-125	
3,3'-Dichlorobenzidine	64.0	58.9	92	5	25	49-135	
3-Nitroaniline	32.0	26.7	83	16	19	51-120	
4,6-Dinitro-2-methylphenol	64.0	82.4	129	15	15	46-136	
4-Bromophenyl phenyl ether	32.0	33.7	105	2	15	65-120	
4-Chloro-3-methylphenol	32.0	31.2	97	8	27	61-123	
4-Chloroaniline	32.0	26.0	81	19	22	30-120	
4-Chlorophenyl phenyl ether	32.0	37.9	118	8	16	62-120	
4-Methylphenol	32.0	27.9	87	5	24	29-131	
4-Nitroaniline	32.0	36.0	112	16	24	65-120	
4-Nitrophenol	64.0	60.3	94	7	48	45-120	
Acenaphthene	32.0	34.5	108	9	24	60-120	
Acenaphthylene	32.0	35.0	109	12	18	63-120	
Acetophenone	32.0	30.6	96	2	20	45-120	
Anthracene	32.0	33.3	104	9	15	67-120	
Atrazine	64.0	89.7	140	5	20	71-130	*+
Benzaldehyde	64.0	61.2	96	0	20	10-140	
Benzo[a]anthracene	32.0	32.4	101	4	15	70-121	
Benzo[a]pyrene	32.0	33.4	104	10	15	60-123	
Benzo[b]fluoranthene	32.0	33.6	105	9	15	66-126	
Benzo[g,h,i]perylene	32.0	34.3	107	10	15	66-150	
Benzo[k]fluoranthene	32.0	33.8	106	11	22	65-124	
Biphenyl	32.0	34.5	108	10	20	59-120	
bis (2-chloroisopropyl) ether	32.0	24.7	77	6	24	21-136	
Bis(2-chloroethoxy)methane	32.0	25.5	80	3	17	50-128	
Bis(2-chloroethyl)ether	32.0	26.9	84	1	21	44-120	
Bis(2-ethylhexyl) phthalate	32.0	30.1	94	5	15	63-139	
Butyl benzyl phthalate	32.0	31.1	97	2	16	70-129	
Caprolactam	64.0	22.8	36	9	20	22-120	
Carbazole	32.0	36.4	114	9	20	66-123	

Column to be used to flag recovery and RPD values

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Lab Sample ID: CCVIS 480-654983/3 Calibration Date: 01/04/2023 14:21

Instrument ID: HP5973X Calib Start Date: 11/01/2022 13:23

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 11/01/2022 16:39

Lab File ID: X241831212.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Biphenyl	Ave	1.544	1.466	0.0100	47500	50000	-5.0	20.0
2-Chloronaphthalene	Ave	1.175	1.113	0.8000	47300	50000	-5.3	20.0
2-Nitroaniline	Ave	0.3237	0.3323	0.0100	51300	50000	2.7	20.0
Dimethyl phthalate	Ave	1.240	1.256	0.0100	50700	50000	1.3	20.0
1,3-Dinitrobenzene	Ave	0.0853	0.1235	0.0100	72400	50000	44.8*	20.0
2,6-Dinitrotoluene	Lin2		0.3022	0.2000	54000	50000	7.9	20.0
Acenaphthylene	Ave	1.714	1.655	0.9000	48300	50000	-3.4	20.0
3-Nitroaniline	Lin2		0.3125	0.0100	51700	50000	3.3	20.0
Acenaphthene	Ave	1.200	1.152	0.9000	48000	50000	-4.0	20.0
2,4-Dinitrophenol	Lin1		0.1508	0.0100	125000	100000	24.8*	20.0
4-Nitrophenol	Ave	0.1432	0.1618	0.0100	113000	100000	13.0	20.0
2,4-Dinitrotoluene	Ave	0.3308	0.4144	0.2000	62600	50000	25.3*	20.0
Dibenzofuran	Ave	1.618	1.614	0.8000	49900	50000	-0.2	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.2610	0.2888	0.0100	55300	50000	10.7	20.0
Diethyl phthalate	Ave	1.208	1.260	0.0100	52200	50000	4.4	20.0
Hexadecane	Ave	0.8950	0.7803	0.0100	43600	50000	-12.8	20.0
Fluorene	Ave	1.280	1.307	0.9000	51100	50000	2.1	20.0
4-Chlorophenyl phenyl ether	Ave	0.6353	0.6414	0.4000	50500	50000	0.9	20.0
4-Nitroaniline	Ave	0.2741	0.3081	0.0100	56200	50000	12.4	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.1229	0.0100	107000	100000	6.5	20.0
Diphenylamine	Ave	0.6958	0.6777	0.0100	41600	42800	-2.6	20.0
N-Nitrosodiphenylamine	Ave	0.5949	0.5794	0.0100	48700	50000	-2.6	20.0
1,2-Diphenylhydrazine	Ave	0.8348	0.7745	0.0100	46400	50000	-7.2	20.0
trans-Azobenzene	Ave	0.8348	0.7745	0.0100	46400	50000	-7.2	20.0
4-Bromophenyl phenyl ether	Ave	0.2282	0.2275	0.1000	49800	50000	-0.3	20.0
Hexachlorobenzene	Ave	0.2484	0.2461	0.1000	49500	50000	-0.9	20.0
Atrazine	Ave	0.3425	0.3588	0.0100	52400	50000	4.8	20.0
Pentachlorophenol	Lin2		0.1222	0.0500	112000	100000	11.6	20.0
n-Octadecane	Ave	0.5468	0.4603	0.0100	42100	50000	-15.8	20.0
Phenanthrene	Ave	1.074	1.105	0.7000	51400	50000	2.8	20.0
Anthracene	Ave	1.098	1.105	0.7000	50300	50000	0.7	20.0
Carbazole	Ave	1.009	0.9911	0.0100	49100	50000	-1.8	20.0
Di-n-butyl phthalate	Ave	1.163	1.199	0.0100	51500	50000	3.1	20.0
Fluoranthene	Ave	1.144	1.172	0.6000	51200	50000	2.5	20.0
Benzidine	Ave	0.5453	0.3908	0.0100	35800	50000	-28.3	50.0
Pyrene	Ave	1.211	1.279	0.6000	52800	50000	5.7	20.0
Butyl benzyl phthalate	Ave	0.5533	0.5589	0.0100	50500	50000	1.0	20.0
3,3'-Dichlorobenzidine	Ave	0.4665	0.4131	0.0100	44300	50000	-11.5	50.0
Benzo[a]anthracene	Ave	1.226	1.189	0.8000	48500	50000	-3.0	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.8251	0.8396	0.0100	50900	50000	1.8	20.0
Chrysene	Ave	1.173	1.170	0.7000	49900	50000	-0.3	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Lab Sample ID: CCVIS 480-654446/3 Calibration Date: 12/27/2022 10:39

Instrument ID: HP5973Y Calib Start Date: 11/21/2022 15:45

GC Column: RXI-5Sil MS ID: 0.25(mm) Calib End Date: 11/21/2022 18:57

Lab File ID: Y029832.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin2		0.2955	0.0100	3190	4000	-20.3*	20.0
N-Nitrosodimethylamine	Ave	0.4557	0.4878	0.0100	4280	4000	7.0	50.0
Pyridine	Lin2		0.3364	0.0100	6560	8000	-18.0	50.0
Benzaldehyde	Lin2		0.7146	0.0100	7520	8000	-6.0	50.0
Phenol	Ave	1.289	1.093	0.8000	3390	4000	-15.2	20.0
Aniline	Ave	1.500	1.117	0.0100	2980	4000	-25.6*	20.0
Bis(2-chloroethyl)ether	Lin2		0.7802	0.7000	3450	4000	-13.9	20.0
2-Chlorophenol	Ave	1.255	1.199	0.8000	3820	4000	-4.5	20.0
n-Decane	Lin2		0.6365	0.0100	2990	4000	-25.2*	20.0
1,3-Dichlorobenzene	Ave	1.491	1.440	0.0100	3870	4000	-3.4	20.0
1,4-Dichlorobenzene	Ave	1.523	1.481	0.0100	3890	4000	-2.7	20.0
Benzyl alcohol	Lin2		0.4439	0.0100	2760	4000	-30.9*	20.0
1,2-Dichlorobenzene	Ave	1.443	1.370	0.0100	3800	4000	-5.1	20.0
2-Methylphenol	Ave	1.037	0.9167	0.7000	3540	4000	-11.6	20.0
bis (2-chloroisopropyl) ether	Lin2		0.5956	0.0100	3120	4000	-22.1*	20.0
Indene	Ave	2.438	2.295	0.0100	18800	20000	-5.8	20.0
N-Nitrosodi-n-propylamine	Lin2		0.5650	0.5000	3460	4000	-13.5	20.0
4-Methylphenol	Lin2		0.8354	0.6000	3140	4000	-21.6*	20.0
Acetophenone	Ave	1.608	1.449	0.0100	3610	4000	-9.9	20.0
Hexachloroethane	Ave	0.5722	0.5510	0.3000	3850	4000	-3.7	20.0
Nitrobenzene	Ave	0.3045	0.2756	0.2000	3620	4000	-9.5	20.0
Isophorone	Ave	0.5304	0.4709	0.4000	3550	4000	-11.2	20.0
2-Nitrophenol	Lin2		0.1824	0.1000	3750	4000	-6.3	20.0
2,4-Dimethylphenol	Lin2		0.3467	0.2000	3890	4000	-2.7	20.0
Bis(2-chloroethoxy)methane	Ave	0.3153	0.2528*	0.3000	3210	4000	-19.8	20.0
Benzoic acid	Lin1		0.1121	0.0100	13200	20000	-34.2	50.0
2,4-Dichlorophenol	Lin2		0.2975	0.2000	3980	4000	-0.5	20.0
1,2,4-Trichlorobenzene	Ave	0.3519	0.3673	0.0100	4180	4000	4.4	20.0
Naphthalene	Lin2		0.9755	0.7000	3810	4000	-4.9	20.0
4-Chloroaniline	Ave	0.3721	0.3259	0.0100	3500	4000	-12.4	20.0
2,6-Dichlorophenol	Ave	0.2979	0.3090	0.0100	4150	4000	3.7	20.0
Hexachlorobutadiene	Ave	0.2268	0.2572	0.0100	4540	4000	13.4	20.0
Caprolactam	Lin2		0.0716	0.0100	6810	8000	-14.9	50.0
4-Chloro-3-methylphenol	Lin2		0.2689	0.2000	3770	4000	-5.7	20.0
2-Methylnaphthalene	Ave	0.6860	0.6953	0.4000	4050	4000	1.4	20.0
1-Methylnaphthalene	Ave	0.6443	0.6234	0.0100	3870	4000	-3.3	20.0
Hexachlorocyclopentadiene	Lin1		0.1613	0.0500	2980	4000	-25.5*	20.0
1,2,4,5-Tetrachlorobenzene	Lin2		0.6290	0.0100	4190	4000	4.8	20.0
2,4,6-Trichlorophenol	Ave	0.3599	0.3585	0.2000	3980	4000	-0.4	20.0
2,4,5-Trichlorophenol	Lin2		0.3699	0.2000	3860	4000	-3.4	20.0

FORM VII
PFAS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Burlington Job No.: 480-204989-1

SDG No.:

Lab Sample ID: CCV 200-187284/22 Calibration Date: 01/05/2023 17:41

Instrument ID: LC812 Calib Start Date: 11/18/2022 14:29

GC Column: C-18 ID: 4.60(mm) Calib End Date: 11/18/2022 15:10

Lab File ID: PA230105A22.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorotridecanoic acid (PFTriA)	AveID	1.013	0.9636		2.38	2.50	-4.9	
Perfluorotetradecanoic acid (PFTeA)	AveID	0.1369	0.1214		2.22	2.50	-11.3	
Perfluoro-n-hexadecanoic acid (PFHxDA)	L1ID		0.9000		2.43	2.50	-2.8	30.0
Perfluoro-n-octadecanoic acid (PFODA)	AveID	0.8236	0.8322		2.53	2.50	1.0	
13C4 PFBA	Ave	1.122	1.051		1.17	1.25	-6.3	
13C5 PFPeA	Ave	0.8543	0.7962		1.17	1.25	-6.8	
13C3 PFBS	Ave	0.9281	0.9150		1.15	1.16	-1.4	
M2-4:2 FTS	Ave	0.0820	0.0806		1.15	1.17	-1.7	
13C2 PFHxA	Ave	0.8951	0.8741		1.22	1.25	-2.3	
13C3 HFPO-DA	Ave	0.1580	0.1499		1.19	1.25	-5.1	
13C4 PFHpA	Ave	0.9206	0.9500		1.29	1.25	3.2	50.0
18O2 PFHxS	Ave	0.6761	0.6930		1.21	1.18	2.5	50.0
M2-6:2 FTS	Ave	0.1134	0.1338		1.40	1.19	18.0	
13C4 PFOA	Ave	1.035	1.047		1.26	1.25	1.2	50.0
13C4 PFOS	Ave	0.4588	0.4439		1.16	1.20	-3.2	50.0
13C5 PFNA	Ave	1.006	1.151		1.43	1.25	14.4	50.0
13C2 PFDA	Ave	1.025	1.211		1.48	1.25	18.1	
M2-8:2 FTS	Ave	0.1387	0.2347		2.03	1.20	69.3	
13C8 FOSA	Ave	0.8403	0.8212		1.22	1.25	-2.3	
d3-NMeFOSAA	Ave	0.2087	0.3052		1.83	1.25	46.2	
13C2 PFUnA	Ave	0.9385	1.159		1.54	1.25	23.5	
d5-NEtFOSAA	Ave	0.2055	0.3524		2.14	1.25	71.5	
13C2 PFDoA	Ave	0.9562	1.200		1.57	1.25	25.5	
13C2 PFTeDA	Ave	0.8270	1.029		1.55	1.25	24.4	
13C2 PFHxDA	Ave	1.022	1.090		1.33	1.25	6.6	

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 480-204989-1

SDG No.:

Instrument ID: LC812 Start Date: 01/04/2023 14:45

Analysis Batch Number: 187252 End Date: 01/04/2023 18:58

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		01/04/2023 14:45	1		C-18 4.6(mm)
ZZZZZ		01/04/2023 14:53	1		C-18 4.6(mm)
ZZZZZ		01/04/2023 15:01	1		C-18 4.6(mm)
CCB 200-187252/4		01/04/2023 15:09	1	PA230104A04.d	C-18 4.6(mm)
CCVLIS 200-187252/5		01/04/2023 15:18	1	PA230104A05.d	C-18 4.6(mm)
ZZZZZ		01/04/2023 15:26	1		C-18 4.6(mm)
CCV 200-187252/7		01/04/2023 15:34	1	PA230104A07.d	C-18 4.6(mm)
MB 200-187194/1-A		01/04/2023 15:42	1	PA230104A08.d	C-18 4.6(mm)
LCS 200-187194/2-A		01/04/2023 15:50	1	PA230104A09.d	C-18 4.6(mm)
LCSD 200-187194/3-A		01/04/2023 15:59	1	PA230104A10.d	C-18 4.6(mm)
ZZZZZ		01/04/2023 16:07	1		C-18 4.6(mm)
ZZZZZ		01/04/2023 16:15	1		C-18 4.6(mm)
ZZZZZ		01/04/2023 16:23	1		C-18 4.6(mm)
ZZZZZ		01/04/2023 16:31	1		C-18 4.6(mm)
ZZZZZ		01/04/2023 16:39	1		C-18 4.6(mm)
ZZZZZ		01/04/2023 16:48	1		C-18 4.6(mm)
480-204989-1	FB_122122	01/04/2023 16:56	1	PA230104A17.d	C-18 4.6(mm)
ZZZZZ		01/04/2023 17:04	1		C-18 4.6(mm)
ZZZZZ		01/04/2023 17:12	1		C-18 4.6(mm)
ZZZZZ		01/04/2023 17:20	1		C-18 4.6(mm)
CCV 200-187252/21		01/04/2023 17:28	1	PA230104A21.d	C-18 4.6(mm)
ZZZZZ		01/04/2023 17:37	1		C-18 4.6(mm)
ZZZZZ		01/04/2023 17:45	1		C-18 4.6(mm)
ZZZZZ		01/04/2023 17:53	1		C-18 4.6(mm)
ZZZZZ		01/04/2023 18:01	1		C-18 4.6(mm)
ZZZZZ		01/04/2023 18:09	1		C-18 4.6(mm)
ZZZZZ		01/04/2023 18:18	1		C-18 4.6(mm)
ZZZZZ		01/04/2023 18:26	1		C-18 4.6(mm)
ZZZZZ		01/04/2023 18:34	1		C-18 4.6(mm)
ZZZZZ		01/04/2023 18:42	1		C-18 4.6(mm)
ZZZZZ		01/04/2023 18:50	1		C-18 4.6(mm)
CCV 200-187252/32		01/04/2023 18:58	1		C-18 4.6(mm)

PFAS ANALYSIS RUN LOG

Lab Name: Eurofins Burlington Job No.: 480-204989-1

SDG No.:

Instrument ID: LC812 Start Date: 01/05/2023 14:49

Analysis Batch Number: 187284 End Date: 01/05/2023 19:02

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		01/05/2023 14:49	1		C-18 4.6(mm)
ZZZZZ		01/05/2023 14:57	1		C-18 4.6(mm)
ZZZZZ		01/05/2023 15:05	1		C-18 4.6(mm)
CCB 200-187284/4		01/05/2023 15:13	1	PA230105A04.d	C-18 4.6(mm)
CCVLIS 200-187284/5		01/05/2023 15:22	1	PA230105A05.d	C-18 4.6(mm)
ZZZZZ		01/05/2023 15:30	10		C-18 4.6(mm)
ZZZZZ		01/05/2023 15:38	1		C-18 4.6(mm)
ZZZZZ		01/05/2023 15:46	1		C-18 4.6(mm)
ZZZZZ		01/05/2023 15:54	5		C-18 4.6(mm)
CCV 200-187284/10		01/05/2023 16:03	1	PA230105A10.d	C-18 4.6(mm)
MB 200-187189/1-A		01/05/2023 16:11	1	PA230105A11.d	C-18 4.6(mm)
LCS 200-187189/2-A		01/05/2023 16:19	1	PA230105A12.d	C-18 4.6(mm)
ZZZZZ		01/05/2023 16:27	1		C-18 4.6(mm)
ZZZZZ		01/05/2023 16:35	1		C-18 4.6(mm)
ZZZZZ		01/05/2023 16:43	1		C-18 4.6(mm)
ZZZZZ		01/05/2023 16:52	1		C-18 4.6(mm)
ZZZZZ		01/05/2023 17:00	1		C-18 4.6(mm)
ZZZZZ		01/05/2023 17:08	1		C-18 4.6(mm)
ZZZZZ		01/05/2023 17:16	1		C-18 4.6(mm)
ZZZZZ		01/05/2023 17:24	1		C-18 4.6(mm)
ZZZZZ		01/05/2023 17:32	1		C-18 4.6(mm)
CCV 200-187284/22		01/05/2023 17:41	1	PA230105A22.d	C-18 4.6(mm)
ZZZZZ		01/05/2023 17:49	1		C-18 4.6(mm)
ZZZZZ		01/05/2023 17:57	1		C-18 4.6(mm)
ZZZZZ		01/05/2023 18:05	1		C-18 4.6(mm)
ZZZZZ		01/05/2023 18:13	1		C-18 4.6(mm)
480-204989-5	SB-2 (1-2)	01/05/2023 18:22	1	PA230105A27.d	C-18 4.6(mm)
480-204989-5 MS	SB-2 (1-2) MS	01/05/2023 18:30	1	PA230105A28.d	C-18 4.6(mm)
480-204989-5 MSD	SB-2 (1-2) MSD	01/05/2023 18:38	1	PA230105A29.d	C-18 4.6(mm)
480-204989-7	FDUP_122122	01/05/2023 18:46	1	PA230105A30.d	C-18 4.6(mm)
ZZZZZ		01/05/2023 18:54	1		C-18 4.6(mm)
CCV 200-187284/32		01/05/2023 19:02	1	PA230105A32.d	C-18 4.6(mm)

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

ICV Source: MEI_10_CCVL_00486 Concentration Units: mg/L

CCV Source: MEI_10_CCVL_00486

Analyte	CCVL 480-654754/39 12/29/2022 14:28											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Aluminum	0.221		0.200	110								
Antimony	0.0169	J	0.0200	85								
Arsenic	0.0169		0.0150	113								
Barium	0.00217		0.00200	109								
Beryllium	0.00206		0.00200	103								
Cadmium	0.00194	J	0.00200	97								
Calcium	0.532		0.500	106								
Chromium	0.00333	J	0.00400	83								
Cobalt	0.00354	J	0.00400	89								
Copper	0.00967	J	0.0100	97								
Iron	0.0701		0.0500	140								
Lead	0.0103		0.0100	103								
Magnesium	0.215		0.200	107								
Manganese	0.00354		0.00300	118								
Nickel	0.00714	J	0.0100	71								
Potassium	0.475	J	0.500	95								
Selenium	0.0259		0.0250	104								
Silver	0.00639		0.00600	107								
Sodium	0.968	J	1.01	96								
Thallium	0.0178	J	0.0200	89								
Vanadium	0.00448	J	0.00500	90								
Zinc	0.00980	J	0.0100	98								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-655145/7 01/04/2023 12:20		CCB 480-655145/20 01/04/2023 14:01		CCB 480-655145/29 01/04/2023 14:47			
		Found	C	Found	C	Found	C	Found	C
Antimony	0.020	ND		ND		ND			
Cadmium	0.0020	ND		ND		ND			
Iron	0.050	ND		ND		ND			
Lead	0.010	ND		ND		ND			
Nickel	0.010	ND		ND		ND			
Silver	0.0060	ND		ND		ND			
Vanadium	0.0050	ND		ND		ND			
Aluminum	0.20	ND		ND		ND			
Arsenic	0.015	ND		ND		ND			
Barium	0.0020	ND		ND		ND			
Beryllium	0.0020	ND		ND		ND			
Calcium	0.50	ND		ND		ND			
Chromium	0.0040	ND		ND		ND			
Cobalt	0.0040	ND		ND		ND			
Copper	0.010	ND		ND		ND			
Magnesium	0.20	ND		ND		ND			
Manganese	0.0030	ND		ND		ND			
Potassium	0.50	ND		ND		ND			
Selenium	0.025	ND		ND		ND			
Sodium	1.0	ND		ND		ND			
Thallium	0.020	ND		ND		ND			
Zinc	0.010	ND		ND		ND			

Italicized analytes were not requested for this

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-654667/6 12/28/2022 13:34		CCB 480-654667/19 12/28/2022 23:46		CCB 480-654667/29 12/29/2022 00:32		CCB 480-654667/41 12/29/2022 01:19	
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND		ND		ND		ND	
Antimony	0.020	ND		ND		ND		ND	
Arsenic	0.015	ND		ND		ND		ND	
Barium	0.0020	ND		ND		ND		ND	
Beryllium	0.0020	ND		ND		ND		ND	
Cadmium	0.0020	ND		ND		ND		ND	
Calcium	0.50	ND		ND		ND		ND	
Chromium	0.0040	ND		ND		ND		ND	
Cobalt	0.0040	ND		ND		ND		ND	
Copper	0.010	ND		ND		ND		ND	
Iron	0.050	ND		ND		ND		ND	
Lead	0.010	ND		ND		ND		ND	
Magnesium	0.20	ND		ND		ND		ND	
Manganese	0.0030	ND		ND		ND		ND	
Nickel	0.010	ND		0.00238	J	0.00233	J	0.00268	J
Potassium	0.50	ND		ND		ND		ND	
Selenium	0.025	ND		ND		ND		ND	
Silver	0.0060	ND		ND		ND		ND	
Sodium	1.0	ND		ND		ND		ND	
Thallium	0.020	ND		ND		ND		ND	
Vanadium	0.0050	ND		ND		ND		ND	
Zinc	0.010	ND		ND		ND		ND	

Italicized analytes were not requested for this

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-654754/6 12/29/2022 10:58		CCB 480-654754/16 12/29/2022 11:37		CCB 480-654754/28 12/29/2022 13:06		CCB 480-654754/42 12/29/2022 14:39	
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND		ND		ND		ND	
Antimony	0.020	ND		ND		ND		ND	
Arsenic	0.015	ND		ND		ND		ND	
Barium	0.0020	ND		ND		ND		ND	
Beryllium	0.0020	ND		ND		ND		ND	
Cadmium	0.0020	ND		ND		ND		ND	
Calcium	0.50	ND		ND		ND		ND	
Chromium	0.0040	ND		ND		ND		ND	
Cobalt	0.0040	ND		ND		ND		ND	
Copper	0.010	ND		ND		ND		ND	
Iron	0.050	ND		ND		0.0257	J	ND	
Lead	0.010	ND		ND		ND		ND	
Magnesium	0.20	ND		ND		ND		ND	
Manganese	0.0030	ND		0.000540	J	0.000620	J	ND	
Nickel	0.010	ND		ND		ND		ND	
Potassium	0.50	ND		ND		ND		ND	
Selenium	0.025	ND		ND		ND		ND	
Silver	0.0060	ND		ND		ND		ND	
Sodium	1.0	ND		ND		ND		ND	
Thallium	0.020	ND		ND		ND		ND	
Vanadium	0.0050	ND		ND		ND		ND	
Zinc	0.010	ND		ND		ND		ND	

Italicized analytes were not requested for this

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-654710/8 12/29/2022 12:42		CCB 480-654710/35 12/29/2022 13:17		CCB 480-654710/47 12/29/2022 13:33		CCB 480-654710/60 12/29/2022 13:50	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.00020	ND		ND		ND		ND	

Italicized analytes were not requested for this

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	CCB 480-654710/72 12/29/2022 14:05							
		Found	C	Found	C	Found	C	Found	C
Mercury	0.00020	ND							

Italicized analytes were not requested for this

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-654936/8 01/03/2023 14:08		CCB 480-654936/71 01/03/2023 15:30		CCB 480-654936/83 01/03/2023 15:46		CCB 480-654936/95 01/03/2023 16:01	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.00020	ND		ND		ND		ND	

Italicized analytes were not requested for this

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: MB 480-654412/1-A

Instrument Code: ICAP2 Batch No.: 654667

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			6010C
7440-36-0	Antimony	ND			6010C
7440-38-2	Arsenic	ND			6010C
7440-39-3	Barium	ND			6010C
7440-41-7	Beryllium	ND			6010C
7440-43-9	Cadmium	ND			6010C
7440-70-2	Calcium	ND			6010C
7440-47-3	Chromium	ND			6010C
7440-48-4	Cobalt	ND			6010C
7440-50-8	Copper	ND			6010C
7439-89-6	Iron	ND			6010C
7439-92-1	Lead	ND			6010C
7439-95-4	Magnesium	ND			6010C
7439-96-5	Manganese	0.000460	J		6010C
7440-02-0	Nickel	0.00315	J		6010C
7440-09-7	Potassium	ND			6010C
7782-49-2	Selenium	ND			6010C
7440-22-4	Silver	ND			6010C
7440-23-5	Sodium	ND			6010C
7440-28-0	Thallium	ND			6010C
7440-62-2	Vanadium	ND			6010C
7440-66-6	Zinc	ND			6010C

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 480-654477/1-A

Instrument Code: ICAP2 Batch No.: 654754

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	5.36	J		6010C
7440-36-0	Antimony	ND			6010C
7440-38-2	Arsenic	ND			6010C
7440-39-3	Barium	ND			6010C
7440-41-7	Beryllium	ND			6010C
7440-43-9	Cadmium	ND			6010C
7440-70-2	Calcium	3.34	J		6010C
7440-47-3	Chromium	ND			6010C
7440-48-4	Cobalt	ND			6010C
7440-50-8	Copper	ND			6010C
7439-89-6	Iron	6.80	J		6010C
7439-92-1	Lead	ND			6010C
7439-95-4	Magnesium	1.78	J		6010C
7439-96-5	Manganese	0.145	J		6010C
7440-02-0	Nickel	ND			6010C
7440-09-7	Potassium	ND			6010C
7782-49-2	Selenium	ND			6010C
7440-22-4	Silver	ND			6010C
7440-23-5	Sodium	ND			6010C
7440-28-0	Thallium	ND			6010C
7440-62-2	Vanadium	ND			6010C
7440-66-6	Zinc	ND			6010C

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Lab Sample ID: ICSA 480-655145/9 Instrument ID: ICAP1

Lab File ID: I1010423A-3.asc ICS Source: MEI_MSS_ICSA_00052

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony		**-0.0109**	
Cadmium		**0.0010**	
Iron	**200**	**183**	**91**
Lead		**-0.0004**	
Nickel		**0.0005**	
Silver		**0.0005**	
Vanadium		**0.0009**	
Aluminum	*500*	*495*	*99*
Arsenic		*-0.0018*	
Barium	*0.0120*	*0.0013*	
Beryllium		*0.0000*	
Boron		*-0.0023*	
Calcium	*500*	*464*	*93*
Chromium		*0.0020*	
Cobalt		*0.0000*	
Copper		*0.0037*	
Lithium		*0.0041*	
Magnesium	*500*	*513*	*103*
Manganese		*0.0024*	
Molybdenum		*-0.0012*	
Potassium		*0.0689*	
Selenium		*-0.0045*	
Sodium		*0.107*	
Strontium		*0.0034*	
Thallium		*-0.0008*	
Tin		*-0.0038*	
Titanium		*0.0021*	
Zinc		*0.0012*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Lab Sample ID: ICSAB 480-655145/10 Instrument ID: ICAP1

Lab File ID: I1010423A-3.asc ICS Source: MEI_MSS_ICSAB_00046

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony	**0.500**	**0.511**	**102**
Cadmium	**0.500**	**0.523**	**105**
Iron	**200**	**183**	**91**
Lead	**0.500**	**0.501**	**100**
Nickel	**0.501**	**0.499**	**100**
Silver	**0.500**	**0.563**	**113**
Vanadium	**0.500**	**0.504**	**101**
Aluminum	*500*	*497*	*99*
Arsenic	*0.500*	*0.501*	*100*
Barium	*0.513*	*0.507*	*99*
Beryllium	*0.250*	*0.244*	*98*
Boron	*5.00*	*4.96*	*99*
Calcium	*500*	*465*	*93*
Chromium	*0.500*	*0.497*	*99*
Cobalt	*0.500*	*0.496*	*99*
Copper	*0.500*	*0.535*	*107*
Lithium		*0.0057*	
Magnesium	*500*	*516*	*103*
Manganese	*0.501*	*0.499*	*100*
Molybdenum	*0.500*	*0.487*	*97*
Potassium	*5.00*	*5.27*	*105*
Selenium	*0.500*	*0.507*	*101*
Sodium	*5.00*	*5.34*	*107*
Strontium	*0.500*	*0.478*	*96*
Thallium	*0.500*	*0.500*	*100*
Tin	*0.500*	*0.490*	*98*
Titanium	*0.500*	*0.500*	*100*
Zinc	*0.501*	*0.463*	*92*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Lab Sample ID: ICSA 480-654667/8 Instrument ID: ICAP2

Lab File ID: I2122822B-11.asc ICS Source: MEI_MSS_ICSA_00051

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**500**	**503**	**101**
Antimony		**-0.0044**	
Arsenic		**-0.0007**	
Barium	**0.0120**	**0.0136**	
Beryllium		**0.0000**	
Cadmium		**0.0000**	
Calcium	**500**	**475**	**95**
Chromium		**-0.0010**	
Cobalt		**-0.0005**	
Copper		**0.0021**	
Iron	**200**	**189**	**94**
Lead		**0.0043**	
Magnesium	**500**	**514**	**103**
Manganese		**0.0023**	
Nickel		**-0.0006**	
Potassium		**0.0142**	
Selenium		**0.0039**	
Silver		**0.0023**	
Sodium		**0.0626**	
Thallium		**0.0132**	
Vanadium		**-0.0001**	
Zinc		**0.0015**	
Boron		*-0.0001*	
Lithium		*0.0021*	
Molybdenum		*-0.0008*	
Silicon		*-0.0141*	
Sulfur		*0.0915*	
Tin		*0.0029*	
Titanium		*0.0021*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Lab Sample ID: ICSAB 480-654667/9 Instrument ID: ICAP2

Lab File ID: I2122822B-11.asc ICS Source: MEI_MSS_ICSAB_00046

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Aluminum	**500**	**499**	**100**
Antimony	**0.500**	**0.498**	**100**
Arsenic	**0.500**	**0.487**	**97**
Barium	**0.513**	**0.519**	**101**
Beryllium	**0.250**	**0.250**	**100**
Cadmium	**0.500**	**0.510**	**102**
Calcium	**500**	**476**	**95**
Chromium	**0.500**	**0.498**	**100**
Cobalt	**0.500**	**0.488**	**98**
Copper	**0.500**	**0.523**	**105**
Iron	**200**	**189**	**94**
Lead	**0.500**	**0.495**	**99**
Magnesium	**500**	**516**	**103**
Manganese	**0.501**	**0.495**	**99**
Nickel	**0.501**	**0.485**	**97**
Potassium	**5.00**	**5.36**	**107**
Selenium	**0.500**	**0.482**	**96**
Silver	**0.500**	**0.540**	**108**
Sodium	**5.00**	**5.38**	**108**
Thallium	**0.500**	**0.486**	**97**
Vanadium	**0.500**	**0.505**	**101**
Zinc	**0.501**	**0.463**	**93**
Boron	*5.00*	*4.79*	*96*
Lithium		*0.0032*	
Molybdenum	*0.500*	*0.480*	*96*
Silicon	*5.00*	*4.92*	*98*
Strontium	*0.500*	*0.498*	*100*
Sulfur		*0.0618*	
Tin	*0.500*	*0.486*	*97*
Titanium	*0.500*	*0.503*	*101*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Lab Sample ID: ICSA 480-654754/8 Instrument ID: ICAP2

Lab File ID: I2122922A-1.asc ICS Source: MEI_MSS_ICSA_00051

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**500**	**503**	**101**
Antimony		**-0.0009**	
Arsenic		**-0.0016**	
Barium	**0.0120**	**0.0137**	
Beryllium		**0.0000**	
Cadmium		**-0.0003**	
Calcium	**500**	**476**	**95**
Chromium		**-0.0012**	
Cobalt		**-0.0006**	
Copper		**0.0014**	
Iron	**200**	**187**	**94**
Lead		**-0.0005**	
Magnesium	**500**	**517**	**103**
Manganese		**0.0021**	
Nickel		**0.0061**	
Potassium		**0.0929**	
Selenium		**-0.0033**	
Silver		**0.0002**	
Sodium		**0.0728**	
Thallium		**0.0063**	
Vanadium		**0.0012**	
Zinc		**0.0027**	
Boron		*0.0001*	
Lithium		*-0.0260*	
Molybdenum		*-0.0015*	
Tin		*0.0014*	
Titanium		*0.0020*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-204989-1

SDG No.:

Lab Sample ID: ICSAB 480-654754/9 Instrument ID: ICAP2

Lab File ID: I2122922A-1.asc ICS Source: MEI_MSS_ICSAB_00046

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Aluminum	**500**	**495**	**99**
Antimony	**0.500**	**0.501**	**100**
Arsenic	**0.500**	**0.497**	**99**
Barium	**0.513**	**0.514**	**100**
Beryllium	**0.250**	**0.249**	**99**
Cadmium	**0.500**	**0.513**	**103**
Calcium	**500**	**471**	**94**
Chromium	**0.500**	**0.491**	**98**
Cobalt	**0.500**	**0.495**	**99**
Copper	**0.500**	**0.518**	**104**
Iron	**200**	**186**	**93**
Lead	**0.500**	**0.506**	**101**
Magnesium	**500**	**513**	**103**
Manganese	**0.501**	**0.492**	**98**
Nickel	**0.501**	**0.497**	**99**
Potassium	**5.00**	**5.40**	**108**
Selenium	**0.500**	**0.489**	**98**
Silver	**0.500**	**0.531**	**106**
Sodium	**5.00**	**5.38**	**108**
Thallium	**0.500**	**0.496**	**99**
Vanadium	**0.500**	**0.499**	**100**
Zinc	**0.501**	**0.458**	**92**
Boron	*5.00*	*4.88*	*98*
Lithium		*-0.0266*	
Molybdenum	*0.500*	*0.486*	*97*
Strontium	*0.500*	*0.493*	*99*
Tin	*0.500*	*0.493*	*99*
Titanium	*0.500*	*0.502*	*100*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS

Client ID: SB-2 (1-2) MS
Lab ID: 480-204989-5 MS
Lab Name: Eurofins Buffalo
Job No.: 480-204989-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 91.5

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	16400		8640		2220	350	75-125	F1	6010C
Antimony	45.80		4.1	J	44.4	94	75-125		6010C
Arsenic	61.08		14.2		44.4	106	75-125		6010C
Barium	203.1		79.8		44.4	278	75-125	F1	6010C
Beryllium	42.94		0.50		44.4	96	75-125		6010C
Cadmium	51.82		0.79		44.4	115	75-125		6010C
Calcium	4256		2730		2220	69	75-125	F1	6010C
Chromium	61.34		16.2		44.4	102	75-125		6010C
Cobalt	56.13		7.8		44.4	109	75-125		6010C
Copper	71.08		60.6		44.4	24	75-125	F1	6010C
Iron	84430		84900		2220	-20	75-125	4	6010C
Lead	218.3		105		44.4	256	75-125	F1	6010C
Magnesium	4870		2570		2220	104	75-125		6010C
Manganese	477.6		610		44.4	-299	75-125	4	6010C
Nickel	83.90		23.2		44.4	137	75-125	F1	6010C
Potassium	5318		1380		2220	177	75-125	F1	6010C
Selenium	43.02		1.9	J	44.4	93	75-125		6010C
Silver	12.49		ND		11.1	113	75-125		6010C
Sodium	2152		92.8	J	2220	93	75-125		6010C
Thallium	46.34		ND		44.4	104	75-125		6010C
Vanadium	96.81		28.7		44.4	154	75-125	F1	6010C
Zinc	159.6		89.4		44.4	158	75-125	F1	6010C
Mercury	0.408		0.053		0.359	99	80-120		7471B

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS

Client ID: SB-2 (1-2) MSD
Lab ID: 480-204989-5 MSD
Lab Name: Eurofins Buffalo
Job No.: 480-204989-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg
% Solids: 91.5

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Aluminum	14740		2080	293	75-125	11	20	4	6010C
Antimony	26.63	J	41.6	54	75-125	53	20	F1 F2	6010C
Arsenic	49.61		41.6	85	75-125	21	20	F2	6010C
Barium	116.5		41.6	88	75-125	54	20	F2	6010C
Beryllium	40.21		41.6	95	75-125	7	20		6010C
Cadmium	38.78		41.6	91	75-125	29	20	F2	6010C
Calcium	4149		2080	68	75-125	3	20	F1	6010C
Chromium	53.20		41.6	89	75-125	14	20		6010C
Cobalt	49.57		41.6	100	75-125	12	20		6010C
Copper	60.91		41.6	0.7	75-125	15	20	F1	6010C
Iron	28250		2080	-2719	75-125	100	20	4 F2	6010C
Lead	131.8		41.6	65	75-125	49	20	F1 F2	6010C
Magnesium	5290		2080	131	75-125	8	20	F1	6010C
Manganese	448.2		41.6	-389	75-125	6	20	4	6010C
Nickel	58.47		41.6	85	75-125	36	20	F2	6010C
Potassium	4153		2080	133	75-125	25	20	F1 F2	6010C
Selenium	41.05		41.6	94	75-125	5	20		6010C
Silver	10.11		10.4	97	75-125	21	20	F2	6010C
Sodium	1977		2080	90	75-125	8	20		6010C
Thallium	41.58		41.6	100	75-125	11	20		6010C
Vanadium	63.05		41.6	83	75-125	42	20	F2	6010C
Zinc	113.1		41.6	57	75-125	34	20	F1 F2	6010C
Mercury	0.431		0.377	100	80-120	6	20		7471B

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: SB-2 (1-2) PDS
Lab ID: 480-204989-5 PDS
Lab Name: Eurofins Buffalo
Job No.: 480-204989-1
SDG No.:
Matrix: Solid
Concentration Units: mg/Kg

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	9772		8640		2120	54	80-120	W	6010C
Antimony	104.6		4.1	J	84.6	119	80-120		6010C
Arsenic	55.40		14.2		42.3	97	80-120		6010C
Barium	112.0		79.8		42.3	76	80-120	W	6010C
Beryllium	41.30		0.50		42.3	96	80-120		6010C
Cadmium	97.08		0.79		84.6	114	80-120		6010C
Calcium	4450		2730		2120	81	80-120		6010C
Chromium	53.29		16.2		42.3	88	80-120		6010C
Cobalt	52.86		7.8		42.3	107	80-120		6010C
Copper	94.61		60.6		42.3	80	80-120		6010C
Iron	86150		84900		4230	NC	80-120		6010C
Lead	209.7		105		84.6	124	80-120	W	6010C
Magnesium	4336		2570		2120	84	80-120		6010C
Manganese	600.9		610		42.3	NC	80-120		6010C
Nickel	127.6		23.2		84.6	123	80-120	W	6010C
Potassium	3369		1380		2120	94	80-120		6010C
Selenium	42.52		1.9	J	42.3	96	80-120		6010C
Silver	23.33		ND		21.2	110	80-120		6010C
Sodium	1999		92.8	J	2120	90	80-120		6010C
Thallium	46.64		ND		42.3	110	80-120		6010C
Vanadium	122.7		28.7		84.6	111	80-120		6010C
Zinc	118.9		89.4		42.3	70	80-120	W	6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.
Note - Results and Reporting Limits have been adjusted for dry weight.

FORM VB - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS

Lab ID: 480-204989-B-5-A SD ^5

SDG No:

Lab Name: Eurofins Buffalo Job No: 480-204989-1

Matrix: Solid Concentration Units: mg/Kg

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Aluminum	8640		9578		11	V	6010C
Antimony	4.1	J	5.02	J	NC		6010C
Arsenic	14.2		17.15		21	V	6010C
Barium	79.8		91.24		14	V	6010C
Beryllium	0.50		0.571	J	NC		6010C
Cadmium	0.79		0.666	J	NC		6010C
Calcium	2730		3122		14	V	6010C
Chromium	16.2		17.79		9.7		6010C
Cobalt	7.8		8.18		5.1		6010C
Copper	60.6		65.69		8.4		6010C
Iron	84900		80470		5.2		6010C
Lead	105		86.70		17	V	6010C
Magnesium	2570		2948		15	V	6010C
Manganese	610		696.1		14	V	6010C
Nickel	23.2		18.86	J	19	V	6010C
Potassium	1380		1474		6.9		6010C
Selenium	1.9	J	ND		NC		6010C
Silver	ND		ND		NC		6010C
Sodium	92.8	J	89.96	J	NC		6010C
Thallium	ND		ND		NC		6010C
Vanadium	28.7		26.06		9.1		6010C
Zinc	89.4		113.9		27	V	6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-205124-1

SDG No.:

Matrix: Water Level: Low Lab File ID: N3668.d

Lab ID: LCS 480-655113/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	25.0	24.9	100	80-120	
1,1,1-Trichloroethane	25.0	27.7	111	73-126	
1,1,2,2-Tetrachloroethane	25.0	22.8	91	76-120	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	30.2	121	61-148	
1,1,2-Trichloroethane	25.0	21.7	87	76-122	
1,1-Dichloroethane	25.0	26.3	105	77-120	
1,1-Dichloroethene	25.0	27.5	110	66-127	
1,2,4-Trichlorobenzene	25.0	25.4	102	79-122	
1,2,4-Trimethylbenzene	25.0	23.0	92	76-121	
1,2-Dibromo-3-Chloropropane	25.0	24.7	99	56-134	
1,2-Dibromoethane	25.0	21.9	87	77-120	
1,2-Dichlorobenzene	25.0	24.9	100	80-124	
1,2-Dichloroethane	25.0	27.5	110	75-120	
1,2-Dichloropropane	25.0	26.8	107	76-120	
1,3,5-Trimethylbenzene	25.0	22.3	89	77-121	
1,3-Dichlorobenzene	25.0	24.7	99	77-120	
1,4-Dichlorobenzene	25.0	23.1	92	80-120	
2-Butanone (MEK)	125	156	125	57-140	
2-Hexanone	125	124	99	65-127	
4-Methyl-2-pentanone (MIBK)	125	120	96	71-125	
Acetone	125	179	143	56-142	*+
Benzene	25.0	25.8	103	71-124	
Bromodichloromethane	25.0	30.0	120	80-122	
Bromoform	25.0	33.8	135	61-132	*+
Bromomethane	25.0	33.2	133	55-144	
Carbon disulfide	25.0	27.2	109	59-134	
Carbon tetrachloride	25.0	33.9	136	72-134	*+
Chlorobenzene	25.0	22.4	90	80-120	
Chloroethane	25.0	28.2	113	69-136	
Chloroform	25.0	27.8	111	73-127	
Chloromethane	25.0	25.1	100	68-124	
cis-1,2-Dichloroethene	25.0	28.0	112	74-124	
cis-1,3-Dichloropropene	25.0	26.0	104	74-124	
Cyclohexane	25.0	26.7	107	59-135	
Dibromochloromethane	25.0	30.7	123	75-125	
Dichlorodifluoromethane	25.0	29.3	117	59-135	
Ethylbenzene	25.0	23.1	93	77-123	
Isopropylbenzene	25.0	22.6	90	77-122	
m,p-Xylene	25.0	22.5	90	76-122	
Methyl acetate	50.0	58.0	116	74-133	
Methyl tert-butyl ether	25.0	27.1	109	77-120	

Column to be used to flag recovery and RPD values

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-205124-1

SDG No.:

Lab Sample ID: CCVIS 480-655113/3 Calibration Date: 01/05/2023 09:16

Instrument ID: HP5973N Calib Start Date: 12/07/2022 18:39

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 12/07/2022 21:21

Lab File ID: N3666.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.391	1.621	0.1000	29.1	25.0	16.5	50.0
Chloromethane	Ave	3.114	3.152	0.1000	25.3	25.0	1.2	20.0
Vinyl chloride	Ave	1.733	2.218	0.1000	32.0	25.0	28.0*	20.0
Butadiene	Ave	2.705	2.948		27.2	25.0	9.0	20.0
Bromomethane	Ave	0.7966	0.9930	0.1000	31.2	25.0	24.7	50.0
Chloroethane	Ave	1.120	1.219	0.1000	27.2	25.0	8.9	50.0
Trichlorofluoromethane	Ave	1.767	2.302	0.1000	32.6	25.0	30.2*	20.0
Dichlorofluoromethane	Ave	2.389	2.499		26.1	25.0	4.6	20.0
Ethyl ether	Ave	2.148	2.099		24.4	25.0	-2.3	20.0
Acrolein	Ave	0.1744	0.1972		141	125	13.1	50.0
1,1-Dichloroethene	Ave	1.286	1.421	0.1000	27.6	25.0	10.5	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.264	1.529	0.1000	30.2	25.0	21.0*	20.0
Acetone	Ave	0.7614	0.9347	0.1000	153	125	22.8	50.0
Iodomethane	Ave	2.318	2.749		29.6	25.0	18.6	20.0
Carbon disulfide	Ave	4.548	4.842	0.1000	26.6	25.0	6.5	20.0
Allyl chloride	Ave	4.666	4.775		25.6	25.0	2.3	20.0
Methyl acetate	Ave	2.550	2.599	0.1000	51.0	50.0	1.9	50.0
Methylene Chloride	Lin1		1.591	0.1000	27.6	25.0	10.4	20.0
2-Methyl-2-propanol	Ave	0.2129	0.2112		248	250	-0.8	50.0
Methyl tert-butyl ether	Ave	5.120	5.214	0.1000	25.5	25.0	1.9	20.0
trans-1,2-Dichloroethene	Ave	1.507	1.710	0.1000	28.4	25.0	13.5	20.0
Acrylonitrile	Ave	1.202	1.422		296	250	18.3	20.0
Hexane	Ave	3.586	3.841		26.8	25.0	7.1	20.0
1,1-Dichloroethane	Ave	3.653	3.708	0.2000	25.4	25.0	1.5	20.0
Vinyl acetate	Ave	6.019	5.345		44.4	50.0	-11.2	20.0
2,2-Dichloropropane	Ave	1.711	1.563		22.8	25.0	-8.7	20.0
cis-1,2-Dichloroethene	Ave	1.676	1.847	0.1000	27.5	25.0	10.2	20.0
2-Butanone (MEK)	Ave	1.486	1.674	0.1000	141	125	12.7	20.0
Chlorobromomethane	Ave	0.8067	0.9047		28.0	25.0	12.2	20.0
Tetrahydrofuran	Ave	1.079	1.202		55.7	50.0	11.4	20.0
Chloroform	Lin1		2.794	0.2000	26.6	25.0	6.3	20.0
1,1,1-Trichloroethane	Ave	2.309	2.458	0.1000	26.6	25.0	6.4	20.0
Cyclohexane	Ave	4.527	4.563	0.1000	25.2	25.0	0.8	20.0
Carbon tetrachloride	Ave	1.513	2.057	0.1000	34.0	25.0	36.0*	20.0
1,1-Dichloropropene	Ave	2.115	2.259		26.7	25.0	6.8	20.0
Benzene	Ave	6.292	6.315	0.5000	25.1	25.0	0.4	20.0
Isobutyl alcohol	Ave	0.1193	0.1082		567	625	-9.3	50.0
1,2-Dichloroethane	Ave	2.817	2.937	0.1000	26.1	25.0	4.3	20.0
n-Heptane	Ave	3.966	4.207		26.5	25.0	6.1	20.0
Trichloroethene	Ave	1.542	1.678	0.2000	27.2	25.0	8.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-205124-1

SDG No.:

Lab Sample ID: CCVIS 480-655113/3 Calibration Date: 01/05/2023 09:16

Instrument ID: HP5973N Calib Start Date: 12/07/2022 18:39

GC Column: ZB-624 (20) ID: 0.18(mm) Calib End Date: 12/07/2022 21:21

Lab File ID: N3666.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	2.674	2.693	0.1000	25.2	25.0	0.7	20.0
1,2-Dichloropropane	Ave	1.927	1.973	0.1000	25.6	25.0	2.4	20.0
Dibromomethane	Ave	0.9913	1.039	0.1000	26.2	25.0	4.9	20.0
1,4-Dioxane	Ave	0.0032	0.0041		637	500	27.3	50.0
Bromodichloromethane	Ave	1.785	2.053	0.2000	28.8	25.0	15.0	20.0
2-Chloroethyl vinyl ether	Ave	1.330	1.387		26.1	25.0	4.3	20.0
cis-1,3-Dichloropropene	Ave	2.449	2.428	0.2000	24.8	25.0	-0.9	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3074	0.2988	0.1000	121	125	-2.8	20.0
Toluene	Ave	1.031	1.084	0.4000	26.3	25.0	5.1	20.0
trans-1,3-Dichloropropene	Ave	0.6207	0.5451	0.1000	22.0	25.0	-12.2	20.0
Ethyl methacrylate	Ave	0.5673	0.4232		18.7	25.0	-25.4*	20.0
1,1,2-Trichloroethane	Ave	0.3298	0.2992	0.1000	22.7	25.0	-9.3	20.0
Tetrachloroethene	Ave	0.4485	0.4562	0.2000	25.4	25.0	1.7	20.0
1,3-Dichloropropane	Ave	0.6573	0.6277		23.9	25.0	-4.5	20.0
2-Hexanone	Ave	0.6043	0.5830	0.1000	121	125	-3.5	20.0
Dibromochloromethane	Ave	0.2897	0.3837	0.1000	33.1	25.0	32.4*	20.0
1,2-Dibromoethane	Ave	0.4163	0.3894		23.4	25.0	-6.5	20.0
Chlorobenzene	Ave	1.205	1.206	0.5000	25.0	25.0	0.0	20.0
Ethylbenzene	Ave	1.997	1.988	0.1000	24.9	25.0	-0.4	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3554	0.3786		26.6	25.0	6.5	20.0
m,p-Xylene	Ave	0.7962	0.7600	0.1000	23.9	25.0	-4.5	20.0
o-Xylene	Ave	0.7957	0.7613	0.3000	23.9	25.0	-4.3	20.0
Styrene	Ave	1.372	1.259	0.3000	22.9	25.0	-8.2	20.0
Bromoform	Ave	0.1686	0.2383	0.1000	35.3	25.0	41.3	50.0
Isopropylbenzene	Ave	3.946	3.710	0.1000	23.5	25.0	-6.0	20.0
Bromobenzene	Ave	0.996	0.9673		24.3	25.0	-2.9	20.0
1,1,2,2-Tetrachloroethane	Ave	1.047	0.9688	0.3000	23.1	25.0	-7.5	20.0
N-Propylbenzene	Ave	4.555	4.563		25.0	25.0	0.2	20.0
1,2,3-Trichloropropane	Lin1		0.3165		26.0	25.0	4.1	20.0
trans-1,4-Dichloro-2-butene	Ave	0.5253	0.4679		22.3	25.0	-10.9	50.0
2-Chlorotoluene	Ave	0.8686	0.9019		26.0	25.0	3.8	20.0
1,3,5-Trimethylbenzene	Ave	3.295	3.175		24.1	25.0	-3.7	20.0
4-Chlorotoluene	Ave	2.934	2.987		25.5	25.0	1.8	20.0
tert-Butylbenzene	Ave	0.6602	0.6903		26.1	25.0	4.6	20.0
1,2,4-Trimethylbenzene	Ave	3.280	3.268		24.9	25.0	-0.4	20.0
sec-Butylbenzene	Ave	4.120	4.021		24.4	25.0	-2.4	20.0
1,3-Dichlorobenzene	Ave	1.796	1.848	0.6000	25.7	25.0	2.9	20.0
4-Isopropyltoluene	Ave	3.580	3.653		25.5	25.0	2.1	20.0
1,4-Dichlorobenzene	Ave	1.889	1.889	0.5000	25.0	25.0	-0.0	20.0
n-Butylbenzene	Ave	3.188	3.228		25.3	25.0	1.3	20.0
1,2-Dichlorobenzene	Ave	1.748	1.856	0.4000	26.6	25.0	6.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-205124-1

SDG No.:

Lab Sample ID: CCVIS 480-655097/4 Calibration Date: 01/04/2023 19:06

Instrument ID: HP5977M Calib Start Date: 12/13/2022 01:18

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 12/13/2022 03:45

Lab File ID: M08125.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	1.374	1.285	0.1000	46.8	50.0	-6.5	50.0
Chloromethane	Ave	1.751	1.677	0.1000	47.9	50.0	-4.3	20.0
Vinyl chloride	Ave	1.302	1.579	0.1000	60.6	50.0	21.2*	20.0
Butadiene	Ave	1.426	1.614		56.6	50.0	13.2	20.0
Bromomethane	Ave	0.7383	0.8069	0.1000	54.6	50.0	9.3	50.0
Chloroethane	Ave	0.8348	0.9693	0.1000	58.1	50.0	16.1	50.0
Trichlorofluoromethane	Ave	1.532	1.727	0.1000	56.4	50.0	12.7	20.0
Dichlorofluoromethane	Ave	2.003	2.164		54.0	50.0	8.0	20.0
Ethyl ether	Ave	1.189	1.259		53.0	50.0	5.9	20.0
Acrolein	Ave	0.0936	0.0945		252	250	1.0	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	1.088	1.168	0.1000	53.7	50.0	7.3	20.0
1,1-Dichloroethene	Ave	0.9453	0.996	0.1000	52.7	50.0	5.4	20.0
Acetone	Ave	0.4751	0.4326	0.1000	228	250	-8.9	50.0
Iodomethane	Ave	1.834	1.751		47.7	50.0	-4.5	20.0
Carbon disulfide	Ave	3.407	3.545	0.1000	52.0	50.0	4.1	20.0
Allyl chloride	Ave	1.958	2.137		54.6	50.0	9.1	20.0
Methyl acetate	Ave	1.049	1.082	0.1000	103	100	3.2	50.0
Methylene Chloride	Lin1		1.253	0.1000	53.5	50.0	6.9	20.0
2-Methyl-2-propanol	Ave	0.2144	0.1418		331	500	-33.9	50.0
Methyl tert-butyl ether	Ave	3.743	3.680	0.1000	49.2	50.0	-1.7	20.0
trans-1,2-Dichloroethene	Ave	1.121	1.160	0.1000	51.8	50.0	3.5	20.0
Acrylonitrile	Ave	0.5461	0.5611		514	500	2.7	20.0
Hexane	Ave	1.832	2.090		57.0	50.0	14.1	20.0
1,1-Dichloroethane	Ave	2.145	2.366	0.2000	55.2	50.0	10.3	20.0
Vinyl acetate	Ave	2.713	2.728		101	100	0.6	20.0
2,2-Dichloropropane	Ave	1.310	1.242		47.4	50.0	-5.2	20.0
cis-1,2-Dichloroethene	Ave	1.276	1.339	0.1000	52.5	50.0	5.0	20.0
2-Butanone (MEK)	Ave	0.6529	0.6987	0.1000	268	250	7.0	20.0
Chlorobromomethane	Ave	0.6601	0.6452		48.9	50.0	-2.3	20.0
Tetrahydrofuran	Ave	0.4506	0.4864		108	100	8.0	20.0
Chloroform	Ave	2.148	2.172	0.2000	50.6	50.0	1.1	20.0
Cyclohexane	Ave	2.233	2.625	0.1000	58.8	50.0	17.5	20.0
1,1,1-Trichloroethane	Ave	1.627	1.606	0.1000	49.4	50.0	-1.2	20.0
Carbon tetrachloride	Ave	1.347	1.194	0.1000	44.3	50.0	-11.4	20.0
1,1-Dichloropropene	Ave	1.427	1.616		56.6	50.0	13.3	20.0
Benzene	Ave	4.227	4.569	0.5000	54.0	50.0	8.1	20.0
Isobutyl alcohol	Ave	0.0763	0.0552		904	1250	-27.7	50.0
1,2-Dichloroethane	Ave	1.683	1.810	0.1000	53.8	50.0	7.6	20.0
n-Heptane	Ave	1.735	2.107		60.7	50.0	21.4*	20.0
Trichloroethene	Ave	1.083	1.181	0.2000	54.5	50.0	9.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo Job No.: 480-205124-1

SDG No.:

Lab Sample ID: CCVIS 480-655097/4 Calibration Date: 01/04/2023 19:06

Instrument ID: HP5977M Calib Start Date: 12/13/2022 01:18

GC Column: ZB-624 (30) VOA ID: 0.25(mm) Calib End Date: 12/13/2022 03:45

Lab File ID: M08125.D Conc. Units: ug/L Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	1.953	2.157	0.1000	55.2	50.0	10.4	20.0
1,2-Dichloropropane	Ave	1.193	1.296	0.1000	54.3	50.0	8.6	20.0
Dibromomethane	Ave	0.7110	0.7338	0.1000	51.6	50.0	3.2	20.0
1,4-Dioxane	Ave	0.0065	0.0059		906	1000	-9.4	50.0
Bromodichloromethane	Ave	1.446	1.399	0.2000	48.4	50.0	-3.2	20.0
2-Chloroethyl vinyl ether	Ave	0.7117	0.7592		53.3	50.0	6.7	20.0
cis-1,3-Dichloropropene	Ave	1.778	1.732	0.2000	48.7	50.0	-2.6	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6673	0.7069	0.1000	265	250	5.9	20.0
Toluene	Ave	1.305	1.288	0.4000	49.3	50.0	-1.3	20.0
trans-1,3-Dichloropropene	Ave	0.8056	0.7032	0.1000	43.6	50.0	-12.7	20.0
Ethyl methacrylate	Ave	0.7200	0.6105		42.4	50.0	-15.2	20.0
1,1,2-Trichloroethane	Ave	0.4096	0.3879	0.1000	47.4	50.0	-5.3	20.0
Tetrachloroethene	Ave	0.5237	0.5112	0.2000	48.8	50.0	-2.4	20.0
1,3-Dichloropropane	Ave	0.8278	0.8056		48.7	50.0	-2.7	20.0
2-Hexanone	Ave	0.4499	0.4635	0.1000	258	250	3.0	20.0
Dibromochloromethane	Ave	0.5176	0.4079	0.1000	39.4	50.0	-21.2*	20.0
1,2-Dibromoethane	Ave	0.4994	0.4552		45.6	50.0	-8.8	20.0
Chlorobenzene	Ave	1.493	1.424	0.5000	47.7	50.0	-4.6	20.0
Ethylbenzene	Ave	2.464	2.486	0.1000	50.4	50.0	0.9	20.0
1,1,1,2-Tetrachloroethane	Ave	0.5626	0.4442		39.5	50.0	-21.1*	20.0
m,p-Xylene	Ave	0.9863	0.9638	0.1000	48.9	50.0	-2.3	20.0
o-Xylene	Ave	1.043	1.005	0.3000	48.2	50.0	-3.7	20.0
Styrene	Ave	1.713	1.614	0.3000	47.1	50.0	-5.8	20.0
Bromoform	Ave	0.3381	0.2327	0.1000	34.4	50.0	-31.2	50.0
Isopropylbenzene	Ave	2.517	2.604	0.1000	51.7	50.0	3.5	20.0
Bromobenzene	Ave	0.6675	0.5989		44.9	50.0	-10.3	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7394	0.7096	0.3000	48.0	50.0	-4.0	20.0
N-Propylbenzene	Ave	2.985	3.140		52.6	50.0	5.2	20.0
1,2,3-Trichloropropane	Ave	0.2244	0.2090		46.6	50.0	-6.8	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2477	0.2226		44.9	50.0	-10.1	50.0
2-Chlorotoluene	Ave	0.6348	0.6244		49.2	50.0	-1.6	20.0
1,3,5-Trimethylbenzene	Ave	2.245	2.260		50.3	50.0	0.7	20.0
4-Chlorotoluene	Ave	0.6485	0.6243		48.1	50.0	-3.7	20.0
tert-Butylbenzene	Ave	0.4754	0.4887		51.4	50.0	2.8	20.0
1,2,4-Trimethylbenzene	Ave	2.372	2.376		50.1	50.0	0.2	20.0
sec-Butylbenzene	Ave	2.818	2.951		52.3	50.0	4.7	20.0
1,3-Dichlorobenzene	Ave	1.326	1.243	0.6000	46.8	50.0	-6.3	20.0
4-Isopropyltoluene	Ave	2.499	2.560		51.2	50.0	2.4	20.0
1,4-Dichlorobenzene	Ave	1.369	1.266	0.5000	46.2	50.0	-7.5	20.0
n-Butylbenzene	Ave	2.340	2.476		52.9	50.0	5.8	20.0
1,2-Dichlorobenzene	Ave	1.345	1.250	0.4000	46.5	50.0	-7.1	20.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-205124-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-655096/2-A

Matrix: Solid | Lab File ID: M08130.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 01/04/2023 21:08

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (30) VOA ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) Y pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 655097 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	ND		5.0	0.50
71-55-6	1,1,1-Trichloroethane	ND		5.0	0.36
79-34-5	1,1,2,2-Tetrachloroethane	ND		5.0	0.81
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1
79-00-5	1,1,2-Trichloroethane	ND		5.0	0.65
75-34-3	1,1-Dichloroethane	ND		5.0	0.61
75-35-4	1,1-Dichloroethene	ND		5.0	0.61
526-73-8	1,2,3-Trimethylbenzene	ND		5.0	1.0
120-82-1	1,2,4-Trichlorobenzene	ND		5.0	0.30
95-63-6	1,2,4-Trimethylbenzene	ND		5.0	0.96
96-12-8	1,2-Dibromo-3-Chloropropane	ND		5.0	2.5
106-93-4	1,2-Dibromoethane	ND		5.0	0.64
95-50-1	1,2-Dichlorobenzene	ND		5.0	0.39
107-06-2	1,2-Dichloroethane	ND		5.0	0.25
78-87-5	1,2-Dichloropropane	ND		5.0	2.5
108-67-8	1,3,5-Trimethylbenzene	ND		5.0	0.32
541-73-1	1,3-Dichlorobenzene	ND		5.0	0.26
106-46-7	1,4-Dichlorobenzene	ND		5.0	0.70
78-93-3	2-Butanone (MEK)	ND		25	1.8
591-78-6	2-Hexanone	ND		25	2.5
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		25	1.6
67-64-1	Acetone	ND		25	4.2
71-43-2	Benzene	ND		5.0	0.25
75-27-4	Bromodichloromethane	ND		5.0	0.67
75-25-2	Bromoform	ND		5.0	2.5
74-83-9	Bromomethane	ND		5.0	0.45
75-15-0	Carbon disulfide	ND		5.0	2.5
56-23-5	Carbon tetrachloride	ND		5.0	0.48
108-90-7	Chlorobenzene	ND		5.0	0.66
75-00-3	Chloroethane	ND		5.0	1.1
67-66-3	Chloroform	0.472	J	5.0	0.31
74-87-3	Chloromethane	ND		5.0	0.30
156-59-2	cis-1,2-Dichloroethene	ND		5.0	0.64

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Buffalo | Job No.: 480-205124-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 480-655096/2-A

Matrix: Solid | Lab File ID: M08130.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(g) | Date Analyzed: 01/04/2023 21:08

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: ZB-624 (30) VOA ID: 0.25(mm)

Purge Volume: 5.0(mL) | Heated Purge: (Y/N) Y pH:

% Moisture: % Solids: | Level: (low/med) Low

Analysis Batch No.: 655097 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
10061-01-5	cis-1,3-Dichloropropene	ND		5.0	0.72
110-82-7	Cyclohexane	ND		5.0	0.70
124-48-1	Dibromochloromethane	ND		5.0	0.64
75-71-8	Dichlorodifluoromethane	ND		5.0	0.41
100-41-4	Ethylbenzene	ND		5.0	0.35
98-82-8	Isopropylbenzene	ND		5.0	0.75
179601-23-1	m,p-Xylene	ND		10	0.84
79-20-9	Methyl acetate	ND		25	3.0
1634-04-4	Methyl tert-butyl ether	ND		5.0	0.49
108-87-2	Methylcyclohexane	ND		5.0	0.76
75-09-2	Methylene Chloride	ND		5.0	2.3
104-51-8	n-Butylbenzene	ND		5.0	0.44
103-65-1	N-Propylbenzene	ND		5.0	0.40
95-47-6	o-Xylene	ND		5.0	0.65
135-98-8	sec-Butylbenzene	ND		5.0	0.44
100-42-5	Styrene	ND		5.0	0.25
98-06-6	tert-Butylbenzene	ND		5.0	0.52
127-18-4	Tetrachloroethene	0.755	J	5.0	0.67
108-88-3	Toluene	ND		5.0	0.38
156-60-5	trans-1,2-Dichloroethene	ND		5.0	0.52
10061-02-6	trans-1,3-Dichloropropene	ND		5.0	2.2
79-01-6	Trichloroethene	ND		5.0	1.1
75-69-4	Trichlorofluoromethane	ND		5.0	0.47
75-01-4	Vinyl chloride	ND		5.0	0.61
1330-20-7	Xylenes, Total	ND		10	0.84

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	104		64-126
460-00-4	4-Bromofluorobenzene (Surr)	93		72-126
1868-53-7	Dibromofluoromethane (Surr)	97		60-140
2037-26-5	Toluene-d8 (Surr)	95		71-125

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-205124-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): RXI-5Sil MS ID: 0.25(mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPHd14 #
EB_010323	480-205124-2	63	50	82	113	96	125
FB_010323	480-205124-3	56	45	76	100	85	121
	MB 480-655242/1-A	53	40	64	88	95	110
	LCS 480-655242/2-A	85	75	95	112	130 S1+	122
	LCSD 480-655242/3-A	78	66	90	113	125 S1+	123

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	35-120
PHL = Phenol-d5 (Surr)	22-120
NBZ = Nitrobenzene-d5 (Surr)	46-120
FBP = 2-Fluorobiphenyl (Surr)	48-120
TBP = 2,4,6-Tribromophenol (Surr)	41-120
TPHd14 = p-Terphenyl-d14 (Surr)	60-148

Column to be used to flag recovery values

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-205124-1

SDG No.:

Matrix: Water Level: Low Lab File ID: W10023606.d

Lab ID: LCS 480-655242/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
2,4,5-Trichlorophenol	32.0	39.3	123	65-126	
2,4,6-Trichlorophenol	32.0	34.3	107	64-120	
2,4-Dichlorophenol	32.0	36.9	115	63-120	
2,4-Dimethylphenol	32.0	31.7	99	47-120	
2,4-Dinitrophenol	64.0	68.2	107	31-137	
2,4-Dinitrotoluene	32.0	32.5	102	69-120	
2,6-Dinitrotoluene	32.0	33.8	105	68-120	
2-Chloronaphthalene	32.0	39.2	122	58-120	*+
2-Chlorophenol	32.0	34.8	109	48-120	
2-Methylnaphthalene	32.0	32.9	103	59-120	
2-Methylphenol	32.0	38.9	122	39-120	*+
2-Nitroaniline	32.0	33.0	103	54-127	
2-Nitrophenol	32.0	33.1	103	52-125	
3,3'-Dichlorobenzidine	64.0	66.6	104	49-135	
3-Nitroaniline	32.0	30.2	94	51-120	
4,6-Dinitro-2-methylphenol	64.0	80.1	125	46-136	
4-Bromophenyl phenyl ether	32.0	39.8	124	65-120	*+
4-Chloro-3-methylphenol	32.0	33.7	105	61-123	
4-Chloroaniline	32.0	28.4	89	30-120	
4-Chlorophenyl phenyl ether	32.0	38.7	121	62-120	*+
4-Methylphenol	32.0	32.1	100	29-131	
4-Nitroaniline	32.0	33.1	103	65-120	
4-Nitrophenol	64.0	51.6	81	45-120	
Acenaphthene	32.0	32.7	102	60-120	
Acenaphthylene	32.0	33.4	104	63-120	
Acetophenone	32.0	35.2	110	45-120	
Anthracene	32.0	37.3	116	67-120	
Atrazine	64.0	84.6	132	71-130	*+
Benzaldehyde	64.0	57.3	90	10-140	
Benzo[a]anthracene	32.0	33.1	103	70-121	
Benzo[a]pyrene	32.0	34.0	106	60-123	
Benzo[b]fluoranthene	32.0	37.7	118	66-126	
Benzo[g,h,i]perylene	32.0	36.1	113	66-150	
Benzo[k]fluoranthene	32.0	34.9	109	65-124	
Biphenyl	32.0	32.4	101	59-120	
bis (2-chloroisopropyl) ether	32.0	24.0	75	21-136	
Bis(2-chloroethoxy)methane	32.0	28.2	88	50-128	
Bis(2-chloroethyl)ether	32.0	33.8	106	44-120	
Bis(2-ethylhexyl) phthalate	32.0	27.8	87	63-139	
Butyl benzyl phthalate	32.0	28.7	90	70-129	
Caprolactam	64.0	27.2	43	22-120	
Carbazole	32.0	38.2	119	66-123	

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-205124-1

SDG No.:

Matrix: Water Level: Low Lab File ID: W10023606.d

Lab ID: LCS 480-655242/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Chrysene	32.0	31.6	99	69-120	
Dibenz(a,h)anthracene	32.0	37.4	117	65-135	
Dibenzofuran	32.0	34.8	109	66-120	
Diethyl phthalate	32.0	35.9	112	59-127	
Dimethyl phthalate	32.0	35.7	111	68-120	
Di-n-butyl phthalate	32.0	33.7	105	69-131	
Di-n-octyl phthalate	32.0	30.0	94	63-140	
Fluoranthene	32.0	35.8	112	69-126	
Fluorene	32.0	36.1	113	66-120	
Hexachlorobenzene	32.0	41.2	129	61-120	*+
Hexachlorobutadiene	32.0	30.9	97	35-120	
Hexachlorocyclopentadiene	32.0	29.1	91	31-120	
Hexachloroethane	32.0	26.3	82	43-120	
Indeno[1,2,3-cd]pyrene	32.0	38.8	121	69-146	
Isophorone	32.0	27.6	86	55-120	
Naphthalene	32.0	33.7	105	57-120	
Nitrobenzene	32.0	28.1	88	53-123	
N-Nitrosodi-n-propylamine	32.0	31.7	99	32-140	
N-Nitrosodiphenylamine	32.0	34.3	107	61-120	
Pentachlorophenol	64.0	61.5	96	29-136	
Phenanthrene	32.0	33.1	104	68-120	
Phenol	32.0	24.0	75	17-120	
Pyrene	32.0	31.6	99	70-125	

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-205124-1

SDG No.:

Matrix: Water Level: Low Lab File ID: W10023607.d

Lab ID: LCSD 480-655242/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2,4,5-Trichlorophenol	32.0	41.5	130	6	18	65-126	*+
2,4,6-Trichlorophenol	32.0	35.0	109	2	19	64-120	
2,4-Dichlorophenol	32.0	33.2	104	11	19	63-120	
2,4-Dimethylphenol	32.0	30.3	95	5	42	47-120	
2,4-Dinitrophenol	64.0	69.9	109	2	22	31-137	
2,4-Dinitrotoluene	32.0	35.8	112	10	20	69-120	
2,6-Dinitrotoluene	32.0	34.8	109	3	15	68-120	
2-Chloronaphthalene	32.0	39.0	122	1	21	58-120	*+
2-Chlorophenol	32.0	30.6	96	13	25	48-120	
2-Methylnaphthalene	32.0	29.6	93	11	21	59-120	
2-Methylphenol	32.0	32.9	103	17	27	39-120	
2-Nitroaniline	32.0	32.4	101	2	15	54-127	
2-Nitrophenol	32.0	31.4	98	5	18	52-125	
3,3'-Dichlorobenzidine	64.0	67.3	105	1	25	49-135	
3-Nitroaniline	32.0	30.5	95	1	19	51-120	
4,6-Dinitro-2-methylphenol	64.0	71.5	112	11	15	46-136	
4-Bromophenyl phenyl ether	32.0	37.9	118	5	15	65-120	
4-Chloro-3-methylphenol	32.0	30.6	96	10	27	61-123	
4-Chloroaniline	32.0	26.1	82	8	22	30-120	
4-Chlorophenyl phenyl ether	32.0	38.1	119	2	16	62-120	
4-Methylphenol	32.0	35.0	109	9	24	29-131	
4-Nitroaniline	32.0	35.5	111	7	24	65-120	
4-Nitrophenol	64.0	57.7	90	11	48	45-120	
Acenaphthene	32.0	34.1	107	4	24	60-120	
Acenaphthylene	32.0	33.4	104	0	18	63-120	
Acetophenone	32.0	32.2	101	9	20	45-120	
Anthracene	32.0	36.3	114	3	15	67-120	
Atrazine	64.0	87.4	137	3	20	71-130	*+
Benzaldehyde	64.0	52.8	82	8	20	10-140	
Benzo[a]anthracene	32.0	33.8	106	2	15	70-121	
Benzo[a]pyrene	32.0	33.6	105	1	15	60-123	
Benzo[b]fluoranthene	32.0	39.8	124	6	15	66-126	
Benzo[g,h,i]perylene	32.0	34.3	107	5	15	66-150	
Benzo[k]fluoranthene	32.0	32.6	102	7	22	65-124	
Biphenyl	32.0	32.6	102	1	20	59-120	
bis (2-chloroisopropyl) ether	32.0	19.8	62	19	24	21-136	
Bis(2-chloroethoxy)methane	32.0	26.7	83	5	17	50-128	
Bis(2-chloroethyl)ether	32.0	32.4	101	4	21	44-120	
Bis(2-ethylhexyl) phthalate	32.0	27.7	86	1	15	63-139	
Butyl benzyl phthalate	32.0	27.5	86	4	16	70-129	
Caprolactam	64.0	27.3	43	0	20	22-120	
Carbazole	32.0	36.1	113	6	20	66-123	

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-205124-1

SDG No.:

Matrix: Water Level: Low Lab File ID: W10023607.d

Lab ID: LCSD 480-655242/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Chrysene	32.0	31.0	97	2	15	69-120	
Dibenz(a,h)anthracene	32.0	37.4	117	0	15	65-135	
Dibenzofuran	32.0	35.8	112	3	15	66-120	
Diethyl phthalate	32.0	35.7	112	1	15	59-127	
Dimethyl phthalate	32.0	35.4	111	1	15	68-120	
Di-n-butyl phthalate	32.0	32.4	101	4	15	69-131	
Di-n-octyl phthalate	32.0	29.6	93	1	16	63-140	
Fluoranthene	32.0	35.7	112	0	15	69-126	
Fluorene	32.0	38.4	120	6	15	66-120	
Hexachlorobenzene	32.0	37.8	118	9	15	61-120	
Hexachlorobutadiene	32.0	29.9	93	3	44	35-120	
Hexachlorocyclopentadiene	32.0	28.2	88	3	49	31-120	
Hexachloroethane	32.0	24.6	77	7	46	43-120	
Indeno[1,2,3-cd]pyrene	32.0	38.6	121	1	15	69-146	
Isophorone	32.0	27.8	87	1	17	55-120	
Naphthalene	32.0	33.4	104	1	29	57-120	
Nitrobenzene	32.0	26.8	84	5	24	53-123	
N-Nitrosodi-n-propylamine	32.0	28.6	89	10	31	32-140	
N-Nitrosodiphenylamine	32.0	32.8	102	5	15	61-120	
Pentachlorophenol	64.0	55.9	87	10	37	29-136	
Phenanthrene	32.0	35.2	110	6	15	68-120	
Phenol	32.0	21.4	67	11	34	17-120	
Pyrene	32.0	31.6	99	0	19	70-125	

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-205124-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: V3161404.d

Lab ID: 480-205124-1 MSD Client ID: SB3 (23-25) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2,4,5-Trichlorophenol	1800	1900	106	21	18	46-120	F2
2,4,6-Trichlorophenol	1800	1900	106	21	19	41-123	F2
2,4-Dichlorophenol	1800	1680	94	23	19	45-120	F2
2,4-Dimethylphenol	1800	1750	97	24	42	52-120	
2,4-Dinitrophenol	3590	3060	85	23	22	41-146	F2
2,4-Dinitrotoluene	1800	1840	103	18	20	63-125	
2,6-Dinitrotoluene	1800	1870	104	23	15	66-120	F2
2-Chloronaphthalene	1800	1770	99	17	21	57-120	
2-Chlorophenol	1800	1560	87	22	25	43-120	
2-Methylnaphthalene	1800	1620	90	22	21	55-120	F2
2-Methylphenol	1800	1590	89	26	27	48-120	
2-Nitroaniline	1800	1850	103	23	15	61-120	F2
2-Nitrophenol	1800	1720	96	21	18	37-120	F2
3,3'-Dichlorobenzidine	3590	3840	107	18	25	37-126	
3-Nitroaniline	1800	1640	91	19	19	48-120	
4,6-Dinitro-2-methylphenol	3590	3590	100	25	15	23-149	F2
4-Bromophenyl phenyl ether	1800	1980	110	23	15	58-120	F2
4-Chloro-3-methylphenol	1800	1700	95	28	27	49-125	F2
4-Chloroaniline	1800	1390	78	27	22	38-120	F2
4-Chlorophenyl phenyl ether	1800	1770	99	19	16	63-124	F2
4-Methylphenol	1800	1570	88	28	24	50-120	F2
4-Nitroaniline	1800	1650	92	7	24	47-120	
4-Nitrophenol	3590	3580	100	11	25	31-147	
Acenaphthene	1800	1820	101	18	35	60-120	
Acenaphthylene	1800	1870	104	19	18	58-121	F2
Acetophenone	1800	1590	88	24	20	47-120	F2
Anthracene	1800	1940	108	18	15	62-120	F2
Atrazine	3590	3570	99	14	20	60-150	
Benzaldehyde	3590	3210	89	25	20	10-150	E F2
Benzo[a]anthracene	1800	1990	111	19	15	65-120	F2
Benzo[a]pyrene	1800	2000	111	20	15	64-120	F2
Benzo[b]fluoranthene	1800	1990	111	18	15	10-150	F2
Benzo[g,h,i]perylene	1800	2040	113	16	15	45-145	F2
Benzo[k]fluoranthene	1800	1820	101	21	22	23-150	
Biphenyl	1800	1840	102	17	20	58-120	
bis (2-chloroisopropyl) ether	1800	1510	84	22	24	31-120	
Bis(2-chloroethoxy)methane	1800	1680	94	21	17	52-120	F2
Bis(2-chloroethyl)ether	1800	1530	85	21	21	45-120	
Bis(2-ethylhexyl) phthalate	1800	1920	107	15	15	61-133	
Butyl benzyl phthalate	1800	1880	105	15	16	61-120	
Caprolactam	3590	3380	94	25	20	37-133	F2
Carbazole	1800	1930	107	14	20	59-120	

Column to be used to flag recovery and RPD values

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-205124-1

SDG No.:

Matrix: Solid Level: Low Lab File ID: V3161404.d

Lab ID: 480-205124-1 MSD Client ID: SB3 (23-25) MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Chrysene	1800	1850	103	21	15	64-120	F2
Dibenz(a,h)anthracene	1800	2080	116	16	15	54-132	F2
Dibenzofuran	1800	1800	100	19	15	62-120	F2
Diethyl phthalate	1800	1850	103	22	15	66-120	F2
Dimethyl phthalate	1800	1860	104	20	15	65-124	F2
Di-n-butyl phthalate	1800	1940	108	19	15	58-130	F2
Di-n-octyl phthalate	1800	1960	109	19	16	57-133	F2
Fluoranthene	1800	1900	106	13	15	62-120	
Fluorene	1800	1770	99	16	15	63-120	F2
Hexachlorobenzene	1800	1870	104	21	15	60-120	F2
Hexachlorobutadiene	1800	1580	88	15	44	45-120	
Hexachlorocyclopentadiene	1800	1760	98	18	49	31-120	
Hexachloroethane	1800	1470	82	19	46	21-120	
Indeno[1,2,3-cd]pyrene	1800	2230	124	17	15	56-134	F2
Isophorone	1800	1690	94	20	17	56-120	F2
Naphthalene	1800	1620	90	20	29	46-120	
Nitrobenzene	1800	1670	93	19	24	49-120	
N-Nitrosodi-n-propylamine	1800	1530	85	24	31	46-120	
N-Nitrosodiphenylamine	1800	2010	112	25	15	20-128	F2
Pentachlorophenol	3590	3880	108	20	35	25-136	
Phenanthrene	1800	1910	106	17	15	60-122	F2
Phenol	1800	1540	86	24	35	50-120	
Pyrene	1800	1940	108	18	35	61-133	

Column to be used to flag recovery and RPD values

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Buffalo | Job No.: 480-205124-1

SDG No.:

Lab Sample ID: CCVIS 480-655370/3 | Calibration Date: 01/09/2023 10:57

Instrument ID: HP5973W | Calib Start Date: 11/04/2022 11:26

GC Column: RXI-5Sil MS ID: 0.25(mm) | Calib End Date: 11/04/2022 14:37

Lab File ID: W10023599.d | Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.5143	0.4405	0.0100	3430	4000	-14.4	20.0
N-Nitrosodimethylamine	Ave	0.7591	0.8712	0.0100	4590	4000	14.8	50.0
Pyridine	Ave	0.7327	0.5558	0.0100	6070	8000	-24.1	50.0
Benzaldehyde	Lin2		1.039	0.0100	7640	8000	-4.5	50.0
Phenol	Ave	1.536	1.546	0.8000	4030	4000	0.7	20.0
Aniline	Ave	2.001	1.501	0.0100	3000	4000	-25.0*	20.0
Bis(2-chloroethyl)ether	Lin2		1.245	0.7000	4290	4000	7.2	20.0
n-Decane	Ave	1.366	1.037	0.0100	3040	4000	-24.1*	20.0
2-Chlorophenol	Ave	1.285	1.318	0.8000	4100	4000	2.6	20.0
1,3-Dichlorobenzene	Ave	1.542	1.716	0.0100	4450	4000	11.3	20.0
1,4-Dichlorobenzene	Ave	1.591	1.637	0.0100	4120	4000	2.9	20.0
Benzyl alcohol	Ave	0.7847	0.7381	0.0100	3760	4000	-5.9	20.0
1,2-Dichlorobenzene	Ave	1.487	1.509	0.0100	4060	4000	1.5	20.0
2-Methylphenol	Ave	1.176	1.212	0.7000	4120	4000	3.1	20.0
bis (2-chloroisopropyl) ether	Ave	1.468	1.005	0.0100	2740	4000	-31.5*	20.0
Indene	Ave	0.6389	0.6034	0.0100	18900	20000	-5.6	20.0
N-Nitrosodi-n-propylamine	Ave	0.9203	0.7868	0.5000	3420	4000	-14.5	20.0
4-Methylphenol	Ave	1.222	1.232	0.6000	4030	4000	0.8	20.0
Acetophenone	Lin2		1.820	0.0100	3970	4000	-0.7	20.0
Hexachloroethane	Ave	0.6432	0.6067	0.3000	3770	4000	-5.7	20.0
Nitrobenzene	Ave	0.4123	0.3272	0.2000	3170	4000	-20.6*	20.0
Isophorone	Ave	0.6968	0.6029	0.4000	3460	4000	-13.5	20.0
2-Nitrophenol	Lin2		0.1832	0.1000	3830	4000	-4.3	20.0
2,4-Dimethylphenol	Ave	0.3692	0.3636	0.2000	3940	4000	-1.5	20.0
Bis(2-chloroethoxy)methane	Lin2		0.3274	0.3000	3400	4000	-15.0	20.0
Benzoic acid	Lin2		0.1234	0.0100	12600	20000	-37.0	50.0
2,4-Dichlorophenol	Ave	0.2867	0.2735	0.2000	3820	4000	-4.6	20.0
1,2,4-Trichlorobenzene	Ave	0.3214	0.3440	0.0100	4280	4000	7.0	20.0
Naphthalene	Ave	0.8997	1.016	0.7000	4520	4000	13.0	20.0
4-Chloroaniline	Lin2		0.3348	0.0100	3860	4000	-3.6	20.0
2,6-Dichlorophenol	Ave	0.2967	0.2938	0.0100	3960	4000	-1.0	20.0
Hexachlorobutadiene	Ave	0.1988	0.2278	0.0100	4580	4000	14.6	20.0
Caprolactam	Lin2		0.0871	0.0100	7410	8000	-7.4	50.0
4-Chloro-3-methylphenol	Ave	0.2997	0.2754	0.2000	3680	4000	-8.1	20.0
2-Methylnaphthalene	Lin2		0.6889	0.4000	4040	4000	0.9	20.0
1-Methylnaphthalene	Ave	0.6549	0.6668	0.0100	4070	4000	1.8	20.0
Hexachlorocyclopentadiene	Ave	0.3684	0.3076	0.0500	3340	4000	-16.5	20.0
1,2,4,5-Tetrachlorobenzene	Lin2		0.6185	0.0100	4710	4000	17.8	20.0
2,4,6-Trichlorophenol	Lin2		0.3699	0.2000	3810	4000	-4.8	20.0
2,4,5-Trichlorophenol	Lin2		0.3893	0.2000	4380	4000	9.4	20.0

FORM III
PFAS LOW LEVEL CONTROL STANDARD DUPLICATE RECOVERY

Lab Name: Eurofins Burlington Job No.: 480-205124-1

SDG No.:

Matrix: Water Level: Low Lab File ID: PA230113A10.d

Lab ID: LLCSD 200-187354/3-A Client ID:

COMPOUND	SPIKE ADDED (ng/L)	LLCSD CONCENTRATION (ng/L)	LLCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Perfluorobutanoic acid (PFBA)	10.0	10.5	105	15	30	50-150	
Perfluoropentanoic acid (PFPeA)	4.00	5.08	127	14	30	50-150	
Perfluorohexanoic acid (PFHxA)	4.00	4.29	107	13	30	50-150	
Perfluoroheptanoic acid (PFHpA)	4.00	4.42	111	2	30	50-150	
Perfluorooctanoic acid (PFOA)	4.00	3.60	90	27	30	50-150	
Perfluorononanoic acid (PFNA)	4.00	4.57	114	21	30	50-150	
Perfluorodecanoic acid (PFDA)	4.00	3.96	99	1	30	50-150	
Perfluoroundecanoic acid (PFUnA)	4.00	4.36	109	22	30	50-150	
Perfluorododecanoic acid (PFDoA)	4.00	3.42	86	11	30	50-150	
Perfluorotridecanoic acid (PFTriA)	4.00	4.28	107	31	30	50-150	*1
Perfluorotetradecanoic acid (PFTeA)	4.00	3.84	96	9	30	50-150	
Perfluorobutanesulfonic acid (PFBS)	3.54	4.66	132	26	30	50-150	
Perfluorohexanesulfonic acid (PFHxS)	3.64	3.86	106	6	30	50-150	
Perfluoroheptanesulfonic acid (PFHpS)	3.81	3.75	98	0.7	30	50-150	
Perfluorooctanesulfonic acid (PFOS)	3.71	4.04	109	6	30	50-150	
Perfluorodecanesulfonic acid (PFDS)	3.86	3.24	84	5	30	50-150	
Perfluorooctanesulfonamide (PFOSA)	4.00	3.44	86	0.3	30	50-150	
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	10.0	10.2	102	3	30	50-150	
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	10.0	9.68	97	4	30	50-150	
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	9.48	9.25	98	0.7	30	50-150	
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	3.83	3.51	92	16	30	50-150	
18O2 PFHxS	47.3	40.9	87			50-150	
13C4 PFHpA	50.0	51.4	103			50-150	
13C4 PFOA	50.0	53.4	107			50-150	
13C4 PFOS	47.8	46.3	97			50-150	
13C5 PFNA	50.0	46.9	94			50-150	
13C4 PFBA	50.0	46.3	93			50-150	
13C2 PFHxA	50.0	46.2	92			50-150	
13C2 PFDA	50.0	47.2	94			50-150	
13C2 PFUnA	50.0	46.1	92			50-150	

Column to be used to flag recovery and RPD values

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-205124-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-655387/7 01/06/2023 10:44		CCB 480-655387/20 01/06/2023 12:43		CCB 480-655387/32 01/06/2023 13:29		CCB 480-655387/44 01/06/2023 14:16	
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND		ND		ND		ND	
Antimony	0.020	ND		ND		ND		ND	
Arsenic	0.015	ND		ND		ND		ND	
Barium	0.0020	ND		ND		ND		ND	
Beryllium	0.0020	ND		ND		ND		ND	
Cadmium	0.0020	ND		ND		ND		ND	
Calcium	0.50	ND		ND		ND		ND	
Chromium	0.0040	ND		ND		ND		ND	
Cobalt	0.0040	ND		ND		ND		ND	
Copper	0.010	ND		ND		ND		ND	
Iron	0.050	ND		ND		0.0300	J	0.0208	J
Lead	0.010	ND		ND		ND		ND	
Magnesium	0.20	ND		ND		ND		ND	
Manganese	0.0030	ND		ND		0.00105	J	0.000810	J
Nickel	0.010	ND		ND		ND		ND	
Potassium	0.50	ND		ND		ND		ND	
Selenium	0.025	ND		ND		ND		ND	
Silver	0.0060	ND		ND		ND		ND	
Sodium	1.0	ND		ND		ND		ND	
Thallium	0.020	ND		ND		ND		ND	
Vanadium	0.0050	ND		ND		ND		ND	
Zinc	0.010	ND		ND		ND		ND	

Italicized analytes were not requested for this

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Buffalo Job No.: 480-205124-1

SDG No.:

Concentration Units: mg/Kg Lab Sample ID: MB 480-655190/1-A

Instrument Code: ICAP2 Batch No.: 655387

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			6010C
7440-36-0	Antimony	ND			6010C
7440-38-2	Arsenic	ND			6010C
7440-39-3	Barium	ND			6010C
7440-41-7	Beryllium	ND			6010C
7440-43-9	Cadmium	ND			6010C
7440-70-2	Calcium	ND			6010C
7440-47-3	Chromium	ND			6010C
7440-48-4	Cobalt	ND			6010C
7440-50-8	Copper	ND			6010C
7439-89-6	Iron	ND			6010C
7439-92-1	Lead	ND			6010C
7439-95-4	Magnesium	ND			6010C
7439-96-5	Manganese	0.0444	J		6010C
7440-02-0	Nickel	ND			6010C
7440-09-7	Potassium	ND			6010C
7782-49-2	Selenium	ND			6010C
7440-22-4	Silver	ND			6010C
7440-23-5	Sodium	ND			6010C
7440-28-0	Thallium	ND			6010C
7440-62-2	Vanadium	ND			6010C
7440-66-6	Zinc	ND			6010C

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-205124-1

SDG No.:

Lab Sample ID: ICSA 480-655265/8 Instrument ID: ICAP2

Lab File ID: I2010523A-4.asc ICS Source: MEI_MSS_ICSA_00051

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**500**	**489**	**98**
Antimony		**-0.0056**	
Arsenic		**-0.0002**	
Barium	**0.0120**	**0.0012**	
Beryllium		**-0.0001**	
Cadmium		**-0.0004**	
Calcium	**500**	**458**	**92**
Chromium		**-0.0003**	
Cobalt		**-0.0001**	
Copper		**0.0003**	
Iron	**200**	**183**	**92**
Lead		**0.0008**	
Magnesium	**500**	**502**	**100**
Manganese		**0.0023**	
Nickel		**0.0062**	
Potassium		**0.105**	
Selenium		**0.0003**	
Silver		**-0.0019**	
Sodium		**0.111**	
Thallium		**0.0055**	
Vanadium		**0.0014**	
Zinc		**0.0020**	
Boron		*-0.0001*	
Lithium		*-0.0246*	
Molybdenum		*-0.0016*	
Silicon		*-0.0037*	
Strontium		*0.0033*	
Sulfur		*0.0326*	
Tin		*-0.0001*	
Titanium		*0.0027*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-205124-1

SDG No.:

Lab Sample ID: ICSAB 480-655265/9 Instrument ID: ICAP2

Lab File ID: I2010523A-4.asc ICS Source: MEI_MSS_ICSAB_00048

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Aluminum	**500**	**487**	**97**
Antimony	**0.500**	**0.497**	**99**
Arsenic	**0.500**	**0.486**	**97**
Barium	**0.513**	**0.500**	**98**
Beryllium	**0.250**	**0.238**	**95**
Cadmium	**0.500**	**0.505**	**101**
Calcium	**500**	**459**	**92**
Chromium	**0.500**	**0.481**	**96**
Cobalt	**0.500**	**0.480**	**96**
Copper	**0.500**	**0.509**	**102**
Iron	**200**	**183**	**92**
Lead	**0.500**	**0.470**	**94**
Magnesium	**500**	**499**	**100**
Manganese	**0.501**	**0.480**	**96**
Nickel	**0.501**	**0.484**	**97**
Potassium	**5.00**	**5.21**	**104**
Selenium	**0.500**	**0.488**	**98**
Silver	**0.500**	**0.517**	**103**
Sodium	**5.00**	**5.20**	**104**
Thallium	**0.500**	**0.482**	**96**
Vanadium	**0.500**	**0.486**	**97**
Zinc	**0.501**	**0.457**	**91**
Boron	*5.00*	*4.77*	*95*
Lithium		*-0.0253*	
Molybdenum	*0.500*	*0.471*	*94*
Silicon	*5.00*	*4.75*	*95*
Strontium	*0.500*	*0.470*	*94*
Sulfur		*0.0329*	
Tin	*0.500*	*0.478*	*96*
Titanium	*0.500*	*0.490*	*98*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-205124-1

SDG No.:

Lab Sample ID: ICSA 480-655387/9 Instrument ID: ICAP2

Lab File ID: I2010623A-2.asc ICS Source: MEI_MSS_ICSA_00052

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**500**	**485**	**97**
Antimony		**0.0004**	
Arsenic		**0.0004**	
Barium	**0.0120**	**0.0012**	
Beryllium		**0.0000**	
Cadmium		**-0.0003**	
Calcium	**500**	**449**	**90**
Chromium		**-0.0008**	
Cobalt		**-0.0004**	
Copper		**0.0007**	
Iron	**200**	**184**	**92**
Lead		**0.0035**	
Magnesium	**500**	**509**	**102**
Manganese		**0.0023**	
Nickel		**0.0047**	
Potassium		**0.0643**	
Selenium		**-0.0024**	
Silver		**0.0007**	
Sodium		**0.154**	
Thallium		**0.0080**	
Vanadium		**0.0007**	
Zinc		**0.0022**	
Boron		*-0.0014*	
Lithium		*0.0095*	
Molybdenum		*-0.0017*	
Strontium		*0.0031*	
Tin		*0.0013*	
Titanium		*0.0018*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

Detection Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-1

Client Sample ID: MW1-013123 (Continued) — Lab Sample ID: 480-205868-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc, Dissolved	0.0025	J	0.010	0.0015	mg/L	1		6010C	Dissolved

Client Sample ID: FB_013123 — Lab Sample ID: 480-205868-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	0.00089	J B	0.0030	0.00040	mg/L	1		6010C	Total/NA

Client Sample ID: TB_013123 — Lab Sample ID: 480-205868-7

No Detections.

This Detection Summary does not include radiochemical test results.

FORM III
GC/MS SEMI VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Buffalo Job No.: 480-205868-1

SDG No.:

Matrix: Water Level: Low Lab File ID: Y030215.D

Lab ID: 480-205868-1 MSD Client ID: MW2-013123-MSD MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
2,4,5-Trichlorophenol	33.3	37.1	111	7	18	65-126	
2,4,6-Trichlorophenol	33.3	32.6	98	9	19	64-120	
2,4-Dichlorophenol	33.3	31.2	94	9	19	48-132	
2,4-Dimethylphenol	33.3	32.3	97	10	42	39-130	
2,4-Dinitrophenol	66.7	83.1	125	6	22	21-150	
2,4-Dinitrotoluene	33.3	36.8	110	9	20	54-138	
2,6-Dinitrotoluene	33.3	36.1	108	5	15	17-150	
2-Chloronaphthalene	33.3	31.2	94	11	21	52-124	
2-Chlorophenol	33.3	30.0	90	12	25	48-120	
2-Methylnaphthalene	33.3	28.6	86	11	21	34-140	
2-Methylphenol	33.3	32.7	98	12	27	46-120	
2-Nitroaniline	33.3	37.6	113	9	15	44-136	
2-Nitrophenol	33.3	34.9	105	11	18	38-141	
3,3'-Dichlorobenzidine	66.7	62.9	94	10	25	10-150	
3-Nitroaniline	33.3	26.1	78	2	19	32-150	
4,6-Dinitro-2-methylphenol	66.7	92.6	139	9	15	38-150	
4-Bromophenyl phenyl ether	33.3	33.5	100	9	15	63-126	
4-Chloro-3-methylphenol	33.3	32.9	99	9	27	64-127	
4-Chloroaniline	33.3	20.8	62	1	22	16-124	
4-Chlorophenyl phenyl ether	33.3	32.0	96	8	16	61-120	
4-Methylphenol	33.3	32.3	97	11	24	36-120	
4-Nitroaniline	33.3	31.7	95	2	24	32-150	
4-Nitrophenol	66.7	58.5	88	2	48	23-132	
Acenaphthene	33.3	32.7	98	10	24	48-120	
Acenaphthylene	33.3	33.0	99	9	18	63-120	
Acetophenone	33.3	37.9	114	12	20	53-120	
Anthracene	33.3	34.7	104	11	15	65-122	
Atrazine	66.7	79.8	120	6	20	50-150	
Benzaldehyde	66.7	66.7	100	16	20	10-150	
Benzo[a]anthracene	33.3	33.0	99	7	15	43-124	
Benzo[a]pyrene	33.3	33.4	100	7	15	23-125	
Benzo[b]fluoranthene	33.3	34.0	102	10	15	27-127	
Benzo[g,h,i]perylene	33.3	32.2	97	6	15	16-147	
Benzo[k]fluoranthene	33.3	33.8	101	10	22	20-124	
Biphenyl	33.3	32.8	98	11	20	57-120	
bis (2-chloroisopropyl) ether	33.3	35.4	106	12	24	28-121	
Bis(2-chloroethoxy)methane	33.3	34.0	102	11	17	44-128	
Bis(2-chloroethyl)ether	33.3	42.1	126	15	21	45-120	F1
Bis(2-ethylhexyl) phthalate	33.3	34.0	102	7	15	16-150	
Butyl benzyl phthalate	33.3	33.0	99	5	16	51-140	
Caprolactam	66.7	24.5	37	4	20	10-120	
Carbazole	33.3	38.1	114	6	20	16-148	

Column to be used to flag recovery and RPD values

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-205868-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-657819/6 02/02/2023 10:59		CCB 480-657819/19 02/02/2023 21:42		CCB 480-657819/27 02/02/2023 22:28		CCB 480-657819/39 02/02/2023 23:14	
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND		ND		ND		ND	
Antimony	0.020	ND		ND		ND		ND	
Arsenic	0.015	ND		ND		ND		ND	
Barium	0.0020	ND		ND		ND		ND	
Beryllium	0.0020	ND		ND		ND		ND	
Cadmium	0.0020	ND		ND		ND		ND	
Calcium	0.50	ND		ND		ND		ND	
Chromium	0.0040	ND		ND		ND		ND	
Cobalt	0.0040	ND		ND		ND		ND	
Copper	0.010	ND		ND		ND		ND	
Iron	0.050	ND		ND		ND		ND	
Lead	0.010	ND		ND		ND		ND	
Magnesium	0.20	ND		ND		ND		ND	
Manganese	0.0030	ND		ND		ND		ND	
Nickel	0.010	ND		ND		ND		ND	
Potassium	0.50	ND		ND		ND		ND	
Selenium	0.025	ND		ND		ND		ND	
Silver	0.0060	ND		ND		ND		ND	
Sodium	1.0	ND		0.440	J	ND		ND	
Thallium	0.020	ND		ND		ND		ND	
Vanadium	0.0050	ND		ND		ND		ND	
Zinc	0.010	ND		ND		ND		ND	

Italicized analytes were not requested for this

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-205868-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	CCB 480-657819/51 02/03/2023 00:00							
		Found	C	Found	C	Found	C	Found	C
Aluminum	0.20	ND							
Antimony	0.020	ND							
Arsenic	0.015	ND							
Barium	0.0020	0.00258							
Beryllium	0.0020	0.000310	J						
Cadmium	0.0020	ND							
Calcium	0.50	ND							
Chromium	0.0040	ND							
Cobalt	0.0040	ND							
Copper	0.010	ND							
Iron	0.050	ND							
Lead	0.010	ND							
Magnesium	0.20	ND							
Manganese	0.0030	ND							
Nickel	0.010	ND							
Potassium	0.50	ND							
Selenium	0.025	ND							
Silver	0.0060	ND							
Sodium	1.0	ND							
Thallium	0.020	ND							
Vanadium	0.0050	ND							
Zinc	0.010	ND							

Italicized analytes were not requested for this

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-205868-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-657820/6 02/02/2023 10:59		CCB 480-657820/19 02/03/2023 00:00		CCB 480-657820/31 02/03/2023 00:46		CCB 480-657820/43 02/03/2023 01:32	
		Found	C	Found	C	Found	C	Found	C
Antimony, Dissolved	0.020	ND		ND		ND		ND	
Arsenic, Dissolved	0.015	ND		ND		ND		ND	
Cadmium, Dissolved	0.0020	ND		ND		ND		ND	
Chromium, Dissolved	0.0040	ND		ND		ND		ND	
Cobalt, Dissolved	0.0040	ND		ND		ND		ND	
Copper, Dissolved	0.010	ND		ND		ND		ND	
Lead, Dissolved	0.010	ND		ND		ND		ND	
Magnesium, Dissolved	0.20	ND		ND		ND		ND	
Manganese, Dissolved	0.0030	ND		ND		ND		ND	
Nickel, Dissolved	0.010	ND		ND		ND		ND	
Potassium, Dissolved	0.50	ND		ND		0.227	J	ND	
Selenium, Dissolved	0.025	ND		ND		ND		ND	
Silver, Dissolved	0.0060	ND		ND		ND		ND	
Sodium, Dissolved	1.0	ND		ND		0.453	J	ND	
Thallium, Dissolved	0.020	ND		ND		ND		ND	
Vanadium, Dissolved	0.0050	ND		ND		ND		ND	
Zinc, Dissolved	0.010	ND		ND		ND		ND	
Aluminum	0.20	ND		ND				ND	
Barium	0.0020	ND							
Beryllium	0.0020	ND		0.000310	J			ND	
Calcium	0.50	ND		ND				ND	
Iron	0.050	ND		ND				ND	

Italicized analytes were not requested for this

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-205868-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-657965/6 02/03/2023 11:36		CCB 480-657965/19 02/03/2023 21:05		CCB 480-657965/28 02/03/2023 21:52		CCB 480-657965/37 02/03/2023 22:38	
		Found	C	Found	C	Found	C	Found	C
Aluminum, Dissolved	0.20	ND		ND		ND		ND	
Barium, Dissolved	0.0020	ND		ND		ND		ND	
Beryllium, Dissolved	0.0020	ND		ND		ND		ND	
Calcium, Dissolved	0.50	ND		ND		ND		ND	
Iron, Dissolved	0.050	ND		ND		ND		ND	
Antimony	0.020	ND		ND		ND		ND	
Arsenic	0.015	ND		ND		ND		ND	
Cadmium	0.0020	ND		ND		ND		ND	
Chromium	0.0040	ND		ND		ND		ND	
Cobalt	0.0040	ND		ND		ND		ND	
Copper	0.010	ND		ND		0.00165	J	ND	
Lead	0.010	ND		ND		ND		ND	
Magnesium	0.20	ND		ND		ND		ND	
Manganese	0.0030	ND		ND		ND		ND	
Nickel	0.010	ND		ND		ND		ND	
Potassium	0.50	ND		0.209	J	ND		ND	
Selenium	0.025	ND		ND		ND		ND	
Silver	0.0060	ND		ND		ND		ND	
Sodium	1.0	ND		ND		ND		ND	
Thallium	0.020	ND		ND		ND		ND	
Vanadium	0.0050	ND		ND		ND		ND	
Zinc	0.010	ND		ND		ND		ND	

Italicized analytes were not requested for this

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-205868-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	ICB 480-657771/8 02/02/2023 16:35		CCB 480-657771/11 02/02/2023 16:39		CCB 480-657771/23 02/02/2023 16:58		CCB 480-657771/35 02/02/2023 17:14	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.00020	ND		ND		ND		ND	

Italicized analytes were not requested for this

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: Eurofins Buffalo Job No.: 480-205868-1

SDG No.:

Concentration Units: mg/L

Analyte	RL	CCB 480-657771/47 02/02/2023 17:30		CCB 480-657771/59 02/02/2023 17:45					
		Found	C	Found	C	Found	C	Found	C
Mercury	0.00020	ND		ND					

Italicized analytes were not requested for this

FORM III-IN

3-IN
METHOD BLANK
METALS

Lab Name: Eurofins Buffalo Job No.: 480-205868-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: MB 480-657580/1-A

Instrument Code: ICAP2 Batch No.: 657819

CAS No.	Analyte	Concentration	C	Q	Method
7429-90-5	Aluminum	ND			6010C
7440-36-0	Antimony	ND			6010C
7440-38-2	Arsenic	ND			6010C
7440-39-3	Barium	ND			6010C
7440-41-7	Beryllium	ND			6010C
7440-43-9	Cadmium	ND			6010C
7440-70-2	Calcium	ND			6010C
7440-47-3	Chromium	ND			6010C
7440-48-4	Cobalt	ND			6010C
7440-50-8	Copper	ND			6010C
7439-89-6	Iron	ND			6010C
7439-92-1	Lead	ND			6010C
7439-95-4	Magnesium	ND			6010C
7439-96-5	Manganese	0.000460	J		6010C
7440-02-0	Nickel	ND			6010C
7440-09-7	Potassium	ND			6010C
7782-49-2	Selenium	ND			6010C
7440-22-4	Silver	ND			6010C
7440-23-5	Sodium	ND			6010C
7440-28-0	Thallium	ND			6010C
7440-62-2	Vanadium	ND			6010C
7440-66-6	Zinc	ND			6010C

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: Eurofins Buffalo Job No.: 480-205868-1

SDG No.:

Concentration Units: mg/L Lab Sample ID: MB 480-657568/1-A

Instrument Code: ICAP2 Batch No.: 657820

CAS No.	Analyte	Concentration	C	Q	Method
7440-36-0	Antimony, Dissolved	ND			6010C
7440-38-2	Arsenic, Dissolved	ND			6010C
7440-43-9	Cadmium, Dissolved	ND			6010C
7440-47-3	Chromium, Dissolved	ND			6010C
7440-48-4	Cobalt, Dissolved	ND			6010C
7440-50-8	Copper, Dissolved	ND			6010C
7439-92-1	Lead, Dissolved	ND			6010C
7439-95-4	Magnesium, Dissolved	ND			6010C
7439-96-5	Manganese, Dissolved	0.000400	J		6010C
7440-02-0	Nickel, Dissolved	ND			6010C
7440-09-7	Potassium, Dissolved	ND			6010C
7782-49-2	Selenium, Dissolved	ND			6010C
7440-22-4	Silver, Dissolved	ND			6010C
7440-23-5	Sodium, Dissolved	ND			6010C
7440-28-0	Thallium, Dissolved	ND			6010C
7440-62-2	Vanadium, Dissolved	ND			6010C
7440-66-6	Zinc, Dissolved	ND			6010C

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-205868-1

SDG No.:

Lab Sample ID: ICSA 480-657819/8 Instrument ID: ICAP2

Lab File ID: I2020223A-7.asc ICS Source: MEI_MSS_ICSA_00052

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum	**500**	**489**	**98**
Antimony		**-0.0067**	
Arsenic		**0.0053**	
Barium	**0.0120**	**0.0012**	
Beryllium		**0.0001**	
Cadmium		**-0.0006**	
Calcium	**500**	**470**	**94**
Chromium		**0.0005**	
Cobalt		**-0.0002**	
Copper		**0.0009**	
Iron	**200**	**185**	**93**
Lead		**0.0052**	
Magnesium	**500**	**505**	**101**
Manganese		**0.0018**	
Nickel		**0.0060**	
Potassium		**0.0529**	
Selenium		**-0.0028**	
Silver		**0.0015**	
Sodium		**0.115**	
Thallium		**0.0071**	
Vanadium		**0.0015**	
Zinc		**0.0021**	
Boron		*-0.0004*	
Lithium		*-0.0265*	
Molybdenum		*-0.0018*	
Silicon		*-0.0358*	
Strontium		*0.0033*	
Sulfur		*0.0369*	
Tin		*0.0008*	
Titanium		*0.0021*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-205868-1

SDG No.:

Lab Sample ID: ICSA 480-657820/8 Instrument ID: ICAP2

Lab File ID: I2020223A-8.asc ICS Source: MEI_MSS_ICSA_00052

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Antimony, Dissolved		**-0.0067**	
Arsenic, Dissolved		**0.0053**	
Cadmium, Dissolved		**-0.0006**	
Chromium, Dissolved		**0.0005**	
Cobalt, Dissolved		**-0.0002**	
Copper, Dissolved		**0.0009**	
Lead, Dissolved		**0.0052**	
Magnesium, Dissolved	**500**	**505**	**101**
Manganese, Dissolved		**0.0018**	
Nickel, Dissolved		**0.0060**	
Potassium, Dissolved		**0.0529**	
Selenium, Dissolved		**-0.0028**	
Silver, Dissolved		**0.0015**	
Sodium, Dissolved		**0.115**	
Thallium, Dissolved		**0.0071**	
Vanadium, Dissolved		**0.0015**	
Zinc, Dissolved		**0.0021**	
Aluminum	*500*	*489*	*98*
Barium	*0.0120*	*0.0012*	
Beryllium		*0.0001*	
Boron		*-0.0004*	
Calcium	*500*	*470*	*94*
Iron	*200*	*185*	*93*
Lithium		*-0.0265*	
Molybdenum		*-0.0018*	
Silicon		*-0.0358*	
Strontium		*0.0033*	
Sulfur		*0.0369*	
Tin		*0.0008*	
Titanium		*0.0021*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-205868-1

SDG No.:

Lab Sample ID: ICSAB 480-657819/9 Instrument ID: ICAP2

Lab File ID: I2020223A-7.asc ICS Source: MEI_MSS_ICSAB_00048

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Aluminum	**500**	**487**	**97**
Antimony	**0.500**	**0.489**	**98**
Arsenic	**0.500**	**0.495**	**99**
Barium	**0.513**	**0.517**	**101**
Beryllium	**0.250**	**0.244**	**97**
Cadmium	**0.500**	**0.511**	**102**
Calcium	**500**	**469**	**94**
Chromium	**0.500**	**0.485**	**97**
Cobalt	**0.500**	**0.493**	**99**
Copper	**0.500**	**0.519**	**104**
Iron	**200**	**185**	**92**
Lead	**0.500**	**0.502**	**100**
Magnesium	**500**	**516**	**103**
Manganese	**0.501**	**0.494**	**99**
Nickel	**0.501**	**0.493**	**98**
Potassium	**5.00**	**5.31**	**106**
Selenium	**0.500**	**0.490**	**98**
Silver	**0.500**	**0.522**	**104**
Sodium	**5.00**	**5.42**	**108**
Thallium	**0.500**	**0.488**	**98**
Vanadium	**0.500**	**0.491**	**98**
Zinc	**0.501**	**0.450**	**90**
Boron	*5.00*	*4.81*	*96*
Lithium		*-0.0263*	
Molybdenum	*0.500*	*0.480*	*96*
Silicon	*5.00*	*4.51*	*90*
Strontium	*0.500*	*0.489*	*98*
Sulfur		*0.0357*	
Tin	*0.500*	*0.486*	*97*
Titanium	*0.500*	*0.501*	*100*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-205868-1

SDG No.:

Lab Sample ID: ICSAB 480-657820/9 Instrument ID: ICAP2

Lab File ID: I2020223A-8.asc ICS Source: MEI_MSS_ICSAB_00048

Concentration Units: mg/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Antimony, Dissolved	**0.500**	**0.489**	**98**
Arsenic, Dissolved	**0.500**	**0.495**	**99**
Cadmium, Dissolved	**0.500**	**0.511**	**102**
Chromium, Dissolved	**0.500**	**0.485**	**97**
Cobalt, Dissolved	**0.500**	**0.493**	**99**
Copper, Dissolved	**0.500**	**0.519**	**104**
Lead, Dissolved	**0.500**	**0.502**	**100**
Magnesium, Dissolved	**500**	**516**	**103**
Manganese, Dissolved	**0.501**	**0.494**	**99**
Nickel, Dissolved	**0.501**	**0.493**	**98**
Potassium, Dissolved	**5.00**	**5.31**	**106**
Selenium, Dissolved	**0.500**	**0.490**	**98**
Silver, Dissolved	**0.500**	**0.522**	**104**
Sodium, Dissolved	**5.00**	**5.42**	**108**
Thallium, Dissolved	**0.500**	**0.488**	**98**
Vanadium, Dissolved	**0.500**	**0.491**	**98**
Zinc, Dissolved	**0.501**	**0.450**	**90**
Aluminum	*500*	*487*	*97*
Barium	*0.513*	*0.517*	*101*
Beryllium	*0.250*	*0.244*	*97*
Boron	*5.00*	*4.81*	*96*
Calcium	*500*	*469*	*94*
Iron	*200*	*185*	*92*
Lithium		*-0.0263*	
Molybdenum	*0.500*	*0.480*	*96*
Silicon	*5.00*	*4.51*	*90*
Strontium	*0.500*	*0.489*	*98*
Sulfur		*0.0357*	
Tin	*0.500*	*0.486*	*97*
Titanium	*0.500*	*0.501*	*100*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: Eurofins Buffalo Job No.: 480-205868-1

SDG No.:

Lab Sample ID: ICSA 480-657965/8 Instrument ID: ICAP2

Lab File ID: I2020323A-7.asc ICS Source: MEI_MSS_ICSA_00053

Concentration Units: mg/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Aluminum, Dissolved	**500**	**500**	**100**
Barium, Dissolved	**0.0120**	**0.0012**	
Beryllium, Dissolved		**-0.0001**	
Calcium, Dissolved	**500**	**474**	**95**
Iron, Dissolved	**200**	**188**	**94**
Antimony		*0.0009*	
Arsenic		*0.0031*	
Boron		*0.0010*	
Cadmium		*-0.0004*	
Chromium		*0.0003*	
Cobalt		*-0.0002*	
Copper		*0.0015*	
Lead		*-0.0011*	
Lithium		*-0.0255*	
Magnesium	*500*	*516*	*103*
Manganese		*0.0019*	
Molybdenum		*-0.0015*	
Nickel		*0.0063*	
Potassium		*0.0082*	
Selenium		*0.0036*	
Silicon		*-0.0226*	
Silver		*0.0049*	
Sodium		*0.121*	
Strontium		*0.0034*	
Sulfur		*0.0302*	
Thallium		*0.0058*	
Tin		*0.0010*	
Titanium		*0.0022*	
Vanadium		*0.0009*	
Zinc		*0.0023*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS

Client ID: MW2-013123 PDS
Lab ID: 480-205868-1 PDS
Lab Name: Eurofins Buffalo
Job No.: 480-205868-1
SDG No.:
Matrix: Water
Concentration Units: mg/L

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum	10.40		0.12	J	10.0	103	80-120		6010C
Antimony	0.218		ND		0.200	109	80-120		6010C
Arsenic	0.206		ND		0.200	103	80-120		6010C
Barium	0.297		0.096		0.200	101	80-120		6010C
Beryllium	0.207		ND		0.200	104	80-120		6010C
Cadmium	0.214		ND		0.200	107	80-120		6010C
Calcium	85.01		79.0		10.0	60	80-120	W	6010C
Chromium	0.202		ND		0.200	101	80-120		6010C
Cobalt	0.206		ND		0.200	103	80-120		6010C
Copper	0.205		ND		0.200	102	80-120		6010C
Iron	10.29		0.046	J	10.0	102	80-120		6010C
Lead	0.218		ND		0.200	109	80-120		6010C
Magnesium	24.70		15.9		10.0	88	80-120		6010C
Manganese	0.337		0.14		0.200	97	80-120		6010C
Nickel	0.206		ND		0.200	103	80-120		6010C
Potassium	13.63		3.6		10.0	100	80-120		6010C
Selenium	0.206		ND		0.200	103	80-120		6010C
Silver	0.0477		ND		0.0500	95	80-120		6010C
Sodium	60.46		53.0		10.0	74	80-120	W	6010C
Thallium	0.208		ND		0.200	104	80-120		6010C
Vanadium	0.209		ND		0.200	105	80-120		6010C
Zinc	0.201		ND		0.200	101	80-120		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VB - IN

5B-IN
POST DIGESTION SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: MW2-013123 PDS | Lab ID: 480-205868-H-1-A PDS

Lab Name: Eurofins Buffalo | Job No.: 480-205868-1

SDG No.:

Matrix: Water | Concentration Units: mg/L

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Aluminum, Dissolved	9.54		ND		10.0	95	80-120		6010C
Antimony, Dissolved	0.219		ND		0.200	110	80-120		6010C
Arsenic, Dissolved	0.209		ND		0.200	104	80-120		6010C
Barium, Dissolved	0.290		0.098		0.200	96	80-120		6010C
Beryllium, Dissolved	0.203		ND		0.200	101	80-120		6010C
Cadmium, Dissolved	0.216		ND		0.200	108	80-120		6010C
Calcium, Dissolved	84.99		80.3		10.0	47	80-120	W	6010C
Chromium, Dissolved	0.206		ND		0.200	103	80-120		6010C
Cobalt, Dissolved	0.209		ND		0.200	105	80-120		6010C
Copper, Dissolved	0.208		ND		0.200	104	80-120		6010C
Iron, Dissolved	9.43		0.019	J	10.0	94	80-120		6010C
Lead, Dissolved	0.221		ND		0.200	110	80-120		6010C
Magnesium, Dissolved	24.66		15.6		10.0	91	80-120		6010C
Manganese, Dissolved	0.335		0.14		0.200	98	80-120		6010C
Nickel, Dissolved	0.209		ND		0.200	104	80-120		6010C
Potassium, Dissolved	13.60		3.5		10.0	101	80-120		6010C
Selenium, Dissolved	0.212		ND		0.200	106	80-120		6010C
Silver, Dissolved	0.0498		ND		0.0500	100	80-120		6010C
Sodium, Dissolved	60.20		52.0		10.0	82	80-120		6010C
Thallium, Dissolved	0.209		ND		0.200	104	80-120		6010C
Vanadium, Dissolved	0.214		ND		0.200	107	80-120		6010C
Zinc, Dissolved	0.206		ND		0.200	103	80-120		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM III
LCMS MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 480-205868-2

SDG No.:

Matrix: Water Level: Low Lab File ID: 23FEB17-33.d

Lab ID: 480-205868-1 MSD Client ID: MW2-013123-MSD MSD

COMPOUND	SPIKE ADDED (ng/L)	MSD CONCENTRATION (ng/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Perfluorobutanoic acid	96.2	99.3	103	14	30	40-150	
Perfluoropentanoic acid	48.1	48.5	101	19	30	40-150	
Perfluorohexanoic acid	24.0	23.4	97	7	30	40-150	
Perfluoroheptanoic acid	24.0	20.5	85	21	30	40-150	
Perfluorooctanoic acid	24.0	28.5	116	11	30	40-150	
Perfluorononanoic acid	24.0	23.4	98	12	30	40-150	
Perfluorodecanoic acid	24.0	24.6	102	5	30	40-150	
Perfluoroundecanoic acid	24.0	24.6	102	12	30	40-150	
Perfluorododecanoic acid	24.0	23.5	98	8	30	40-150	
Perfluorotridecanoic acid	24.0	23.8	99	8	30	40-150	
Perfluorotetradecanoic acid	24.0	23.6	98	4	30	40-150	
Perfluorobutanesulfonic acid	21.3	23.6	108	14	30	40-150	
Perfluoropentanesulfonic acid	22.6	18.7	83	7	30	40-150	
Perfluorohexanesulfonic acid	22.0	21.1	96	23	30	40-150	
Perfluoroheptanesulfonic acid	22.9	23.8	104	16	30	40-150	
Perfluorooctanesulfonic acid	22.3	23.7	106	11	30	40-150	
Perfluorononanesulfonic acid	23.1	23.0	99	13	30	40-150	
Perfluorodecanesulfonic acid	23.2	22.1	95	3	30	40-150	
Perfluorododecanesulfonic acid (PFDoS)	23.3	22.9	98	0	30	40-150	
1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	90.2	72.6	81	34	30	40-150	F2
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	91.4	70.1	77	7	30	40-150	
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	92.3	79.7	86	11	30	40-150	
Perfluorooctanesulfonamide	24.0	23.0	96	9	30	40-150	
NMeFOSA	24.0	25.2	105	4	30	40-150	
N-ethylperfluoro-1-octanesulfonamide	24.0	24.4	101	1	30	40-150	
NMeFOSAA	24.0	23.8	99	3	30	40-150	
NEtFOSAA	24.0	27.8	116	22	30	40-150	
2-(N-methylperfluoro-1-octanesulfonamido) ethanol	240	235	98	2	30	40-150	
2-(N-ethylperfluoro-1-octanesulfonamido) ethanol	240	240	100	4	30	40-150	
HFPO-DA	96.0	100	104	4	30	40-150	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	90.7	82.1	90	6	30	40-150	
Perfluoro-3-methoxypropanoic acid	48.1	46.5	97	15	30	40-150	

Column to be used to flag recovery and RPD values

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 480-205868-2

SDG No.:

Lab Sample ID: ICVL 410-343978/10 Calibration Date: 02/13/2023 11:59

Instrument ID: 30729 Calib Start Date: 02/13/2023 09:13

GC Column: Gemini C18 50mm ID: 3.00(mm) Calib End Date: 02/13/2023 11:29

Lab File ID: 23FEB13DCAL-12.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	AveID	0.9038	83345		0.405	0.400	1.3	
Perfluoro-3-methoxypropanoic acid	AveID	2.156	125500		0.213	0.200	6.7	
3:3 FTCA	AveID	0.1216	6176		0.466	0.500	-6.9	
Perfluoropentanoic acid	AveID	2.410	140070		0.213	0.200	6.5	
Perfluoro(4-methoxybutanoic acid)	AveID	2.088	115245		0.202	0.200	1.2	
1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	AveID	2.824	21221		0.334	0.375	-11.0	
Perfluoro-3,6-dioxaheptanoic acid	AveID	0.0873	20155		0.257	0.200	28.4	
Perfluorohexanoic acid	AveID	0.6109	133060		0.121	0.100	21.1	
5:3 FTCA	AveID	0.1258	23170		2.56	2.50	2.4	
Perfluorobutanesulfonic acid	AveID	0.7875	191995		0.101	0.0887	14.4	
HFPO-DA	AveID	0.7174	90440		0.429	0.400	7.3	
PFEESA	AveID	2.512	515966		0.203	0.178	14.2	
Perfluoroheptanoic acid	AveID	0.9222	169360		0.103	0.100	2.6	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	AveID	1.708	199979		0.377	0.378	-0.3	
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	AveID	5.170	20287		0.342	0.380	-10.1	
Perfluoropentanesulfonic acid	AveID	1.192	193560		0.0872	0.0941	-7.3	
Perfluorooctanoic acid	AveID	0.6742	169480		0.133	0.100	33.3	
7:3 FTCA	AveID	0.0702	11932		2.36	2.50	-5.5	
Perfluorohexanesulfonic acid	AveID	0.4725	86335		0.0954	0.0914	4.3	
Perfluorononanoic acid	AveID	0.8286	140100		0.0897	0.100	-10.3	
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	AveID	5.839	16583		0.511	0.384	33.2	
Perfluoroheptanesulfonic acid	AveID	0.8065	136988		0.0875	0.0953	-8.2	
NMeFOSAA	AveID	0.8885	32650		0.0963	0.100	-3.7	
Perfluorodecanoic acid	AveID	0.7785	141660		0.103	0.100	2.5	
NEtFOSAA	AveID	0.8170	15200		0.0558	0.100	-44.2	
Perfluorooctanesulfonic acid	AveID	0.9074	177985		0.0984	0.0928	6.0	
Perfluoroundecanoic acid	AveID	0.8208	155530		0.117	0.100	16.5	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	AveID	2.022	245380		0.386	0.374	3.3	
Perfluorononanesulfonic acid	AveID	0.8274	163430		0.103	0.0962	6.7	
Perfluorododecanoic acid	AveID	0.8799	130440		0.102	0.100	1.6	
Perfluorooctanesulfonamide	AveID	0.9796	241000		0.103	0.100	3.1	
Perfluorodecanesulfonic acid	AveID	1.074	194466		0.0944	0.0965	-2.2	
Perfluorotridecanoic acid	AveID	0.9003	86950		0.0908	0.100	-9.2	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	AveID	2.151	261873		0.392	0.378	3.6	
Perfluorotetradecanoic acid	AveID	1.168	80710		0.103	0.100	3.4	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.8482	148144		0.0916	0.0970	-5.6	

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 480-205868-2

SDG No.:

Lab Sample ID: ICVL 410-346561/10 Calibration Date: 02/21/2023 20:43

Instrument ID: 30729 Calib Start Date: 02/21/2023 18:32

GC Column: Gemini C18 50mm ID: 3.00(mm) Calib End Date: 02/21/2023 21:09

Lab File ID: 23FEB21DCAL-12.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Perfluorobutanoic acid	AveID	0.9261	83048		0.362	0.400	-9.4	
Perfluoro-3-methoxypropanoic acid	AveID	2.126	130445		0.201	0.200	0.5	
3:3 FTCA	AveID	0.1264	7504		0.486	0.500	-2.8	
Perfluoropentanoic acid	AveID	2.501	150795		0.197	0.200	-1.3	
Perfluoro(4-methoxybutanoic acid)	AveID	2.092	126325		0.198	0.200	-1.1	
1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	AveID	2.790	28965		0.400	0.375	6.6	
Perfluoro-3,6-dioxaheptanoic acid	AveID	0.8386	20185		0.232	0.200	16.1	
Perfluorohexanoic acid	AveID	5.990	162740		0.131	0.100	31.0	
5:3 FTCA	AveID	1.321	29885		2.73	2.50	9.1	
Perfluorobutanesulfonic acid	AveID	1.065	210519		0.0920	0.0887	3.7	
HFPO-DA	AveID	0.7456	101555		0.382	0.400	-4.4	
PFEESA	AveID	23.89	564157		0.203	0.178	13.9	
Perfluoroheptanoic acid	AveID	0.9206	168090		0.0956	0.100	-4.4	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	AveID	1.691	257513		0.404	0.378	6.9	
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	AveID	4.942	39792		0.380	0.380	0.0	
Perfluoropentanesulfonic acid	AveID	1.117	206419		0.0846	0.0941	-10.1	
Perfluorooctanoic acid	AveID	0.7227	171430		0.0954	0.100	-4.6	
7:3 FTCA	AveID	0.6696	17013		3.06	2.50	22.5	
Perfluorohexanesulfonic acid	AveID	0.4365	87046		0.0887	0.0914	-3.0	
Perfluorononanoic acid	AveID	0.7631	164170		0.104	0.100	4.0	
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	AveID	5.718	12638		0.313	0.384	-18.4	
Perfluoroheptanesulfonic acid	AveID	0.7758	152833		0.0966	0.0953	1.3	
NMeFOSAA	AveID	0.8992	29540		0.0772	0.100	-22.8	
Perfluorodecanoic acid	AveID	0.7584	168450		0.136	0.100	36.5	
NEtFOSAA	AveID	0.8309	32360		0.123	0.100	23.2	
Perfluorooctanesulfonic acid	AveID	0.9229	238427		0.123	0.0928	32.9	
Perfluoroundecanoic acid	AveID	0.8227	166910		0.110	0.100	10.3	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	AveID	2.088	309628		0.389	0.374	4.1	
Perfluorononanesulfonic acid	AveID	0.8278	157037		0.0939	0.0962	-2.4	
Perfluorododecanoic acid	AveID	0.9062	142310		0.103	0.100	3.0	
Perfluorooctanesulfonamide	AveID	1.074	272850		0.0965	0.100	-3.5	
Perfluorodecanesulfonic acid	AveID	1.029	203347		0.0981	0.0965	1.6	
Perfluorotridecanoic acid	AveID	0.9067	95480		0.0953	0.100	-4.7	
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	AveID	2.072	289151		0.370	0.378	-2.0	
Perfluorotetradecanoic acid	AveID	1.182	83640		0.103	0.100	3.4	
Perfluorododecanesulfonic acid (PFDoS)	AveID	0.8210	151031		0.0918	0.0970	-5.4	

FORM VII
LCMS CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 480-205868-2

SDG No.:

Lab Sample ID: CCV 410-349204/245 Calibration Date: 03/02/2023 07:03

Instrument ID: 30729 Calib Start Date: 02/21/2023 18:32

GC Column: Gemini C18 50mm ID: 3.00(mm) Calib End Date: 02/21/2023 21:09

Lab File ID: 23MAR01-80.d Conc. Units: ng/mL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
2-(N-methylperfluoro-1-octanesulfonamido) ethanol	AveID	0.9611	0.9598		25.0	25.0	-0.1	30.0
NMeFOSA	AveID	0.7707	0.7440		2.41	2.50	-3.5	30.0
2-(N-ethylperfluoro-1-octanesulfonamido) ethanol	AveID	0.8372	0.8079		24.1	25.0	-3.5	30.0
N-ethylperfluoro-1-octanesulfonamide	AveID	0.8831	0.8918		2.52	2.50	1.0	30.0
13C4 PFBA	Ave	0.6667	0.5902		8.85	10.0	-11.5	30.0
13C5 PFPeA	Ave	0.3830	0.5040		6.58	5.00	31.6*	30.0
M2-4:2 FTS	Ave	0.0613	0.0580		4.44	4.69	-5.3	30.0
13C5 PFHxA	Ave	0.1406	0.1519		2.70	2.50	8.0	30.0
13C3 PFBS	Ave	1.259	1.185		2.19	2.33	-5.9	30.0
13C3 HFPO-DA	Ave	0.8478	1.138		13.4	10.0	34.2*	30.0
13C4 PFHpA	Ave	1.313	1.578		3.00	2.50	20.1	30.0
M2-6:2 FTS	Ave	0.0427	0.0420		4.67	4.76	-1.8	30.0
13C8 PFOA	Ave	22.60	22.96		2.54	2.50	1.6	30.0
13C3 PFHxS	Ave	1.178	1.192		2.40	2.37	1.2	30.0
13C9 PFNA	Ave	1.088	1.103		1.27	1.25	1.4	30.0
M2-8:2 FTS	Ave	0.0185	0.0183		4.75	4.80	-1.1	30.0
d3-NMeFOSAA	Ave	0.2757	0.3229		5.86	5.00	17.1	30.0
13C6 PFDA	Ave	0.9587	1.010		1.32	1.25	5.4	30.0
d5-NEtFOSAA	Ave	0.2348	0.2494		5.31	5.00	6.2	30.0
13C8 PFOS	Ave	1.394	1.341		2.30	2.40	-3.8	30.0
13C7 PFUnA	Ave	1.009	0.8917		1.10	1.25	-11.7	30.0
13C2-PFDoDA	Ave	0.8627	0.7324		1.06	1.25	-15.1	30.0
13C8 FOSA	Ave	1.665	1.990		2.99	2.50	19.5	30.0
13C2 PFTeDA	Ave	0.3781	0.3226		1.07	1.25	-14.7	30.0
d7-N-MeFOSE-M	Ave	0.3899	0.3526		22.6	25.0	-9.6	30.0
d3-NMePFOSA	Ave	0.2649	0.2548		2.41	2.50	-3.8	30.0
d9-N-EtFOSE-M	Ave	0.3968	0.3657		23.0	25.0	-7.8	30.0
d5-NEtPFOSA	Ave	0.2808	0.2623		2.33	2.50	-6.6	30.0

Appendix C

Data Validation Resumes



Craig Hutchings

Consultant

(360) 939-9617

Olympia, WA

chutchings@integral-corp.com

Craig Hutchings is a chemist with more than 30 years of experience in environmental analytical chemistry, litigation support, project management, environmental investigations, and QA/QC data review and validation. He has led projects using standard and non-standard methodologies for the analysis of per- and polyfluoroalkyl substances (PFAS) in soils, waters, and firefighting foams. Mr. Hutchings has also led PFAS litigation support projects involving data management, data interpretation and analysis, and reporting.

Mr. Hutchings has led the preparation of sampling and analysis plans and quality assurance project plans (QAPPs), data interpretation, and development of quality assurance programs for sites within various state and federal regulatory programs. He has performed and supervised gas chromatography, high-performance liquid chromatography, and gas chromatography/mass spectrometry analyses for contaminants in soil, sediment, water, and tissues using EPA and various state methods. He is experienced in the evaluation and review of analytical data including outputs from inductively coupled plasma instruments and chromatograms for Aroclors, pesticides, and other compounds. In addition, Mr. Hutchings has reviewed chemistry data from numerous projects involving a wide variety of analyses in air, water, soils, sediments, and tissues.

Education & Credentials

B.S., Environmental Studies, The Evergreen State College, Olympia, Washington, 1991

Professional Affiliations

American Chemical Society

Relevant Experience

PFAS

Per- and Polyfluoroalkyl Substances, Northeastern U.S. — Project chemist overseeing analyses and validation of PFAS in groundwater, drinking water, surface water, soil, sediment, and porewater. Reviews isomer profiles of PFAS samples and assists in investigations of potential third-party source contributions.

PFAS Water Treatment Litigation Support, Multiple Sites — Project manager for a team providing litigation support regarding the presence of PFAS in municipal water supplies, including development of cost estimates for PFAS water treatment.

PFAS Litigation Support, Confidential Location — Project manager providing litigation support related to PFAS contamination in drinking water, groundwater, surface water, and soils. Led evaluations of related chemistry data, chemical transport, source identification, and evaluation of treatment costs.

PFAS Analytical Methods — Prepared technical summary and evaluation of current and developing analytical methodologies for PFAS and replacement chemistries.

PFAS Fate and Transport — Provided technical review of PFAS homolog and isomer profiles of

ground water, surface water, porewater, and soil samples to inform plume delineation and source identification. Coordinated analyses using the total oxidizable precursor assay to assess presence of PFAS precursors. Developed site specific desorption coefficients for PFAS compounds.

PFAS Product Stewardship — Provided technical consulting support on short-chain PFAS and related fluorochemical products to the FluoroCouncil. Conducted scientific assessments and assisted with stakeholder communications related to the health and environmental safety of short-chain PFAS and fluorotelomers.

PFAS and Firefighting Foams — Managed a study investigating and evaluating the types of PFAS and other compounds in modern firefighting foams. Coordinated and reviewed data from standard and suspect screening analyses for PFAS and other surfactants. Led evaluation and summarization of analytical data and the effects on human and ecological health of the PFAS and non-PFAS compounds identified in the foam products.

PROJECT MANAGEMENT

Berry's Creek Superfund Site, Meadowlands, New Jersey — Project manager for team leading strategy development and implementation for monitoring remedy performance for PCBs, mercury, and methylmercury. The project team leads field sampling for biota.

Closed Landfill, Sartell, Minnesota — Project manager for team evaluating metals in groundwater near a closed landfill. Evaluated data quality of historical and current data sets for comparison to regulatory criteria. Project team evaluated site hydrogeology and geochemistry, potential remediation costs, and negotiated with state regulators.

Insurance Claim, North Carolina — Managed review of analytical methods and laboratory data for bacteria and coliform to ensure recommended procedures were followed for the analysis of water from a private well related to an insurance claim.

PFAS Water Treatment Litigation Support, Multiple Sites — Project manager for a team providing litigation support regarding the presence of PFAS in municipal water supplies, including development of cost estimates for PFAS water treatment.

PFAS Litigation Support, Confidential Location — Project manager providing litigation support related to PFAS contamination in drinking water, groundwater, surface water, and soils. Led evaluations of related chemistry data, chemical transport, source identification, and evaluation of treatment costs.

Biomonitoring Study, U.S. — Managed a biomonitoring study conducted in support of litigation related to a persistent organic pollutant. Coordinated study design and implementation, sample collection, laboratory oversight, and data management. Evaluated laboratory methodologies, provided laboratory oversight and coordination, evaluated data usability, and prepared a report summarizing the data and results.

CHEMISTRY

Petroleum Hydrocarbon Chromatogram Review, Confidential Project — Reviewed flame ionization detector and mass spectrometry chromatograms to evaluate total petroleum hydrocarbon and PAH patterns in support of a forensic investigation to differentiate between multiple sources.

Pesticide Use Profiles, Tule Lake and Lower Klamath National Wildlife Refuges, California — Participated in multiyear project with federal agencies in developing pesticide use profiles for several active ingredients. Performed toxicological assessments and fate and transport analysis to determine

potential effects of pesticide use on wildlife resources.

Laboratory Manual and Bid Package Review — Provided updates and revisions to manual used for requests for proposals from laboratory networks for a broad suite of analyses. Reviewed laboratory responses to assess completeness, capabilities, and responsiveness, and ranked proposals based on these categories.

Yosemite Slough, Technical Pre-Design Studies, San Francisco, California — Developed QAPP for technical pre-design studies related to the design of non-time-critical removal action. The QAPP addressed analyses of sediment, porewater, and surface water for PCBs, lead, and physical parameters to inform cap design and studies of sediment resuspension, hydrodynamics, and the potential use of monitored and enhanced natural attenuation as an alternative to capping or dredging.

San Jacinto River Waste Pits RI/FS, Houston, Texas — Project chemist for a remedial investigation of dioxin-contaminated sediments. Assisted in the development of QAPPs for sediment, soil, and tissue investigations. Performed laboratory coordination for all aspects of the investigation—soil, sediment, groundwater, and tissue.

Upper Columbia River RI/FS, Washington and British Columbia — Project chemist for a remedial investigation of the upper Columbia River. Carried primary responsibility for the development of QAPP sections related to laboratory activities, the preparation of a comprehensive laboratory request for proposal, and the selection of laboratories for approximately $3 million of analyses, including metals, PCBs, and pesticides. Performed laboratory coordination for beach sediment sampling events.

Portland Harbor RI/FS, Portland, Oregon — Provided assistance to lead project chemists and task managers for this ongoing remedial investigation of a 9-mile stretch of industrialized, urban river. Reviewed analytical data and chromatograms to resolve technical issues, including reviews of chromatograms to confirm Aroclor identifications and the effects of Aroclors on pesticide identifications. Reviewed historical chemistry data for stormwater and managed data to be added to the project database. Completed data validation for a wide variety of analyses, including dioxins and furans, PCB congeners, and EPA methods in sediment, tissue, surface water, and transition zone water samples.

SITE INVESTIGATION

Per- and Polyfluoroalkyl Substances, Northeastern U.S. — Project chemist overseeing analyses and validation of PFAS in groundwater, drinking water, surface water, soil, sediment, and porewater. Reviews isomer profiles of PFAS samples and assists in investigations of potential third-party source contributions.

San Jacinto River Waste Pits RI/FS, Houston, Texas — Project chemist for a remedial investigation of dioxin-contaminated sediments. Assisted in the development of QAPPs for sediment, soil, and tissue investigations. Performed laboratory coordination for all aspects of the investigation—soil, sediment, groundwater, and tissue.

Upper Columbia River RI/FS, Washington and British Columbia — Project chemist for a remedial investigation of the upper Columbia River. Carried primary responsibility for the development of QAPP sections related to laboratory activities, the preparation of a comprehensive laboratory request for proposal, and the selection of laboratories for approximately $3 million of analyses, including metals, PCBs, and pesticides. Performed laboratory coordination for beach sediment sampling events.

Portland Harbor RI/FS, Portland, Oregon — Provided assistance to lead project chemists and task

managers for this ongoing remedial investigation of a 9-mile stretch of industrialized, urban river. Reviewed analytical data and chromatograms to resolve technical issues, including reviews of chromatograms to confirm Aroclor identifications and the effects of Aroclors on pesticide identifications. Reviewed historical chemistry data for stormwater and managed data to be added to the project database. Completed data validation for a wide variety of analyses, including dioxins and furans, PCB congeners, and EPA methods in sediment, tissue, surface water, and transition zone water samples.

DATA QUALITY ASSURANCE

Data Quality Assessment, Litigation Support, Confidential Location — Evaluated data quality of sediment data for metals and alkylated PAHs collected in support of litigation addressing the issue of whether data was appropriately excluded from the fate and transport analysis.

Data Quality Assessment, Allocation Support, Confidential Location — Coordinated laboratory analyses for PAHs and alkylated PAHs collected in support of allocation at a sediment site. Validated and assessed quality of resulting analytical data.

Remediated Wood Treatment Facility, Cass Lake, Minnesota — Evaluated data quality of samples collected in support of a human health and ecological risk assessment at a former wood treatment facility.

Third-Party Data Integrity Evaluation, Confidential Location — Worked with project team to perform a detailed third-party review of 4 years of chemistry data to investigate allegations of improper practices and data falsification at a small-scale wastewater treatment plant laboratory. Examined hard copy and electronic data and ancillary documents to evaluate the validity of analytical results and conformity with analytical methods, laboratory standard operating procedures, and best laboratory practices. Assisted in preparation of a technical report summarizing the evaluation techniques and conclusions to support reporting by legal counsel to the state regulatory agency.

Third-Party Analytical Data Quality Review, Confidential Location — Worked with project team to provided extensive third-party review of 8 years of analytical chemistry data records from three laboratory instruments to identify and evaluate the impacts of improper laboratory practices. Examined raw instrument files, laboratory data packages, hard copy documentation, and the laboratory's information management system database to assess conformity with analytical methods, laboratory standard operating procedures, and best laboratory practices.

Deepwater Horizon, Gulf of Mexico — Worked in conjunction with the consulting team in responding to the *Deepwater Horizon* accident and oil spill in the Gulf of Mexico on behalf of BP Exploration & Production Inc. Provided quality assurance and offshore sample coordination roles to support sample collection, data management, and reporting activities for multiple technical work groups. Participated in the chemistry technical working group in review of the quality assurance plan, laboratory coordination, and other quality assurance review activities and data completeness tasks.

Regional-Scale Risk Assessment, Former Mill and Mine Sites, Illinois — Led the review and data validation of analyses of soil, sediment, and surface water for lead, cadmium, chromium, zinc, mercury, and cyanide.

BIOMONITORING

Biomonitoring Study, U.S. — Managed a biomonitoring study conducted in support of litigation

related to a persistent organic pollutant. Coordinated study design and implementation, sample collection, laboratory oversight, and data management. Evaluated laboratory methodologies, provided laboratory oversight and coordination, evaluated data usability, and prepared a report summarizing the data and results.

Presentations / Posters

Luz, A., C. Hutchings, J. Anderson, P. Goodrum, and J. Field. 2019. A novel approach for assessing hazard associated with firefighting foams. Poster presentation at SETAC North America 40th Annual Meeting, Toronto, Ontario, Canada. November 3–7.

Goodrum, P., A. Luz, J. Anderson, G. Ansell, and C. Hutchings. 2019. Approaches for perfluoroalkyl acid grouping and assessment of mixture toxicity. SETAC North America Focused Topic Meeting: Environmental Risk Assessment of PFAS, Durham, NC. August 12–15.

Hutchings, C., and S. Helgen. 2019. Identifying linear and branched isomers from standard PFAS analysis for source delineation. Platform presentation at Tenth International Conference on the Remediation and Management of Contaminated Sediments, New Orleans, LA. February 11–14.

Helgen, S., M. Marietta, C. Hutchings, and E. Palko. 2018. Site-specific desorption testing of perfluorononanoic acid (PFNA) to assess potential soil leaching to groundwater. Platform presentation at Eleventh International Conference on Remediation of Chlorinated and Recalcitrant Compounds, Palm Springs, CA. April 8–12.

Jones, L., and C. Hutchings. 2013. Superfund data validation. Lorman Education Services Audio Conference.

Hutchings, C., and A. Bailey. 2006. Variables in lipids analyses and effect on data quality. 22nd National Environmental Monitoring Conference, Arlington, VA.

Bailey, A.K., P. Kane, and C. Hutchings. 2006. Reference materials as indicators of analytical data quality for human and ecological risk assessments. Tenth International Symposium on Biological and Environmental Reference Materials, Charleston, SC.



Glenn Esler

Scientist

(503) 943-3617

Portland, OR

gesler@integral-corp.com

Mr. Glenn Esler has more than 30 years of experience in the field of environmental chemistry, including 15 years in laboratory quality assurance and data quality management and 5 years as a GC/MS analyst. His technical specialties include design and implementation of laboratory quality management programs, laboratory and field audits, and data interpretation and assessment of compliance with regulatory requirements and project objectives. He has an in-depth working knowledge of EPA environmental analytical methods and EPA Contract Laboratory Program (CLP) national functional guidelines for data review. His experience includes environmental analysis, data verification and validation, preparation of quality assurance documentation, and coordination of subcontracting laboratories. He is also credentialed as a Certified Laboratory Auditor.

Education & Credentials

B.S., Geography, Portland State University, Portland, Oregon, 2008

A.S., Chemistry, Millersville University, Millersville, Pennsylvania, 1984

Continuing Education

Sustainability Leadership Program Certificate, University of Oregon, Portland, Oregon (2013)

EPA Office of Emergency and Remedial Response, 40-Hour Health and Safety Course (2010)

Certified Laboratory Auditor Training and Credentialing Program, iNARTE (2009)

Naval Sea Systems Command Laboratory Quality and Accreditation Office Sampling and Laboratory Testing E-Learning Training (2009)

Radiometric Data Validation, American Radiochemistry Society (2009)

SDSFIE Web Online Training Course (2005)

Analysts Guide to NELAC Assessment Short Course, Advanced Systems, Inc. (2004)

Relevant Experience

DATA QUALITY ASSURANCE

Airplane Manufacturer Superfund Site, Laboratory and Field Audits, Washington — Conducted onsite laboratory and field audits in support of remedial action and treatment systems related to groundwater contamination. Wrote final report that provided an assessment of the laboratory and field sampling team's performance and ability to provide high-quality, defensible data, and areas where improvements are required.

NOAA, Lower Duwamish River (LDR), Washington — Conducted research related to the Natural Resources Damage Assessment program for PAH allocation in LDR sediments. Research was based on PAH footprint maps, tax parcel information, data from EPA and Washington State Department of Ecology files, site histories, and other publicly available reports produced over the last several decades. Also used Google Earth and ESRI's ArcView to aid in allocation to multiple sites along the LDR.

Energy Distribution Company, Indiana — Assisted with work plan preparation, laboratory coordination, and data validation, data review, and data quality assessment on public sewer sediments and stormwater sampling at the site. The site was identified as a potential source of PCBs to a public sewer system and river sediments associated with a National Priorities List site.

Railroad Transportation Laboratory Audits, Multiple Sites, United States — Conducted onsite laboratory audits and provided assistance in conjunction with the Laboratory Management Program. The program included establishment of a web site for distributing program information, development of a web-based project management tool to handle laboratory projects, documentation of laboratory procedures in an online and hard copy manual, solicitation and establishment of standardized pricing

Basics of Quality Improvement Short Course, University of Delaware (1996)

Environmental Data Quality Short Course, American Chemical Society (1992)

for laboratory work, and presentation of the program to railroad officials, laboratories, and consultants. Also audited laboratories analyzing NPDES samples on behalf of client; evaluated laboratory reports for completeness, verification of reporting limits, and laboratory standard operating procedures. Wrote final report that provided an assessment of the laboratory's performance and ability to provide high quality, defensible data, and areas where improvements were required.

Cleanup of Base Oil/Water Separators, Air Force Center for Environmental Excellence, Grissom Air Reserve Base, Indiana —
Assisted with quality assurance project plan (QAPP) preparation and data quality objectives (DQOs) and performed data validation, data review, and data quality assessment in conjunction with site activities, which included sampling, analyzing, cleaning, collecting, removing, manifesting, and properly disposing of materials for nine oil/water separators in accordance with applicable state regulations.

Selfridge Air National Guard Base, Michigan — Assisted with QAPP preparation and formulation of DQOs for the collection of data to support the evaluation of the corrective action measures, site characterization, and determination of extent of contamination at a Michigan Air National Guard Base.

U.S. Department of the Navy, Naval Facilities Engineering Command Southwest, California — Assisted with the preparation of the pre-design sampling and analysis plan (SAP) and remedial action work plan for the remedial design and remedial action at IR Site 1. Also assisted with laboratory procurement of analytical services and procurement of third-party data validation services.

Groundwater Monitoring Program, Arizona — Assisted in the development of the site-wide quality assurance management plan and the QAPP for an EPA Superfund site. Contaminants of concern were volatile organic compounds (VOCs) and perchlorate. Activities included groundwater program planning and execution, groundwater sampling, quarterly and annual reporting, QA/QC, data validation, and project problem solving. Supported the project quality assurance manager by providing data validation, tracking quality control parameters, and handling laboratory data quality issues.

Partial Database Rebuild for a Sawmill Facility, Montana — Provided technical support for the partial reconstruction of the project database after discrepancies were found during quality assurance activities. Review third-party data validation reports and updated associated electronic data deliverables as appropriate.

Emergency Response at Bulk Chemical Terminal, New Orleans, Louisiana — Assisted with data analyses and audit of the analytical laboratory charges for samples collected related to the emergency response and cleanup of a chemical spill caused by flooding of a bulk chemical terminal during Hurricane Isaac.

Engineering Evaluation and Cost Analysis for a Former Chemical Manufacturing Facility, Portland, Oregon —
Revised project QAPP based on EPA comments on a sediment sampling work plan, which was prepared to collect data for pre-remedial design to address sediments adjacent to the site. Coordinated with analytical laboratories for methods, quality control criteria, standard operating procedures, quality assurance documentation, and costs for additional analyses. Researched and co-authored technical memorandum to EPA on the passive sampling effort to measure the freely dissolved porewater concentrations of DDT and its metabolites, polychlorinated dibenzo-*p*-dioxins and dibenzofurans (PCDD/Fs), and PCBs described in the porewater chemistry section of the work plan.

Laboratory Forensics Investigation, Oregon — Supported the verification of possible reporting anomalies initiated by a respected commercial laboratory. Performed preliminary data review

activities, including review of laboratory documentation, quality control data, and selected instrument run data files followed by a more comprehensive review process for instrument run file outputs associated with reported data.

Forensics Investigation Municipal Wastewater Collection and Treatment Facility, Oregon — Supported a third party investigation of possible analysis procedural and data integrity issues associated with a municipal wastewater treatment plant. The project entailed a review of electronic data files, permit requirements, laboratory record books, and laboratory standard operating procedures, laboratory audits, and staff interviews. Included review of laboratory and corporate procedural guidance documents, instrument manuals, laboratory bench books, and discharge monitoring report data submitted in fulfillment of NPDES requirements. The technical evaluation included data verification by tracing records from sample analysis through reporting, evaluation of quality control data for compliance with laboratory control limits, visual evaluations of time series data and trends, and assessment of the impact of possible improper laboratory practices.

LITIGATION SUPPORT

Database Inventory in Support of Litigation, U.S. West Coast — Supported maintenance of database inventory, which included a summary of relevant information such as information types, sample material, geographic area, period of record, and source information for customized databases cataloging large numbers of publicly available data sets.

Biomonitoring Study Conducted in Support of Litigation, Missouri — Evaluated laboratory methodologies and data usability and prepared a report summarizing the data usability results associated with the collection of human serum from more than 500 participants.

Expert Testimony Report, Confidential Client — Performed research on the pervasiveness and persistence of organochlorine pesticide chemicals in environmental media and biota in support of expert testimony report.

CHEMISTRY

Railyard Air Monitoring, Various Sites, Montana — Served as project chemist for semiannual air sampling program related to indoor air monitoring at several active railyards throughout Montana. Oversaw data validation effort using various air analytical methods, including EPA TO-15 and MADEP VPH. Reviewed data validation reports and associated electronic data deliverables.

Air National Guard, One Clean Program, Multiple Sites, North/Midwest Region — Served as project chemist and oversaw preparation of the QAPP, data validation, and data management for this accelerated turnaround project, which included field investigation activities to determine the presence of environmental contamination at identified areas of concern at 38 sites at 11 installations in the Air National Guard's North/Midwest Region. Oversaw the following: management of all analytical data using the EQuIS™ data management tool; Level III data validation consistent with the Environmental Restoration Program Air National Guard Investigation Guidance; creation of export templates from the database; generation of data tables for the Site Inspection Report; and the electronic data deliverables for the ESOH-MIS database.

Niblack Mining Corporation, Ketchikan, Alaska — Prepared a QAPP revision in support of routine monitoring of surface water and groundwater quality. Assisted in coordinating project logistics, sending sampling equipment to a remote location in Alaska, and subsequent delivery of samples to the analytical laboratory. Monitored laboratory's progress on sample analyses and reviewed and

validated analytical results. Supported preparation of data quality reports summarizing analytical results.

Water Quality Monitoring for a Volcanogenic Massive Sulfide Mine Exploration Project, Alaska — Assisted with QAPP preparation in support of monitoring of surface water and groundwater quality. Assisted in coordinating project logistics, sending sampling equipment to a remote location in Alaska, and subsequent delivery of samples to the analytical laboratory. Monitored laboratories' progress on sample analyses and reviewed and validated analytical results.

Baseline Ecological Risk Assessment (BERA) for a Landfill Superfund Site, New Jersey — As the project's quality assurance chemist, assisted with QAPP preparation for analytical and field activities associated with soil, sediment, surface water, and biota samples to better characterize potential site risks and examine factors that influence metal bioavailability. Chemicals of potential concern included phthalates, PAHs, pesticides, PCBs, PCDD/Fs, metals, and cyanide. Performed laboratory and data validation coordination as well as review of sample receipt variances, laboratory quality control variances, analytical corrective actions, data verification issues (e.g., incomplete records), and data review corrective actions.

RI/FS Waiau Generating Station Honolulu, Hawai'i — Assisted with QAPP preparation for analytical and field activities for multiple sampling phases including onshore source investigation, sediment transport evaluation, biota sampling, source control investigation, and pipe and tunnel investigation. Coordinated with analytical laboratories and data validation firm. Reviewed data validation reports.

Groundwater Monitoring and Delineation of Impacted Soil at Former Mill Site, Centralia, Washington — Coordinated laboratory analytical proposals and work orders, performed review of laboratory deliverables and tabular data, and assisted with field sampling planning.

Per- and Polyfluoroalkyl Substances, Northeastern U.S. — Serving as project chemist overseeing analyses and validation of per- and polyfluoroalkyl substances (PFAS) in groundwater, drinking water, surface water, soil, sediment, and porewater. Review isomer profiles of PFAS samples.

Kenmore Navigation Channel Sediment Characterization, Kenmore, Washington — Under a subcontract, prepared QAPP and health and safety plan (HASP) for a sediment characterization in 2019 to support maintenance dredging. Assisted with development of SAP and sample collection effort.

Elliott Bay Bioaccumulation Study, Seattle, Washington — Under a subcontract, prepared QAPP and HASP for the collection of surface sediment in 2019 to support a benchmark bioaccumulation study. Assisted with development of SAP and sample collection effort.

Ecological Baseline Pre-Design Investigation, Centredale Manor Restoration Project Superfund Site, Rhode Island —
Prepared Uniform Federal Policy QAPP and performed quality assurance chemistry tasks in support of pre-remedial design investigation activities including ecological surveys and sampling stations, sampling equipment and procedures, sample designation, and sample handling. This Superfund site, based in North Providence, has multiple operating units. The site is associated with human health issues and ecological concerns from the presence of dioxins, furans, PCBs, pesticides, herbicides, and VOCs in all environmental media, but particularly in riverine and aquatic environments, associated biota, and floodplain soils.

Detailed Sediment Investigation, San Diego, California — Quality assurance chemistry in support of sediment investigation at two shipyards in San Diego Bay, focusing on the effects of metals, organo-

metallic compounds, PAH, PCBs, polychlorinated triphenyls, and petroleum hydrocarbons on aquatic life, aquatic-dependent wildlife, and human health. Managed laboratory and data validation subcontracting.

Site Investigation, Fairbanks, Alaska — Supported a remedial investigation of PFAS and sulfolane in groundwater and drinking water, including an assessment of potential receptors. Responsible for laboratory, data validation, and data coordination, as well as quality assurance review of third-party data validation reports.

PFAS Delineation in Groundwater and Soil, Denver, Colorado — Supported a large PFAS delineation effort in Denver, Colorado. Performed data validation for samples analyzed for PFAS compounds, total organic carbon, and grain size.

Superfund Site, Navassa, North Carolina — Supported the CERCLA process to characterize and remediate environmental impacts associated with a former wood treatment facility, including dense nonaqueous-phase liquid contamination and contaminated soil, groundwater, and intertidal marsh sediment and sediment porewater. Responsible for laboratory, data validation, and data coordination, as well as quality assurance review of third-party data validation reports.

Berry's Creek Superfund Site, New Jersey — Supported the remedial investigation for the Berry's Creek Study Area (BCSA) Superfund site. The BCSA is a watershed-based Superfund site that traverses six boroughs in northern New Jersey. The creek is a tidal tributary to the Hackensack estuary and encompasses 12 square miles of wetlands. The area contains industrial, commercial, and residential properties and has been impacted by human activities since the turn of the twentieth century. Performed data validation for sediment, surface water, and biota analyzed for mercury, methylmercury, PCBs, and numerous other contaminants.

Former Manufactured Gas Plant (MGP) Site, Missoula, Montana — Project chemist for the environmental assessment and remedial proposal for a former MGP in Missoula, Montana. Performed laboratory coordination and data validation. Provided support to data management for recent sample collection and historical data.

Former Steam Plant, Seattle, Washington — Project chemist for groundwater monitoring program to evaluate whether cleanup criteria were met, and currently participating in the development of a site RI/FS for multiple potentially responsible parties. Performed laboratory coordination and data validation. Provided support for data management.

DATA MANAGEMENT

Deepwater Horizon Oil Spill, Gulf of Mexico — Worked in conjunction with the natural resource damage assessment team responding to the Deepwater Horizon accident and oil spill in the Gulf of Mexico on behalf of BP Exploration & Production Inc. Provided chemistry support and performed data validation and review of data validation reports associated with the environmental sample collection activities.

Industrial Site Data Validation, Vancouver, Washington — Performed data validation for a project involving the presence of chlorinated solvents at an active manufacturing facility in Vancouver, Washington. Project included groundwater monitoring and nearby residential air sample analyses, which are being used by the Washington State Department of Ecology for human health risk assessment.

Electrical Equipment Repair Facility Site Investigation Data Validation and Data Quality Assessment, Oregon —
Performed data validation, data review, and data quality assessment for the site investigation of historical PCB releases at an electrical equipment inspection, service, and repair facility. The site was identified by the Oregon Department of Environmental Quality as a potential source of PCBs detected in the public stormwater system and in Willamette River sediments.

Groundwater Monitoring Program Data Validation, Beaverton, Oregon — Performed validation of groundwater chemistry results generated as part of a RCRA Corrective Action Program. Monitoring required for the project included VOCs and Appendix IX List compounds.

Fort Lewis Thermal Remediation Project Data Review and Validation, Fort Lewis, Washington —
Performed chemical data review and validation on project data, including water and air samples for hydrocarbon and VOC analyses, using GC/photoionization detector and GC/MS, for a remediation project at Fort Lewis using electric resistance heating. The project was designed by the U.S. Army Corps of Engineers to be performed using near-real-time data from a mobile laboratory to make decisions about the remediation process using the Triad Approach.

Field Investigation Oversight and Report Preparation for a Coal-Fired Electrical Power Plant, Indiana —
Performed data validation for a large environmental investigation of a coal-fired power plant. Data included groundwater, soils, and plant tissues.

Interim Remedial Actions/PCB Soil Removals, Cape Canaveral Air Force Station, Brevard County, Florida —
Performed data validation and data assessment for a RCRA interim measures delineation and cleanup effort at Space Launch Complex 40 at Cape Canaveral Air Station, Florida. The project involved delineating TSCA levels in soil to determine PCB concentrations >50 ppm.

Voluntary Property Assessment (VPA) Activities, Former Crosstie Chipping Facility, Alabama —
Performed data validation and data assessment for VPA investigation activities. Work included collection of numerous soil, sediment, surface water, groundwater, and macroinvertebrate samples to evaluate the extent of PAH impacts to the site and surrounding areas resulting from former crosstie chipping operations.

Former Truck Manufacturing Facility Remediation Data Validation and Data Quality Assessment, Washington —
Performed data validation, data review, and data quality assessment for remediation of a former truck manufacturing facility located adjacent to the Duwamish River. The project work consisted of the collection of stormwater and tidal sediments.

Memphis Air National Guard, Memphis, Tennessee — Performed data quality review and data assessment on VOC data from the risk assessment and remediation of petroleum-impacted soil and groundwater.

White Swan Cleaners/Sun Cleaners Superfund Site, New Jersey — Performed data validation on CLP data, and data quality review and assessment on the data for ongoing collection activities related to a Settlement Agreement with EPA Region 2 to conduct an RI/FS of a regional site that has been contaminated by the dry cleaning solvent PCE. PCE had potentially impacted municipal water supply wells at a popular shoreline resort community.

Former Pharmaceuticals Facility Data Validation, Oregon — Performed data validation on the results related to the release of VOCs on the site. The primary contaminants of concern included trichloroethene, *cis*-1, 2-dichloroethene, and vinyl chloride, which were found at concentrations

indicative of dense non-aqueous phase liquid.

Former Industrial Site Water Sampling Data Validation and Data Quality Assessment, New Jersey — Performed data validation, data review, and data quality assessment on the annual drinking water sampling at all homes surrounding a former industrial site, where the chemicals of concern in groundwater include VOCs—primarily 1,1,1-trichloroethane, 1,1-dichloroethylene, and 1,1-dichloroethane.

Groundwater and Surface Water Monitoring, Naval Facilities Engineering Command (NAVFAC), Fort Gordon, Georgia —
Performed data validation, data review, and data quality assessment on quarterly groundwater sampling. Quarterly monitoring of groundwater and surface water was performed under a NAVFAC contract in compliance with NPDES for a wastewater treatment facility and land-application system at the Pointes West Army Recreation Area in Columbia County, Georgia.

Site Characterization at Industrial Operation, Seattle, Washington — Performed data validation, data review, and data quality assessment on the soil boring and groundwater sampling at the site. Site activities included site characterization (i.e., field assessment, focused site characterization report, project management) at an industrial operation approximately 2.1 acres in size located in Seattle, Washington. The site was impacted with metals, PCBs, PAHs, TPH, and VOCs.

West Virginia Department of Environmental Protection Brownfield Sites Data Validation and Data Quality Assessment, West Virginia —
Performed data validation, data review, and data quality assessment using EPA Region 3 modifications to CLP national functional guidelines associated with Phase I surface soil sampling and follow-up Phase II subsurface soil sampling, groundwater investigations, and surface water and sediment sampling at various brownfield sites throughout West Virginia.

Massachusetts Military Reservation Closure Data Validation, Cape Cod, Massachusetts — Validated data for samples submitted for explosives compounds analysis and perchlorate, which are associated with verification that post-excavation bottom soils and expansion area soils are below established action levels in order to obtain closure determination for the CS-19 and CS-18 Source Area sites at the Massachusetts Military Reservation in Cape Cod. Soil samples from the expansion areas were collected using the multi-increment sampling approach proposed by Cold Regions Research and Engineering Laboratory.

Susanville Sawmill and Cogeneration Facility, Susanville, California — Performed expedited data validation and associated report writing associated with air, water, soil, and product samples collected during the overall scope of work, which included site investigations and remediation at the proposed treatment cell area and fuel and maintenance area.

Rosiclare Mine Site, Rosiclare, Illinois — Validated data associated with soil, sediment, and groundwater sampling and wrote data validation report for the RI/FS effort to clean up historical fluorspar mine tailings.

Rental Car Maintenance Facility, San Jose, California — Performed expedited data validation and report writing associated with samples collected during the overall scope of work, which included removal and disposal of underground storage tanks, an aboveground storage tank, below-ground hydraulic lifts, and a car wash structure.

Former Ashland Lease Area, Shoreham Facility, Minneapolis, Minnesota — Performed data validation of quarterly groundwater samples analyzed for anions, conventional parameters, and VOCs and report

writing for the monitoring program for the four remedial actions currently under way at the site: soil vapor extraction, light nonaqueous phase liquid monitoring and recovery, till bioremediation, and outwash pump and treat.

Smeltertown Superfund Site OU1, Salida, Colorado — Validated data from groundwater samples analyzed for metals and wrote report for the annual groundwater monitoring program.

Chemical Distribution Facility, Santa Ana, California — Validated data resulting from semiannual groundwater samples analyzed for PCE, TCE, chemical degradation products of PCE and TCE, and 1,4-dioxane and wrote data validation report as part of oversight of groundwater monitoring and soil remediation at the site.

Waste Rock Water Quality Assessment Open Pit Gold Mine Expansions, Nevada — Validated data associated with ongoing humidity cell test results of existing waste rock, alluvium, and drill cores of expansion material. Assisted with the quality assurance report associated with the 20-week results of the first round of humidity cell tests.

Former DDT Manufacturing Facility, Portland, Oregon — Validated data associated with stormwater monitoring at a former pesticide manufacturing facility under the jurisdiction of the Oregon Department of Environmental Quality. Also monitored laboratories' progress on sample analyses and reviewed and validated analytical results.

Blackwell Zinc Site, Blackwell Oklahoma — Validated data associated with mitigation strategies of metals loading to the city's wastewater treatment plant resulting from infiltration of contaminated groundwater to the city's sanitary collection system.

Soil and Groundwater Investigation at Former Allied Engineering Facility, Alameda, California — Validated historical data and recent data associated with assessment and potential remediation of groundwater and sediment at the site.

Slag and Sewage Site, Past Costs and River Sediment Evaluation, Fox Point Park, Wilmington, Delaware —

Performed Stage 2B and Stage 3 data validation associated with the sediment RI/FS in the Delaware River.

Hazardous Materials Assessment of Soils at Various Public Schools, Hawaii — Performed laboratory coordination and Stage 2B data validation associated with environmental hazard screening of select school sites for arsenic, lead, and organochlorine pesticides.

Former Wood Treating CERCLA Facility, Columbus, Mississippi — Performed data validation in support of a human health risk assessment, Operable Unit 1 focused feasibility study, and Operable Unit 1 removal action work plan, as well as implementation of the Operable Unit 1 voluntary removal action at a Superfund site.



Manon Tanner-Dave

Project Scientist

(503) 943-3616

Portland, OR

mtanner@integral-corp.com

Ms. Manon Tanner-Dave is a chemist with 15 years of experience providing support in project and data quality assurance. She has extensive experience writing field sampling plans and quality assurance project plans (QAPPs) related to a variety environmental media for both state and federal regulatory agencies, including Alaska Department of Environmental Conservation, Washington State Department of Ecology, EPA Regions 6 and 10, and the U.S. Army Corps of Engineers. She specializes in environmental chemistry and is experienced in data validation for organic and inorganic data using EPA's functional guidelines for data validation. She has coordinated analytical laboratory activities and works closely with clients, project teams, and laboratories to resolve any data quality issues, such as background contamination or analytical interference. In addition, Ms. Tanner-Dave is knowledgeable of many analytical methods for environmental matrices, including EPA SW-846, Standard Methods for the Examination of Water and Wastewater, and ASTM International standards.

Education & Credentials

M.S., Environmental Science, Oregon Health & Science University, Portland, Oregon, 2002

B.S., Chemistry, Pacific University, Forest Grove, Oregon, 2001

A.A., General, Modesto Junior College, Modesto, California, 1998

Continuing Education

Confined Space Entry Awareness Course (2007)

Red Cross CPR (2007) and First Aid Training (2004)

Hazardous Waste Operations and Emergency Response 40-Hour Certification (2004; refreshers current)

Oregon Department of Transportation Training (2009)

Relevant Experience

REMEDIAL DESIGN

Portland Harbor Superfund Site Remedial Investigation/Feasibility Study, Portland, Oregon — Assisted in the development of QAPPs and several QAPP addenda for an extensive list of organic and inorganic analytes of interest in soil, sediment, tissue, surface water, and groundwater. Prepared letters of authorization to participating analytical laboratories and data validation firms and assisted with budget projections. Coordinated and oversaw all analytical laboratory services and assisted in sample collection and shipment of samples to the analytical laboratories. Worked closely with the analytical laboratories on analytical method modifications needed for some problematic environmental matrices. Evaluated data and assisted in preparing field sampling reports and data quality assurance reports.

Former Chemical Manufacturing Facility, Portland, Oregon — Drafted QAPPs in support of interim and remedial measures for stormwater as well as post-construction stormwater monitoring for site-specific organic and inorganic analytes of concern. Coordinated laboratory analyses of samples. Reviewed and validated analytical results from stormwater interim and remedial measures, and post-construction stormwater monitoring of site-specific organic and inorganic analytes of concern. Prepared data quality assurance reports summarizing data results.

SAMPLING

Blood Lead Biomonitoring Study, Rico, Colorado — Assisted in developing a biomonitoring study for a

former lead mining town in Colorado. Prepared a QAPP for the study, coordinated field activities with the analytical laboratories, validated analytical results, and prepared a quality assurance data report. Sampled media included blood, house dust, drinking water, and paint. Results of this study were used to evaluate seasonal fluctuations of blood lead levels in town residents and to assess the effectiveness of soil remediation efforts.

Subslab Gas Sampling, Milwaukie International Way Site, Milwaukie, Oregon — Participated in semiannual subslab gas sampling Soil gas probes were installed and sampled following EPA guidance, Standard Operating Procedure (SOP) for Installation of Sub-Slab Vapor Probes and Sampling Using EPA Method TO-15 to Support Vapor Intrusion Investigations. Reviewed and validated analytical results from subslab air samples that were collected and analyzed according to EPA Method TO-15. Provided a data quality summary report for each sampling event.

Semiannual Groundwater Sampling at a Former Wood Waste Disposal Landfill, Oakridge, Oregon — Collected groundwater and surface water samples at a former wood waste landfill site. Analyzed field and analytical data to modify an existing environmental monitoring plan for the site that included a reduced list of analytes.

HUMAN HEALTH RISK ASSESSMENT

Human Health Risk Assessment at Smelter Facility, La Oroya, Peru — Assisted in developing a human health risk assessment for an active smelter. Prepared a study QAPP, coordinated field activities with the analytical laboratories (international and domestic), validated analytical results, and prepared a quality assurance data report. Also participated in one of two field sampling efforts in the community surrounding the smelter to characterize exposure media, including drinking water, surface soil, outdoor dust, and dust in homes. These data were combined with biomonitoring and dietary intake data for the population and air dispersion and deposition modeling results to complete the human health risk assessment. For this project all communications occurred in Spanish.

DATA ANALYSIS

Post-construction Groundwater Monitoring Program, Smeltertown Superfund Site, Operable Unit No. 1, Salida, Colorado —
Provided data validation services for a groundwater monitoring project. Analytes of interest included select metals and semivolatile organic compounds. Provided a data validation summary report.

Water Quality Monitoring for Mining Site, Ketchikan, Alaska — Prepared QAPPs in support of routine monitoring of surface water and groundwater quality, and quarterly monitoring of the wastewater treatment facility effluent for the site barge, which houses onsite employees. Reviewed and validated analytical results from quarterly groundwater, surface water, and wastewater treatment facility effluent from the site barge. Assisted with quarterly and annual data evaluation, reporting, and development of a database for analytical results.

Volcanogenic Massive Sulfide Project, Alaska — Prepared a QAPP using Alaska Department of Environmental Conservation guidance in support of assembling a sufficient data set to define baseline conditions for target analytes in surface water. Analytes of interest included conventional parameters, cations/anions, and total/dissolved metals. Baseline water quality data were used to characterize water quality typical of the project area prior to any potential underground exploration or mine development. Monitored laboratories' progress on sample analyses. Reviewed and validated analytical results from baseline water quality testing. Provided data quality reports summarizing analytical

results and assisted with development of a database for analytical results.

Glenbrook Nickel Site, Coos Bay, Oregon — Provided data validation services for sediment samples submitted for total organic carbon, grain size, and nickel analyses for site investigation purposes. Responsible for providing a data quality summary report of all analytical results.

Groundwater and Wastewater Sample Data Validation, Blackwell, Oklahoma — Reviewed and validated total and dissolved cadmium, lead, zinc, calcium, and magnesium results from groundwater samples. Reviewed and validated cadmium, lead, and zinc results from wastewater treatment plant influent samples. Reviewed and validated cadmium, lead, zinc, naphthalene, and select volatile organic compound results from groundwater treatment facility samples. Assisted with quarterly and annual reporting of analytical results.

Formerly Used Defense Sites — Performed data validation for munitions-related constituents. Provided data validation reports for each area of concern. Delegated role as lead data validator and performed senior review of data validation results and data validation reports.

Deepwater Horizon, Gulf of Mexico — Worked in conjunction with the Cardno ENTRIX team in responding to the Deepwater Horizon accident and oil spill in the Gulf of Mexico on behalf of BP Exploration & Production Inc. Provided support to the chemistry technical working group in quality assurance review activities and data completeness tasks. Primarily validated data and provided data validation review support according to project-specific quality assurance plan specifications.

Appendix H

Laboratory Reports

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-200114-1
Client Project/Site: EF1017 - Refractories

For:
Integral Consulting Inc
319 SW Washington Ave
Suite 1150
Portland, Oregon 97204

Attn: Mr. Glenn Esler

Authorized for release by:
8/10/2022 3:46:08 PM

John Beninati, Project Manager
(716)504-9874
John.Beninati@et.eurofinsus.com

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 5
Client Sample Results 6
Surrogate Summary 17
QC Sample Results 18
QC Association Summary 27
Lab Chronicle 29
Certification Summary 30
Method Summary 31
Sample Summary 32
Chain of Custody 33
Receipt Checklists 34

Definitions/Glossary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200114-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-200114-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-200114-1

Comments
No additional comments.

Receipt
The samples were received on 7/27/2022 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 4.8º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270D: The continuing calibration verification (CCV) associated with batch 480-635511 recovered outside acceptance criteria, low biased, for 3-Nitroaniline. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method 6010C: The low level continuing calibration verification (CCVL 480-635565/27) recovered above the upper control limit for Total Potassium. The samples associated with this CCVL were either less than the reporting limit (RL) for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of samples FB_072622 (480-200114-1), ERB_072622 (480-200114-2), (LCS 480-635377/2-A), (MB 480-635377/1-A), (480-200114-E-1-C MS), (480-200114-E-1-D MSD), (480-200114-E-1-B PDS) and (480-200114-E-1-B SD ^5) was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200114-1

Client Sample ID: FB_072622 — Lab Sample ID: 480-200114-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Butyl benzyl phthalate	1.2	J	5.0	1.0	ug/L	1		8270D	Total/NA
Manganese	0.00051	J	0.0030	0.00040	mg/L	1		6010C	Total/NA

Client Sample ID: ERB_072622 — Lab Sample ID: 480-200114-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	0.0022	J	0.0030	0.00040	mg/L	1		6010C	Total/NA

Client Sample ID: ERB2_072622 — Lab Sample ID: 480-200114-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	0.020	J	0.050	0.019	mg/L	1		6010C	Total/NA
Manganese	0.00089	J	0.0030	0.00040	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200114-1

Client Sample ID: FB_072622
Date Collected: 07/26/22 08:50
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200114-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			07/29/22 12:58	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/29/22 12:58	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/29/22 12:58	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/29/22 12:58	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/29/22 12:58	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/29/22 12:58	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/29/22 12:58	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			07/29/22 12:58	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/29/22 12:58	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			07/29/22 12:58	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/29/22 12:58	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/29/22 12:58	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/29/22 12:58	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/29/22 12:58	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/29/22 12:58	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			07/29/22 12:58	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/29/22 12:58	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/29/22 12:58	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/29/22 12:58	1
2-Hexanone	ND		5.0	1.2	ug/L			07/29/22 12:58	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/29/22 12:58	1
Acetone	ND		10	3.0	ug/L			07/29/22 12:58	1
Benzene	ND		1.0	0.41	ug/L			07/29/22 12:58	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/29/22 12:58	1
Bromoform	ND		1.0	0.26	ug/L			07/29/22 12:58	1
Bromomethane	ND		1.0	0.69	ug/L			07/29/22 12:58	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/29/22 12:58	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/29/22 12:58	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/29/22 12:58	1
Chloroethane	ND		1.0	0.32	ug/L			07/29/22 12:58	1
Chloroform	ND		1.0	0.34	ug/L			07/29/22 12:58	1
Chloromethane	ND		1.0	0.35	ug/L			07/29/22 12:58	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/29/22 12:58	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/29/22 12:58	1
Cyclohexane	ND		1.0	0.18	ug/L			07/29/22 12:58	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/29/22 12:58	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/29/22 12:58	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/29/22 12:58	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/29/22 12:58	1
m,p-Xylene	ND		2.0	0.66	ug/L			07/29/22 12:58	1
Methyl acetate	ND		2.5	1.3	ug/L			07/29/22 12:58	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/29/22 12:58	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/29/22 12:58	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/29/22 12:58	1
n-Butylbenzene	ND		1.0	0.64	ug/L			07/29/22 12:58	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/29/22 12:58	1
o-Xylene	ND		1.0	0.76	ug/L			07/29/22 12:58	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			07/29/22 12:58	1
Styrene	ND		1.0	0.73	ug/L			07/29/22 12:58	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200114-1

Client Sample ID: FB_072622
Date Collected: 07/26/22 08:50
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200114-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		1.0	0.81	ug/L			07/29/22 12:58	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/29/22 12:58	1
Toluene	ND		1.0	0.51	ug/L			07/29/22 12:58	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/29/22 12:58	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/29/22 12:58	1
Trichloroethene	ND		1.0	0.46	ug/L			07/29/22 12:58	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/29/22 12:58	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/29/22 12:58	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/29/22 12:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*77 - 120*		*07/29/22 12:58*	*1*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*		*07/29/22 12:58*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*07/29/22 12:58*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*07/29/22 12:58*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		07/27/22 14:43	07/29/22 22:55	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		07/27/22 14:43	07/29/22 22:55	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		07/27/22 14:43	07/29/22 22:55	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		07/27/22 14:43	07/29/22 22:55	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		07/27/22 14:43	07/29/22 22:55	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		07/27/22 14:43	07/29/22 22:55	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		07/27/22 14:43	07/29/22 22:55	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		07/27/22 14:43	07/29/22 22:55	1
2-Chlorophenol	ND		5.0	0.53	ug/L		07/27/22 14:43	07/29/22 22:55	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		07/27/22 14:43	07/29/22 22:55	1
2-Methylphenol	ND		5.0	0.40	ug/L		07/27/22 14:43	07/29/22 22:55	1
2-Nitroaniline	ND		10	0.42	ug/L		07/27/22 14:43	07/29/22 22:55	1
2-Nitrophenol	ND		5.0	0.48	ug/L		07/27/22 14:43	07/29/22 22:55	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		07/27/22 14:43	07/29/22 22:55	1
3-Nitroaniline	ND		10	0.48	ug/L		07/27/22 14:43	07/29/22 22:55	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		07/27/22 14:43	07/29/22 22:55	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		07/27/22 14:43	07/29/22 22:55	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		07/27/22 14:43	07/29/22 22:55	1
4-Chloroaniline	ND		5.0	0.59	ug/L		07/27/22 14:43	07/29/22 22:55	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		07/27/22 14:43	07/29/22 22:55	1
4-Methylphenol	ND		10	0.36	ug/L		07/27/22 14:43	07/29/22 22:55	1
4-Nitroaniline	ND		10	0.25	ug/L		07/27/22 14:43	07/29/22 22:55	1
4-Nitrophenol	ND		10	1.5	ug/L		07/27/22 14:43	07/29/22 22:55	1
Acenaphthene	ND		5.0	0.41	ug/L		07/27/22 14:43	07/29/22 22:55	1
Acenaphthylene	ND		5.0	0.38	ug/L		07/27/22 14:43	07/29/22 22:55	1
Acetophenone	ND		5.0	0.54	ug/L		07/27/22 14:43	07/29/22 22:55	1
Anthracene	ND		5.0	0.28	ug/L		07/27/22 14:43	07/29/22 22:55	1
Atrazine	ND		5.0	0.46	ug/L		07/27/22 14:43	07/29/22 22:55	1
Benzaldehyde	ND		5.0	0.27	ug/L		07/27/22 14:43	07/29/22 22:55	1
Benzo(a)anthracene	ND		5.0	0.36	ug/L		07/27/22 14:43	07/29/22 22:55	1
Benzo(a)pyrene	ND		5.0	0.47	ug/L		07/27/22 14:43	07/29/22 22:55	1
Benzo(b)fluoranthene	ND		5.0	0.34	ug/L		07/27/22 14:43	07/29/22 22:55	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200114-1

Client Sample ID: FB_072622
Date Collected: 07/26/22 08:50
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200114-1
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo(g,h,i)perylene	ND		5.0	0.35	ug/L		07/27/22 14:43	07/29/22 22:55	1
Benzo(k)fluoranthene	ND		5.0	0.73	ug/L		07/27/22 14:43	07/29/22 22:55	1
Biphenyl	ND		5.0	0.65	ug/L		07/27/22 14:43	07/29/22 22:55	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		07/27/22 14:43	07/29/22 22:55	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		07/27/22 14:43	07/29/22 22:55	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		07/27/22 14:43	07/29/22 22:55	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		07/27/22 14:43	07/29/22 22:55	1
Butyl benzyl phthalate	**1.2**	**J**	5.0	1.0	ug/L		07/27/22 14:43	07/29/22 22:55	1
Caprolactam	ND		5.0	2.2	ug/L		07/27/22 14:43	07/29/22 22:55	1
Carbazole	ND		5.0	0.30	ug/L		07/27/22 14:43	07/29/22 22:55	1
Chrysene	ND		5.0	0.33	ug/L		07/27/22 14:43	07/29/22 22:55	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		07/27/22 14:43	07/29/22 22:55	1
Dibenzofuran	ND		10	0.51	ug/L		07/27/22 14:43	07/29/22 22:55	1
Diethyl phthalate	ND		5.0	0.22	ug/L		07/27/22 14:43	07/29/22 22:55	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		07/27/22 14:43	07/29/22 22:55	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		07/27/22 14:43	07/29/22 22:55	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		07/27/22 14:43	07/29/22 22:55	1
Fluoranthene	ND		5.0	0.40	ug/L		07/27/22 14:43	07/29/22 22:55	1
Fluorene	ND		5.0	0.36	ug/L		07/27/22 14:43	07/29/22 22:55	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		07/27/22 14:43	07/29/22 22:55	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		07/27/22 14:43	07/29/22 22:55	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		07/27/22 14:43	07/29/22 22:55	1
Hexachloroethane	ND		5.0	0.59	ug/L		07/27/22 14:43	07/29/22 22:55	1
Indeno(1,2,3-cd)pyrene	ND		5.0	0.47	ug/L		07/27/22 14:43	07/29/22 22:55	1
Isophorone	ND		5.0	0.43	ug/L		07/27/22 14:43	07/29/22 22:55	1
Naphthalene	ND		5.0	0.76	ug/L		07/27/22 14:43	07/29/22 22:55	1
Nitrobenzene	ND		5.0	0.29	ug/L		07/27/22 14:43	07/29/22 22:55	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		07/27/22 14:43	07/29/22 22:55	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		07/27/22 14:43	07/29/22 22:55	1
Pentachlorophenol	ND		10	2.2	ug/L		07/27/22 14:43	07/29/22 22:55	1
Phenanthrene	ND		5.0	0.44	ug/L		07/27/22 14:43	07/29/22 22:55	1
Phenol	ND		5.0	0.39	ug/L		07/27/22 14:43	07/29/22 22:55	1
Pyrene	ND		5.0	0.34	ug/L		07/27/22 14:43	07/29/22 22:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*90*		*41 - 120*	*07/27/22 14:43*	*07/29/22 22:55*	*1*
2-Fluorobiphenyl	*82*		*48 - 120*	*07/27/22 14:43*	*07/29/22 22:55*	*1*
2-Fluorophenol	*61*		*35 - 120*	*07/27/22 14:43*	*07/29/22 22:55*	*1*
Nitrobenzene-d5	*75*		*46 - 120*	*07/27/22 14:43*	*07/29/22 22:55*	*1*
Phenol-d5	*49*		*22 - 120*	*07/27/22 14:43*	*07/29/22 22:55*	*1*
p-Terphenyl-d14	*101*		*60 - 148*	*07/27/22 14:43*	*07/29/22 22:55*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		07/29/22 08:56	07/29/22 15:31	1
Antimony	ND		0.020	0.0068	mg/L		07/29/22 08:56	07/29/22 15:31	1
Arsenic	ND		0.015	0.0056	mg/L		07/29/22 08:56	07/29/22 15:31	1
Barium	ND		0.0020	0.00070	mg/L		07/29/22 08:56	07/29/22 15:31	1
Beryllium	ND		0.0020	0.00030	mg/L		07/29/22 08:56	07/29/22 15:31	1
Cadmium	ND		0.0020	0.00050	mg/L		07/29/22 08:56	07/29/22 15:31	1

Client Sample ID: FB_072622

Date Collected: 07/26/22 08:50
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200114-1

Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		0.50	0.10	mg/L		07/29/22 08:56	07/29/22 15:31	1
Chromium	ND		0.0040	0.0010	mg/L		07/29/22 08:56	07/29/22 15:31	1
Cobalt	ND		0.0040	0.00063	mg/L		07/29/22 08:56	07/29/22 15:31	1
Copper	ND		0.010	0.0016	mg/L		07/29/22 08:56	07/29/22 15:31	1
Iron	ND		0.050	0.019	mg/L		07/29/22 08:56	07/29/22 15:31	1
Lead	ND		0.010	0.0030	mg/L		07/29/22 08:56	07/29/22 15:31	1
Magnesium	ND		0.20	0.043	mg/L		07/29/22 08:56	07/29/22 15:31	1
Manganese	**0.00051**	**J**	0.0030	0.00040	mg/L		07/29/22 08:56	07/29/22 15:31	1
Nickel	ND		0.010	0.0013	mg/L		07/29/22 08:56	07/29/22 15:31	1
Potassium	ND	^+	0.50	0.10	mg/L		07/29/22 08:56	07/29/22 15:31	1
Selenium	ND		0.025	0.0087	mg/L		07/29/22 08:56	07/29/22 15:31	1
Silver	ND		0.0060	0.0017	mg/L		07/29/22 08:56	07/29/22 15:31	1
Sodium	ND		1.0	0.32	mg/L		07/29/22 08:56	07/29/22 15:31	1
Thallium	ND		0.020	0.010	mg/L		07/29/22 08:56	07/29/22 15:31	1
Vanadium	ND		0.0050	0.0015	mg/L		07/29/22 08:56	07/29/22 15:31	1
Zinc	ND		0.010	0.0015	mg/L		07/29/22 08:56	07/29/22 15:31	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		07/28/22 10:34	07/28/22 15:28	1

Client Sample ID: ERB_072622

Date Collected: 07/26/22 09:00
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200114-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			07/29/22 13:22	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/29/22 13:22	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/29/22 13:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/29/22 13:22	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/29/22 13:22	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/29/22 13:22	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/29/22 13:22	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			07/29/22 13:22	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/29/22 13:22	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			07/29/22 13:22	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/29/22 13:22	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/29/22 13:22	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/29/22 13:22	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/29/22 13:22	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/29/22 13:22	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			07/29/22 13:22	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/29/22 13:22	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/29/22 13:22	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/29/22 13:22	1
2-Hexanone	ND		5.0	1.2	ug/L			07/29/22 13:22	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/29/22 13:22	1
Acetone	ND		10	3.0	ug/L			07/29/22 13:22	1
Benzene	ND		1.0	0.41	ug/L			07/29/22 13:22	1

Client Sample ID: ERB_072622
Date Collected: 07/26/22 09:00
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200114-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		1.0	0.39	ug/L			07/29/22 13:22	1
Bromoform	ND		1.0	0.26	ug/L			07/29/22 13:22	1
Bromomethane	ND		1.0	0.69	ug/L			07/29/22 13:22	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/29/22 13:22	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/29/22 13:22	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/29/22 13:22	1
Chloroethane	ND		1.0	0.32	ug/L			07/29/22 13:22	1
Chloroform	ND		1.0	0.34	ug/L			07/29/22 13:22	1
Chloromethane	ND		1.0	0.35	ug/L			07/29/22 13:22	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/29/22 13:22	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/29/22 13:22	1
Cyclohexane	ND		1.0	0.18	ug/L			07/29/22 13:22	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/29/22 13:22	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/29/22 13:22	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/29/22 13:22	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/29/22 13:22	1
m,p-Xylene	ND		2.0	0.66	ug/L			07/29/22 13:22	1
Methyl acetate	ND		2.5	1.3	ug/L			07/29/22 13:22	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/29/22 13:22	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/29/22 13:22	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/29/22 13:22	1
n-Butylbenzene	ND		1.0	0.64	ug/L			07/29/22 13:22	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/29/22 13:22	1
o-Xylene	ND		1.0	0.76	ug/L			07/29/22 13:22	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			07/29/22 13:22	1
Styrene	ND		1.0	0.73	ug/L			07/29/22 13:22	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			07/29/22 13:22	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/29/22 13:22	1
Toluene	ND		1.0	0.51	ug/L			07/29/22 13:22	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/29/22 13:22	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/29/22 13:22	1
Trichloroethene	ND		1.0	0.46	ug/L			07/29/22 13:22	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/29/22 13:22	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/29/22 13:22	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/29/22 13:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*77 - 120*		*07/29/22 13:22*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*07/29/22 13:22*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*07/29/22 13:22*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*07/29/22 13:22*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		07/27/22 14:43	07/29/22 23:22	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		07/27/22 14:43	07/29/22 23:22	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		07/27/22 14:43	07/29/22 23:22	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		07/27/22 14:43	07/29/22 23:22	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		07/27/22 14:43	07/29/22 23:22	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		07/27/22 14:43	07/29/22 23:22	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200114-1

Client Sample ID: ERB_072622
Date Collected: 07/26/22 09:00
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200114-2
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		07/27/22 14:43	07/29/22 23:22	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		07/27/22 14:43	07/29/22 23:22	1
2-Chlorophenol	ND		5.0	0.53	ug/L		07/27/22 14:43	07/29/22 23:22	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		07/27/22 14:43	07/29/22 23:22	1
2-Methylphenol	ND		5.0	0.40	ug/L		07/27/22 14:43	07/29/22 23:22	1
2-Nitroaniline	ND		10	0.42	ug/L		07/27/22 14:43	07/29/22 23:22	1
2-Nitrophenol	ND		5.0	0.48	ug/L		07/27/22 14:43	07/29/22 23:22	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		07/27/22 14:43	07/29/22 23:22	1
3-Nitroaniline	ND		10	0.48	ug/L		07/27/22 14:43	07/29/22 23:22	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		07/27/22 14:43	07/29/22 23:22	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		07/27/22 14:43	07/29/22 23:22	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		07/27/22 14:43	07/29/22 23:22	1
4-Chloroaniline	ND		5.0	0.59	ug/L		07/27/22 14:43	07/29/22 23:22	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		07/27/22 14:43	07/29/22 23:22	1
4-Methylphenol	ND		10	0.36	ug/L		07/27/22 14:43	07/29/22 23:22	1
4-Nitroaniline	ND		10	0.25	ug/L		07/27/22 14:43	07/29/22 23:22	1
4-Nitrophenol	ND		10	1.5	ug/L		07/27/22 14:43	07/29/22 23:22	1
Acenaphthene	ND		5.0	0.41	ug/L		07/27/22 14:43	07/29/22 23:22	1
Acenaphthylene	ND		5.0	0.38	ug/L		07/27/22 14:43	07/29/22 23:22	1
Acetophenone	ND		5.0	0.54	ug/L		07/27/22 14:43	07/29/22 23:22	1
Anthracene	ND		5.0	0.28	ug/L		07/27/22 14:43	07/29/22 23:22	1
Atrazine	ND		5.0	0.46	ug/L		07/27/22 14:43	07/29/22 23:22	1
Benzaldehyde	ND		5.0	0.27	ug/L		07/27/22 14:43	07/29/22 23:22	1
Benzo(a)anthracene	ND		5.0	0.36	ug/L		07/27/22 14:43	07/29/22 23:22	1
Benzo(a)pyrene	ND		5.0	0.47	ug/L		07/27/22 14:43	07/29/22 23:22	1
Benzo(b)fluoranthene	ND		5.0	0.34	ug/L		07/27/22 14:43	07/29/22 23:22	1
Benzo(g,h,i)perylene	ND		5.0	0.35	ug/L		07/27/22 14:43	07/29/22 23:22	1
Benzo(k)fluoranthene	ND		5.0	0.73	ug/L		07/27/22 14:43	07/29/22 23:22	1
Biphenyl	ND		5.0	0.65	ug/L		07/27/22 14:43	07/29/22 23:22	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		07/27/22 14:43	07/29/22 23:22	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		07/27/22 14:43	07/29/22 23:22	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		07/27/22 14:43	07/29/22 23:22	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		07/27/22 14:43	07/29/22 23:22	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		07/27/22 14:43	07/29/22 23:22	1
Caprolactam	ND		5.0	2.2	ug/L		07/27/22 14:43	07/29/22 23:22	1
Carbazole	ND		5.0	0.30	ug/L		07/27/22 14:43	07/29/22 23:22	1
Chrysene	ND		5.0	0.33	ug/L		07/27/22 14:43	07/29/22 23:22	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		07/27/22 14:43	07/29/22 23:22	1
Dibenzofuran	ND		10	0.51	ug/L		07/27/22 14:43	07/29/22 23:22	1
Diethyl phthalate	ND		5.0	0.22	ug/L		07/27/22 14:43	07/29/22 23:22	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		07/27/22 14:43	07/29/22 23:22	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		07/27/22 14:43	07/29/22 23:22	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		07/27/22 14:43	07/29/22 23:22	1
Fluoranthene	ND		5.0	0.40	ug/L		07/27/22 14:43	07/29/22 23:22	1
Fluorene	ND		5.0	0.36	ug/L		07/27/22 14:43	07/29/22 23:22	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		07/27/22 14:43	07/29/22 23:22	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		07/27/22 14:43	07/29/22 23:22	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		07/27/22 14:43	07/29/22 23:22	1
Hexachloroethane	ND		5.0	0.59	ug/L		07/27/22 14:43	07/29/22 23:22	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200114-1

Client Sample ID: ERB_072622
Date Collected: 07/26/22 09:00
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200114-2
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno(1,2,3-cd)pyrene	ND		5.0	0.47	ug/L		07/27/22 14:43	07/29/22 23:22	1
Isophorone	ND		5.0	0.43	ug/L		07/27/22 14:43	07/29/22 23:22	1
Naphthalene	ND		5.0	0.76	ug/L		07/27/22 14:43	07/29/22 23:22	1
Nitrobenzene	ND		5.0	0.29	ug/L		07/27/22 14:43	07/29/22 23:22	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		07/27/22 14:43	07/29/22 23:22	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		07/27/22 14:43	07/29/22 23:22	1
Pentachlorophenol	ND		10	2.2	ug/L		07/27/22 14:43	07/29/22 23:22	1
Phenanthrene	ND		5.0	0.44	ug/L		07/27/22 14:43	07/29/22 23:22	1
Phenol	ND		5.0	0.39	ug/L		07/27/22 14:43	07/29/22 23:22	1
Pyrene	ND		5.0	0.34	ug/L		07/27/22 14:43	07/29/22 23:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*77*		*41 - 120*	*07/27/22 14:43*	*07/29/22 23:22*	*1*
2-Fluorobiphenyl	*82*		*48 - 120*	*07/27/22 14:43*	*07/29/22 23:22*	*1*
2-Fluorophenol	*56*		*35 - 120*	*07/27/22 14:43*	*07/29/22 23:22*	*1*
Nitrobenzene-d5	*72*		*46 - 120*	*07/27/22 14:43*	*07/29/22 23:22*	*1*
Phenol-d5	*44*		*22 - 120*	*07/27/22 14:43*	*07/29/22 23:22*	*1*
p-Terphenyl-d14	*102*		*60 - 148*	*07/27/22 14:43*	*07/29/22 23:22*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		07/29/22 08:56	07/29/22 15:50	1
Antimony	ND		0.020	0.0068	mg/L		07/29/22 08:56	07/29/22 15:50	1
Arsenic	ND		0.015	0.0056	mg/L		07/29/22 08:56	07/29/22 15:50	1
Barium	ND		0.0020	0.00070	mg/L		07/29/22 08:56	07/29/22 15:50	1
Beryllium	ND		0.0020	0.00030	mg/L		07/29/22 08:56	07/29/22 15:50	1
Cadmium	ND		0.0020	0.00050	mg/L		07/29/22 08:56	07/29/22 15:50	1
Calcium	ND		0.50	0.10	mg/L		07/29/22 08:56	07/29/22 15:50	1
Chromium	ND		0.0040	0.0010	mg/L		07/29/22 08:56	07/29/22 15:50	1
Cobalt	ND		0.0040	0.00063	mg/L		07/29/22 08:56	07/29/22 15:50	1
Copper	ND		0.010	0.0016	mg/L		07/29/22 08:56	07/29/22 15:50	1
Iron	ND		0.050	0.019	mg/L		07/29/22 08:56	07/29/22 15:50	1
Lead	ND		0.010	0.0030	mg/L		07/29/22 08:56	07/29/22 15:50	1
Magnesium	ND		0.20	0.043	mg/L		07/29/22 08:56	07/29/22 15:50	1
Manganese	**0.0022**	**J**	0.0030	0.00040	mg/L		07/29/22 08:56	07/29/22 15:50	1
Nickel	ND		0.010	0.0013	mg/L		07/29/22 08:56	07/29/22 15:50	1
Potassium	ND	^+	0.50	0.10	mg/L		07/29/22 08:56	07/29/22 15:50	1
Selenium	ND		0.025	0.0087	mg/L		07/29/22 08:56	07/29/22 15:50	1
Silver	ND		0.0060	0.0017	mg/L		07/29/22 08:56	07/29/22 15:50	1
Sodium	ND		1.0	0.32	mg/L		07/29/22 08:56	07/29/22 15:50	1
Thallium	ND		0.020	0.010	mg/L		07/29/22 08:56	07/29/22 15:50	1
Vanadium	ND		0.0050	0.0015	mg/L		07/29/22 08:56	07/29/22 15:50	1
Zinc	ND		0.010	0.0015	mg/L		07/29/22 08:56	07/29/22 15:50	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		07/28/22 10:34	07/28/22 15:30	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200114-1

Client Sample ID: ERB2_072622
Date Collected: 07/26/22 09:40
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200114-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			07/29/22 13:45	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/29/22 13:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/29/22 13:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/29/22 13:45	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/29/22 13:45	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/29/22 13:45	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/29/22 13:45	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			07/29/22 13:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/29/22 13:45	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			07/29/22 13:45	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/29/22 13:45	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/29/22 13:45	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/29/22 13:45	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/29/22 13:45	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/29/22 13:45	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			07/29/22 13:45	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/29/22 13:45	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/29/22 13:45	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/29/22 13:45	1
2-Hexanone	ND		5.0	1.2	ug/L			07/29/22 13:45	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/29/22 13:45	1
Acetone	ND		10	3.0	ug/L			07/29/22 13:45	1
Benzene	ND		1.0	0.41	ug/L			07/29/22 13:45	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/29/22 13:45	1
Bromoform	ND		1.0	0.26	ug/L			07/29/22 13:45	1
Bromomethane	ND		1.0	0.69	ug/L			07/29/22 13:45	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/29/22 13:45	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/29/22 13:45	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/29/22 13:45	1
Chloroethane	ND		1.0	0.32	ug/L			07/29/22 13:45	1
Chloroform	ND		1.0	0.34	ug/L			07/29/22 13:45	1
Chloromethane	ND		1.0	0.35	ug/L			07/29/22 13:45	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/29/22 13:45	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/29/22 13:45	1
Cyclohexane	ND		1.0	0.18	ug/L			07/29/22 13:45	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/29/22 13:45	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/29/22 13:45	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/29/22 13:45	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/29/22 13:45	1
m,p-Xylene	ND		2.0	0.66	ug/L			07/29/22 13:45	1
Methyl acetate	ND		2.5	1.3	ug/L			07/29/22 13:45	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/29/22 13:45	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/29/22 13:45	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/29/22 13:45	1
n-Butylbenzene	ND		1.0	0.64	ug/L			07/29/22 13:45	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/29/22 13:45	1
o-Xylene	ND		1.0	0.76	ug/L			07/29/22 13:45	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			07/29/22 13:45	1
Styrene	ND		1.0	0.73	ug/L			07/29/22 13:45	1

Client Sample ID: ERB2_072622
Date Collected: 07/26/22 09:40
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200114-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		1.0	0.81	ug/L			07/29/22 13:45	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/29/22 13:45	1
Toluene	ND		1.0	0.51	ug/L			07/29/22 13:45	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/29/22 13:45	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/29/22 13:45	1
Trichloroethene	ND		1.0	0.46	ug/L			07/29/22 13:45	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/29/22 13:45	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/29/22 13:45	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/29/22 13:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*77 - 120*		*07/29/22 13:45*	*1*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*07/29/22 13:45*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*07/29/22 13:45*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*07/29/22 13:45*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		07/27/22 14:43	07/29/22 23:50	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		07/27/22 14:43	07/29/22 23:50	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		07/27/22 14:43	07/29/22 23:50	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		07/27/22 14:43	07/29/22 23:50	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		07/27/22 14:43	07/29/22 23:50	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		07/27/22 14:43	07/29/22 23:50	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		07/27/22 14:43	07/29/22 23:50	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		07/27/22 14:43	07/29/22 23:50	1
2-Chlorophenol	ND		5.0	0.53	ug/L		07/27/22 14:43	07/29/22 23:50	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		07/27/22 14:43	07/29/22 23:50	1
2-Methylphenol	ND		5.0	0.40	ug/L		07/27/22 14:43	07/29/22 23:50	1
2-Nitroaniline	ND		10	0.42	ug/L		07/27/22 14:43	07/29/22 23:50	1
2-Nitrophenol	ND		5.0	0.48	ug/L		07/27/22 14:43	07/29/22 23:50	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		07/27/22 14:43	07/29/22 23:50	1
3-Nitroaniline	ND		10	0.48	ug/L		07/27/22 14:43	07/29/22 23:50	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		07/27/22 14:43	07/29/22 23:50	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		07/27/22 14:43	07/29/22 23:50	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		07/27/22 14:43	07/29/22 23:50	1
4-Chloroaniline	ND		5.0	0.59	ug/L		07/27/22 14:43	07/29/22 23:50	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		07/27/22 14:43	07/29/22 23:50	1
4-Methylphenol	ND		10	0.36	ug/L		07/27/22 14:43	07/29/22 23:50	1
4-Nitroaniline	ND		10	0.25	ug/L		07/27/22 14:43	07/29/22 23:50	1
4-Nitrophenol	ND		10	1.5	ug/L		07/27/22 14:43	07/29/22 23:50	1
Acenaphthene	ND		5.0	0.41	ug/L		07/27/22 14:43	07/29/22 23:50	1
Acenaphthylene	ND		5.0	0.38	ug/L		07/27/22 14:43	07/29/22 23:50	1
Acetophenone	ND		5.0	0.54	ug/L		07/27/22 14:43	07/29/22 23:50	1
Anthracene	ND		5.0	0.28	ug/L		07/27/22 14:43	07/29/22 23:50	1
Atrazine	ND		5.0	0.46	ug/L		07/27/22 14:43	07/29/22 23:50	1
Benzaldehyde	ND		5.0	0.27	ug/L		07/27/22 14:43	07/29/22 23:50	1
Benzo(a)anthracene	ND		5.0	0.36	ug/L		07/27/22 14:43	07/29/22 23:50	1
Benzo(a)pyrene	ND		5.0	0.47	ug/L		07/27/22 14:43	07/29/22 23:50	1
Benzo(b)fluoranthene	ND		5.0	0.34	ug/L		07/27/22 14:43	07/29/22 23:50	1

Client Sample ID: ERB2_072622
Date Collected: 07/26/22 09:40
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200114-3
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo(g,h,i)perylene	ND		5.0	0.35	ug/L		07/27/22 14:43	07/29/22 23:50	1
Benzo(k)fluoranthene	ND		5.0	0.73	ug/L		07/27/22 14:43	07/29/22 23:50	1
Biphenyl	ND		5.0	0.65	ug/L		07/27/22 14:43	07/29/22 23:50	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		07/27/22 14:43	07/29/22 23:50	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		07/27/22 14:43	07/29/22 23:50	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		07/27/22 14:43	07/29/22 23:50	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		07/27/22 14:43	07/29/22 23:50	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		07/27/22 14:43	07/29/22 23:50	1
Caprolactam	ND		5.0	2.2	ug/L		07/27/22 14:43	07/29/22 23:50	1
Carbazole	ND		5.0	0.30	ug/L		07/27/22 14:43	07/29/22 23:50	1
Chrysene	ND		5.0	0.33	ug/L		07/27/22 14:43	07/29/22 23:50	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		07/27/22 14:43	07/29/22 23:50	1
Dibenzofuran	ND		10	0.51	ug/L		07/27/22 14:43	07/29/22 23:50	1
Diethyl phthalate	ND		5.0	0.22	ug/L		07/27/22 14:43	07/29/22 23:50	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		07/27/22 14:43	07/29/22 23:50	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		07/27/22 14:43	07/29/22 23:50	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		07/27/22 14:43	07/29/22 23:50	1
Fluoranthene	ND		5.0	0.40	ug/L		07/27/22 14:43	07/29/22 23:50	1
Fluorene	ND		5.0	0.36	ug/L		07/27/22 14:43	07/29/22 23:50	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		07/27/22 14:43	07/29/22 23:50	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		07/27/22 14:43	07/29/22 23:50	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		07/27/22 14:43	07/29/22 23:50	1
Hexachloroethane	ND		5.0	0.59	ug/L		07/27/22 14:43	07/29/22 23:50	1
Indeno(1,2,3-cd)pyrene	ND		5.0	0.47	ug/L		07/27/22 14:43	07/29/22 23:50	1
Isophorone	ND		5.0	0.43	ug/L		07/27/22 14:43	07/29/22 23:50	1
Naphthalene	ND		5.0	0.76	ug/L		07/27/22 14:43	07/29/22 23:50	1
Nitrobenzene	ND		5.0	0.29	ug/L		07/27/22 14:43	07/29/22 23:50	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		07/27/22 14:43	07/29/22 23:50	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		07/27/22 14:43	07/29/22 23:50	1
Pentachlorophenol	ND		10	2.2	ug/L		07/27/22 14:43	07/29/22 23:50	1
Phenanthrene	ND		5.0	0.44	ug/L		07/27/22 14:43	07/29/22 23:50	1
Phenol	ND		5.0	0.39	ug/L		07/27/22 14:43	07/29/22 23:50	1
Pyrene	ND		5.0	0.34	ug/L		07/27/22 14:43	07/29/22 23:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*78*		*41 - 120*	*07/27/22 14:43*	*07/29/22 23:50*	*1*
2-Fluorobiphenyl	*82*		*48 - 120*	*07/27/22 14:43*	*07/29/22 23:50*	*1*
2-Fluorophenol	*59*		*35 - 120*	*07/27/22 14:43*	*07/29/22 23:50*	*1*
Nitrobenzene-d5	*72*		*46 - 120*	*07/27/22 14:43*	*07/29/22 23:50*	*1*
Phenol-d5	*47*		*22 - 120*	*07/27/22 14:43*	*07/29/22 23:50*	*1*
p-Terphenyl-d14	*100*		*60 - 148*	*07/27/22 14:43*	*07/29/22 23:50*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		07/29/22 08:56	07/29/22 15:54	1
Antimony	ND		0.020	0.0068	mg/L		07/29/22 08:56	07/29/22 15:54	1
Arsenic	ND		0.015	0.0056	mg/L		07/29/22 08:56	07/29/22 15:54	1
Barium	ND		0.0020	0.00070	mg/L		07/29/22 08:56	07/29/22 15:54	1
Beryllium	ND		0.0020	0.00030	mg/L		07/29/22 08:56	07/29/22 15:54	1
Cadmium	ND		0.0020	0.00050	mg/L		07/29/22 08:56	07/29/22 15:54	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200114-1

Client Sample ID: ERB2_072622
Date Collected: 07/26/22 09:40
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200114-3
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		0.50	0.10	mg/L		07/29/22 08:56	07/29/22 15:54	1
Chromium	ND		0.0040	0.0010	mg/L		07/29/22 08:56	07/29/22 15:54	1
Cobalt	ND		0.0040	0.00063	mg/L		07/29/22 08:56	07/29/22 15:54	1
Copper	ND		0.010	0.0016	mg/L		07/29/22 08:56	07/29/22 15:54	1
Iron	**0.020**	**J**	0.050	0.019	mg/L		07/29/22 08:56	07/29/22 15:54	1
Lead	ND		0.010	0.0030	mg/L		07/29/22 08:56	07/29/22 15:54	1
Magnesium	ND		0.20	0.043	mg/L		07/29/22 08:56	07/29/22 15:54	1
Manganese	**0.00089**	**J**	0.0030	0.00040	mg/L		07/29/22 08:56	07/29/22 15:54	1
Nickel	ND		0.010	0.0013	mg/L		07/29/22 08:56	07/29/22 15:54	1
Potassium	ND		0.50	0.10	mg/L		07/29/22 08:56	08/09/22 18:35	1
Selenium	ND		0.025	0.0087	mg/L		07/29/22 08:56	07/29/22 15:54	1
Silver	ND		0.0060	0.0017	mg/L		07/29/22 08:56	07/29/22 15:54	1
Sodium	ND		1.0	0.32	mg/L		07/29/22 08:56	07/29/22 15:54	1
Thallium	ND		0.020	0.010	mg/L		07/29/22 08:56	07/29/22 15:54	1
Vanadium	ND		0.0050	0.0015	mg/L		07/29/22 08:56	07/29/22 15:54	1
Zinc	ND		0.010	0.0015	mg/L		07/29/22 08:56	07/29/22 15:54	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		07/28/22 10:34	07/28/22 15:31	1

Surrogate Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200114-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-200114-1	FB_072622	108	90	98	98
480-200114-2	ERB_072622	110	93	98	99
480-200114-3	ERB2_072622	110	92	101	100
LCS 480-635431/6	Lab Control Sample	105	96	101	101
MB 480-635431/8	Method Blank	108	96	97	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(41-120)	(48-120)	(35-120)	(46-120)	(22-120)	(60-148)
480-200114-1	FB_072622	90	82	61	75	49	101
480-200114-2	ERB_072622	77	82	56	72	44	102
480-200114-3	ERB2_072622	78	82	59	72	47	100
LCS 480-635149/2-A	Lab Control Sample	88	75	56	70	49	90
MB 480-635149/1-A	Method Blank	63	76	54	69	42	97

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHd14 = p-Terphenyl-d14

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-635431/8
Matrix: Water
Analysis Batch: 635431

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			07/29/22 12:19	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/29/22 12:19	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/29/22 12:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/29/22 12:19	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/29/22 12:19	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/29/22 12:19	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/29/22 12:19	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			07/29/22 12:19	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/29/22 12:19	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			07/29/22 12:19	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/29/22 12:19	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/29/22 12:19	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/29/22 12:19	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/29/22 12:19	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/29/22 12:19	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			07/29/22 12:19	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/29/22 12:19	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/29/22 12:19	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/29/22 12:19	1
2-Hexanone	ND		5.0	1.2	ug/L			07/29/22 12:19	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/29/22 12:19	1
Acetone	ND		10	3.0	ug/L			07/29/22 12:19	1
Benzene	ND		1.0	0.41	ug/L			07/29/22 12:19	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/29/22 12:19	1
Bromoform	ND		1.0	0.26	ug/L			07/29/22 12:19	1
Bromomethane	ND		1.0	0.69	ug/L			07/29/22 12:19	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/29/22 12:19	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/29/22 12:19	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/29/22 12:19	1
Chloroethane	ND		1.0	0.32	ug/L			07/29/22 12:19	1
Chloroform	ND		1.0	0.34	ug/L			07/29/22 12:19	1
Chloromethane	ND		1.0	0.35	ug/L			07/29/22 12:19	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/29/22 12:19	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/29/22 12:19	1
Cyclohexane	ND		1.0	0.18	ug/L			07/29/22 12:19	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/29/22 12:19	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/29/22 12:19	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/29/22 12:19	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/29/22 12:19	1
m,p-Xylene	ND		2.0	0.66	ug/L			07/29/22 12:19	1
Methyl acetate	ND		2.5	1.3	ug/L			07/29/22 12:19	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/29/22 12:19	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/29/22 12:19	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/29/22 12:19	1
n-Butylbenzene	ND		1.0	0.64	ug/L			07/29/22 12:19	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/29/22 12:19	1
o-Xylene	ND		1.0	0.76	ug/L			07/29/22 12:19	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			07/29/22 12:19	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-635431/8
Matrix: Water
Analysis Batch: 635431

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0	0.73	ug/L			07/29/22 12:19	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			07/29/22 12:19	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/29/22 12:19	1
Toluene	ND		1.0	0.51	ug/L			07/29/22 12:19	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/29/22 12:19	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/29/22 12:19	1
Trichloroethene	ND		1.0	0.46	ug/L			07/29/22 12:19	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/29/22 12:19	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/29/22 12:19	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/29/22 12:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*77 - 120*		*07/29/22 12:19*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*07/29/22 12:19*	*1*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*07/29/22 12:19*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*07/29/22 12:19*	*1*

Lab Sample ID: LCS 480-635431/6
Matrix: Water
Analysis Batch: 635431

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	25.0	23.8		ug/L		95	80 - 120
1,1,1-Trichloroethane	25.0	23.0		ug/L		92	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.3		ug/L		97	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.4		ug/L		94	61 - 148
1,1,2-Trichloroethane	25.0	24.9		ug/L		99	76 - 122
1,1-Dichloroethane	25.0	24.3		ug/L		97	77 - 120
1,1-Dichloroethene	25.0	23.0		ug/L		92	66 - 127
1,2,4-Trichlorobenzene	25.0	20.0		ug/L		80	79 - 122
1,2,4-Trimethylbenzene	25.0	22.7		ug/L		91	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	21.4		ug/L		86	56 - 134
1,2-Dibromoethane	25.0	24.2		ug/L		97	77 - 120
1,2-Dichlorobenzene	25.0	22.3		ug/L		89	80 - 124
1,2-Dichloroethane	25.0	24.8		ug/L		99	75 - 120
1,2-Dichloropropane	25.0	24.3		ug/L		97	76 - 120
1,3,5-Trimethylbenzene	25.0	22.7		ug/L		91	77 - 121
1,3-Dichlorobenzene	25.0	22.7		ug/L		91	77 - 120
1,4-Dichlorobenzene	25.0	22.2		ug/L		89	80 - 120
2-Butanone (MEK)	125	129		ug/L		103	57 - 140
2-Hexanone	125	126		ug/L		101	65 - 127
4-Methyl-2-pentanone (MIBK)	125	118		ug/L		95	71 - 125
Acetone	125	160		ug/L		128	56 - 142
Benzene	25.0	23.6		ug/L		95	71 - 124
Bromodichloromethane	25.0	24.5		ug/L		98	80 - 122
Bromoform	25.0	22.1		ug/L		88	61 - 132
Bromomethane	25.0	23.3		ug/L		93	55 - 144
Carbon disulfide	25.0	21.3		ug/L		85	59 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-635431/6
Matrix: Water
Analysis Batch: 635431

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon tetrachloride	25.0	22.2		ug/L		89	72 - 134
Chlorobenzene	25.0	23.0		ug/L		92	80 - 120
Chloroethane	25.0	22.5		ug/L		90	69 - 136
Chloroform	25.0	24.0		ug/L		96	73 - 127
Chloromethane	25.0	20.0		ug/L		80	68 - 124
cis-1,2-Dichloroethene	25.0	24.0		ug/L		96	74 - 124
cis-1,3-Dichloropropene	25.0	24.2		ug/L		97	74 - 124
Cyclohexane	25.0	20.8		ug/L		83	59 - 135
Dibromochloromethane	25.0	23.4		ug/L		93	75 - 125
Dichlorodifluoromethane	25.0	17.4		ug/L		70	59 - 135
Ethylbenzene	25.0	22.9		ug/L		91	77 - 123
Isopropylbenzene	25.0	21.8		ug/L		87	77 - 122
m,p-Xylene	25.0	22.5		ug/L		90	76 - 122
Methyl acetate	50.0	47.7		ug/L		95	74 - 133
Methyl tert-butyl ether	25.0	24.8		ug/L		99	77 - 120
Methylcyclohexane	25.0	21.3		ug/L		85	68 - 134
Methylene Chloride	25.0	25.0		ug/L		100	75 - 124
n-Butylbenzene	25.0	22.1		ug/L		88	71 - 128
N-Propylbenzene	25.0	22.4		ug/L		89	75 - 127
o-Xylene	25.0	22.7		ug/L		91	76 - 122
sec-Butylbenzene	25.0	21.9		ug/L		88	74 - 127
Styrene	25.0	23.6		ug/L		94	80 - 120
tert-Butylbenzene	25.0	21.8		ug/L		87	75 - 123
Tetrachloroethene	25.0	21.3		ug/L		85	74 - 122
Toluene	25.0	22.7		ug/L		91	80 - 122
trans-1,2-Dichloroethene	25.0	23.9		ug/L		95	73 - 127
Trichloroethene	25.0	22.9		ug/L		92	74 - 123
Trichlorofluoromethane	25.0	23.8		ug/L		95	62 - 150
Vinyl chloride	25.0	20.8		ug/L		83	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*
Dibromofluoromethane (Surr)	*101*		*75 - 123*
Toluene-d8 (Surr)	*101*		*80 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-635149/1-A
Matrix: Water
Analysis Batch: 635511

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635149

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		07/27/22 14:43	07/29/22 17:52	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		07/27/22 14:43	07/29/22 17:52	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		07/27/22 14:43	07/29/22 17:52	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		07/27/22 14:43	07/29/22 17:52	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		07/27/22 14:43	07/29/22 17:52	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		07/27/22 14:43	07/29/22 17:52	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-635149/1-A
Matrix: Water
Analysis Batch: 635511

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635149

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		07/27/22 14:43	07/29/22 17:52	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		07/27/22 14:43	07/29/22 17:52	1
2-Chlorophenol	ND		5.0	0.53	ug/L		07/27/22 14:43	07/29/22 17:52	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		07/27/22 14:43	07/29/22 17:52	1
2-Methylphenol	ND		5.0	0.40	ug/L		07/27/22 14:43	07/29/22 17:52	1
2-Nitroaniline	ND		10	0.42	ug/L		07/27/22 14:43	07/29/22 17:52	1
2-Nitrophenol	ND		5.0	0.48	ug/L		07/27/22 14:43	07/29/22 17:52	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		07/27/22 14:43	07/29/22 17:52	1
3-Nitroaniline	ND		10	0.48	ug/L		07/27/22 14:43	07/29/22 17:52	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		07/27/22 14:43	07/29/22 17:52	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		07/27/22 14:43	07/29/22 17:52	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		07/27/22 14:43	07/29/22 17:52	1
4-Chloroaniline	ND		5.0	0.59	ug/L		07/27/22 14:43	07/29/22 17:52	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		07/27/22 14:43	07/29/22 17:52	1
4-Methylphenol	ND		10	0.36	ug/L		07/27/22 14:43	07/29/22 17:52	1
4-Nitroaniline	ND		10	0.25	ug/L		07/27/22 14:43	07/29/22 17:52	1
4-Nitrophenol	ND		10	1.5	ug/L		07/27/22 14:43	07/29/22 17:52	1
Acenaphthene	ND		5.0	0.41	ug/L		07/27/22 14:43	07/29/22 17:52	1
Acenaphthylene	ND		5.0	0.38	ug/L		07/27/22 14:43	07/29/22 17:52	1
Acetophenone	ND		5.0	0.54	ug/L		07/27/22 14:43	07/29/22 17:52	1
Anthracene	ND		5.0	0.28	ug/L		07/27/22 14:43	07/29/22 17:52	1
Atrazine	ND		5.0	0.46	ug/L		07/27/22 14:43	07/29/22 17:52	1
Benzaldehyde	ND		5.0	0.27	ug/L		07/27/22 14:43	07/29/22 17:52	1
Benzo(a)anthracene	ND		5.0	0.36	ug/L		07/27/22 14:43	07/29/22 17:52	1
Benzo(a)pyrene	ND		5.0	0.47	ug/L		07/27/22 14:43	07/29/22 17:52	1
Benzo(b)fluoranthene	ND		5.0	0.34	ug/L		07/27/22 14:43	07/29/22 17:52	1
Benzo(g,h,i)perylene	ND		5.0	0.35	ug/L		07/27/22 14:43	07/29/22 17:52	1
Benzo(k)fluoranthene	ND		5.0	0.73	ug/L		07/27/22 14:43	07/29/22 17:52	1
Biphenyl	ND		5.0	0.65	ug/L		07/27/22 14:43	07/29/22 17:52	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		07/27/22 14:43	07/29/22 17:52	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		07/27/22 14:43	07/29/22 17:52	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		07/27/22 14:43	07/29/22 17:52	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		07/27/22 14:43	07/29/22 17:52	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		07/27/22 14:43	07/29/22 17:52	1
Caprolactam	ND		5.0	2.2	ug/L		07/27/22 14:43	07/29/22 17:52	1
Carbazole	ND		5.0	0.30	ug/L		07/27/22 14:43	07/29/22 17:52	1
Chrysene	ND		5.0	0.33	ug/L		07/27/22 14:43	07/29/22 17:52	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		07/27/22 14:43	07/29/22 17:52	1
Dibenzofuran	ND		10	0.51	ug/L		07/27/22 14:43	07/29/22 17:52	1
Diethyl phthalate	ND		5.0	0.22	ug/L		07/27/22 14:43	07/29/22 17:52	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		07/27/22 14:43	07/29/22 17:52	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		07/27/22 14:43	07/29/22 17:52	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		07/27/22 14:43	07/29/22 17:52	1
Fluoranthene	ND		5.0	0.40	ug/L		07/27/22 14:43	07/29/22 17:52	1
Fluorene	ND		5.0	0.36	ug/L		07/27/22 14:43	07/29/22 17:52	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		07/27/22 14:43	07/29/22 17:52	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		07/27/22 14:43	07/29/22 17:52	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		07/27/22 14:43	07/29/22 17:52	1
Hexachloroethane	ND		5.0	0.59	ug/L		07/27/22 14:43	07/29/22 17:52	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-635149/1-A
Matrix: Water
Analysis Batch: 635511

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635149

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno(1,2,3-cd)pyrene	ND		5.0	0.47	ug/L		07/27/22 14:43	07/29/22 17:52	1
Isophorone	ND		5.0	0.43	ug/L		07/27/22 14:43	07/29/22 17:52	1
Naphthalene	ND		5.0	0.76	ug/L		07/27/22 14:43	07/29/22 17:52	1
Nitrobenzene	ND		5.0	0.29	ug/L		07/27/22 14:43	07/29/22 17:52	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		07/27/22 14:43	07/29/22 17:52	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		07/27/22 14:43	07/29/22 17:52	1
Pentachlorophenol	ND		10	2.2	ug/L		07/27/22 14:43	07/29/22 17:52	1
Phenanthrene	ND		5.0	0.44	ug/L		07/27/22 14:43	07/29/22 17:52	1
Phenol	ND		5.0	0.39	ug/L		07/27/22 14:43	07/29/22 17:52	1
Pyrene	ND		5.0	0.34	ug/L		07/27/22 14:43	07/29/22 17:52	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*63*		*41 - 120*	*07/27/22 14:43*	*07/29/22 17:52*	*1*
2-Fluorobiphenyl	*76*		*48 - 120*	*07/27/22 14:43*	*07/29/22 17:52*	*1*
2-Fluorophenol	*54*		*35 - 120*	*07/27/22 14:43*	*07/29/22 17:52*	*1*
Nitrobenzene-d5	*69*		*46 - 120*	*07/27/22 14:43*	*07/29/22 17:52*	*1*
Phenol-d5	*42*		*22 - 120*	*07/27/22 14:43*	*07/29/22 17:52*	*1*
p-Terphenyl-d14	*97*		*60 - 148*	*07/27/22 14:43*	*07/29/22 17:52*	*1*

Lab Sample ID: LCS 480-635149/2-A
Matrix: Water
Analysis Batch: 635511

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635149

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	32.0	27.2		ug/L		85	65 - 126
2,4,6-Trichlorophenol	32.0	26.1		ug/L		82	64 - 120
2,4-Dichlorophenol	32.0	24.8		ug/L		78	63 - 120
2,4-Dimethylphenol	32.0	24.8		ug/L		77	47 - 120
2,4-Dinitrophenol	64.0	59.4		ug/L		93	31 - 137
2,4-Dinitrotoluene	32.0	29.6		ug/L		92	69 - 120
2,6-Dinitrotoluene	32.0	28.4		ug/L		89	68 - 120
2-Chloronaphthalene	32.0	22.4		ug/L		70	58 - 120
2-Chlorophenol	32.0	22.6		ug/L		71	48 - 120
2-Methylnaphthalene	32.0	20.5		ug/L		64	59 - 120
2-Methylphenol	32.0	23.2		ug/L		72	39 - 120
2-Nitroaniline	32.0	27.9		ug/L		87	54 - 127
2-Nitrophenol	32.0	24.1		ug/L		75	52 - 125
3,3'-Dichlorobenzidine	64.0	60.2		ug/L		94	49 - 135
3-Nitroaniline	32.0	27.2		ug/L		85	51 - 120
4,6-Dinitro-2-methylphenol	64.0	63.0		ug/L		98	46 - 136
4-Bromophenyl phenyl ether	32.0	27.6		ug/L		86	65 - 120
4-Chloro-3-methylphenol	32.0	26.5		ug/L		83	61 - 123
4-Chloroaniline	32.0	23.2		ug/L		73	30 - 120
4-Chlorophenyl phenyl ether	32.0	25.4		ug/L		79	62 - 120
4-Methylphenol	32.0	23.4		ug/L		73	29 - 131
4-Nitroaniline	32.0	33.6		ug/L		105	65 - 120
4-Nitrophenol	64.0	45.1		ug/L		70	45 - 120
Acenaphthene	32.0	24.4		ug/L		76	60 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-635149/2-A
Matrix: Water
Analysis Batch: 635511

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635149

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthylene	32.0	26.0		ug/L		81	63 - 120
Acetophenone	32.0	23.9		ug/L		75	45 - 120
Anthracene	32.0	29.1		ug/L		91	67 - 120
Atrazine	64.0	59.7		ug/L		93	71 - 130
Benzaldehyde	64.0	46.7		ug/L		73	10 - 140
Benzo(a)anthracene	32.0	28.3		ug/L		88	70 - 121
Benzo(a)pyrene	32.0	28.3		ug/L		89	60 - 123
Benzo(b)fluoranthene	32.0	29.5		ug/L		92	66 - 126
Benzo(g,h,i)perylene	32.0	28.2		ug/L		88	66 - 150
Benzo(k)fluoranthene	32.0	28.6		ug/L		89	65 - 124
Biphenyl	32.0	23.4		ug/L		73	59 - 120
bis (2-chloroisopropyl) ether	32.0	22.9		ug/L		72	21 - 136
Bis(2-chloroethoxy)methane	32.0	24.3		ug/L		76	50 - 128
Bis(2-chloroethyl)ether	32.0	23.4		ug/L		73	44 - 120
Bis(2-ethylhexyl) phthalate	32.0	29.7		ug/L		93	63 - 139
Butyl benzyl phthalate	32.0	31.4		ug/L		98	70 - 129
Caprolactam	64.0	23.5		ug/L		37	22 - 120
Carbazole	32.0	38.0		ug/L		119	66 - 123
Chrysene	32.0	28.4		ug/L		89	69 - 120
Dibenz(a,h)anthracene	32.0	28.6		ug/L		89	65 - 135
Dibenzofuran	32.0	25.6		ug/L		80	66 - 120
Diethyl phthalate	32.0	28.0		ug/L		87	59 - 127
Dimethyl phthalate	32.0	27.3		ug/L		85	68 - 120
Di-n-butyl phthalate	32.0	30.7		ug/L		96	69 - 131
Di-n-octyl phthalate	32.0	29.8		ug/L		93	63 - 140
Fluoranthene	32.0	29.7		ug/L		93	69 - 126
Fluorene	32.0	27.0		ug/L		84	66 - 120
Hexachlorobenzene	32.0	26.7		ug/L		83	61 - 120
Hexachlorobutadiene	32.0	16.4		ug/L		51	35 - 120
Hexachlorocyclopentadiene	32.0	15.3		ug/L		48	31 - 120
Hexachloroethane	32.0	16.5		ug/L		52	43 - 120
Indeno(1,2,3-cd)pyrene	32.0	29.0		ug/L		91	69 - 146
Isophorone	32.0	25.4		ug/L		79	55 - 120
Naphthalene	32.0	21.5		ug/L		67	57 - 120
Nitrobenzene	32.0	23.3		ug/L		73	53 - 123
N-Nitrosodi-n-propylamine	32.0	25.0		ug/L		78	32 - 140
Pentachlorophenol	64.0	57.4		ug/L		90	29 - 136
Phenanthrene	32.0	28.4		ug/L		89	68 - 120
Phenol	32.0	15.5		ug/L		49	17 - 120
Pyrene	32.0	29.8		ug/L		93	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*88*		*41 - 120*
2-Fluorobiphenyl	*75*		*48 - 120*
2-Fluorophenol	*56*		*35 - 120*
Nitrobenzene-d5	*70*		*46 - 120*
Phenol-d5	*49*		*22 - 120*
p-Terphenyl-d14	*90*		*60 - 148*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-635377/1-A
Matrix: Water
Analysis Batch: 635565

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635377

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		07/29/22 08:56	07/29/22 15:04	1
Antimony	ND		0.020	0.0068	mg/L		07/29/22 08:56	07/29/22 15:04	1
Arsenic	ND		0.015	0.0056	mg/L		07/29/22 08:56	07/29/22 15:04	1
Barium	ND		0.0020	0.00070	mg/L		07/29/22 08:56	07/29/22 15:04	1
Beryllium	ND		0.0020	0.00030	mg/L		07/29/22 08:56	07/29/22 15:04	1
Cadmium	ND		0.0020	0.00050	mg/L		07/29/22 08:56	07/29/22 15:04	1
Calcium	ND		0.50	0.10	mg/L		07/29/22 08:56	07/29/22 15:04	1
Chromium	ND		0.0040	0.0010	mg/L		07/29/22 08:56	07/29/22 15:04	1
Cobalt	ND		0.0040	0.00063	mg/L		07/29/22 08:56	07/29/22 15:04	1
Copper	ND		0.010	0.0016	mg/L		07/29/22 08:56	07/29/22 15:04	1
Iron	ND		0.050	0.019	mg/L		07/29/22 08:56	07/29/22 15:04	1
Lead	ND		0.010	0.0030	mg/L		07/29/22 08:56	07/29/22 15:04	1
Magnesium	ND		0.20	0.043	mg/L		07/29/22 08:56	07/29/22 15:04	1
Manganese	ND		0.0030	0.00040	mg/L		07/29/22 08:56	07/29/22 15:04	1
Nickel	ND		0.010	0.0013	mg/L		07/29/22 08:56	07/29/22 15:04	1
Potassium	ND	^+	0.50	0.10	mg/L		07/29/22 08:56	07/29/22 15:04	1
Selenium	ND		0.025	0.0087	mg/L		07/29/22 08:56	07/29/22 15:04	1
Silver	ND		0.0060	0.0017	mg/L		07/29/22 08:56	07/29/22 15:04	1
Sodium	ND		1.0	0.32	mg/L		07/29/22 08:56	07/29/22 15:04	1
Thallium	ND		0.020	0.010	mg/L		07/29/22 08:56	07/29/22 15:04	1
Vanadium	ND		0.0050	0.0015	mg/L		07/29/22 08:56	07/29/22 15:04	1
Zinc	ND		0.010	0.0015	mg/L		07/29/22 08:56	07/29/22 15:04	1

Lab Sample ID: LCS 480-635377/2-A
Matrix: Water
Analysis Batch: 635565

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635377

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	10.0	9.74		mg/L		97	80 - 120
Antimony	0.200	0.200		mg/L		100	80 - 120
Arsenic	0.200	0.200		mg/L		100	80 - 120
Barium	0.200	0.206		mg/L		103	80 - 120
Beryllium	0.200	0.202		mg/L		101	80 - 120
Cadmium	0.200	0.196		mg/L		98	80 - 120
Calcium	10.0	10.10		mg/L		101	80 - 120
Chromium	0.200	0.203		mg/L		101	80 - 120
Cobalt	0.200	0.194		mg/L		97	80 - 120
Copper	0.200	0.205		mg/L		102	80 - 120
Iron	10.0	10.01		mg/L		100	80 - 120
Lead	0.200	0.195		mg/L		98	80 - 120
Magnesium	10.0	10.63		mg/L		106	80 - 120
Manganese	0.200	0.206		mg/L		103	80 - 120
Nickel	0.200	0.193		mg/L		97	80 - 120
Potassium	10.0	9.95	^+	mg/L		99	80 - 120
Selenium	0.200	0.201		mg/L		101	80 - 120
Silver	0.0500	0.0493		mg/L		99	80 - 120
Sodium	10.0	9.64		mg/L		96	80 - 120
Thallium	0.200	0.199		mg/L		100	80 - 120
Vanadium	0.200	0.200		mg/L		100	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-635377/2-A
Matrix: Water
Analysis Batch: 635565

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635377

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Zinc			0.200	0.201		mg/L		101	80 - 120		

Lab Sample ID: 480-200114-1 MS
Matrix: Water
Analysis Batch: 635565

Client Sample ID: FB_072622
Prep Type: Total/NA
Prep Batch: 635377

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Aluminum	ND		10.0	9.90		mg/L		99	75 - 125		
Antimony	ND		0.200	0.200		mg/L		100	75 - 125		
Arsenic	ND		0.200	0.198		mg/L		99	75 - 125		
Barium	ND		0.200	0.207		mg/L		104	75 - 125		
Beryllium	ND		0.200	0.203		mg/L		101	75 - 125		
Cadmium	ND		0.200	0.195		mg/L		97	75 - 125		
Calcium	ND		10.0	10.06		mg/L		101	75 - 125		
Chromium	ND		0.200	0.202		mg/L		101	75 - 125		
Cobalt	ND		0.200	0.193		mg/L		97	75 - 125		
Copper	ND		0.200	0.203		mg/L		102	75 - 125		
Iron	ND		10.0	10.02		mg/L		100	75 - 125		
Lead	ND		0.200	0.194		mg/L		97	75 - 125		
Magnesium	ND		10.0	10.55		mg/L		106	75 - 125		
Manganese	0.00051	J	0.200	0.205		mg/L		102	75 - 125		
Nickel	ND		0.200	0.191		mg/L		95	75 - 125		
Potassium	ND	^+	10.0	10.10	^+	mg/L		101	75 - 125		
Selenium	ND		0.200	0.200		mg/L		100	75 - 125		
Silver	ND		0.0500	0.0498		mg/L		100	75 - 125		
Sodium	ND		10.0	9.79		mg/L		98	75 - 125		
Thallium	ND		0.200	0.197		mg/L		99	75 - 125		
Vanadium	ND		0.200	0.198		mg/L		99	75 - 125		
Zinc	ND		0.200	0.200		mg/L		100	75 - 125		

Lab Sample ID: 480-200114-1 MSD
Matrix: Water
Analysis Batch: 635565

Client Sample ID: FB_072622
Prep Type: Total/NA
Prep Batch: 635377

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	ND		10.0	9.37		mg/L		94	75 - 125	5	20
Antimony	ND		0.200	0.192		mg/L		96	75 - 125	4	20
Arsenic	ND		0.200	0.189		mg/L		94	75 - 125	5	20
Barium	ND		0.200	0.198		mg/L		99	75 - 125	5	20
Beryllium	ND		0.200	0.194		mg/L		97	75 - 125	5	20
Cadmium	ND		0.200	0.187		mg/L		94	75 - 125	4	20
Calcium	ND		10.0	9.60		mg/L		96	75 - 125	5	20
Chromium	ND		0.200	0.193		mg/L		97	75 - 125	4	20
Cobalt	ND		0.200	0.186		mg/L		93	75 - 125	4	20
Copper	ND		0.200	0.194		mg/L		97	75 - 125	5	20
Iron	ND		10.0	9.63		mg/L		96	75 - 125	4	20
Lead	ND		0.200	0.188		mg/L		94	75 - 125	3	20
Magnesium	ND		10.0	10.14		mg/L		101	75 - 125	4	20
Manganese	0.00051	J	0.200	0.197		mg/L		98	75 - 125	4	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-200114-1 MSD
Matrix: Water
Analysis Batch: 635565

Client Sample ID: FB_072622
Prep Type: Total/NA
Prep Batch: 635377

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Nickel	ND		0.200	0.184		mg/L		92	75 - 125	4	20
Potassium	ND	^+	10.0	9.62	^+	mg/L		96	75 - 125	5	20
Selenium	ND		0.200	0.189		mg/L		95	75 - 125	6	20
Silver	ND		0.0500	0.0464		mg/L		93	75 - 125	7	20
Sodium	ND		10.0	9.32		mg/L		93	75 - 125	5	20
Thallium	ND		0.200	0.191		mg/L		96	75 - 125	3	20
Vanadium	ND		0.200	0.191		mg/L		95	75 - 125	4	20
Zinc	ND		0.200	0.191		mg/L		96	75 - 125	5	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-635248/1-A
Matrix: Water
Analysis Batch: 635397

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635248

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		07/28/22 10:34	07/28/22 15:02	1

Lab Sample ID: LCS 480-635248/2-A
Matrix: Water
Analysis Batch: 635397

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635248

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00667	0.00663		mg/L		99	80 - 120

GC/MS VOA

Analysis Batch: 635431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200114-1	FB_072622	Total/NA	Water	8260C	
480-200114-2	ERB_072622	Total/NA	Water	8260C	
480-200114-3	ERB2_072622	Total/NA	Water	8260C	
MB 480-635431/8	Method Blank	Total/NA	Water	8260C	
LCS 480-635431/6	Lab Control Sample	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 635149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200114-1	FB_072622	Total/NA	Water	3510C	
480-200114-2	ERB_072622	Total/NA	Water	3510C	
480-200114-3	ERB2_072622	Total/NA	Water	3510C	
MB 480-635149/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-635149/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 635511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200114-1	FB_072622	Total/NA	Water	8270D	635149
480-200114-2	ERB_072622	Total/NA	Water	8270D	635149
480-200114-3	ERB2_072622	Total/NA	Water	8270D	635149
MB 480-635149/1-A	Method Blank	Total/NA	Water	8270D	635149
LCS 480-635149/2-A	Lab Control Sample	Total/NA	Water	8270D	635149

Metals

Prep Batch: 635248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200114-1	FB_072622	Total/NA	Water	7470A	
480-200114-2	ERB_072622	Total/NA	Water	7470A	
480-200114-3	ERB2_072622	Total/NA	Water	7470A	
MB 480-635248/1-A	Method Blank	Total/NA	Water	7470A	
LCS 480-635248/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 635377

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200114-1	FB_072622	Total/NA	Water	3005A	
480-200114-2	ERB_072622	Total/NA	Water	3005A	
480-200114-3	ERB2_072622	Total/NA	Water	3005A	
MB 480-635377/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-635377/2-A	Lab Control Sample	Total/NA	Water	3005A	
480-200114-1 MS	FB_072622	Total/NA	Water	3005A	
480-200114-1 MSD	FB_072622	Total/NA	Water	3005A	

Analysis Batch: 635397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200114-1	FB_072622	Total/NA	Water	7470A	635248
480-200114-2	ERB_072622	Total/NA	Water	7470A	635248
480-200114-3	ERB2_072622	Total/NA	Water	7470A	635248
MB 480-635248/1-A	Method Blank	Total/NA	Water	7470A	635248
LCS 480-635248/2-A	Lab Control Sample	Total/NA	Water	7470A	635248

QC Association Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200114-1

Metals

Analysis Batch: 635565

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200114-1	FB_072622	Total/NA	Water	6010C	635377
480-200114-2	ERB_072622	Total/NA	Water	6010C	635377
480-200114-3	ERB2_072622	Total/NA	Water	6010C	635377
MB 480-635377/1-A	Method Blank	Total/NA	Water	6010C	635377
LCS 480-635377/2-A	Lab Control Sample	Total/NA	Water	6010C	635377
480-200114-1 MS	FB_072622	Total/NA	Water	6010C	635377
480-200114-1 MSD	FB_072622	Total/NA	Water	6010C	635377

Analysis Batch: 636845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200114-3	ERB2_072622	Total/NA	Water	6010C	635377

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200114-1

Client Sample ID: FB_072622

Lab Sample ID: 480-200114-1

Date Collected: 07/26/22 08:50

Matrix: Water

Date Received: 07/27/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	635431	CB	EETNE BUF	07/29/22 12:58
Total/NA	Prep	3510C			635149	CMC	EETNE BUF	07/27/22 14:43
Total/NA	Analysis	8270D		1	635511	PJQ	EETNE BUF	07/29/22 22:55
Total/NA	Prep	3005A			635377	NZG	EETNE BUF	07/29/22 08:56
Total/NA	Analysis	6010C		1	635565	LMH	EETNE BUF	07/29/22 15:31
Total/NA	Prep	7470A			635248	NVK	EETNE BUF	07/28/22 10:34
Total/NA	Analysis	7470A		1	635397	NVK	EETNE BUF	07/28/22 15:28

Client Sample ID: ERB_072622

Lab Sample ID: 480-200114-2

Date Collected: 07/26/22 09:00

Matrix: Water

Date Received: 07/27/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	635431	CB	EETNE BUF	07/29/22 13:22
Total/NA	Prep	3510C			635149	CMC	EETNE BUF	07/27/22 14:43
Total/NA	Analysis	8270D		1	635511	PJQ	EETNE BUF	07/29/22 23:22
Total/NA	Prep	3005A			635377	NZG	EETNE BUF	07/29/22 08:56
Total/NA	Analysis	6010C		1	635565	LMH	EETNE BUF	07/29/22 15:50
Total/NA	Prep	7470A			635248	NVK	EETNE BUF	07/28/22 10:34
Total/NA	Analysis	7470A		1	635397	NVK	EETNE BUF	07/28/22 15:30

Client Sample ID: ERB2_072622

Lab Sample ID: 480-200114-3

Date Collected: 07/26/22 09:40

Matrix: Water

Date Received: 07/27/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	635431	CB	EETNE BUF	07/29/22 13:45
Total/NA	Prep	3510C			635149	CMC	EETNE BUF	07/27/22 14:43
Total/NA	Analysis	8270D		1	635511	PJQ	EETNE BUF	07/29/22 23:50
Total/NA	Prep	3005A			635377	NZG	EETNE BUF	07/29/22 08:56
Total/NA	Analysis	6010C		1	635565	LMH	EETNE BUF	07/29/22 15:54
Total/NA	Prep	3005A			635377	NZG	EETNE BUF	07/29/22 08:56
Total/NA	Analysis	6010C		1	636845	BMB	EETNE BUF	08/09/22 18:35
Total/NA	Prep	7470A			635248	NVK	EETNE BUF	07/28/22 10:34
Total/NA	Analysis	7470A		1	635397	NVK	EETNE BUF	07/28/22 15:31

Laboratory References:

EETNE BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200114-1

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	1,2,3-Trimethylbenzene

Method Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200114-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EETNE BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	EETNE BUF
6010C	Metals (ICP)	SW846	EETNE BUF
7470A	Mercury (CVAA)	SW846	EETNE BUF
3005A	Preparation, Total Metals	SW846	EETNE BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EETNE BUF
5030C	Purge and Trap	SW846	EETNE BUF
7470A	Preparation, Mercury	SW846	EETNE BUF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EETNE BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200114-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-200114-1	FB_072622	Water	07/26/22 08:50	07/27/22 10:00
480-200114-2	ERB_072622	Water	07/26/22 09:00	07/27/22 10:00
480-200114-3	ERB2_072622	Water	07/26/22 09:40	07/27/22 10:00

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing America

Syracuse #225

Client Information	Sampler: K. Zatwarnicki	Lab PM: Beninati, John	Carrier Tracking No(s):	COC No: 480-175095-37696.4
Client Contact: Mr. Glenn Esler	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin:	Page: Page 4 of 4
Company: Integral Consulting Inc	PWSID:	Analysis Requested		Job #:
Address: 319 SW Washington Ave Suite 1150	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3
City: Portland	TAT Requested (days): Per Quote			
State, Zip: OR, 97204	Compliance Project: Δ Yes Δ No			
Phone: 503-943-3617(Tel)	PO #: Purchase Order not required			
Email: gesler@integral-corp.com	WO #:			
Project Name: EF1017 - Refractories - Soil Boring	Project #: 48025298			
Site:	SSOW#:			

480-200114 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs (LL)	6010C, 7471B	8270D - TCL SVOCs - to include 1,4 Dioxane	PFC_IDA - PFAS - NY 21 Analytes	Total Number	Special Instructions/Note:
			Preservation Code:				N	N	N	N		
FB_072622	7/26/22	0850	G	Solid, BLANK			3	1	4			
ERB_072622		0900	G	Solid, BLANK								
ERB2_072622		0940	G	BLANK								

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) NYSDEC Cat B / Integral-specific QAPP

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: FedEx

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Katelyn Zatwarnicki	7/26/22 1800	Integral	[illegible]	7/27/22 1000	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 4.8 # 1 ICE

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Integral Consulting Inc

Job Number: 480-200114-1

Login Number: 200114
List Number: 1
Creator: Wallace, Cameron

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	INTEGRAL
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-200130-1
Client Project/Site: EF1017 - Refractories
Revision: 1

For:
Integral Consulting Inc
319 SW Washington Ave
Suite 1150
Portland, Oregon 97204

Attn: Mr. Glenn Esler

Authorized for release by:
8/10/2022 7:57:36 AM

John Beninati, Project Manager
(716)504-9874
John.Beninati@et.eurofinsus.com

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 4
Detection Summary 6
Client Sample Results 9
Surrogate Summary 23
QC Sample Results 24
QC Association Summary 37
Lab Chronicle 39
Certification Summary 41
Method Summary 42
Sample Summary 43
Chain of Custody 44
Receipt Checklists 45

Definitions/Glossary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200130-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*3	ISTD response or retention time outside acceptable limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-200130-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-200130-1

Comments
No additional comments.

Revision 1
The report being provided is a revision of the original report sent on 8/5/2022. The report (revision 1) is being revised due to: Additional analytes added to Method 8260C list in accordance with client QAPP.

Receipt
The samples were received on 7/27/2022 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.2º C.

Receipt Exceptions
The following samples were preserved via freezing on 7/27/22 at 1400: SB5 (0-0.5) (480-200130-1), SB5 (0.5-1) (480-200130-2), SB5 (1-2) (480-200130-3) and SB5 (13-15) (480-200130-4) .

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-635513 recovered above the upper control limit for 1,1,1-Trichloroethane, 1,2-Dichloroethane, Carbon tetrachloride, Chlorodibromomethane, Dichlorobromomethane, Tetrachloroethene and Trichlorofluoromethane. The sample(s) associated with this CCV were non-detects or below the reporting limit (RL) for the affected analytes; therefore, the data have been reported. The associated sample is impacted: SB5 (13-15) (480-200130-4).

Method 8260C: The laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 480-635335 and analytical batch 480-635513 recovered outside control limits for the following analytes: Bromoform and Chlorodibromomethane. These analytes were biased high in the LCS/LCSD and were not detected in the associated sample(s); therefore, the data have been reported. The associated sample is impacted: SB5 (13-15) (480-200130-4).

Method 8260C: Internal standard and surrogate responses for the following sample were outside control limits: SB5 (0-0.5) (480-200130-1), SB5 (0.5-1) (480-200130-2) and SB5 (1-2) (480-200130-3). The samples were re-analyzed and responses were outside control limits.

Method 8260C: The laboratory control sample (LCS) for preparation batch 480-635770 and analytical batch 480-635772 recovered outside control limits for the following analytes: Bromoform, Carbon tetrachloride and Dibromochloromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The associated samples are: SB5 (0-0.5) (480-200130-1), SB5 (0.5-1) (480-200130-2) and SB5 (1-2) (480-200130-3).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-635772 recovered above the upper control limit for 1,1,1-Trichloroethane, Bromoform, Carbon tetrachloride, Dibromochloromethane, Tetrachloroethene and Trichlorofluoromethane. The samples associated with this CCV were non-detects or above the reporting limits for the affected analytes; therefore, the data have been reported. The associated samples are impacted: SB5 (0-0.5) (480-200130-1), SB5 (0.5-1) (480-200130-2) and SB5 (1-2) (480-200130-3).

Method 8260C: The surrogate Dibromofluoromethane (Surr) was outside the 20%D limits on the continuing calibration verification (CCV) but was within laboratory limits. The following samples are impacted: SB5 (0-0.5) (480-200130-1), SB5 (0.5-1) (480-200130-2) and SB5 (1-2) (480-200130-3).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270D: The following sample was diluted due to viscosity: SB5 (0.5-1) (480-200130-2). Elevated reporting limits (RL) are provided.

Method 8270D: The following sample required a dilution due to viscosity: SB5 (0.5-1) (480-200130-2). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Job ID: 480-200130-1 (Continued)

Laboratory: Eurofins Buffalo (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200130-1

Client Sample ID: SB5 (0-0.5) — Lab Sample ID: 480-200130-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	61	J	190	39	ug/Kg	1	☼	8270D	Total/NA
Acenaphthylene	130	J	190	25	ug/Kg	1	☼	8270D	Total/NA
Anthracene	71	J	190	48	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	370		190	19	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	350		190	28	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	600		190	31	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	260		190	20	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	240		190	25	ug/Kg	1	☼	8270D	Total/NA
Carbazole	31	J	190	23	ug/Kg	1	☼	8270D	Total/NA
Chrysene	550		190	43	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	120	J	190	34	ug/Kg	1	☼	8270D	Total/NA
Dibenzofuran	43	J	190	23	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	550		190	20	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	300		190	24	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	59	J	190	25	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	230		190	28	ug/Kg	1	☼	8270D	Total/NA
Pyrene	470		190	23	ug/Kg	1	☼	8270D	Total/NA
Aluminum	5360		11.0	4.9	mg/Kg	1	☼	6010C	Total/NA
Antimony	2.2	J	16.6	0.44	mg/Kg	1	☼	6010C	Total/NA
Arsenic	13.0		2.2	0.44	mg/Kg	1	☼	6010C	Total/NA
Barium	62.3		0.55	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.42		0.22	0.031	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.29		0.22	0.033	mg/Kg	1	☼	6010C	Total/NA
Calcium	2640		55.2	3.6	mg/Kg	1	☼	6010C	Total/NA
Chromium	12.2		0.55	0.22	mg/Kg	1	☼	6010C	Total/NA
Cobalt	7.3		0.55	0.055	mg/Kg	1	☼	6010C	Total/NA
Copper	56.0		1.1	0.23	mg/Kg	1	☼	6010C	Total/NA
Iron	23900		11.0	3.9	mg/Kg	1	☼	6010C	Total/NA
Lead	80.9		1.1	0.27	mg/Kg	1	☼	6010C	Total/NA
Magnesium	1400	B	22.1	1.0	mg/Kg	1	☼	6010C	Total/NA
Manganese	530	B	0.22	0.035	mg/Kg	1	☼	6010C	Total/NA
Nickel	15.0		5.5	0.25	mg/Kg	1	☼	6010C	Total/NA
Potassium	407		33.1	22.1	mg/Kg	1	☼	6010C	Total/NA
Selenium	1.0	J B	4.4	0.44	mg/Kg	1	☼	6010C	Total/NA
Silver	0.22	J	0.66	0.22	mg/Kg	1	☼	6010C	Total/NA
Sodium	48.6	J	155	14.4	mg/Kg	1	☼	6010C	Total/NA
Vanadium	16.6		0.55	0.12	mg/Kg	1	☼	6010C	Total/NA
Zinc	61.0		2.2	0.71	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.12		0.024	0.0055	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB5 (0.5-1) — Lab Sample ID: 480-200130-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.44	J	5.0	0.36	ug/Kg	1	☼	8260C	Total/NA
Benzo[a]pyrene	660	J	3500	510	ug/Kg	20	☼	8270D	Total/NA
Benzo[b]fluoranthene	990	J	3500	550	ug/Kg	20	☼	8270D	Total/NA
Benzo[g,h,i]perylene	590	J	3500	370	ug/Kg	20	☼	8270D	Total/NA
Benzo[k]fluoranthene	570	J	3500	450	ug/Kg	20	☼	8270D	Total/NA
Fluoranthene	850	J	3500	370	ug/Kg	20	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	600	J	3500	430	ug/Kg	20	☼	8270D	Total/NA
Pyrene	740	J	3500	410	ug/Kg	20	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample ID: SB5 (0.5-1) (Continued)

Lab Sample ID: 480-200130-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	7340		10.3	4.5	mg/Kg	1	☼	6010C	Total/NA
Antimony	1.3	J	15.4	0.41	mg/Kg	1	☼	6010C	Total/NA
Arsenic	26.9		2.1	0.41	mg/Kg	1	☼	6010C	Total/NA
Barium	61.4		0.51	0.11	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.43		0.21	0.029	mg/Kg	1	☼	6010C	Total/NA
Cadmium	1.0		0.21	0.031	mg/Kg	1	☼	6010C	Total/NA
Calcium	5320		51.4	3.4	mg/Kg	1	☼	6010C	Total/NA
Chromium	12.4		0.51	0.21	mg/Kg	1	☼	6010C	Total/NA
Cobalt	8.1		0.51	0.051	mg/Kg	1	☼	6010C	Total/NA
Copper	34.6		1.0	0.22	mg/Kg	1	☼	6010C	Total/NA
Iron	23700		10.3	3.6	mg/Kg	1	☼	6010C	Total/NA
Lead	169		1.0	0.25	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2680	B	20.6	0.95	mg/Kg	1	☼	6010C	Total/NA
Manganese	296	B	0.21	0.033	mg/Kg	1	☼	6010C	Total/NA
Nickel	17.5		5.1	0.24	mg/Kg	1	☼	6010C	Total/NA
Potassium	466		30.8	20.6	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.65	J B	4.1	0.41	mg/Kg	1	☼	6010C	Total/NA
Sodium	56.5	J	144	13.4	mg/Kg	1	☼	6010C	Total/NA
Vanadium	14.5		0.51	0.11	mg/Kg	1	☼	6010C	Total/NA
Zinc	88.7		2.1	0.66	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.22		0.021	0.0049	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB5 (1-2)

Lab Sample ID: 480-200130-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1.9	J	5.4	0.40	ug/Kg	1	☼	8260C	Total/NA
Benzene	0.44	J	5.4	0.27	ug/Kg	1	☼	8260C	Total/NA
Toluene	0.63	J *3	5.4	0.41	ug/Kg	1	☼	8260C	Total/NA
Aluminum	1440		11.4	5.0	mg/Kg	1	☼	6010C	Total/NA
Arsenic	1.4	J	2.3	0.45	mg/Kg	1	☼	6010C	Total/NA
Barium	15.9		0.57	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.29		0.23	0.032	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.034	J	0.23	0.034	mg/Kg	1	☼	6010C	Total/NA
Calcium	839		56.8	3.7	mg/Kg	1	☼	6010C	Total/NA
Chromium	4.6		0.57	0.23	mg/Kg	1	☼	6010C	Total/NA
Cobalt	2.9		0.57	0.057	mg/Kg	1	☼	6010C	Total/NA
Copper	48.9		1.1	0.24	mg/Kg	1	☼	6010C	Total/NA
Iron	4330		11.4	4.0	mg/Kg	1	☼	6010C	Total/NA
Lead	8.9		1.1	0.27	mg/Kg	1	☼	6010C	Total/NA
Magnesium	140	B	22.7	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	42.7	B	0.23	0.036	mg/Kg	1	☼	6010C	Total/NA
Nickel	8.1		5.7	0.26	mg/Kg	1	☼	6010C	Total/NA
Potassium	164		34.1	22.7	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.92	J B	4.5	0.45	mg/Kg	1	☼	6010C	Total/NA
Sodium	25.5	J	159	14.8	mg/Kg	1	☼	6010C	Total/NA
Vanadium	7.6		0.57	0.12	mg/Kg	1	☼	6010C	Total/NA
Zinc	4.3		2.3	0.73	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.051		0.021	0.0049	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200130-1

Client Sample ID: SB5 (13-15)

Lab Sample ID: 480-200130-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.65	J	5.0	0.36	ug/Kg	1	☼	8260C	Total/NA
Aluminum	11800		13.0	5.7	mg/Kg	1	☼	6010C	Total/NA
Antimony	0.87	J	19.6	0.52	mg/Kg	1	☼	6010C	Total/NA
Arsenic	9.0		2.6	0.52	mg/Kg	1	☼	6010C	Total/NA
Barium	110		0.65	0.14	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.64		0.26	0.037	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.16	J	0.26	0.039	mg/Kg	1	☼	6010C	Total/NA
Calcium	1890		65.2	4.3	mg/Kg	1	☼	6010C	Total/NA
Chromium	14.8		0.65	0.26	mg/Kg	1	☼	6010C	Total/NA
Cobalt	11.3		0.65	0.065	mg/Kg	1	☼	6010C	Total/NA
Copper	16.3		1.3	0.27	mg/Kg	1	☼	6010C	Total/NA
Iron	26000		13.0	4.6	mg/Kg	1	☼	6010C	Total/NA
Lead	23.5		1.3	0.31	mg/Kg	1	☼	6010C	Total/NA
Magnesium	3420	B	26.1	1.2	mg/Kg	1	☼	6010C	Total/NA
Manganese	661	B	0.26	0.042	mg/Kg	1	☼	6010C	Total/NA
Nickel	24.1		6.5	0.30	mg/Kg	1	☼	6010C	Total/NA
Potassium	832		39.1	26.1	mg/Kg	1	☼	6010C	Total/NA
Sodium	40.2	J	183	17.0	mg/Kg	1	☼	6010C	Total/NA
Vanadium	16.8		0.65	0.14	mg/Kg	1	☼	6010C	Total/NA
Zinc	66.5		2.6	0.83	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.10		0.025	0.0057	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200130-1

Client Sample ID: SB5 (0-0.5)

Date Collected: 07/25/22 15:32
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200130-1

Matrix: Solid
Percent Solids: 86.7

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	*3	6.0	0.60	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
1,1,1-Trichloroethane	ND		6.0	0.44	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
1,1,2,2-Tetrachloroethane	ND	*3	6.0	0.98	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.0	1.4	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
1,1,2-Trichloroethane	ND	*3	6.0	0.78	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
1,1-Dichloroethane	ND		6.0	0.73	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
1,1-Dichloroethene	ND		6.0	0.74	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
1,2,3-Trimethylbenzene	ND	*3	6.0	1.2	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
1,2,4-Trichlorobenzene	ND	*3	6.0	0.37	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
1,2,4-Trimethylbenzene	ND	*3	6.0	1.2	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
1,2-Dibromo-3-Chloropropane	ND	*3	6.0	3.0	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
1,2-Dibromoethane	ND	*3	6.0	0.77	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
1,2-Dichlorobenzene	ND	*3	6.0	0.47	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
1,2-Dichloroethane	ND		6.0	0.30	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
1,2-Dichloropropane	ND		6.0	3.0	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
1,3,5-Trimethylbenzene	ND	*3	6.0	0.39	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
1,3-Dichlorobenzene	ND	*3	6.0	0.31	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
1,4-Dichlorobenzene	ND	*3	6.0	0.84	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
2-Butanone (MEK)	ND		30	2.2	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
2-Hexanone	ND	*3	30	3.0	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
4-Methyl-2-pentanone (MIBK)	ND	*3	30	2.0	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
Acetone	ND		30	5.1	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
Benzene	ND		6.0	0.30	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
Bromodichloromethane	ND		6.0	0.81	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
Bromoform	ND	*3 *+	6.0	3.0	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
Bromomethane	ND		6.0	0.54	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
Carbon disulfide	ND		6.0	3.0	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
Carbon tetrachloride	ND	*+	6.0	0.58	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
Chlorobenzene	ND	*3	6.0	0.79	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
Chloroethane	ND		6.0	1.4	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
Chloroform	ND		6.0	0.37	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
Chloromethane	ND		6.0	0.36	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
cis-1,2-Dichloroethene	ND		6.0	0.77	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
cis-1,3-Dichloropropene	ND		6.0	0.87	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
Cyclohexane	ND		6.0	0.84	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
Dibromochloromethane	ND	*3 *+	6.0	0.77	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
Dichlorodifluoromethane	ND		6.0	0.50	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
Ethylbenzene	ND	*3	6.0	0.42	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
Isopropylbenzene	ND	*3	6.0	0.91	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
m,p-Xylene	ND	*3	12	1.0	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
Methyl acetate	ND		30	3.6	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
Methyl tert-butyl ether	ND		6.0	0.59	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
Methylcyclohexane	ND		6.0	0.92	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
Methylene Chloride	ND		6.0	2.8	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
n-Butylbenzene	ND	*3	6.0	0.52	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
N-Propylbenzene	ND	*3	6.0	0.48	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
o-Xylene	ND	*3	6.0	0.79	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
sec-Butylbenzene	ND	*3	6.0	0.52	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
Styrene	ND	*3	6.0	0.30	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200130-1

Client Sample ID: SB5 (0-0.5)
Date Collected: 07/25/22 15:32
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200130-1
Matrix: Solid
Percent Solids: 86.7

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND	*3	6.0	0.63	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
Tetrachloroethene	ND	*3	6.0	0.81	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
Toluene	ND	*3	6.0	0.46	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
trans-1,2-Dichloroethene	ND		6.0	0.62	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
trans-1,3-Dichloropropene	ND	*3	6.0	2.6	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
Trichloroethene	ND		6.0	1.3	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
Trichlorofluoromethane	ND		6.0	0.57	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
Vinyl chloride	ND		6.0	0.73	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1
Xylenes, Total	ND		12	1.0	ug/Kg	☼	07/27/22 14:00	08/01/22 21:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*131*	*S1+*	*64 - 126*	*07/27/22 14:00*	*08/01/22 21:50*	*1*
4-Bromofluorobenzene (Surr)	*76*	**3*	*72 - 126*	*07/27/22 14:00*	*08/01/22 21:50*	*1*
Dibromofluoromethane (Surr)	*148*	*S1+*	*60 - 140*	*07/27/22 14:00*	*08/01/22 21:50*	*1*
Toluene-d8 (Surr)	*146*	*S1+ *3*	*71 - 125*	*07/27/22 14:00*	*08/01/22 21:50*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		190	52	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
2,4,6-Trichlorophenol	ND		190	39	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
2,4-Dichlorophenol	ND		190	20	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
2,4-Dimethylphenol	ND		190	46	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
2,4-Dinitrophenol	ND		1900	890	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
2,4-Dinitrotoluene	ND		190	40	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
2,6-Dinitrotoluene	ND		190	23	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
2-Chloronaphthalene	ND		190	32	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
2-Chlorophenol	ND		370	35	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
2-Methylnaphthalene	**61**	**J**	190	39	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
2-Methylphenol	ND		190	23	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
2-Nitroaniline	ND		370	28	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
2-Nitrophenol	ND		190	54	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
3,3'-Dichlorobenzidine	ND		370	230	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
3-Nitroaniline	ND		370	53	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
4,6-Dinitro-2-methylphenol	ND		370	190	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
4-Bromophenyl phenyl ether	ND		190	27	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
4-Chloro-3-methylphenol	ND		190	48	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
4-Chloroaniline	ND		190	48	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
4-Chlorophenyl phenyl ether	ND		190	24	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
4-Methylphenol	ND		370	23	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
4-Nitroaniline	ND		370	100	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
4-Nitrophenol	ND		370	130	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Acenaphthene	ND		190	28	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Acenaphthylene	**130**	**J**	190	25	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Acetophenone	ND		190	26	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Anthracene	**71**	**J**	190	48	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Atrazine	ND		190	67	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Benzaldehyde	ND		190	150	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Benzo[a]anthracene	**370**		190	19	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Benzo[a]pyrene	**350**		190	28	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Benzo[b]fluoranthene	**600**		190	31	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1

Client Sample ID: SB5 (0-0.5)
Date Collected: 07/25/22 15:32
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200130-1
Matrix: Solid
Percent Solids: 86.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	**260**		190	20	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Benzo[k]fluoranthene	**240**		190	25	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Biphenyl	ND		190	28	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
bis (2-chloroisopropyl) ether	ND		190	39	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Bis(2-chloroethoxy)methane	ND		190	41	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Bis(2-chloroethyl)ether	ND		190	25	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Bis(2-ethylhexyl) phthalate	ND		190	66	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Butyl benzyl phthalate	ND		190	32	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Caprolactam	ND		190	58	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Carbazole	**31**	**J**	190	23	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Chrysene	**550**		190	43	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Dibenz(a,h)anthracene	**120**	**J**	190	34	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Dibenzofuran	**43**	**J**	190	23	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Diethyl phthalate	ND		190	25	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Dimethyl phthalate	ND		190	23	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Di-n-butyl phthalate	ND		190	33	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Di-n-octyl phthalate	ND		190	23	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Fluoranthene	**550**		190	20	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Fluorene	ND		190	23	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Hexachlorobenzene	ND		190	26	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Hexachlorobutadiene	ND		190	28	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Hexachlorocyclopentadiene	ND		190	26	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Hexachloroethane	ND		190	25	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Indeno[1,2,3-cd]pyrene	**300**		190	24	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Isophorone	ND		190	41	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Naphthalene	**59**	**J**	190	25	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Nitrobenzene	ND		190	22	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
N-Nitrosodi-n-propylamine	ND		190	33	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
N-Nitrosodiphenylamine	ND		190	160	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Pentachlorophenol	ND		370	190	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Phenanthrene	**230**		190	28	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Phenol	ND		190	29	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1
Pyrene	**470**		190	23	ug/Kg	☼	07/29/22 15:47	08/02/22 22:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*99*		*54 - 120*	*07/29/22 15:47*	*08/02/22 22:05*	*1*
2-Fluorobiphenyl	*83*		*60 - 120*	*07/29/22 15:47*	*08/02/22 22:05*	*1*
2-Fluorophenol	*66*		*52 - 120*	*07/29/22 15:47*	*08/02/22 22:05*	*1*
Nitrobenzene-d5	*69*		*53 - 120*	*07/29/22 15:47*	*08/02/22 22:05*	*1*
Phenol-d5	*71*		*54 - 120*	*07/29/22 15:47*	*08/02/22 22:05*	*1*
p-Terphenyl-d14	*93*		*79 - 130*	*07/29/22 15:47*	*08/02/22 22:05*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5360**		11.0	4.9	mg/Kg	☼	08/01/22 11:03	08/02/22 14:59	1
Antimony	**2.2**	**J**	16.6	0.44	mg/Kg	☼	08/01/22 11:03	08/02/22 14:59	1
Arsenic	**13.0**		2.2	0.44	mg/Kg	☼	08/01/22 11:03	08/02/22 14:59	1
Barium	**62.3**		0.55	0.12	mg/Kg	☼	08/01/22 11:03	08/02/22 14:59	1
Beryllium	**0.42**		0.22	0.031	mg/Kg	☼	08/01/22 11:03	08/02/22 14:59	1
Cadmium	**0.29**		0.22	0.033	mg/Kg	☼	08/01/22 11:03	08/02/22 14:59	1

Client Sample ID: SB5 (0-0.5)

Lab Sample ID: 480-200130-1
Date Collected: 07/25/22 15:32
Matrix: Solid
Date Received: 07/27/22 10:00
Percent Solids: 86.7

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	2640		55.2	3.6	mg/Kg	☼	08/01/22 11:03	08/02/22 14:59	1
Chromium	12.2		0.55	0.22	mg/Kg	☼	08/01/22 11:03	08/02/22 14:59	1
Cobalt	7.3		0.55	0.055	mg/Kg	☼	08/01/22 11:03	08/02/22 14:59	1
Copper	56.0		1.1	0.23	mg/Kg	☼	08/01/22 11:03	08/02/22 14:59	1
Iron	23900		11.0	3.9	mg/Kg	☼	08/01/22 11:03	08/02/22 14:59	1
Lead	80.9		1.1	0.27	mg/Kg	☼	08/01/22 11:03	08/02/22 14:59	1
Magnesium	1400	B	22.1	1.0	mg/Kg	☼	08/01/22 11:03	08/02/22 14:59	1
Manganese	530	B	0.22	0.035	mg/Kg	☼	08/01/22 11:03	08/02/22 14:59	1
Nickel	15.0		5.5	0.25	mg/Kg	☼	08/01/22 11:03	08/02/22 14:59	1
Potassium	407		33.1	22.1	mg/Kg	☼	08/01/22 11:03	08/02/22 14:59	1
Selenium	1.0	J B	4.4	0.44	mg/Kg	☼	08/01/22 11:03	08/02/22 14:59	1
Silver	0.22	J	0.66	0.22	mg/Kg	☼	08/01/22 11:03	08/02/22 14:59	1
Sodium	48.6	J	155	14.4	mg/Kg	☼	08/01/22 11:03	08/02/22 14:59	1
Thallium	ND		6.6	0.33	mg/Kg	☼	08/01/22 11:03	08/02/22 14:59	1
Vanadium	16.6		0.55	0.12	mg/Kg	☼	08/01/22 11:03	08/02/22 14:59	1
Zinc	61.0		2.2	0.71	mg/Kg	☼	08/01/22 11:03	08/02/22 14:59	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12		0.024	0.0055	mg/Kg	☼	08/02/22 09:35	08/02/22 14:23	1

Client Sample ID: SB5 (0.5-1)

Lab Sample ID: 480-200130-2
Date Collected: 07/25/22 16:18
Matrix: Solid
Date Received: 07/27/22 10:00
Percent Solids: 96.1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	*3	5.0	0.50	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
1,1,1-Trichloroethane	0.44	J	5.0	0.36	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
1,1,2,2-Tetrachloroethane	ND	*3	5.0	0.81	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
1,1,2-Trichloroethane	ND	*3	5.0	0.65	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
1,2,3-Trimethylbenzene	ND	*3	5.0	1.0	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
1,2,4-Trichlorobenzene	ND	*3	5.0	0.30	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
1,2,4-Trimethylbenzene	ND	*3	5.0	0.96	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
1,2-Dibromo-3-Chloropropane	ND	*3	5.0	2.5	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
1,2-Dibromoethane	ND	*3	5.0	0.64	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
1,2-Dichlorobenzene	ND	*3	5.0	0.39	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
1,3,5-Trimethylbenzene	ND	*3	5.0	0.32	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
1,3-Dichlorobenzene	ND	*3	5.0	0.26	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
1,4-Dichlorobenzene	ND	*3	5.0	0.70	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
2-Hexanone	ND	*3	25	2.5	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
4-Methyl-2-pentanone (MIBK)	ND	*3	25	1.6	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
Acetone	ND		25	4.2	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
Benzene	ND		5.0	0.24	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1

Client Sample ID: SB5 (0.5-1)
Date Collected: 07/25/22 16:18
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200130-2
Matrix: Solid
Percent Solids: 96.1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		5.0	0.67	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
Bromoform	ND	*3 *+	5.0	2.5	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
Bromomethane	ND		5.0	0.45	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
Carbon disulfide	ND		5.0	2.5	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
Carbon tetrachloride	ND	*+	5.0	0.48	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
Chlorobenzene	ND	*3	5.0	0.66	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
Chloroethane	ND		5.0	1.1	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
Chloroform	ND		5.0	0.31	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
Chloromethane	ND		5.0	0.30	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
Cyclohexane	ND		5.0	0.70	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
Dibromochloromethane	ND	*3 *+	5.0	0.64	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
Ethylbenzene	ND	*3	5.0	0.34	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
Isopropylbenzene	ND	*3	5.0	0.75	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
m,p-Xylene	ND	*3	10	0.84	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
Methyl acetate	ND		25	3.0	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
Methylene Chloride	ND		5.0	2.3	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
n-Butylbenzene	ND	*3	5.0	0.43	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
N-Propylbenzene	ND	*3	5.0	0.40	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
o-Xylene	ND	*3	5.0	0.65	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
sec-Butylbenzene	ND	*3	5.0	0.43	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
Styrene	ND	*3	5.0	0.25	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
tert-Butylbenzene	ND	*3	5.0	0.52	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
Tetrachloroethene	ND	*3	5.0	0.67	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
Toluene	ND	*3	5.0	0.38	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
trans-1,2-Dichloroethene	ND		5.0	0.51	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
trans-1,3-Dichloropropene	ND	*3	5.0	2.2	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
Trichloroethene	ND		5.0	1.1	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
Vinyl chloride	ND		5.0	0.61	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1
Xylenes, Total	ND		10	0.84	ug/Kg	☼	07/27/22 14:00	08/01/22 22:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*132*	*S1+*	*64 - 126*	*07/27/22 14:00*	*08/01/22 22:14*	*1*
4-Bromofluorobenzene (Surr)	*80*	**3*	*72 - 126*	*07/27/22 14:00*	*08/01/22 22:14*	*1*
Dibromofluoromethane (Surr)	*147*	*S1+*	*60 - 140*	*07/27/22 14:00*	*08/01/22 22:14*	*1*
Toluene-d8 (Surr)	*141*	*S1+ *3*	*71 - 125*	*07/27/22 14:00*	*08/01/22 22:14*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		3500	940	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
2,4,6-Trichlorophenol	ND		3500	690	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
2,4-Dichlorophenol	ND		3500	370	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
2,4-Dimethylphenol	ND		3500	840	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
2,4-Dinitrophenol	ND		34000	16000	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
2,4-Dinitrotoluene	ND		3500	710	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20

Client Sample ID: SB5 (0.5-1)
Date Collected: 07/25/22 16:18
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200130-2
Matrix: Solid
Percent Solids: 96.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		3500	410	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
2-Chloronaphthalene	ND		3500	570	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
2-Chlorophenol	ND		6700	630	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
2-Methylnaphthalene	ND		3500	690	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
2-Methylphenol	ND		3500	410	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
2-Nitroaniline	ND		6700	510	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
2-Nitrophenol	ND		3500	980	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
3,3'-Dichlorobenzidine	ND		6700	4100	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
3-Nitroaniline	ND		6700	960	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
4,6-Dinitro-2-methylphenol	ND		6700	3500	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
4-Bromophenyl phenyl ether	ND		3500	490	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
4-Chloro-3-methylphenol	ND		3500	860	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
4-Chloroaniline	ND		3500	860	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
4-Chlorophenyl phenyl ether	ND		3500	430	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
4-Methylphenol	ND		6700	410	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
4-Nitroaniline	ND		6700	1800	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
4-Nitrophenol	ND		6700	2400	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Acenaphthene	ND		3500	510	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Acenaphthylene	ND		3500	450	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Acetophenone	ND		3500	470	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Anthracene	ND		3500	860	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Atrazine	ND		3500	1200	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Benzaldehyde	ND		3500	2800	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Benzo[a]anthracene	ND		3500	350	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Benzo[a]pyrene	**660**	**J**	3500	510	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Benzo[b]fluoranthene	**990**	**J**	3500	550	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Benzo[g,h,i]perylene	**590**	**J**	3500	370	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Benzo[k]fluoranthene	**570**	**J**	3500	450	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Biphenyl	ND		3500	510	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
bis (2-chloroisopropyl) ether	ND		3500	690	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Bis(2-chloroethoxy)methane	ND		3500	730	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Bis(2-chloroethyl)ether	ND		3500	450	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Bis(2-ethylhexyl) phthalate	ND		3500	1200	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Butyl benzyl phthalate	ND		3500	570	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Caprolactam	ND		3500	1000	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Carbazole	ND		3500	410	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Chrysene	ND		3500	770	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Dibenz(a,h)anthracene	ND		3500	610	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Dibenzofuran	ND		3500	410	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Diethyl phthalate	ND		3500	450	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Dimethyl phthalate	ND		3500	410	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Di-n-butyl phthalate	ND		3500	590	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Di-n-octyl phthalate	ND		3500	410	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Fluoranthene	**850**	**J**	3500	370	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Fluorene	ND		3500	410	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Hexachlorobenzene	ND		3500	470	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Hexachlorobutadiene	ND		3500	510	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Hexachlorocyclopentadiene	ND		3500	470	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Hexachloroethane	ND		3500	450	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20

Client Sample ID: SB5 (0.5-1)
Date Collected: 07/25/22 16:18
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200130-2
Matrix: Solid
Percent Solids: 96.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	600	J	3500	430	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Isophorone	ND		3500	730	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Naphthalene	ND		3500	450	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Nitrobenzene	ND		3500	390	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
N-Nitrosodi-n-propylamine	ND		3500	590	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
N-Nitrosodiphenylamine	ND		3500	2800	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Pentachlorophenol	ND		6700	3500	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Phenanthrene	ND		3500	510	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Phenol	ND		3500	530	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20
Pyrene	740	J	3500	410	ug/Kg	☼	07/29/22 15:47	08/02/22 22:29	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*107*		*54 - 120*	*07/29/22 15:47*	*08/02/22 22:29*	*20*
2-Fluorobiphenyl	*79*		*60 - 120*	*07/29/22 15:47*	*08/02/22 22:29*	*20*
2-Fluorophenol	*72*		*52 - 120*	*07/29/22 15:47*	*08/02/22 22:29*	*20*
Nitrobenzene-d5	*58*		*53 - 120*	*07/29/22 15:47*	*08/02/22 22:29*	*20*
Phenol-d5	*64*		*54 - 120*	*07/29/22 15:47*	*08/02/22 22:29*	*20*
p-Terphenyl-d14	*82*		*79 - 130*	*07/29/22 15:47*	*08/02/22 22:29*	*20*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7340		10.3	4.5	mg/Kg	☼	08/01/22 11:03	08/02/22 15:03	1
Antimony	1.3	J	15.4	0.41	mg/Kg	☼	08/01/22 11:03	08/02/22 15:03	1
Arsenic	26.9		2.1	0.41	mg/Kg	☼	08/01/22 11:03	08/02/22 15:03	1
Barium	61.4		0.51	0.11	mg/Kg	☼	08/01/22 11:03	08/02/22 15:03	1
Beryllium	0.43		0.21	0.029	mg/Kg	☼	08/01/22 11:03	08/02/22 15:03	1
Cadmium	1.0		0.21	0.031	mg/Kg	☼	08/01/22 11:03	08/02/22 15:03	1
Calcium	5320		51.4	3.4	mg/Kg	☼	08/01/22 11:03	08/02/22 15:03	1
Chromium	12.4		0.51	0.21	mg/Kg	☼	08/01/22 11:03	08/02/22 15:03	1
Cobalt	8.1		0.51	0.051	mg/Kg	☼	08/01/22 11:03	08/02/22 15:03	1
Copper	34.6		1.0	0.22	mg/Kg	☼	08/01/22 11:03	08/02/22 15:03	1
Iron	23700		10.3	3.6	mg/Kg	☼	08/01/22 11:03	08/02/22 15:03	1
Lead	169		1.0	0.25	mg/Kg	☼	08/01/22 11:03	08/02/22 15:03	1
Magnesium	2680	B	20.6	0.95	mg/Kg	☼	08/01/22 11:03	08/02/22 15:03	1
Manganese	296	B	0.21	0.033	mg/Kg	☼	08/01/22 11:03	08/02/22 15:03	1
Nickel	17.5		5.1	0.24	mg/Kg	☼	08/01/22 11:03	08/02/22 15:03	1
Potassium	466		30.8	20.6	mg/Kg	☼	08/01/22 11:03	08/02/22 15:03	1
Selenium	0.65	J B	4.1	0.41	mg/Kg	☼	08/01/22 11:03	08/02/22 15:03	1
Silver	ND		0.62	0.21	mg/Kg	☼	08/01/22 11:03	08/02/22 15:03	1
Sodium	56.5	J	144	13.4	mg/Kg	☼	08/01/22 11:03	08/02/22 15:03	1
Thallium	ND		6.2	0.31	mg/Kg	☼	08/01/22 11:03	08/02/22 15:03	1
Vanadium	14.5		0.51	0.11	mg/Kg	☼	08/01/22 11:03	08/02/22 15:03	1
Zinc	88.7		2.1	0.66	mg/Kg	☼	08/01/22 11:03	08/02/22 15:03	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.22		0.021	0.0049	mg/Kg	☼	08/02/22 09:35	08/02/22 14:24	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200130-1

Client Sample ID: SB5 (1-2)
Date Collected: 07/25/22 16:10
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200130-3
Matrix: Solid
Percent Solids: 91.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	*3	5.4	0.54	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
1,1,1-Trichloroethane	**1.9**	**J**	5.4	0.40	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
1,1,2,2-Tetrachloroethane	ND	*3	5.4	0.88	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.4	1.2	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
1,1,2-Trichloroethane	ND	*3	5.4	0.71	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
1,1-Dichloroethane	ND		5.4	0.66	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
1,1-Dichloroethene	ND		5.4	0.67	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
1,2,3-Trimethylbenzene	ND	*3	5.4	1.1	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
1,2,4-Trichlorobenzene	ND	*3	5.4	0.33	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
1,2,4-Trimethylbenzene	ND	*3	5.4	1.0	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
1,2-Dibromo-3-Chloropropane	ND	*3	5.4	2.7	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
1,2-Dibromoethane	ND	*3	5.4	0.70	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
1,2-Dichlorobenzene	ND	*3	5.4	0.43	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
1,2-Dichloroethane	ND		5.4	0.27	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
1,2-Dichloropropane	ND		5.4	2.7	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
1,3,5-Trimethylbenzene	ND	*3	5.4	0.35	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
1,3-Dichlorobenzene	ND	*3	5.4	0.28	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
1,4-Dichlorobenzene	ND	*3	5.4	0.76	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
2-Butanone (MEK)	ND		27	2.0	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
2-Hexanone	ND	*3	27	2.7	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
4-Methyl-2-pentanone (MIBK)	ND	*3	27	1.8	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
Acetone	ND		27	4.6	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
Benzene	**0.44**	**J**	5.4	0.27	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
Bromodichloromethane	ND		5.4	0.73	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
Bromoform	ND	*3 *+	5.4	2.7	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
Bromomethane	ND		5.4	0.49	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
Carbon disulfide	ND		5.4	2.7	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
Carbon tetrachloride	ND	*+	5.4	0.53	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
Chlorobenzene	ND	*3	5.4	0.72	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
Chloroethane	ND		5.4	1.2	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
Chloroform	ND		5.4	0.34	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
Chloromethane	ND		5.4	0.33	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
cis-1,2-Dichloroethene	ND		5.4	0.70	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
cis-1,3-Dichloropropene	ND		5.4	0.78	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
Cyclohexane	ND		5.4	0.76	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
Dibromochloromethane	ND	*3 *+	5.4	0.70	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
Dichlorodifluoromethane	ND		5.4	0.45	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
Ethylbenzene	ND	*3	5.4	0.38	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
Isopropylbenzene	ND	*3	5.4	0.82	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
m,p-Xylene	ND	*3	11	0.92	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
Methyl acetate	ND		27	3.3	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
Methyl tert-butyl ether	ND		5.4	0.54	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
Methylcyclohexane	ND		5.4	0.83	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
Methylene Chloride	ND		5.4	2.5	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
n-Butylbenzene	ND	*3	5.4	0.47	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
N-Propylbenzene	ND	*3	5.4	0.44	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
o-Xylene	ND	*3	5.4	0.71	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
sec-Butylbenzene	ND	*3	5.4	0.47	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
Styrene	ND	*3	5.4	0.27	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200130-1

Client Sample ID: SB5 (1-2)
Date Collected: 07/25/22 16:10
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200130-3
Matrix: Solid
Percent Solids: 91.4

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND	*3	5.4	0.57	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
Tetrachloroethene	ND	*3	5.4	0.73	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
Toluene	**0.63**	**J *3**	5.4	0.41	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
trans-1,2-Dichloroethene	ND		5.4	0.56	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
trans-1,3-Dichloropropene	ND	*3	5.4	2.4	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
Trichloroethene	ND		5.4	1.2	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
Trichlorofluoromethane	ND		5.4	0.52	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
Vinyl chloride	ND		5.4	0.66	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1
Xylenes, Total	ND		11	0.92	ug/Kg	☼	07/27/22 14:00	08/01/22 22:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*134*	*S1+*	*64 - 126*	*07/27/22 14:00*	*08/01/22 22:38*	*1*
4-Bromofluorobenzene (Surr)	*71*	*S1- *3*	*72 - 126*	*07/27/22 14:00*	*08/01/22 22:38*	*1*
Dibromofluoromethane (Surr)	*150*	*S1+*	*60 - 140*	*07/27/22 14:00*	*08/01/22 22:38*	*1*
Toluene-d8 (Surr)	*141*	*S1+ *3*	*71 - 125*	*07/27/22 14:00*	*08/01/22 22:38*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		180	50	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
2,4,6-Trichlorophenol	ND		180	37	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
2,4-Dichlorophenol	ND		180	19	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
2,4-Dimethylphenol	ND		180	44	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
2,4-Dinitrophenol	ND		1800	850	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
2,4-Dinitrotoluene	ND		180	38	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
2,6-Dinitrotoluene	ND		180	22	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
2-Chloronaphthalene	ND		180	30	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
2-Chlorophenol	ND		360	33	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
2-Methylnaphthalene	ND		180	37	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
2-Methylphenol	ND		180	22	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
2-Nitroaniline	ND		360	27	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
2-Nitrophenol	ND		180	52	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
3,3'-Dichlorobenzidine	ND		360	220	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
3-Nitroaniline	ND		360	51	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
4,6-Dinitro-2-methylphenol	ND		360	180	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
4-Bromophenyl phenyl ether	ND		180	26	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
4-Chloro-3-methylphenol	ND		180	45	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
4-Chloroaniline	ND		180	45	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
4-Chlorophenyl phenyl ether	ND		180	23	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
4-Methylphenol	ND		360	22	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
4-Nitroaniline	ND		360	96	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
4-Nitrophenol	ND		360	130	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Acenaphthene	ND		180	27	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Acenaphthylene	ND		180	24	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Acetophenone	ND		180	25	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Anthracene	ND		180	45	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Atrazine	ND		180	64	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Benzaldehyde	ND		180	150	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Benzo[a]anthracene	ND		180	18	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Benzo[a]pyrene	ND		180	27	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Benzo[b]fluoranthene	ND		180	29	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1

Client Sample ID: SB5 (1-2)
Date Collected: 07/25/22 16:10
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200130-3
Matrix: Solid
Percent Solids: 91.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		180	19	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Benzo[k]fluoranthene	ND		180	24	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Biphenyl	ND		180	27	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
bis (2-chloroisopropyl) ether	ND		180	37	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Bis(2-chloroethoxy)methane	ND		180	39	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Bis(2-chloroethyl)ether	ND		180	24	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Bis(2-ethylhexyl) phthalate	ND		180	63	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Butyl benzyl phthalate	ND		180	30	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Caprolactam	ND		180	55	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Carbazole	ND		180	22	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Chrysene	ND		180	41	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Dibenz(a,h)anthracene	ND		180	32	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Dibenzofuran	ND		180	22	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Diethyl phthalate	ND		180	24	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Dimethyl phthalate	ND		180	22	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Di-n-butyl phthalate	ND		180	31	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Di-n-octyl phthalate	ND		180	22	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Fluoranthene	ND		180	19	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Fluorene	ND		180	22	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Hexachlorobenzene	ND		180	25	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Hexachlorobutadiene	ND		180	27	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Hexachlorocyclopentadiene	ND		180	25	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Hexachloroethane	ND		180	24	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Indeno[1,2,3-cd]pyrene	ND		180	23	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Isophorone	ND		180	39	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Naphthalene	ND		180	24	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Nitrobenzene	ND		180	21	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
N-Nitrosodi-n-propylamine	ND		180	31	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
N-Nitrosodiphenylamine	ND		180	150	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Pentachlorophenol	ND		360	180	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Phenanthrene	ND		180	27	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Phenol	ND		180	28	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1
Pyrene	ND		180	22	ug/Kg	☼	07/29/22 15:47	08/02/22 22:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*89*		*54 - 120*	*07/29/22 15:47*	*08/02/22 22:54*	*1*
2-Fluorobiphenyl	*88*		*60 - 120*	*07/29/22 15:47*	*08/02/22 22:54*	*1*
2-Fluorophenol	*71*		*52 - 120*	*07/29/22 15:47*	*08/02/22 22:54*	*1*
Nitrobenzene-d5	*72*		*53 - 120*	*07/29/22 15:47*	*08/02/22 22:54*	*1*
Phenol-d5	*73*		*54 - 120*	*07/29/22 15:47*	*08/02/22 22:54*	*1*
p-Terphenyl-d14	*85*		*79 - 130*	*07/29/22 15:47*	*08/02/22 22:54*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**1440**		11.4	5.0	mg/Kg	☼	08/01/22 11:03	08/02/22 15:06	1
Antimony	ND		17.0	0.45	mg/Kg	☼	08/01/22 11:03	08/02/22 15:06	1
Arsenic	**1.4**	**J**	2.3	0.45	mg/Kg	☼	08/01/22 11:03	08/02/22 15:06	1
Barium	**15.9**		0.57	0.12	mg/Kg	☼	08/01/22 11:03	08/02/22 15:06	1
Beryllium	**0.29**		0.23	0.032	mg/Kg	☼	08/01/22 11:03	08/02/22 15:06	1
Cadmium	**0.034**	**J**	0.23	0.034	mg/Kg	☼	08/01/22 11:03	08/02/22 15:06	1

Client Sample ID: SB5 (1-2)

Lab Sample ID: 480-200130-3
Date Collected: 07/25/22 16:10
Matrix: Solid
Date Received: 07/27/22 10:00
Percent Solids: 91.4

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	839		56.8	3.7	mg/Kg	☼	08/01/22 11:03	08/02/22 15:06	1
Chromium	4.6		0.57	0.23	mg/Kg	☼	08/01/22 11:03	08/02/22 15:06	1
Cobalt	2.9		0.57	0.057	mg/Kg	☼	08/01/22 11:03	08/02/22 15:06	1
Copper	48.9		1.1	0.24	mg/Kg	☼	08/01/22 11:03	08/02/22 15:06	1
Iron	4330		11.4	4.0	mg/Kg	☼	08/01/22 11:03	08/02/22 15:06	1
Lead	8.9		1.1	0.27	mg/Kg	☼	08/01/22 11:03	08/02/22 15:06	1
Magnesium	140	B	22.7	1.1	mg/Kg	☼	08/01/22 11:03	08/02/22 15:06	1
Manganese	42.7	B	0.23	0.036	mg/Kg	☼	08/01/22 11:03	08/02/22 15:06	1
Nickel	8.1		5.7	0.26	mg/Kg	☼	08/01/22 11:03	08/02/22 15:06	1
Potassium	164		34.1	22.7	mg/Kg	☼	08/01/22 11:03	08/02/22 15:06	1
Selenium	0.92	J B	4.5	0.45	mg/Kg	☼	08/01/22 11:03	08/02/22 15:06	1
Silver	ND		0.68	0.23	mg/Kg	☼	08/01/22 11:03	08/02/22 15:06	1
Sodium	25.5	J	159	14.8	mg/Kg	☼	08/01/22 11:03	08/02/22 15:06	1
Thallium	ND		6.8	0.34	mg/Kg	☼	08/01/22 11:03	08/02/22 15:06	1
Vanadium	7.6		0.57	0.12	mg/Kg	☼	08/01/22 11:03	08/02/22 15:06	1
Zinc	4.3		2.3	0.73	mg/Kg	☼	08/01/22 11:03	08/02/22 15:06	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.051		0.021	0.0049	mg/Kg	☼	08/02/22 09:35	08/02/22 14:30	1

Client Sample ID: SB5 (13-15)

Lab Sample ID: 480-200130-4
Date Collected: 07/25/22 16:05
Matrix: Solid
Date Received: 07/27/22 10:00
Percent Solids: 76.8

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.50	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
1,1,1-Trichloroethane	0.65	J	5.0	0.36	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
1,2,3-Trimethylbenzene	ND		5.0	1.0	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
2-Hexanone	ND		25	2.5	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
Acetone	ND		25	4.2	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
Benzene	ND		5.0	0.24	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1

Client Sample ID: SB5 (13-15)
Date Collected: 07/25/22 16:05
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200130-4
Matrix: Solid
Percent Solids: 76.8

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		5.0	0.67	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
Bromoform	ND	*+	5.0	2.5	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
Bromomethane	ND		5.0	0.45	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
Carbon disulfide	ND		5.0	2.5	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
Chlorobenzene	ND		5.0	0.66	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
Chloroethane	ND		5.0	1.1	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
Chloroform	ND		5.0	0.31	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
Chloromethane	ND		5.0	0.30	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
Cyclohexane	ND		5.0	0.70	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
Dibromochloromethane	ND	*+	5.0	0.64	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
Ethylbenzene	ND		5.0	0.34	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
m,p-Xylene	ND		10	0.84	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
Methyl acetate	ND		25	3.0	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
Methylene Chloride	ND		5.0	2.3	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
n-Butylbenzene	ND		5.0	0.43	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
o-Xylene	ND		5.0	0.65	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
sec-Butylbenzene	ND		5.0	0.43	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
Styrene	ND		5.0	0.25	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
Toluene	ND		5.0	0.38	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
trans-1,2-Dichloroethene	ND		5.0	0.51	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
Trichloroethene	ND		5.0	1.1	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
Vinyl chloride	ND		5.0	0.61	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1
Xylenes, Total	ND		10	0.84	ug/Kg	☼	07/27/22 14:00	07/29/22 19:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*64 - 126*	*07/27/22 14:00*	*07/29/22 19:01*	*1*
4-Bromofluorobenzene (Surr)	*108*		*72 - 126*	*07/27/22 14:00*	*07/29/22 19:01*	*1*
Dibromofluoromethane (Surr)	*117*		*60 - 140*	*07/27/22 14:00*	*07/29/22 19:01*	*1*
Toluene-d8 (Surr)	*104*		*71 - 125*	*07/27/22 14:00*	*07/29/22 19:01*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		220	59	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
2,4,6-Trichlorophenol	ND		220	43	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
2,4-Dichlorophenol	ND		220	23	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
2,4-Dimethylphenol	ND		220	52	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
2,4-Dinitrophenol	ND		2100	1000	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
2,4-Dinitrotoluene	ND		220	45	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200130-1

Client Sample ID: SB5 (13-15)
Date Collected: 07/25/22 16:05
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200130-4
Matrix: Solid
Percent Solids: 76.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		220	26	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
2-Chloronaphthalene	ND		220	36	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
2-Chlorophenol	ND		420	40	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
2-Methylnaphthalene	ND		220	43	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
2-Methylphenol	ND		220	26	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
2-Nitroaniline	ND		420	32	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
2-Nitrophenol	ND		220	61	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
3,3'-Dichlorobenzidine	ND		420	260	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
3-Nitroaniline	ND		420	60	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
4,6-Dinitro-2-methylphenol	ND		420	220	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
4-Bromophenyl phenyl ether	ND		220	31	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
4-Chloro-3-methylphenol	ND		220	54	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
4-Chloroaniline	ND		220	54	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
4-Chlorophenyl phenyl ether	ND		220	27	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
4-Methylphenol	ND		420	26	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
4-Nitroaniline	ND		420	110	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
4-Nitrophenol	ND		420	150	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Acenaphthene	ND		220	32	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Acenaphthylene	ND		220	28	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Acetophenone	ND		220	29	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Anthracene	ND		220	54	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Atrazine	ND		220	75	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Benzaldehyde	ND		220	170	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Benzo[a]anthracene	ND		220	22	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Benzo[a]pyrene	ND		220	32	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Benzo[b]fluoranthene	ND		220	35	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Benzo[g,h,i]perylene	ND		220	23	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Benzo[k]fluoranthene	ND		220	28	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Biphenyl	ND		220	32	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
bis (2-chloroisopropyl) ether	ND		220	43	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Bis(2-chloroethoxy)methane	ND		220	46	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Bis(2-chloroethyl)ether	ND		220	28	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Bis(2-ethylhexyl) phthalate	ND		220	74	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Butyl benzyl phthalate	ND		220	36	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Caprolactam	ND		220	65	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Carbazole	ND		220	26	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Chrysene	ND		220	49	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Dibenz(a,h)anthracene	ND		220	38	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Dibenzofuran	ND		220	26	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Diethyl phthalate	ND		220	28	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Dimethyl phthalate	ND		220	26	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Di-n-butyl phthalate	ND		220	37	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Di-n-octyl phthalate	ND		220	26	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Fluoranthene	ND		220	23	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Fluorene	ND		220	26	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Hexachlorobenzene	ND		220	29	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Hexachlorobutadiene	ND		220	32	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Hexachlorocyclopentadiene	ND		220	29	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Hexachloroethane	ND		220	28	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1

Client Sample ID: SB5 (13-15)
Date Collected: 07/25/22 16:05
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200130-4
Matrix: Solid
Percent Solids: 76.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	ND		220	27	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Isophorone	ND		220	46	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Naphthalene	ND		220	28	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Nitrobenzene	ND		220	24	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
N-Nitrosodi-n-propylamine	ND		220	37	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
N-Nitrosodiphenylamine	ND		220	180	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Pentachlorophenol	ND		420	220	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Phenanthrene	ND		220	32	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Phenol	ND		220	33	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1
Pyrene	ND		220	26	ug/Kg	☼	07/29/22 15:47	08/02/22 23:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*96*		*54 - 120*	*07/29/22 15:47*	*08/02/22 23:18*	*1*
2-Fluorobiphenyl	*81*		*60 - 120*	*07/29/22 15:47*	*08/02/22 23:18*	*1*
2-Fluorophenol	*68*		*52 - 120*	*07/29/22 15:47*	*08/02/22 23:18*	*1*
Nitrobenzene-d5	*67*		*53 - 120*	*07/29/22 15:47*	*08/02/22 23:18*	*1*
Phenol-d5	*70*		*54 - 120*	*07/29/22 15:47*	*08/02/22 23:18*	*1*
p-Terphenyl-d14	*96*		*79 - 130*	*07/29/22 15:47*	*08/02/22 23:18*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**11800**		13.0	5.7	mg/Kg	☼	08/01/22 11:03	08/02/22 16:16	1
Antimony	**0.87**	**J**	19.6	0.52	mg/Kg	☼	08/01/22 11:03	08/02/22 16:16	1
Arsenic	**9.0**		2.6	0.52	mg/Kg	☼	08/01/22 11:03	08/02/22 16:16	1
Barium	**110**		0.65	0.14	mg/Kg	☼	08/01/22 11:03	08/02/22 16:16	1
Beryllium	**0.64**		0.26	0.037	mg/Kg	☼	08/01/22 11:03	08/03/22 15:42	1
Cadmium	**0.16**	**J**	0.26	0.039	mg/Kg	☼	08/01/22 11:03	08/02/22 16:16	1
Calcium	**1890**		65.2	4.3	mg/Kg	☼	08/01/22 11:03	08/02/22 16:16	1
Chromium	**14.8**		0.65	0.26	mg/Kg	☼	08/01/22 11:03	08/02/22 16:16	1
Cobalt	**11.3**		0.65	0.065	mg/Kg	☼	08/01/22 11:03	08/02/22 16:16	1
Copper	**16.3**		1.3	0.27	mg/Kg	☼	08/01/22 11:03	08/02/22 16:16	1
Iron	**26000**		13.0	4.6	mg/Kg	☼	08/01/22 11:03	08/02/22 16:16	1
Lead	**23.5**		1.3	0.31	mg/Kg	☼	08/01/22 11:03	08/02/22 16:16	1
Magnesium	**3420**	**B**	26.1	1.2	mg/Kg	☼	08/01/22 11:03	08/02/22 16:16	1
Manganese	**661**	**B**	0.26	0.042	mg/Kg	☼	08/01/22 11:03	08/02/22 16:16	1
Nickel	**24.1**		6.5	0.30	mg/Kg	☼	08/01/22 11:03	08/02/22 16:16	1
Potassium	**832**		39.1	26.1	mg/Kg	☼	08/01/22 11:03	08/02/22 16:16	1
Selenium	ND		5.2	0.52	mg/Kg	☼	08/01/22 11:03	08/02/22 16:16	1
Silver	ND		0.78	0.26	mg/Kg	☼	08/01/22 11:03	08/02/22 16:16	1
Sodium	**40.2**	**J**	183	17.0	mg/Kg	☼	08/01/22 11:03	08/02/22 16:16	1
Thallium	ND		7.8	0.39	mg/Kg	☼	08/01/22 11:03	08/02/22 16:16	1
Vanadium	**16.8**		0.65	0.14	mg/Kg	☼	08/01/22 11:03	08/02/22 16:16	1
Zinc	**66.5**		2.6	0.83	mg/Kg	☼	08/01/22 11:03	08/02/22 16:16	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.10**		0.025	0.0057	mg/Kg	☼	08/02/22 09:35	08/02/22 14:31	1

Surrogate Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200130-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(64-126)	(72-126)	(60-140)	(71-125)
480-200130-1	SB5 (0-0.5)	131 S1+	76 *3	148 S1+	146 S1+ *3
480-200130-2	SB5 (0.5-1)	132 S1+	80 *3	147 S1+	141 S1+ *3
480-200130-3	SB5 (1-2)	134 S1+	71 S1- *3	150 S1+	141 S1+ *3
480-200130-4	SB5 (13-15)	112	108	117	104
LCS 480-635335/1-A	Lab Control Sample	106	110	112	97
LCS 480-635770/1-A	Lab Control Sample	111	117	120	98
LCSD 480-635335/2-A	Lab Control Sample Dup	112	114	117	98
MB 480-635335/3-A	Method Blank	113	111	117	93
MB 480-635770/2-A	Method Blank	117	115	123	97

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(54-120)	(60-120)	(52-120)	(53-120)	(54-120)	(79-130)
480-200130-1	SB5 (0-0.5)	99	83	66	69	71	93
480-200130-2	SB5 (0.5-1)	107	79	72	58	64	82
480-200130-3	SB5 (1-2)	89	88	71	72	73	85
480-200130-4	SB5 (13-15)	96	81	68	67	70	96
LCS 480-635559/2-A	Lab Control Sample	89	83	68	67	70	88
MB 480-635559/1-A	Method Blank	95	80	68	67	73	97

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHd14 = p-Terphenyl-d14

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-635335/3-A
Matrix: Solid
Analysis Batch: 635513

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635335

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.50	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
1,2,3-Trimethylbenzene	ND		5.0	1.0	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
2-Hexanone	ND		25	2.5	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
Acetone	ND		25	4.2	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
Benzene	ND		5.0	0.25	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
Bromoform	ND		5.0	2.5	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
Bromomethane	ND		5.0	0.45	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
Chloroethane	ND		5.0	1.1	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
Chloroform	ND		5.0	0.31	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
Chloromethane	ND		5.0	0.30	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
Cyclohexane	ND		5.0	0.70	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
m,p-Xylene	ND		10	0.84	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
Methyl acetate	ND		25	3.0	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
o-Xylene	ND		5.0	0.65	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		07/28/22 13:43	07/29/22 16:36	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-635335/3-A
Matrix: Solid
Analysis Batch: 635513

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635335

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		5.0	0.25	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
Toluene	ND		5.0	0.38	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
Trichloroethene	ND		5.0	1.1	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		07/28/22 13:43	07/29/22 16:36	1
Xylenes, Total	ND		10	0.84	ug/Kg		07/28/22 13:43	07/29/22 16:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*64 - 126*	*07/28/22 13:43*	*07/29/22 16:36*	*1*
4-Bromofluorobenzene (Surr)	*111*		*72 - 126*	*07/28/22 13:43*	*07/29/22 16:36*	*1*
Dibromofluoromethane (Surr)	*117*		*60 - 140*	*07/28/22 13:43*	*07/29/22 16:36*	*1*
Toluene-d8 (Surr)	*93*		*71 - 125*	*07/28/22 13:43*	*07/29/22 16:36*	*1*

Lab Sample ID: LCS 480-635335/1-A
Matrix: Solid
Analysis Batch: 635513

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635335

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	62.0		ug/Kg		124	74 - 127
1,1,1-Trichloroethane	50.0	60.3		ug/Kg		121	77 - 121
1,1,2,2-Tetrachloroethane	50.0	42.4		ug/Kg		85	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	45.5		ug/Kg		91	60 - 140
1,1,2-Trichloroethane	50.0	47.0		ug/Kg		94	78 - 122
1,1-Dichloroethane	50.0	47.9		ug/Kg		96	73 - 126
1,1-Dichloroethene	50.0	47.4		ug/Kg		95	59 - 125
1,2,4-Trichlorobenzene	50.0	52.7		ug/Kg		105	64 - 120
1,2,4-Trimethylbenzene	50.0	47.4		ug/Kg		95	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	54.9		ug/Kg		110	63 - 124
1,2-Dibromoethane	50.0	53.6		ug/Kg		107	78 - 120
1,2-Dichlorobenzene	50.0	48.9		ug/Kg		98	75 - 120
1,2-Dichloroethane	50.0	58.1		ug/Kg		116	77 - 122
1,2-Dichloropropane	50.0	44.6		ug/Kg		89	75 - 124
1,3,5-Trimethylbenzene	50.0	47.6		ug/Kg		95	74 - 120
1,3-Dichlorobenzene	50.0	48.7		ug/Kg		97	74 - 120
1,4-Dichlorobenzene	50.0	49.0		ug/Kg		98	73 - 120
2-Butanone (MEK)	250	244		ug/Kg		98	70 - 134
2-Hexanone	250	246		ug/Kg		99	59 - 130
4-Methyl-2-pentanone (MIBK)	250	241		ug/Kg		96	65 - 133
Acetone	250	245		ug/Kg		98	61 - 137
Benzene	50.0	45.2		ug/Kg		90	79 - 127
Bromodichloromethane	50.0	60.1		ug/Kg		120	80 - 122
Bromoform	50.0	77.7	*+	ug/Kg		155	68 - 126
Bromomethane	50.0	49.1		ug/Kg		98	37 - 149
Carbon disulfide	50.0	44.3		ug/Kg		89	64 - 131

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-635335/1-A
Matrix: Solid
Analysis Batch: 635513

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635335

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon tetrachloride	50.0	66.3		ug/Kg		133	75 - 135
Chlorobenzene	50.0	52.4		ug/Kg		105	76 - 124
Chloroethane	50.0	36.0		ug/Kg		72	69 - 135
Chloroform	50.0	51.2		ug/Kg		102	80 - 120
Chloromethane	50.0	48.7		ug/Kg		97	63 - 127
cis-1,2-Dichloroethene	50.0	48.7		ug/Kg		97	81 - 120
cis-1,3-Dichloropropene	50.0	50.2		ug/Kg		100	80 - 120
Cyclohexane	50.0	43.6		ug/Kg		87	65 - 120
Dibromochloromethane	50.0	70.8	*+	ug/Kg		142	76 - 125
Dichlorodifluoromethane	50.0	54.2		ug/Kg		108	57 - 142
Ethylbenzene	50.0	49.9		ug/Kg		100	80 - 120
Isopropylbenzene	50.0	46.1		ug/Kg		92	72 - 120
m,p-Xylene	50.0	51.1		ug/Kg		102	70 - 130
Methyl acetate	100	90.4		ug/Kg		90	55 - 136
Methyl tert-butyl ether	50.0	47.0		ug/Kg		94	63 - 125
Methylcyclohexane	50.0	42.9		ug/Kg		86	60 - 140
Methylene Chloride	50.0	48.7		ug/Kg		97	61 - 127
n-Butylbenzene	50.0	44.3		ug/Kg		89	70 - 120
N-Propylbenzene	50.0	43.9		ug/Kg		88	70 - 130
o-Xylene	50.0	51.3		ug/Kg		103	70 - 130
sec-Butylbenzene	50.0	46.2		ug/Kg		92	74 - 120
Styrene	50.0	50.7		ug/Kg		101	80 - 120
tert-Butylbenzene	50.0	50.1		ug/Kg		100	73 - 120
Tetrachloroethene	50.0	58.7		ug/Kg		117	74 - 122
Toluene	50.0	47.5		ug/Kg		95	74 - 128
trans-1,2-Dichloroethene	50.0	49.1		ug/Kg		98	78 - 126
trans-1,3-Dichloropropene	50.0	52.5		ug/Kg		105	73 - 123
Trichloroethene	50.0	51.5		ug/Kg		103	77 - 129
Trichlorofluoromethane	50.0	60.4		ug/Kg		121	65 - 146
Vinyl chloride	50.0	37.9		ug/Kg		76	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*64 - 126*
4-Bromofluorobenzene (Surr)	*110*		*72 - 126*
Dibromofluoromethane (Surr)	*112*		*60 - 140*
Toluene-d8 (Surr)	*97*		*71 - 125*

Lab Sample ID: LCSD 480-635335/2-A
Matrix: Solid
Analysis Batch: 635513

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 635335

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	50.0	59.9		ug/Kg		120	74 - 127	3	20
1,1,1-Trichloroethane	50.0	56.6		ug/Kg		113	77 - 121	6	20
1,1,2,2-Tetrachloroethane	50.0	41.5		ug/Kg		83	80 - 120	2	20
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	43.0		ug/Kg		86	60 - 140	6	20
1,1,2-Trichloroethane	50.0	46.1		ug/Kg		92	78 - 122	2	20
1,1-Dichloroethane	50.0	44.9		ug/Kg		90	73 - 126	7	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 480-635335/2-A
Matrix: Solid
Analysis Batch: 635513

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 635335

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	50.0	44.7		ug/Kg		89	59 - 125	6	20
1,2,4-Trichlorobenzene	50.0	50.7		ug/Kg		101	64 - 120	4	20
1,2,4-Trimethylbenzene	50.0	44.2		ug/Kg		88	74 - 120	7	20
1,2-Dibromo-3-Chloropropane	50.0	54.5		ug/Kg		109	63 - 124	1	20
1,2-Dibromoethane	50.0	52.6		ug/Kg		105	78 - 120	2	20
1,2-Dichlorobenzene	50.0	47.0		ug/Kg		94	75 - 120	4	20
1,2-Dichloroethane	50.0	56.8		ug/Kg		114	77 - 122	2	20
1,2-Dichloropropane	50.0	43.5		ug/Kg		87	75 - 124	3	20
1,3,5-Trimethylbenzene	50.0	44.6		ug/Kg		89	74 - 120	7	20
1,3-Dichlorobenzene	50.0	46.9		ug/Kg		94	74 - 120	4	20
1,4-Dichlorobenzene	50.0	46.3		ug/Kg		93	73 - 120	6	20
2-Butanone (MEK)	250	231		ug/Kg		92	70 - 134	5	20
2-Hexanone	250	241		ug/Kg		96	59 - 130	2	20
4-Methyl-2-pentanone (MIBK)	250	239		ug/Kg		96	65 - 133	1	20
Acetone	250	220		ug/Kg		88	61 - 137	11	20
Benzene	50.0	43.6		ug/Kg		87	79 - 127	4	20
Bromodichloromethane	50.0	58.0		ug/Kg		116	80 - 122	4	20
Bromoform	50.0	76.5	*+	ug/Kg		153	68 - 126	2	20
Bromomethane	50.0	47.1		ug/Kg		94	37 - 149	4	20
Carbon disulfide	50.0	41.0		ug/Kg		82	64 - 131	8	20
Carbon tetrachloride	50.0	63.2		ug/Kg		126	75 - 135	5	20
Chlorobenzene	50.0	50.5		ug/Kg		101	76 - 124	4	20
Chloroethane	50.0	35.3		ug/Kg		71	69 - 135	2	20
Chloroform	50.0	49.8		ug/Kg		100	80 - 120	3	20
Chloromethane	50.0	47.1		ug/Kg		94	63 - 127	3	20
cis-1,2-Dichloroethene	50.0	47.4		ug/Kg		95	81 - 120	3	20
cis-1,3-Dichloropropene	50.0	47.8		ug/Kg		96	80 - 120	5	20
Cyclohexane	50.0	42.9		ug/Kg		86	65 - 120	2	20
Dibromochloromethane	50.0	69.8	*+	ug/Kg		140	76 - 125	1	20
Dichlorodifluoromethane	50.0	49.7		ug/Kg		99	57 - 142	9	20
Ethylbenzene	50.0	47.7		ug/Kg		95	80 - 120	5	20
Isopropylbenzene	50.0	43.4		ug/Kg		87	72 - 120	6	20
m,p-Xylene	50.0	48.4		ug/Kg		97	70 - 130	5	20
Methyl acetate	100	87.7		ug/Kg		88	55 - 136	3	20
Methyl tert-butyl ether	50.0	46.9		ug/Kg		94	63 - 125	0	20
Methylcyclohexane	50.0	41.1		ug/Kg		82	60 - 140	4	20
Methylene Chloride	50.0	47.6		ug/Kg		95	61 - 127	2	20
n-Butylbenzene	50.0	40.8		ug/Kg		82	70 - 120	8	20
N-Propylbenzene	50.0	40.7		ug/Kg		81	70 - 130	8	20
o-Xylene	50.0	48.3		ug/Kg		97	70 - 130	6	20
sec-Butylbenzene	50.0	42.8		ug/Kg		86	74 - 120	8	20
Styrene	50.0	48.2		ug/Kg		96	80 - 120	5	20
tert-Butylbenzene	50.0	46.6		ug/Kg		93	73 - 120	7	20
Tetrachloroethene	50.0	54.5		ug/Kg		109	74 - 122	7	20
Toluene	50.0	44.8		ug/Kg		90	74 - 128	6	20
trans-1,2-Dichloroethene	50.0	46.3		ug/Kg		93	78 - 126	6	20
trans-1,3-Dichloropropene	50.0	51.7		ug/Kg		103	73 - 123	2	20
Trichloroethene	50.0	49.3		ug/Kg		99	77 - 129	4	20
Trichlorofluoromethane	50.0	57.1		ug/Kg		114	65 - 146	6	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 480-635335/2-A
Matrix: Solid
Analysis Batch: 635513

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 635335

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Vinyl chloride			50.0	35.4		ug/Kg		71	61 - 133	7	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*112*		*64 - 126*
4-Bromofluorobenzene (Surr)	*114*		*72 - 126*
Dibromofluoromethane (Surr)	*117*		*60 - 140*
Toluene-d8 (Surr)	*98*		*71 - 125*

Lab Sample ID: MB 480-635770/2-A
Matrix: Solid
Analysis Batch: 635772

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635770

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.50	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
1,2,3-Trimethylbenzene	ND		5.0	1.0	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
2-Hexanone	ND		25	2.5	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
Acetone	ND		25	4.2	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
Benzene	ND		5.0	0.25	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
Bromoform	ND		5.0	2.5	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
Bromomethane	ND		5.0	0.45	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
Chloroethane	ND		5.0	1.1	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
Chloroform	ND		5.0	0.31	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
Chloromethane	ND		5.0	0.30	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
Cyclohexane	ND		5.0	0.70	ug/Kg		08/01/22 17:20	08/01/22 21:23	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-635770/2-A
Matrix: Solid
Analysis Batch: 635772

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635770

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		5.0	0.64	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
m,p-Xylene	ND		10	0.84	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
Methyl acetate	ND		25	3.0	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
o-Xylene	ND		5.0	0.65	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
Styrene	ND		5.0	0.25	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
Toluene	ND		5.0	0.38	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
Trichloroethene	ND		5.0	1.1	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		08/01/22 17:20	08/01/22 21:23	1
Xylenes, Total	ND		10	0.84	ug/Kg		08/01/22 17:20	08/01/22 21:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*64 - 126*	*08/01/22 17:20*	*08/01/22 21:23*	*1*
4-Bromofluorobenzene (Surr)	*115*		*72 - 126*	*08/01/22 17:20*	*08/01/22 21:23*	*1*
Dibromofluoromethane (Surr)	*123*		*60 - 140*	*08/01/22 17:20*	*08/01/22 21:23*	*1*
Toluene-d8 (Surr)	*97*		*71 - 125*	*08/01/22 17:20*	*08/01/22 21:23*	*1*

Lab Sample ID: LCS 480-635770/1-A
Matrix: Solid
Analysis Batch: 635772

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635770

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	62.0		ug/Kg		124	74 - 127
1,1,1-Trichloroethane	50.0	59.5		ug/Kg		119	77 - 121
1,1,2,2-Tetrachloroethane	50.0	40.2		ug/Kg		80	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	49.3		ug/Kg		99	60 - 140
1,1,2-Trichloroethane	50.0	45.1		ug/Kg		90	78 - 122
1,1-Dichloroethane	50.0	45.7		ug/Kg		91	73 - 126
1,1-Dichloroethene	50.0	46.0		ug/Kg		92	59 - 125
1,2,4-Trichlorobenzene	50.0	49.2		ug/Kg		98	64 - 120
1,2,4-Trimethylbenzene	50.0	43.2		ug/Kg		86	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	54.0		ug/Kg		108	63 - 124
1,2-Dibromoethane	50.0	51.2		ug/Kg		102	78 - 120
1,2-Dichlorobenzene	50.0	46.7		ug/Kg		93	75 - 120
1,2-Dichloroethane	50.0	55.4		ug/Kg		111	77 - 122

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-635770/1-A
Matrix: Solid
Analysis Batch: 635772

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635770

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichloropropane	50.0	43.0		ug/Kg		86	75 - 124
1,3,5-Trimethylbenzene	50.0	43.1		ug/Kg		86	74 - 120
1,3-Dichlorobenzene	50.0	45.9		ug/Kg		92	74 - 120
1,4-Dichlorobenzene	50.0	45.7		ug/Kg		91	73 - 120
2-Butanone (MEK)	250	217		ug/Kg		87	70 - 134
2-Hexanone	250	231		ug/Kg		92	59 - 130
4-Methyl-2-pentanone (MIBK)	250	233		ug/Kg		93	65 - 133
Acetone	250	207		ug/Kg		83	61 - 137
Benzene	50.0	44.0		ug/Kg		88	79 - 127
Bromodichloromethane	50.0	58.8		ug/Kg		118	80 - 122
Bromoform	50.0	76.1	*+	ug/Kg		152	68 - 126
Bromomethane	50.0	48.2		ug/Kg		96	37 - 149
Carbon disulfide	50.0	42.4		ug/Kg		85	64 - 131
Carbon tetrachloride	50.0	68.6	*+	ug/Kg		137	75 - 135
Chlorobenzene	50.0	49.5		ug/Kg		99	76 - 124
Chloroethane	50.0	36.2		ug/Kg		72	69 - 135
Chloroform	50.0	50.4		ug/Kg		101	80 - 120
Chloromethane	50.0	44.5		ug/Kg		89	63 - 127
cis-1,2-Dichloroethene	50.0	46.1		ug/Kg		92	81 - 120
cis-1,3-Dichloropropene	50.0	45.7		ug/Kg		91	80 - 120
Cyclohexane	50.0	44.1		ug/Kg		88	65 - 120
Dibromochloromethane	50.0	68.2	*+	ug/Kg		136	76 - 125
Dichlorodifluoromethane	50.0	55.5		ug/Kg		111	57 - 142
Ethylbenzene	50.0	46.4		ug/Kg		93	80 - 120
Isopropylbenzene	50.0	42.8		ug/Kg		86	72 - 120
m,p-Xylene	50.0	48.1		ug/Kg		96	70 - 130
Methyl acetate	100	84.5		ug/Kg		85	55 - 136
Methyl tert-butyl ether	50.0	47.1		ug/Kg		94	63 - 125
Methylcyclohexane	50.0	44.6		ug/Kg		89	60 - 140
Methylene Chloride	50.0	47.5		ug/Kg		95	61 - 127
n-Butylbenzene	50.0	39.9		ug/Kg		80	70 - 120
N-Propylbenzene	50.0	40.3		ug/Kg		81	70 - 130
o-Xylene	50.0	47.8		ug/Kg		96	70 - 130
sec-Butylbenzene	50.0	42.5		ug/Kg		85	74 - 120
Styrene	50.0	47.1		ug/Kg		94	80 - 120
tert-Butylbenzene	50.0	46.6		ug/Kg		93	73 - 120
Tetrachloroethene	50.0	55.9		ug/Kg		112	74 - 122
Toluene	50.0	44.4		ug/Kg		89	74 - 128
trans-1,2-Dichloroethene	50.0	47.9		ug/Kg		96	78 - 126
trans-1,3-Dichloropropene	50.0	48.9		ug/Kg		98	73 - 123
Trichloroethene	50.0	49.4		ug/Kg		99	77 - 129
Trichlorofluoromethane	50.0	62.4		ug/Kg		125	65 - 146
Vinyl chloride	50.0	35.5		ug/Kg		71	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*111*		*64 - 126*
4-Bromofluorobenzene (Surr)	*117*		*72 - 126*
Dibromofluoromethane (Surr)	*120*		*60 - 140*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-635770/1-A
Matrix: Solid
Analysis Batch: 635772

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635770

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	98		71 - 125

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-635559/1-A
Matrix: Solid
Analysis Batch: 635875

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635559

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		170	45	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
2,4,6-Trichlorophenol	ND		170	33	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
2,4-Dimethylphenol	ND		170	40	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
2,4-Dinitrophenol	ND		1600	760	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
2,4-Dinitrotoluene	ND		170	34	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
2,6-Dinitrotoluene	ND		170	19	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
2-Chloronaphthalene	ND		170	27	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
2-Chlorophenol	ND		320	30	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
2-Methylnaphthalene	ND		170	33	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
2-Methylphenol	ND		170	19	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
2-Nitroaniline	ND		320	24	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
2-Nitrophenol	ND		170	47	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
3,3'-Dichlorobenzidine	ND		320	190	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
3-Nitroaniline	ND		320	46	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
4,6-Dinitro-2-methylphenol	ND		320	170	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
4-Bromophenyl phenyl ether	ND		170	23	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
4-Chloro-3-methylphenol	ND		170	41	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
4-Chloroaniline	ND		170	41	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
4-Chlorophenyl phenyl ether	ND		170	20	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
4-Methylphenol	ND		320	19	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
4-Nitroaniline	ND		320	87	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
4-Nitrophenol	ND		320	120	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Acenaphthene	ND		170	24	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Acenaphthylene	ND		170	21	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Acetophenone	ND		170	22	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Anthracene	ND		170	41	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Atrazine	ND		170	57	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Benzaldehyde	ND		170	130	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Benzo[a]anthracene	ND		170	17	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Benzo[a]pyrene	ND		170	24	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Benzo[b]fluoranthene	ND		170	26	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Benzo[k]fluoranthene	ND		170	21	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Biphenyl	ND		170	24	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
bis (2-chloroisopropyl) ether	ND		170	33	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Bis(2-chloroethoxy)methane	ND		170	35	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Bis(2-chloroethyl)ether	ND		170	21	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Bis(2-ethylhexyl) phthalate	ND		170	56	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Butyl benzyl phthalate	ND		170	27	ug/Kg		07/29/22 15:47	08/02/22 19:41	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-635559/1-A
Matrix: Solid
Analysis Batch: 635875

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635559

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Caprolactam	ND		170	50	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Carbazole	ND		170	19	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Chrysene	ND		170	37	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Dibenz(a,h)anthracene	ND		170	29	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Dibenzofuran	ND		170	19	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Diethyl phthalate	ND		170	21	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Dimethyl phthalate	ND		170	19	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Di-n-butyl phthalate	ND		170	28	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Di-n-octyl phthalate	ND		170	19	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Fluoranthene	ND		170	18	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Fluorene	ND		170	19	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Hexachlorobenzene	ND		170	22	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Hexachlorobutadiene	ND		170	24	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Hexachlorocyclopentadiene	ND		170	22	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Hexachloroethane	ND		170	21	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Indeno[1,2,3-cd]pyrene	ND		170	20	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Isophorone	ND		170	35	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Naphthalene	ND		170	21	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Nitrobenzene	ND		170	18	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
N-Nitrosodi-n-propylamine	ND		170	28	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
N-Nitrosodiphenylamine	ND		170	130	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Pentachlorophenol	ND		320	170	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Phenanthrene	ND		170	24	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Phenol	ND		170	25	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Pyrene	ND		170	19	ug/Kg		07/29/22 15:47	08/02/22 19:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*95*		*54 - 120*	*07/29/22 15:47*	*08/02/22 19:41*	*1*
2-Fluorobiphenyl	*80*		*60 - 120*	*07/29/22 15:47*	*08/02/22 19:41*	*1*
2-Fluorophenol	*68*		*52 - 120*	*07/29/22 15:47*	*08/02/22 19:41*	*1*
Nitrobenzene-d5	*67*		*53 - 120*	*07/29/22 15:47*	*08/02/22 19:41*	*1*
Phenol-d5	*73*		*54 - 120*	*07/29/22 15:47*	*08/02/22 19:41*	*1*
p-Terphenyl-d14	*97*		*79 - 130*	*07/29/22 15:47*	*08/02/22 19:41*	*1*

Lab Sample ID: LCS 480-635559/2-A
Matrix: Solid
Analysis Batch: 636030

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635559

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	1640	1350		ug/Kg		82	59 - 126
2,4,6-Trichlorophenol	1640	1360		ug/Kg		83	59 - 123
2,4-Dichlorophenol	1640	1350		ug/Kg		82	61 - 120
2,4-Dimethylphenol	1640	1250		ug/Kg		76	59 - 120
2,4-Dinitrophenol	3280	2680		ug/Kg		82	41 - 146
2,4-Dinitrotoluene	1640	1380		ug/Kg		84	63 - 120
2,6-Dinitrotoluene	1640	1310		ug/Kg		80	66 - 120
2-Chloronaphthalene	1640	1340		ug/Kg		81	57 - 120
2-Chlorophenol	1640	1200		ug/Kg		73	53 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-635559/2-A
Matrix: Solid
Analysis Batch: 636030

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635559

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Methylnaphthalene	1640	1150		ug/Kg		70	59 - 120
2-Methylphenol	1640	1260		ug/Kg		77	54 - 120
2-Nitroaniline	1640	1290		ug/Kg		79	61 - 120
2-Nitrophenol	1640	1220		ug/Kg		74	56 - 120
3,3'-Dichlorobenzidine	3280	2490		ug/Kg		76	54 - 120
3-Nitroaniline	1640	1100		ug/Kg		67	48 - 120
4,6-Dinitro-2-methylphenol	3280	3070		ug/Kg		94	49 - 122
4-Bromophenyl phenyl ether	1640	1560		ug/Kg		95	58 - 120
4-Chloro-3-methylphenol	1640	1270		ug/Kg		77	61 - 120
4-Chloroaniline	1640	1060		ug/Kg		64	38 - 120
4-Chlorophenyl phenyl ether	1640	1340		ug/Kg		82	63 - 124
4-Methylphenol	1640	1240		ug/Kg		76	55 - 120
4-Nitroaniline	1640	1250		ug/Kg		76	56 - 120
4-Nitrophenol	3280	2530		ug/Kg		77	43 - 147
Acenaphthene	1640	1280		ug/Kg		78	62 - 120
Acenaphthylene	1640	1300		ug/Kg		80	58 - 121
Acetophenone	1640	1210		ug/Kg		74	54 - 120
Anthracene	1640	1480		ug/Kg		90	62 - 120
Atrazine	3280	2850		ug/Kg		87	60 - 127
Benzaldehyde	3280	2440		ug/Kg		74	10 - 150
Benzo[a]anthracene	1640	1470		ug/Kg		90	65 - 120
Benzo[a]pyrene	1640	1480		ug/Kg		90	64 - 120
Benzo[b]fluoranthene	1640	1380		ug/Kg		84	64 - 120
Benzo[g,h,i]perylene	1640	1590		ug/Kg		97	45 - 145
Benzo[k]fluoranthene	1640	1620		ug/Kg		99	65 - 120
Biphenyl	1640	1310		ug/Kg		80	59 - 120
bis (2-chloroisopropyl) ether	1640	1110		ug/Kg		68	44 - 120
Bis(2-chloroethoxy)methane	1640	1170		ug/Kg		71	55 - 120
Bis(2-chloroethyl)ether	1640	1160		ug/Kg		70	45 - 120
Bis(2-ethylhexyl) phthalate	1640	1410		ug/Kg		86	61 - 133
Butyl benzyl phthalate	1640	1430		ug/Kg		87	61 - 129
Caprolactam	3280	2700		ug/Kg		82	47 - 120
Carbazole	1640	1480		ug/Kg		90	65 - 120
Chrysene	1640	1450		ug/Kg		88	64 - 120
Dibenz(a,h)anthracene	1640	1580		ug/Kg		96	54 - 132
Dibenzofuran	1640	1270		ug/Kg		78	63 - 120
Diethyl phthalate	1640	1420		ug/Kg		86	66 - 120
Dimethyl phthalate	1640	1340		ug/Kg		81	65 - 124
Di-n-butyl phthalate	1640	1490		ug/Kg		91	58 - 130
Di-n-octyl phthalate	1640	1430		ug/Kg		87	57 - 133
Fluoranthene	1640	1550		ug/Kg		95	62 - 120
Fluorene	1640	1350		ug/Kg		83	63 - 120
Hexachlorobenzene	1640	1580		ug/Kg		96	60 - 120
Hexachlorobutadiene	1640	1260		ug/Kg		77	45 - 120
Hexachlorocyclopentadiene	1640	1050		ug/Kg		64	47 - 120
Hexachloroethane	1640	1070		ug/Kg		65	41 - 120
Indeno[1,2,3-cd]pyrene	1640	1590		ug/Kg		97	56 - 134
Isophorone	1640	1230		ug/Kg		75	56 - 120
Naphthalene	1640	1220		ug/Kg		74	55 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-635559/2-A
Matrix: Solid
Analysis Batch: 636030

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635559

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrobenzene	1640	1140		ug/Kg		70	54 - 120
N-Nitrosodi-n-propylamine	1640	1130		ug/Kg		69	52 - 120
Pentachlorophenol	3280	2940		ug/Kg		90	51 - 120
Phenanthrene	1640	1410		ug/Kg		86	60 - 120
Phenol	1640	1130		ug/Kg		69	53 - 120
Pyrene	1640	1520		ug/Kg		93	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*89*		*54 - 120*
2-Fluorobiphenyl	*83*		*60 - 120*
2-Fluorophenol	*68*		*52 - 120*
Nitrobenzene-d5	*67*		*53 - 120*
Phenol-d5	*70*		*54 - 120*
p-Terphenyl-d14	*88*		*79 - 130*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-635468/1-A
Matrix: Solid
Analysis Batch: 635981

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635468

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		9.8	4.3	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Antimony	ND		14.7	0.39	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Arsenic	ND		2.0	0.39	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Barium	ND		0.49	0.11	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Beryllium	ND		0.20	0.027	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Cadmium	ND		0.20	0.029	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Calcium	ND		49.1	3.2	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Chromium	ND		0.49	0.20	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Cobalt	ND		0.49	0.049	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Copper	ND		0.98	0.21	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Iron	ND		9.8	3.4	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Lead	ND		0.98	0.24	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Magnesium	1.11	J	19.6	0.91	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Manganese	0.0510	J	0.20	0.031	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Nickel	ND		4.9	0.23	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Potassium	ND		29.4	19.6	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Selenium	0.686	J	3.9	0.39	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Silver	ND		0.59	0.20	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Sodium	ND		137	12.8	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Thallium	ND		5.9	0.29	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Vanadium	ND		0.49	0.11	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Zinc	ND		2.0	0.63	mg/Kg		08/01/22 11:03	08/02/22 14:51	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-635468/2-A
Matrix: Solid
Analysis Batch: 635981

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635468

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	8630	7431		mg/Kg		86.1	50.6 - 149.5
Antimony	129	192.0		mg/Kg		148.9	19.8 - 250.4
Arsenic	84.5	74.95		mg/Kg		88.7	70.1 - 130.2
Barium	249	214.4		mg/Kg		86.1	75.1 - 124.9
Beryllium	163	142.1		mg/Kg		87.2	74.8 - 125.2
Cadmium	99.0	88.95		mg/Kg		89.8	74.9 - 125.3
Calcium	4760	4128		mg/Kg		86.7	72.7 - 127.5
Chromium	122	107.1		mg/Kg		87.8	70.2 - 130.3
Cobalt	61.7	59.73		mg/Kg		96.8	75.0 - 125.1
Copper	61.5	54.20		mg/Kg		88.1	75.0 - 124.9
Iron	14500	14260		mg/Kg		98.4	35.8 - 164.1
Lead	123	118.1		mg/Kg		96.0	71.8 - 128.5
Magnesium	2360	2174		mg/Kg		92.1	62.7 - 137.7
Manganese	456	410.8		mg/Kg		90.1	76.8 - 123.5
Nickel	135	129.4		mg/Kg		95.9	70.1 - 130.4
Potassium	2090	1791		mg/Kg		85.7	59.3 - 140.7
Selenium	121	105.6		mg/Kg		87.3	66.4 - 133.9
Silver	33.6	36.83		mg/Kg		109.6	68.5 - 131.3
Sodium	136	123.9	J	mg/Kg		91.1	35.4 - 164.0
Thallium	144	142.2		mg/Kg		98.8	70.1 - 129.9
Vanadium	186	165.2		mg/Kg		88.8	74.2 - 126.3
Zinc	295	266.3		mg/Kg		90.3	70.2 - 130.2

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-635740/1-A
Matrix: Solid
Analysis Batch: 635900

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635740

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0046	mg/Kg		08/02/22 09:35	08/02/22 14:20	1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: LCSSRM 480-635740/2-A ^10
Matrix: Solid
Analysis Batch: 635900

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635740

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			18.9	23.02		mg/Kg		121.8	59.8 - 139.7		

Lab Sample ID: 480-200130-2 MS
Matrix: Solid
Analysis Batch: 635900

Client Sample ID: SB5 (0.5-1)
Prep Type: Total/NA
Prep Batch: 635740

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	0.22		0.352	0.588		mg/Kg	☼	106	80 - 120		

Lab Sample ID: 480-200130-2 MSD
Matrix: Solid
Analysis Batch: 635900

Client Sample ID: SB5 (0.5-1)
Prep Type: Total/NA
Prep Batch: 635740

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.22		0.357	0.612		mg/Kg	☼	111	80 - 120	4	20

QC Association Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200130-1

GC/MS VOA

Prep Batch: 635335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200130-4	SB5 (13-15)	Total/NA	Solid	5035A_L	
MB 480-635335/3-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-635335/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	
LCSD 480-635335/2-A	Lab Control Sample Dup	Total/NA	Solid	5035A_L	

Analysis Batch: 635513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200130-4	SB5 (13-15)	Total/NA	Solid	8260C	635335
MB 480-635335/3-A	Method Blank	Total/NA	Solid	8260C	635335
LCS 480-635335/1-A	Lab Control Sample	Total/NA	Solid	8260C	635335
LCSD 480-635335/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	635335

Prep Batch: 635770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200130-1	SB5 (0-0.5)	Total/NA	Solid	5035A_L	
480-200130-2	SB5 (0.5-1)	Total/NA	Solid	5035A_L	
480-200130-3	SB5 (1-2)	Total/NA	Solid	5035A_L	
MB 480-635770/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-635770/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

Analysis Batch: 635772

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200130-1	SB5 (0-0.5)	Total/NA	Solid	8260C	635770
480-200130-2	SB5 (0.5-1)	Total/NA	Solid	8260C	635770
480-200130-3	SB5 (1-2)	Total/NA	Solid	8260C	635770
MB 480-635770/2-A	Method Blank	Total/NA	Solid	8260C	635770
LCS 480-635770/1-A	Lab Control Sample	Total/NA	Solid	8260C	635770

GC/MS Semi VOA

Prep Batch: 635559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200130-1	SB5 (0-0.5)	Total/NA	Solid	3550C	
480-200130-2	SB5 (0.5-1)	Total/NA	Solid	3550C	
480-200130-3	SB5 (1-2)	Total/NA	Solid	3550C	
480-200130-4	SB5 (13-15)	Total/NA	Solid	3550C	
MB 480-635559/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-635559/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 635875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200130-1	SB5 (0-0.5)	Total/NA	Solid	8270D	635559
480-200130-2	SB5 (0.5-1)	Total/NA	Solid	8270D	635559
480-200130-3	SB5 (1-2)	Total/NA	Solid	8270D	635559
480-200130-4	SB5 (13-15)	Total/NA	Solid	8270D	635559
MB 480-635559/1-A	Method Blank	Total/NA	Solid	8270D	635559

Analysis Batch: 636030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-635559/2-A	Lab Control Sample	Total/NA	Solid	8270D	635559

Metals

Prep Batch: 635468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200130-1	SB5 (0-0.5)	Total/NA	Solid	3050B	
480-200130-2	SB5 (0.5-1)	Total/NA	Solid	3050B	
480-200130-3	SB5 (1-2)	Total/NA	Solid	3050B	
480-200130-4	SB5 (13-15)	Total/NA	Solid	3050B	
MB 480-635468/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-635468/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 635740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200130-1	SB5 (0-0.5)	Total/NA	Solid	7471B	
480-200130-2	SB5 (0.5-1)	Total/NA	Solid	7471B	
480-200130-3	SB5 (1-2)	Total/NA	Solid	7471B	
480-200130-4	SB5 (13-15)	Total/NA	Solid	7471B	
MB 480-635740/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-635740/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	
480-200130-2 MS	SB5 (0.5-1)	Total/NA	Solid	7471B	
480-200130-2 MSD	SB5 (0.5-1)	Total/NA	Solid	7471B	

Analysis Batch: 635900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200130-1	SB5 (0-0.5)	Total/NA	Solid	7471B	635740
480-200130-2	SB5 (0.5-1)	Total/NA	Solid	7471B	635740
480-200130-3	SB5 (1-2)	Total/NA	Solid	7471B	635740
480-200130-4	SB5 (13-15)	Total/NA	Solid	7471B	635740
MB 480-635740/1-A	Method Blank	Total/NA	Solid	7471B	635740
LCSSRM 480-635740/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	635740
480-200130-2 MS	SB5 (0.5-1)	Total/NA	Solid	7471B	635740
480-200130-2 MSD	SB5 (0.5-1)	Total/NA	Solid	7471B	635740

Analysis Batch: 635981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200130-1	SB5 (0-0.5)	Total/NA	Solid	6010C	635468
480-200130-2	SB5 (0.5-1)	Total/NA	Solid	6010C	635468
480-200130-3	SB5 (1-2)	Total/NA	Solid	6010C	635468
480-200130-4	SB5 (13-15)	Total/NA	Solid	6010C	635468
MB 480-635468/1-A	Method Blank	Total/NA	Solid	6010C	635468
LCSSRM 480-635468/2-A	Lab Control Sample	Total/NA	Solid	6010C	635468

Analysis Batch: 636161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200130-4	SB5 (13-15)	Total/NA	Solid	6010C	635468

General Chemistry

Analysis Batch: 635192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200130-1	SB5 (0-0.5)	Total/NA	Solid	Moisture	
480-200130-2	SB5 (0.5-1)	Total/NA	Solid	Moisture	
480-200130-3	SB5 (1-2)	Total/NA	Solid	Moisture	
480-200130-4	SB5 (13-15)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200130-1

Client Sample ID: SB5 (0-0.5)
Date Collected: 07/25/22 15:32
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200130-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	635192	07/27/22 16:25	KER	EETNE BUF

Client Sample ID: SB5 (0-0.5)
Date Collected: 07/25/22 15:32
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200130-1
Matrix: Solid
Percent Solids: 86.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			635770	07/27/22 14:00	CDC	EETNE BUF
Total/NA	Analysis	8260C		1	635772	08/01/22 21:50	CDC	EETNE BUF
Total/NA	Prep	3550C			635559	07/29/22 15:47	SJM	EETNE BUF
Total/NA	Analysis	8270D		1	635875	08/02/22 22:05	PJQ	EETNE BUF
Total/NA	Prep	3050B			635468	08/01/22 11:03	NZG	EETNE BUF
Total/NA	Analysis	6010C		1	635981	08/02/22 14:59	BMB	EETNE BUF
Total/NA	Prep	7471B			635740	08/02/22 09:35	NVK	EETNE BUF
Total/NA	Analysis	7471B		1	635900	08/02/22 14:23	NVK	EETNE BUF

Client Sample ID: SB5 (0.5-1)
Date Collected: 07/25/22 16:18
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200130-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	635192	07/27/22 16:25	KER	EETNE BUF

Client Sample ID: SB5 (0.5-1)
Date Collected: 07/25/22 16:18
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200130-2
Matrix: Solid
Percent Solids: 96.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			635770	07/27/22 14:00	CDC	EETNE BUF
Total/NA	Analysis	8260C		1	635772	08/01/22 22:14	CDC	EETNE BUF
Total/NA	Prep	3550C			635559	07/29/22 15:47	SJM	EETNE BUF
Total/NA	Analysis	8270D		20	635875	08/02/22 22:29	PJQ	EETNE BUF
Total/NA	Prep	3050B			635468	08/01/22 11:03	NZG	EETNE BUF
Total/NA	Analysis	6010C		1	635981	08/02/22 15:03	BMB	EETNE BUF
Total/NA	Prep	7471B			635740	08/02/22 09:35	NVK	EETNE BUF
Total/NA	Analysis	7471B		1	635900	08/02/22 14:24	NVK	EETNE BUF

Client Sample ID: SB5 (1-2)
Date Collected: 07/25/22 16:10
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200130-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	635192	07/27/22 16:25	KER	EETNE BUF

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200130-1

Client Sample ID: SB5 (1-2)

Date Collected: 07/25/22 16:10
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200130-3

Matrix: Solid
Percent Solids: 91.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			635770	07/27/22 14:00	CDC	EETNE BUF
Total/NA	Analysis	8260C		1	635772	08/01/22 22:38	CDC	EETNE BUF
Total/NA	Prep	3550C			635559	07/29/22 15:47	SJM	EETNE BUF
Total/NA	Analysis	8270D		1	635875	08/02/22 22:54	PJQ	EETNE BUF
Total/NA	Prep	3050B			635468	08/01/22 11:03	NZG	EETNE BUF
Total/NA	Analysis	6010C		1	635981	08/02/22 15:06	BMB	EETNE BUF
Total/NA	Prep	7471B			635740	08/02/22 09:35	NVK	EETNE BUF
Total/NA	Analysis	7471B		1	635900	08/02/22 14:30	NVK	EETNE BUF

Client Sample ID: SB5 (13-15)

Date Collected: 07/25/22 16:05
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200130-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	635192	07/27/22 16:25	KER	EETNE BUF

Client Sample ID: SB5 (13-15)

Date Collected: 07/25/22 16:05
Date Received: 07/27/22 10:00

Lab Sample ID: 480-200130-4

Matrix: Solid
Percent Solids: 76.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			635335	07/27/22 14:00	AXK	EETNE BUF
Total/NA	Analysis	8260C		1	635513	07/29/22 19:01	CDC	EETNE BUF
Total/NA	Prep	3550C			635559	07/29/22 15:47	SJM	EETNE BUF
Total/NA	Analysis	8270D		1	635875	08/02/22 23:18	PJQ	EETNE BUF
Total/NA	Prep	3050B			635468	08/01/22 11:03	NZG	EETNE BUF
Total/NA	Analysis	6010C		1	635981	08/02/22 16:16	BMB	EETNE BUF
Total/NA	Prep	3050B			635468	08/01/22 11:03	NZG	EETNE BUF
Total/NA	Analysis	6010C		1	636161	08/03/22 15:42	BMB	EETNE BUF
Total/NA	Prep	7471B			635740	08/02/22 09:35	NVK	EETNE BUF
Total/NA	Analysis	7471B		1	635900	08/02/22 14:31	NVK	EETNE BUF

Laboratory References:

EETNE BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200130-1

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260C	5035A_L	Solid	1,2,3-Trimethylbenzene
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200130-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EETNE BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	EETNE BUF
6010C	Metals (ICP)	SW846	EETNE BUF
7471B	Mercury (CVAA)	SW846	EETNE BUF
Moisture	Percent Moisture	EPA	EETNE BUF
3050B	Preparation, Metals	SW846	EETNE BUF
3550C	Ultrasonic Extraction	SW846	EETNE BUF
5035A_L	Closed System Purge and Trap	SW846	EETNE BUF
7471B	Preparation, Mercury	SW846	EETNE BUF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EETNE BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200130-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-200130-1	SB5 (0-0.5)	Solid	07/25/22 15:32	07/27/22 10:00
480-200130-2	SB5 (0.5-1)	Solid	07/25/22 16:18	07/27/22 10:00
480-200130-3	SB5 (1-2)	Solid	07/25/22 16:10	07/27/22 10:00
480-200130-4	SB5 (13-15)	Solid	07/25/22 16:05	07/27/22 10:00

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing America

Syracuse #225

Client Information	Sampler: K. Zatwarnicki	Lab PM: Beninati, John	Carrier Tracking No(s):	COC No: 480-175095-37696.3
Client Contact: Mr. Glenn Esler	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin:	Page: Page 3 of 4
Company: Integral Consulting Inc	PWSID:	Analysis Requested		Job #:
Address: 319 SW Washington Ave Suite 1150	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
City: Portland	TAT Requested (days): Per Quote			
State, Zip: OR, 97204	Compliance Project: Δ Yes Δ No			
Phone: 503-943-3617(Tel)	PO #: Purchase Order not required			
Email: gesler@integral-corp.com	WO #:			
Project Name: EF1017 - Refractories - Soil Boring	Project #: 48025298			
Site:	SSOW#:			Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs (LL)	6010C, 7471B	8270D - TCL SVOCs - to include 1,4 Dioxane	PFC_IDA - PFAS - NY 21 Analytes	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N		
SB5 (0-0.5)	7/25/22	1532	G	Solid	N	N	1	1	1			(1 terracore kit)
SB5 (0.5-1)	↓	1618	↓	Solid			↓	↓	↓			
SB5 (1-2)		1610		Solid								
SB5 (13-15)		1605		Solid								
				Solid								
				Solid								
				Solid								
				Solid								
				Solid								
				Solid								
				Solid								

480-200130 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) NYSDEC Cat B / Integral-Specific EDD

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: Fed ex

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Katelyn Zatwarnicki	7/26/22 1800	Integral	Caballero	7/27/22 1000	TAB

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: #1 3.2

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Integral Consulting Inc

Job Number: 480-200130-1

Login Number: 200130
List Number: 1
Creator: Kolb, Chris M

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	INTEGRAL
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-200156-1
Client Project/Site: EF1017 - Refractories

For:
Integral Consulting Inc
319 SW Washington Ave
Suite 1150
Portland, Oregon 97204

Attn: Mr. Glenn Esler

Authorized for release by:
8/12/2022 10:52:14 AM

John Beninati, Project Manager
(716)504-9874
John.Beninati@et.eurofinsus.com

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

Visit us at:
www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 5
Detection Summary 7
Client Sample Results 13
Surrogate Summary 55
Isotope Dilution Summary 57
QC Sample Results 59
QC Association Summary 90
Lab Chronicle 96
Certification Summary 102
Method Summary 103
Sample Summary 104
Chain of Custody 105
Receipt Checklists 109

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*3	ISTD response or retention time outside acceptable limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

LCMS

Qualifier	Qualifier Description
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-200156-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-200156-1

Comments
No additional comments.

Receipt
The samples were received on 7/28/2022 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.6º C.

Receipt Exceptions
Method 537 (modified): Due to a FedEx delay, the following samples were received at the laboratory outside the required temperature criteria: SS7 (0-6) (480-200156-8), SS7 (6-12) (480-200156-9), SS7 (12-24) (480-200156-10), SS7 (0-2) (480-200156-11) and FB2_072722 (480-200156-12). This does not meet regulatory requirements. The cooler was received with a corrected temperature of 23.3C. There was water in the cooler to indicate melted ice.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-635938 recovered above the upper control limit for Trichlorofluoromethane. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The associated samples are impacted: SB1 (0.5-1) (480-200156-3), SB1 (1-2) (480-200156-4) and SB1 (15-16) (480-200156-6).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-636094 recovered above the upper control limit for Carbon tetrachloride and Dibromochloromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: SB1 (0-0.5) (480-200156-2), SS7 (0-6) (480-200156-8), SS7 (6-12) (480-200156-9), SS7 (12-24) (480-200156-10) and SS7 (0-2) (480-200156-11).

Method 8260C: The laboratory control sample (LCS) for preparation batch 480-636092 and analytical batch 480-636094 recovered outside control limits for the following analytes: tert-Butylbenzene, Bromoform, Dibromochloromethane and Tetrachloroethene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The associated samples are: SB1 (0-0.5) (480-200156-2), SS7 (0-6) (480-200156-8), SS7 (6-12) (480-200156-9), SS7 (12-24) (480-200156-10) and SS7 (0-2) (480-200156-11)

Method 8260C: Internal standard and/or surrogate responses for the following samples were outside control limits: SS7 (0-6) (480-200156-8), SS7 (6-12) (480-200156-9), SS7 (12-24) (480-200156-10) and SS7 (0-2) (480-200156-11). The samples were re-analyzed and responses were outside control limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270D: The laboratory control sample (LCS) for preparation batch 480-635534 and analytical batch 480-635707 recovered outside control limits for the following analytes: 4-Nitroaniline and Carbazole. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270D: The following samples were diluted due to color and appearance: SS7 (6-12) (480-200156-9) and SS7 (12-24) (480-200156-10). Elevated reporting limits (RL) are provided.

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-636030 recovered above the upper control limit for Pentachlorophenol. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: SB1 (0-0.5) (480-200156-2), SB1 (0.5-1) (480-200156-3), SB1 (1-2) (480-200156-4), SB1 (15-16) (480-200156-5), SS7 (0-6) (480-200156-8), SS7 (6-12) (480-200156-9), SS7 (12-24) (480-200156-10) and SS7 (0-2) (480-200156-11).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Job ID: 480-200156-1 (Continued)

Laboratory: Eurofins Buffalo (Continued)

Metals

Method 6010C: The low level continuing calibration verification (CCVL) for analytical batch 480-636329 recovered above the upper control limit for (Potassium). The sample associated with this CCVL contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of samples SS7 (0-2) (480-200156-11) was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

LCMS

Method 537 (modified): Method 537 (modified): The “I” qualifier associated with samples SS7 (0-6) (480-200156-8) and SS7 (0-2) (480-200156-11) is applied because the transition mass ratio for the indicated analyte(s) was outside of the established ratio limits. The qualitative identification has some degree of uncertainty, however analyst judgment was used to positively identify the analyte(s).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200156-1

Client Sample ID: FB_072722 — Lab Sample ID: 480-200156-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	0.0011	J	0.0040	0.0010	mg/L	1		6010C	Total/NA

Client Sample ID: SB1 (0-0.5) — Lab Sample ID: 480-200156-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	84	J	190	64	ug/Kg	1	☼	8270D	Total/NA
Aluminum	8980		13.2	5.8	mg/Kg	1	☼	6010C	Total/NA
Antimony	3.9	J	19.8	0.53	mg/Kg	1	☼	6010C	Total/NA
Arsenic	7.4		2.6	0.53	mg/Kg	1	☼	6010C	Total/NA
Barium	137		0.66	0.15	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.42		0.26	0.037	mg/Kg	1	☼	6010C	Total/NA
Cadmium	11.6		0.26	0.040	mg/Kg	1	☼	6010C	Total/NA
Calcium	6080		66.0	4.4	mg/Kg	1	☼	6010C	Total/NA
Chromium	15.2		0.66	0.26	mg/Kg	1	☼	6010C	Total/NA
Cobalt	9.6		0.66	0.066	mg/Kg	1	☼	6010C	Total/NA
Copper	21.4		1.3	0.28	mg/Kg	1	☼	6010C	Total/NA
Iron	20000		13.2	4.6	mg/Kg	1	☼	6010C	Total/NA
Lead	186		1.3	0.32	mg/Kg	1	☼	6010C	Total/NA
Magnesium	4080	B	26.4	1.2	mg/Kg	1	☼	6010C	Total/NA
Manganese	559	B	0.26	0.042	mg/Kg	1	☼	6010C	Total/NA
Nickel	23.1		6.6	0.30	mg/Kg	1	☼	6010C	Total/NA
Potassium	870		39.6	26.4	mg/Kg	1	☼	6010C	Total/NA
Selenium	1.1	J B	5.3	0.53	mg/Kg	1	☼	6010C	Total/NA
Silver	0.52	J	0.79	0.26	mg/Kg	1	☼	6010C	Total/NA
Sodium	172	J	185	17.1	mg/Kg	1	☼	6010C	Total/NA
Vanadium	14.0		0.66	0.15	mg/Kg	1	☼	6010C	Total/NA
Zinc	297		2.6	0.84	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.22		0.022	0.0051	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB1 (0.5-1) — Lab Sample ID: 480-200156-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.35	J	4.4	0.33	ug/Kg	1	☼	8260C	Total/NA
Aluminum	9170		11.5	5.1	mg/Kg	1	☼	6010C	Total/NA
Antimony	1.4	J	17.3	0.46	mg/Kg	1	☼	6010C	Total/NA
Arsenic	7.9		2.3	0.46	mg/Kg	1	☼	6010C	Total/NA
Barium	125		0.58	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.47		0.23	0.032	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.47		0.23	0.035	mg/Kg	1	☼	6010C	Total/NA
Calcium	1960		57.5	3.8	mg/Kg	1	☼	6010C	Total/NA
Chromium	11.3		0.58	0.23	mg/Kg	1	☼	6010C	Total/NA
Cobalt	8.3		0.58	0.058	mg/Kg	1	☼	6010C	Total/NA
Copper	10.6		1.2	0.24	mg/Kg	1	☼	6010C	Total/NA
Iron	18600		11.5	4.0	mg/Kg	1	☼	6010C	Total/NA
Lead	17.8		1.2	0.28	mg/Kg	1	☼	6010C	Total/NA
Magnesium	3110	B	23.0	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	585	B	0.23	0.037	mg/Kg	1	☼	6010C	Total/NA
Nickel	18.7		5.8	0.26	mg/Kg	1	☼	6010C	Total/NA
Potassium	1030		34.5	23.0	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.64	J B	4.6	0.46	mg/Kg	1	☼	6010C	Total/NA
Sodium	123	J	161	15.0	mg/Kg	1	☼	6010C	Total/NA
Vanadium	13.1		0.58	0.13	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB1 (0.5-1) (Continued) — Lab Sample ID: 480-200156-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	66.4		2.3	0.74	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.042		0.025	0.0057	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB1 (1-2) — Lab Sample ID: 480-200156-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	8530		11.9	5.3	mg/Kg	1	☼	6010C	Total/NA
Antimony	1.1	J	17.9	0.48	mg/Kg	1	☼	6010C	Total/NA
Arsenic	6.8		2.4	0.48	mg/Kg	1	☼	6010C	Total/NA
Barium	117		0.60	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.44		0.24	0.033	mg/Kg	1	☼	6010C	Total/NA
Cadmium	1.3		0.24	0.036	mg/Kg	1	☼	6010C	Total/NA
Calcium	1810		59.7	3.9	mg/Kg	1	☼	6010C	Total/NA
Chromium	13.3		0.60	0.24	mg/Kg	1	☼	6010C	Total/NA
Cobalt	8.0		0.60	0.060	mg/Kg	1	☼	6010C	Total/NA
Copper	9.9		1.2	0.25	mg/Kg	1	☼	6010C	Total/NA
Iron	17000		11.9	4.2	mg/Kg	1	☼	6010C	Total/NA
Lead	33.7		1.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2840	B	23.9	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	535	B	0.24	0.038	mg/Kg	1	☼	6010C	Total/NA
Nickel	17.4		6.0	0.27	mg/Kg	1	☼	6010C	Total/NA
Potassium	967		35.8	23.9	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.72	J B	4.8	0.48	mg/Kg	1	☼	6010C	Total/NA
Sodium	135	J	167	15.5	mg/Kg	1	☼	6010C	Total/NA
Vanadium	11.9		0.60	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	95.6		2.4	0.76	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.025		0.020	0.0047	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB1 (15-16) — Lab Sample ID: 480-200156-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	7070		11.2	4.9	mg/Kg	1	☼	6010C	Total/NA
Antimony	0.80	J	16.8	0.45	mg/Kg	1	☼	6010C	Total/NA
Arsenic	8.9		2.2	0.45	mg/Kg	1	☼	6010C	Total/NA
Barium	82.3		0.56	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.26		0.22	0.031	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.13	J	0.22	0.034	mg/Kg	1	☼	6010C	Total/NA
Calcium	1340		55.9	3.7	mg/Kg	1	☼	6010C	Total/NA
Chromium	11.5		0.56	0.22	mg/Kg	1	☼	6010C	Total/NA
Cobalt	7.4		0.56	0.056	mg/Kg	1	☼	6010C	Total/NA
Copper	19.8		1.1	0.23	mg/Kg	1	☼	6010C	Total/NA
Iron	20500		11.2	3.9	mg/Kg	1	☼	6010C	Total/NA
Lead	8.5		1.1	0.27	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2370	B	22.4	1.0	mg/Kg	1	☼	6010C	Total/NA
Manganese	682	B	0.22	0.036	mg/Kg	1	☼	6010C	Total/NA
Nickel	17.5		5.6	0.26	mg/Kg	1	☼	6010C	Total/NA
Potassium	341		33.5	22.4	mg/Kg	1	☼	6010C	Total/NA
Sodium	112	J	157	14.5	mg/Kg	1	☼	6010C	Total/NA
Vanadium	11.6		0.56	0.12	mg/Kg	1	☼	6010C	Total/NA
Zinc	56.6		2.2	0.72	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.0050	J	0.020	0.0046	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200156-1

Client Sample ID: SB1 (15-16) — Lab Sample ID: 480-200156-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	4.2	J	27	2.0	ug/Kg	1	☼	8260C	Total/NA
Acetone	11	J	27	4.5	ug/Kg	1	☼	8260C	Total/NA
Benzene	0.52	J	5.4	0.26	ug/Kg	1	☼	8260C	Total/NA
Toluene	0.79	J	5.4	0.41	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: ERB_72722 — Lab Sample ID: 480-200156-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	0.00063	J	0.0030	0.00040	mg/L	1		6010C	Total/NA

Client Sample ID: SS7 (0-6) — Lab Sample ID: 480-200156-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	79	J	180	24	ug/Kg	1	☼	8270D	Total/NA
Anthracene	48	J	180	45	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	280		180	18	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	240		180	27	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	450		180	29	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	210		180	19	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	170	J	180	24	ug/Kg	1	☼	8270D	Total/NA
Chrysene	350		180	41	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	71	J	180	32	ug/Kg	1	☼	8270D	Total/NA
Dibenzofuran	26	J	180	21	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	500		180	19	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	210		180	23	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	34	J	180	24	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	160	J	180	27	ug/Kg	1	☼	8270D	Total/NA
Pyrene	410		180	21	ug/Kg	1	☼	8270D	Total/NA
Perfluorohexanoic acid (PFHxA)	0.15	J I	0.21	0.048	ug/Kg	1	☼	537 IDA	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.053	J	0.21	0.041	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorooctanoic acid (PFOA)	0.092	J	0.21	0.061	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorononanoic acid (PFNA)	0.078	J	0.21	0.036	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorodecanoic acid (PFDA)	0.043	J	0.21	0.029	ug/Kg	1	☼	537 IDA	Total/NA
Perfluoroundecanoic acid (PFUnA)	0.051	J	0.21	0.028	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorododecanoic acid (PFDoA)	0.026	J	0.21	0.026	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorotridecanoic acid (PFTriA)	0.026	J	0.21	0.026	ug/Kg	1	☼	537 IDA	Total/NA
Perfluoroheptanesulfonic acid (PFHpS)	0.075	J	0.21	0.024	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.12	J I	0.21	0.12	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorodecanesulfonic acid (PFDS)	0.021	J	0.21	0.020	ug/Kg	1	☼	537 IDA	Total/NA
Aluminum	8700		11.2	4.9	mg/Kg	1	☼	6010C	Total/NA
Antimony	1.4	J	16.8	0.45	mg/Kg	1	☼	6010C	Total/NA
Arsenic	10.7		2.2	0.45	mg/Kg	1	☼	6010C	Total/NA
Barium	77.8		0.56	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.40		0.22	0.031	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.21	J	0.22	0.034	mg/Kg	1	☼	6010C	Total/NA
Calcium	2820		56.0	3.7	mg/Kg	1	☼	6010C	Total/NA
Chromium	11.9		0.56	0.22	mg/Kg	1	☼	6010C	Total/NA
Cobalt	8.7		0.56	0.056	mg/Kg	1	☼	6010C	Total/NA
Copper	38.9		1.1	0.24	mg/Kg	1	☼	6010C	Total/NA
Iron	22800		11.2	3.9	mg/Kg	1	☼	6010C	Total/NA
Lead	51.5		1.1	0.27	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample ID: SS7 (0-6) (Continued)

Lab Sample ID: 480-200156-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Magnesium	2760	B	22.4	1.0	mg/Kg	1	☼	6010C	Total/NA
Manganese	407	B	0.22	0.036	mg/Kg	1	☼	6010C	Total/NA
Nickel	20.4		5.6	0.26	mg/Kg	1	☼	6010C	Total/NA
Potassium	508		33.6	22.4	mg/Kg	1	☼	6010C	Total/NA
Sodium	33.3	J	157	14.6	mg/Kg	1	☼	6010C	Total/NA
Vanadium	14.6		0.56	0.12	mg/Kg	1	☼	6010C	Total/NA
Zinc	69.5		2.2	0.72	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.081		0.022	0.0051	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS7 (6-12)

Lab Sample ID: 480-200156-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	120	J	870	110	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	430	J	870	87	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	490	J	870	130	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	730	J	870	140	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	410	J	870	92	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	250	J	870	110	ug/Kg	5	☼	8270D	Total/NA
Chrysene	480	J	870	190	ug/Kg	5	☼	8270D	Total/NA
Dibenz(a,h)anthracene	160	J	870	150	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	730	J	870	92	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	420	J	870	110	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	290	J	870	130	ug/Kg	5	☼	8270D	Total/NA
Pyrene	630	J	870	100	ug/Kg	5	☼	8270D	Total/NA
Perfluorooctanoic acid (PFOA)	0.060	J	0.20	0.059	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.12	J	0.20	0.11	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorodecanesulfonic acid (PFDS)	0.022	J	0.20	0.019	ug/Kg	1	☼	537 IDA	Total/NA
Aluminum	8520		10.3	4.6	mg/Kg	1	☼	6010C	Total/NA
Antimony	1.2	J	15.5	0.41	mg/Kg	1	☼	6010C	Total/NA
Arsenic	14.6		2.1	0.41	mg/Kg	1	☼	6010C	Total/NA
Barium	107		0.52	0.11	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.44		0.21	0.029	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.51		0.21	0.031	mg/Kg	1	☼	6010C	Total/NA
Calcium	13100		51.7	3.4	mg/Kg	1	☼	6010C	Total/NA
Chromium	13.7		0.52	0.21	mg/Kg	1	☼	6010C	Total/NA
Cobalt	9.2		0.52	0.052	mg/Kg	1	☼	6010C	Total/NA
Copper	45.7		1.0	0.22	mg/Kg	1	☼	6010C	Total/NA
Iron	23900		10.3	3.6	mg/Kg	1	☼	6010C	Total/NA
Lead	140		1.0	0.25	mg/Kg	1	☼	6010C	Total/NA
Magnesium	6700	B	20.7	0.96	mg/Kg	1	☼	6010C	Total/NA
Manganese	531	B	0.21	0.033	mg/Kg	1	☼	6010C	Total/NA
Nickel	20.4		5.2	0.24	mg/Kg	1	☼	6010C	Total/NA
Potassium	521		31.0	20.7	mg/Kg	1	☼	6010C	Total/NA
Sodium	50.7	J	145	13.5	mg/Kg	1	☼	6010C	Total/NA
Vanadium	16.6		0.52	0.11	mg/Kg	1	☼	6010C	Total/NA
Zinc	86.5		2.1	0.66	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.14		0.021	0.0048	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS7 (12-24)

Lab Sample ID: 480-200156-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	7.9	J	28	4.6	ug/Kg	1	☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS7 (12-24) (Continued) — Lab Sample ID: 480-200156-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl acetate	4.7	J	28	3.3	ug/Kg	1	☼	8260C	Total/NA
Acenaphthylene	420	J	1800	230	ug/Kg	10	☼	8270D	Total/NA
Anthracene	800	J	1800	440	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]anthracene	1900		1800	180	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]pyrene	1900		1800	260	ug/Kg	10	☼	8270D	Total/NA
Benzo[b]fluoranthene	2600		1800	280	ug/Kg	10	☼	8270D	Total/NA
Benzo[g,h,i]perylene	1400	J	1800	190	ug/Kg	10	☼	8270D	Total/NA
Benzo[k]fluoranthene	1100	J	1800	230	ug/Kg	10	☼	8270D	Total/NA
Carbazole	370	J	1800	210	ug/Kg	10	☼	8270D	Total/NA
Chrysene	2000		1800	400	ug/Kg	10	☼	8270D	Total/NA
Dibenz(a,h)anthracene	430	J	1800	320	ug/Kg	10	☼	8270D	Total/NA
Fluoranthene	4400		1800	190	ug/Kg	10	☼	8270D	Total/NA
Fluorene	290	J	1800	210	ug/Kg	10	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	1500	J	1800	220	ug/Kg	10	☼	8270D	Total/NA
Phenanthrene	2900		1800	260	ug/Kg	10	☼	8270D	Total/NA
Pyrene	3400		1800	210	ug/Kg	10	☼	8270D	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.23		0.21	0.12	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorodecanesulfonic acid (PFDS)	0.072	J	0.21	0.020	ug/Kg	1	☼	537 IDA	Total/NA
Aluminum	8610		10.7	4.7	mg/Kg	1	☼	6010C	Total/NA
Antimony	1.0	J	16.1	0.43	mg/Kg	1	☼	6010C	Total/NA
Arsenic	16.3		2.1	0.43	mg/Kg	1	☼	6010C	Total/NA
Barium	88.2		0.54	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.48		0.21	0.030	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.75		0.21	0.032	mg/Kg	1	☼	6010C	Total/NA
Calcium	13700		53.6	3.5	mg/Kg	1	☼	6010C	Total/NA
Chromium	13.1		0.54	0.21	mg/Kg	1	☼	6010C	Total/NA
Cobalt	8.7		0.54	0.054	mg/Kg	1	☼	6010C	Total/NA
Copper	40.8		1.1	0.22	mg/Kg	1	☼	6010C	Total/NA
Iron	21600		10.7	3.7	mg/Kg	1	☼	6010C	Total/NA
Lead	299		1.1	0.26	mg/Kg	1	☼	6010C	Total/NA
Magnesium	3940	B	21.4	0.99	mg/Kg	1	☼	6010C	Total/NA
Manganese	436	B	0.21	0.034	mg/Kg	1	☼	6010C	Total/NA
Nickel	20.2		5.4	0.25	mg/Kg	1	☼	6010C	Total/NA
Potassium	1040		32.1	21.4	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.74	J B	4.3	0.43	mg/Kg	1	☼	6010C	Total/NA
Sodium	87.5	J	150	13.9	mg/Kg	1	☼	6010C	Total/NA
Vanadium	19.7		0.54	0.12	mg/Kg	1	☼	6010C	Total/NA
Zinc	104		2.1	0.69	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.26		0.021	0.0047	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS7 (0-2) — Lab Sample ID: 480-200156-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	71	J	200	26	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	180	J	200	20	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	190	J	200	29	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	320		200	31	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	150	J	200	21	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	130	J	200	26	ug/Kg	1	☼	8270D	Total/NA
Chrysene	250		200	44	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	51	J	200	35	ug/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS7 (0-2) (Continued)

Lab Sample ID: 480-200156-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	290		200	21	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	140	J	200	24	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	120	J	200	29	ug/Kg	1	☼	8270D	Total/NA
Pyrene	250		200	23	ug/Kg	1	☼	8270D	Total/NA
Perfluorohexanoic acid (PFHxA)	0.13	J I	0.23	0.052	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorononanoic acid (PFNA)	0.063	J	0.23	0.038	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorodecanoic acid (PFDA)	0.039	J I	0.23	0.032	ug/Kg	1	☼	537 IDA	Total/NA
Perfluoroundecanoic acid (PFUnA)	0.042	J	0.23	0.030	ug/Kg	1	☼	537 IDA	Total/NA
Perfluoroheptanesulfonic acid (PFHpS)	0.068	J	0.23	0.026	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorodecanesulfonic acid (PFDS)	0.036	J	0.23	0.021	ug/Kg	1	☼	537 IDA	Total/NA
Aluminum	8790		12.2	5.4	mg/Kg	1	☼	6010C	Total/NA
Antimony	0.91	J	18.3	0.49	mg/Kg	1	☼	6010C	Total/NA
Arsenic	10		2.4	0.49	mg/Kg	1	☼	6010C	Total/NA
Barium	95.7		0.61	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.49		0.24	0.034	mg/Kg	1	☼	6010C	Total/NA
Calcium	2060		61.1	4.0	mg/Kg	1	☼	6010C	Total/NA
Chromium	11.6		0.61	0.24	mg/Kg	1	☼	6010C	Total/NA
Cobalt	7.9		0.61	0.061	mg/Kg	1	☼	6010C	Total/NA
Copper	28.3		1.2	0.26	mg/Kg	1	☼	6010C	Total/NA
Iron	18100		12.2	4.3	mg/Kg	1	☼	6010C	Total/NA
Lead	42.8		1.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2380	B	24.4	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	415	B	0.24	0.039	mg/Kg	1	☼	6010C	Total/NA
Nickel	17.3		6.1	0.28	mg/Kg	1	☼	6010C	Total/NA
Potassium	1480	^+	36.7	24.4	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.76	J	4.9	0.49	mg/Kg	1	☼	6010C	Total/NA
Sodium	48.5	J	171	15.9	mg/Kg	1	☼	6010C	Total/NA
Vanadium	14.7		0.61	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	61.0		2.4	0.78	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.064		0.024	0.0056	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: FB2_072722

Lab Sample ID: 480-200156-12

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200156-1

Client Sample ID: FB_072722
Date Collected: 07/27/22 08:30
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			07/29/22 19:15	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/29/22 19:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/29/22 19:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/29/22 19:15	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/29/22 19:15	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/29/22 19:15	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/29/22 19:15	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			07/29/22 19:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/29/22 19:15	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			07/29/22 19:15	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/29/22 19:15	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/29/22 19:15	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/29/22 19:15	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/29/22 19:15	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/29/22 19:15	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			07/29/22 19:15	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/29/22 19:15	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/29/22 19:15	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/29/22 19:15	1
2-Hexanone	ND		5.0	1.2	ug/L			07/29/22 19:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/29/22 19:15	1
Acetone	ND		10	3.0	ug/L			07/29/22 19:15	1
Benzene	ND		1.0	0.41	ug/L			07/29/22 19:15	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/29/22 19:15	1
Bromoform	ND		1.0	0.26	ug/L			07/29/22 19:15	1
Bromomethane	ND		1.0	0.69	ug/L			07/29/22 19:15	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/29/22 19:15	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/29/22 19:15	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/29/22 19:15	1
Chloroethane	ND		1.0	0.32	ug/L			07/29/22 19:15	1
Chloroform	ND		1.0	0.34	ug/L			07/29/22 19:15	1
Chloromethane	ND		1.0	0.35	ug/L			07/29/22 19:15	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/29/22 19:15	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/29/22 19:15	1
Cyclohexane	ND		1.0	0.18	ug/L			07/29/22 19:15	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/29/22 19:15	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/29/22 19:15	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/29/22 19:15	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/29/22 19:15	1
m,p-Xylene	ND		2.0	0.66	ug/L			07/29/22 19:15	1
Methyl acetate	ND		2.5	1.3	ug/L			07/29/22 19:15	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/29/22 19:15	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/29/22 19:15	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/29/22 19:15	1
n-Butylbenzene	ND		1.0	0.64	ug/L			07/29/22 19:15	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/29/22 19:15	1
o-Xylene	ND		1.0	0.76	ug/L			07/29/22 19:15	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			07/29/22 19:15	1
Styrene	ND		1.0	0.73	ug/L			07/29/22 19:15	1

Client Sample ID: FB_072722
Date Collected: 07/27/22 08:30
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		1.0	0.81	ug/L			07/29/22 19:15	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/29/22 19:15	1
Toluene	ND		1.0	0.51	ug/L			07/29/22 19:15	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/29/22 19:15	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/29/22 19:15	1
Trichloroethene	ND		1.0	0.46	ug/L			07/29/22 19:15	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/29/22 19:15	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/29/22 19:15	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/29/22 19:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*77 - 120*		*07/29/22 19:15*	*1*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*		*07/29/22 19:15*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*07/29/22 19:15*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*07/29/22 19:15*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		07/29/22 14:33	08/01/22 19:36	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		07/29/22 14:33	08/01/22 19:36	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		07/29/22 14:33	08/01/22 19:36	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		07/29/22 14:33	08/01/22 19:36	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		07/29/22 14:33	08/01/22 19:36	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		07/29/22 14:33	08/01/22 19:36	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		07/29/22 14:33	08/01/22 19:36	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		07/29/22 14:33	08/01/22 19:36	1
2-Chlorophenol	ND		5.0	0.53	ug/L		07/29/22 14:33	08/01/22 19:36	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		07/29/22 14:33	08/01/22 19:36	1
2-Methylphenol	ND		5.0	0.40	ug/L		07/29/22 14:33	08/01/22 19:36	1
2-Nitroaniline	ND		10	0.42	ug/L		07/29/22 14:33	08/01/22 19:36	1
2-Nitrophenol	ND		5.0	0.48	ug/L		07/29/22 14:33	08/01/22 19:36	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		07/29/22 14:33	08/01/22 19:36	1
3-Nitroaniline	ND		10	0.48	ug/L		07/29/22 14:33	08/01/22 19:36	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		07/29/22 14:33	08/01/22 19:36	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		07/29/22 14:33	08/01/22 19:36	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		07/29/22 14:33	08/01/22 19:36	1
4-Chloroaniline	ND		5.0	0.59	ug/L		07/29/22 14:33	08/01/22 19:36	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		07/29/22 14:33	08/01/22 19:36	1
4-Methylphenol	ND		10	0.36	ug/L		07/29/22 14:33	08/01/22 19:36	1
4-Nitroaniline	ND	*+	10	0.25	ug/L		07/29/22 14:33	08/01/22 19:36	1
4-Nitrophenol	ND		10	1.5	ug/L		07/29/22 14:33	08/01/22 19:36	1
Acenaphthene	ND		5.0	0.41	ug/L		07/29/22 14:33	08/01/22 19:36	1
Acenaphthylene	ND		5.0	0.38	ug/L		07/29/22 14:33	08/01/22 19:36	1
Acetophenone	ND		5.0	0.54	ug/L		07/29/22 14:33	08/01/22 19:36	1
Anthracene	ND		5.0	0.28	ug/L		07/29/22 14:33	08/01/22 19:36	1
Atrazine	ND		5.0	0.46	ug/L		07/29/22 14:33	08/01/22 19:36	1
Benzaldehyde	ND		5.0	0.27	ug/L		07/29/22 14:33	08/01/22 19:36	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		07/29/22 14:33	08/01/22 19:36	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		07/29/22 14:33	08/01/22 19:36	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		07/29/22 14:33	08/01/22 19:36	1

Client Sample ID: FB_072722
Date Collected: 07/27/22 08:30
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-1
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		07/29/22 14:33	08/01/22 19:36	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		07/29/22 14:33	08/01/22 19:36	1
Biphenyl	ND		5.0	0.65	ug/L		07/29/22 14:33	08/01/22 19:36	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		07/29/22 14:33	08/01/22 19:36	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		07/29/22 14:33	08/01/22 19:36	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		07/29/22 14:33	08/01/22 19:36	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		07/29/22 14:33	08/01/22 19:36	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		07/29/22 14:33	08/01/22 19:36	1
Caprolactam	ND		5.0	2.2	ug/L		07/29/22 14:33	08/01/22 19:36	1
Carbazole	ND	*+	5.0	0.30	ug/L		07/29/22 14:33	08/01/22 19:36	1
Chrysene	ND		5.0	0.33	ug/L		07/29/22 14:33	08/01/22 19:36	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		07/29/22 14:33	08/01/22 19:36	1
Dibenzofuran	ND		10	0.51	ug/L		07/29/22 14:33	08/01/22 19:36	1
Diethyl phthalate	ND		5.0	0.22	ug/L		07/29/22 14:33	08/01/22 19:36	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		07/29/22 14:33	08/01/22 19:36	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		07/29/22 14:33	08/01/22 19:36	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		07/29/22 14:33	08/01/22 19:36	1
Fluoranthene	ND		5.0	0.40	ug/L		07/29/22 14:33	08/01/22 19:36	1
Fluorene	ND		5.0	0.36	ug/L		07/29/22 14:33	08/01/22 19:36	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		07/29/22 14:33	08/01/22 19:36	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		07/29/22 14:33	08/01/22 19:36	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		07/29/22 14:33	08/01/22 19:36	1
Hexachloroethane	ND		5.0	0.59	ug/L		07/29/22 14:33	08/01/22 19:36	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		07/29/22 14:33	08/01/22 19:36	1
Isophorone	ND		5.0	0.43	ug/L		07/29/22 14:33	08/01/22 19:36	1
Naphthalene	ND		5.0	0.76	ug/L		07/29/22 14:33	08/01/22 19:36	1
Nitrobenzene	ND		5.0	0.29	ug/L		07/29/22 14:33	08/01/22 19:36	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		07/29/22 14:33	08/01/22 19:36	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		07/29/22 14:33	08/01/22 19:36	1
Pentachlorophenol	ND		10	2.2	ug/L		07/29/22 14:33	08/01/22 19:36	1
Phenanthrene	ND		5.0	0.44	ug/L		07/29/22 14:33	08/01/22 19:36	1
Phenol	ND		5.0	0.39	ug/L		07/29/22 14:33	08/01/22 19:36	1
Pyrene	ND		5.0	0.34	ug/L		07/29/22 14:33	08/01/22 19:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*85*		*41 - 120*	*07/29/22 14:33*	*08/01/22 19:36*	*1*
2-Fluorobiphenyl	*91*		*48 - 120*	*07/29/22 14:33*	*08/01/22 19:36*	*1*
2-Fluorophenol	*66*		*35 - 120*	*07/29/22 14:33*	*08/01/22 19:36*	*1*
Nitrobenzene-d5	*79*		*46 - 120*	*07/29/22 14:33*	*08/01/22 19:36*	*1*
Phenol-d5	*52*		*22 - 120*	*07/29/22 14:33*	*08/01/22 19:36*	*1*
p-Terphenyl-d14	*104*		*60 - 148*	*07/29/22 14:33*	*08/01/22 19:36*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		08/01/22 08:49	08/01/22 17:22	1
Antimony	ND		0.020	0.0068	mg/L		08/01/22 08:49	08/01/22 17:22	1
Arsenic	ND		0.015	0.0056	mg/L		08/01/22 08:49	08/01/22 17:22	1
Barium	ND		0.0020	0.00070	mg/L		08/01/22 08:49	08/01/22 17:22	1
Beryllium	ND		0.0020	0.00030	mg/L		08/01/22 08:49	08/01/22 17:22	1
Cadmium	ND		0.0020	0.00050	mg/L		08/01/22 08:49	08/01/22 17:22	1

Client Sample ID: FB_072722

Date Collected: 07/27/22 08:30
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-1

Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		0.50	0.10	mg/L		08/01/22 08:49	08/01/22 17:22	1
Chromium	**0.0011**	**J**	0.0040	0.0010	mg/L		08/01/22 08:49	08/01/22 17:22	1
Cobalt	ND		0.0040	0.00063	mg/L		08/01/22 08:49	08/01/22 17:22	1
Copper	ND		0.010	0.0016	mg/L		08/01/22 08:49	08/01/22 17:22	1
Iron	ND		0.050	0.019	mg/L		08/01/22 08:49	08/01/22 17:22	1
Lead	ND		0.010	0.0030	mg/L		08/01/22 08:49	08/01/22 17:22	1
Magnesium	ND		0.20	0.043	mg/L		08/01/22 08:49	08/01/22 17:22	1
Manganese	ND		0.0030	0.00040	mg/L		08/01/22 08:49	08/01/22 17:22	1
Nickel	ND		0.010	0.0013	mg/L		08/01/22 08:49	08/01/22 17:22	1
Potassium	ND		0.50	0.10	mg/L		08/01/22 08:49	08/01/22 17:22	1
Selenium	ND		0.025	0.0087	mg/L		08/01/22 08:49	08/01/22 17:22	1
Silver	ND		0.0060	0.0017	mg/L		08/01/22 08:49	08/01/22 17:22	1
Sodium	ND		1.0	0.32	mg/L		08/01/22 08:49	08/01/22 17:22	1
Thallium	ND		0.020	0.010	mg/L		08/01/22 08:49	08/01/22 17:22	1
Vanadium	ND		0.0050	0.0015	mg/L		08/01/22 08:49	08/01/22 17:22	1
Zinc	ND		0.010	0.0015	mg/L		08/01/22 08:49	08/01/22 17:22	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		08/01/22 10:12	08/01/22 13:06	1

Client Sample ID: SB1 (0-0.5)

Date Collected: 07/26/22 16:15
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-2

Matrix: Solid
Percent Solids: 88.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.7	0.57	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
1,1,1-Trichloroethane	ND		5.7	0.41	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
1,1,2,2-Tetrachloroethane	ND		5.7	0.92	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.7	1.3	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
1,1,2-Trichloroethane	ND		5.7	0.74	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
1,1-Dichloroethane	ND		5.7	0.69	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
1,1-Dichloroethene	ND		5.7	0.70	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
1,2,3-Trimethylbenzene	ND		5.7	1.2	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
1,2,4-Trichlorobenzene	ND		5.7	0.35	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
1,2,4-Trimethylbenzene	ND		5.7	1.1	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
1,2-Dibromo-3-Chloropropane	ND		5.7	2.8	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
1,2-Dibromoethane	ND		5.7	0.73	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
1,2-Dichlorobenzene	ND		5.7	0.44	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
1,2-Dichloroethane	ND		5.7	0.29	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
1,2-Dichloropropane	ND		5.7	2.8	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
1,3,5-Trimethylbenzene	ND		5.7	0.37	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
1,3-Dichlorobenzene	ND		5.7	0.29	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
1,4-Dichlorobenzene	ND		5.7	0.80	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
2-Butanone (MEK)	ND		28	2.1	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
2-Hexanone	ND		28	2.8	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
4-Methyl-2-pentanone (MIBK)	ND		28	1.9	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
Acetone	ND		28	4.8	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
Benzene	ND		5.7	0.28	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1

Client Sample ID: SB1 (0-0.5)
Date Collected: 07/26/22 16:15
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-2
Matrix: Solid
Percent Solids: 88.2

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		5.7	0.76	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
Bromoform	ND	*+	5.7	2.8	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
Bromomethane	ND		5.7	0.51	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
Carbon disulfide	ND		5.7	2.8	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
Carbon tetrachloride	ND		5.7	0.55	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
Chlorobenzene	ND		5.7	0.75	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
Chloroethane	ND		5.7	1.3	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
Chloroform	ND		5.7	0.35	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
Chloromethane	ND		5.7	0.34	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
cis-1,2-Dichloroethene	ND		5.7	0.73	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
cis-1,3-Dichloropropene	ND		5.7	0.82	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
Cyclohexane	ND		5.7	0.80	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
Dibromochloromethane	ND	*+	5.7	0.73	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
Dichlorodifluoromethane	ND		5.7	0.47	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
Ethylbenzene	ND		5.7	0.39	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
Isopropylbenzene	ND		5.7	0.86	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
m,p-Xylene	ND		11	0.95	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
Methyl acetate	ND		28	3.4	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
Methyl tert-butyl ether	ND		5.7	0.56	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
Methylcyclohexane	ND		5.7	0.86	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
Methylene Chloride	ND		5.7	2.6	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
n-Butylbenzene	ND		5.7	0.49	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
N-Propylbenzene	ND		5.7	0.45	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
o-Xylene	ND		5.7	0.74	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
sec-Butylbenzene	ND		5.7	0.49	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
Styrene	ND		5.7	0.28	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
tert-Butylbenzene	ND	*+	5.7	0.59	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
Tetrachloroethene	ND	*+	5.7	0.76	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
Toluene	ND		5.7	0.43	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
trans-1,2-Dichloroethene	ND		5.7	0.59	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
trans-1,3-Dichloropropene	ND		5.7	2.5	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
Trichloroethene	ND		5.7	1.3	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
Trichlorofluoromethane	ND		5.7	0.54	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
Vinyl chloride	ND		5.7	0.69	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1
Xylenes, Total	ND		11	0.95	ug/Kg	☼	07/28/22 11:00	08/03/22 22:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*107*		*71 - 125*	*07/28/22 11:00*	*08/03/22 22:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*64 - 126*	*07/28/22 11:00*	*08/03/22 22:07*	*1*
4-Bromofluorobenzene (Surr)	*87*		*72 - 126*	*07/28/22 11:00*	*08/03/22 22:07*	*1*
Dibromofluoromethane (Surr)	*106*		*60 - 140*	*07/28/22 11:00*	*08/03/22 22:07*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		190	51	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
2,4,6-Trichlorophenol	ND		190	37	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
2,4-Dichlorophenol	ND		190	20	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
2,4-Dimethylphenol	ND		190	45	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
2,4-Dinitrophenol	ND		1800	860	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
2,4-Dinitrotoluene	ND		190	39	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1

Client Sample ID: SB1 (0-0.5)
Date Collected: 07/26/22 16:15
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-2
Matrix: Solid
Percent Solids: 88.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		190	22	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
2-Chloronaphthalene	ND		190	31	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
2-Chlorophenol	ND		360	34	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
2-Methylnaphthalene	ND		190	37	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
2-Methylphenol	ND		190	22	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
2-Nitroaniline	ND		360	28	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
2-Nitrophenol	ND		190	53	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
3,3'-Dichlorobenzidine	ND		360	220	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
3-Nitroaniline	ND		360	52	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
4,6-Dinitro-2-methylphenol	ND		360	190	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
4-Bromophenyl phenyl ether	ND		190	26	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
4-Chloro-3-methylphenol	ND		190	46	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
4-Chloroaniline	ND		190	46	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
4-Chlorophenyl phenyl ether	ND		190	23	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
4-Methylphenol	ND		360	22	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
4-Nitroaniline	ND		360	98	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
4-Nitrophenol	ND		360	130	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Acenaphthene	ND		190	28	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Acenaphthylene	ND		190	24	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Acetophenone	ND		190	25	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Anthracene	ND		190	46	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Atrazine	ND		190	65	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Benzaldehyde	ND		190	150	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Benzo[a]anthracene	ND		190	19	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Benzo[a]pyrene	ND		190	28	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Benzo[b]fluoranthene	ND		190	30	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Benzo[g,h,i]perylene	ND		190	20	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Benzo[k]fluoranthene	ND		190	24	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Biphenyl	ND		190	28	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
bis (2-chloroisopropyl) ether	ND		190	37	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Bis(2-chloroethoxy)methane	ND		190	40	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Bis(2-chloroethyl)ether	ND		190	24	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Bis(2-ethylhexyl) phthalate	**84**	**J**	190	64	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Butyl benzyl phthalate	ND		190	31	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Caprolactam	ND		190	56	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Carbazole	ND		190	22	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Chrysene	ND		190	42	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Dibenz(a,h)anthracene	ND		190	33	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Dibenzofuran	ND		190	22	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Diethyl phthalate	ND		190	24	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Dimethyl phthalate	ND		190	22	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Di-n-butyl phthalate	ND		190	32	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Di-n-octyl phthalate	ND		190	22	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Fluoranthene	ND		190	20	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Fluorene	ND		190	22	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Hexachlorobenzene	ND		190	25	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Hexachlorobutadiene	ND		190	28	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Hexachlorocyclopentadiene	ND		190	25	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Hexachloroethane	ND		190	24	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1

Client Sample ID: SB1 (0-0.5)
Date Collected: 07/26/22 16:15
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-2
Matrix: Solid
Percent Solids: 88.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	ND		190	23	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Isophorone	ND		190	40	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Naphthalene	ND		190	24	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Nitrobenzene	ND		190	21	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
N-Nitrosodi-n-propylamine	ND		190	32	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
N-Nitrosodiphenylamine	ND		190	150	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Pentachlorophenol	ND		360	190	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Phenanthrene	ND		190	28	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Phenol	ND		190	29	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1
Pyrene	ND		190	22	ug/Kg	☼	07/29/22 15:47	08/03/22 16:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*92*		*54 - 120*	*07/29/22 15:47*	*08/03/22 16:21*	*1*
2-Fluorobiphenyl	*79*		*60 - 120*	*07/29/22 15:47*	*08/03/22 16:21*	*1*
2-Fluorophenol	*71*		*52 - 120*	*07/29/22 15:47*	*08/03/22 16:21*	*1*
Nitrobenzene-d5	*69*		*53 - 120*	*07/29/22 15:47*	*08/03/22 16:21*	*1*
Phenol-d5	*73*		*54 - 120*	*07/29/22 15:47*	*08/03/22 16:21*	*1*
p-Terphenyl-d14	*85*		*79 - 130*	*07/29/22 15:47*	*08/03/22 16:21*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8980**		13.2	5.8	mg/Kg	☼	08/01/22 11:03	08/02/22 17:03	1
Antimony	**3.9**	**J**	19.8	0.53	mg/Kg	☼	08/01/22 11:03	08/02/22 17:03	1
Arsenic	**7.4**		2.6	0.53	mg/Kg	☼	08/01/22 11:03	08/02/22 17:03	1
Barium	**137**		0.66	0.15	mg/Kg	☼	08/01/22 11:03	08/02/22 17:03	1
Beryllium	**0.42**		0.26	0.037	mg/Kg	☼	08/01/22 11:03	08/03/22 15:46	1
Cadmium	**11.6**		0.26	0.040	mg/Kg	☼	08/01/22 11:03	08/02/22 17:03	1
Calcium	**6080**		66.0	4.4	mg/Kg	☼	08/01/22 11:03	08/02/22 17:03	1
Chromium	**15.2**		0.66	0.26	mg/Kg	☼	08/01/22 11:03	08/02/22 17:03	1
Cobalt	**9.6**		0.66	0.066	mg/Kg	☼	08/01/22 11:03	08/02/22 17:03	1
Copper	**21.4**		1.3	0.28	mg/Kg	☼	08/01/22 11:03	08/02/22 17:03	1
Iron	**20000**		13.2	4.6	mg/Kg	☼	08/01/22 11:03	08/02/22 17:03	1
Lead	**186**		1.3	0.32	mg/Kg	☼	08/01/22 11:03	08/02/22 17:03	1
Magnesium	**4080**	**B**	26.4	1.2	mg/Kg	☼	08/01/22 11:03	08/02/22 17:03	1
Manganese	**559**	**B**	0.26	0.042	mg/Kg	☼	08/01/22 11:03	08/02/22 17:03	1
Nickel	**23.1**		6.6	0.30	mg/Kg	☼	08/01/22 11:03	08/02/22 17:03	1
Potassium	**870**		39.6	26.4	mg/Kg	☼	08/01/22 11:03	08/02/22 17:03	1
Selenium	**1.1**	**J B**	5.3	0.53	mg/Kg	☼	08/01/22 11:03	08/02/22 17:03	1
Silver	**0.52**	**J**	0.79	0.26	mg/Kg	☼	08/01/22 11:03	08/02/22 17:03	1
Sodium	**172**	**J**	185	17.1	mg/Kg	☼	08/01/22 11:03	08/02/22 17:03	1
Thallium	ND		7.9	0.40	mg/Kg	☼	08/01/22 11:03	08/02/22 17:03	1
Vanadium	**14.0**		0.66	0.15	mg/Kg	☼	08/01/22 11:03	08/02/22 17:03	1
Zinc	**297**		2.6	0.84	mg/Kg	☼	08/01/22 11:03	08/02/22 17:03	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.22**		0.022	0.0051	mg/Kg	☼	08/02/22 09:35	08/02/22 14:32	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200156-1

Client Sample ID: SB1 (0.5-1)

Date Collected: 07/26/22 16:20
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-3

Matrix: Solid
Percent Solids: 82.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.4	0.44	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
1,1,1-Trichloroethane	ND		4.4	0.32	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
1,1,2,2-Tetrachloroethane	ND		4.4	0.71	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.4	0.99	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
1,1,2-Trichloroethane	ND		4.4	0.57	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
1,1-Dichloroethane	ND		4.4	0.53	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
1,1-Dichloroethene	ND		4.4	0.53	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
1,2,3-Trimethylbenzene	ND		4.4	0.89	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
1,2,4-Trichlorobenzene	ND		4.4	0.27	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
1,2,4-Trimethylbenzene	ND		4.4	0.84	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
1,2-Dibromo-3-Chloropropane	ND		4.4	2.2	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
1,2-Dibromoethane	ND		4.4	0.56	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
1,2-Dichlorobenzene	ND		4.4	0.34	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
1,2-Dichloroethane	ND		4.4	0.22	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
1,2-Dichloropropane	ND		4.4	2.2	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
1,3,5-Trimethylbenzene	ND		4.4	0.28	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
1,3-Dichlorobenzene	ND		4.4	0.22	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
1,4-Dichlorobenzene	ND		4.4	0.61	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
2-Butanone (MEK)	ND		22	1.6	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
2-Hexanone	ND		22	2.2	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
4-Methyl-2-pentanone (MIBK)	ND		22	1.4	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
Acetone	ND		22	3.7	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
Benzene	ND		4.4	0.21	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
Bromodichloromethane	ND		4.4	0.58	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
Bromoform	ND		4.4	2.2	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
Bromomethane	ND		4.4	0.39	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
Carbon disulfide	ND		4.4	2.2	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
Carbon tetrachloride	ND		4.4	0.42	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
Chlorobenzene	ND		4.4	0.58	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
Chloroethane	ND		4.4	0.99	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
Chloroform	ND		4.4	0.27	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
Chloromethane	ND		4.4	0.26	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
cis-1,2-Dichloroethene	ND		4.4	0.56	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
cis-1,3-Dichloropropene	ND		4.4	0.63	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
Cyclohexane	ND		4.4	0.61	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
Dibromochloromethane	ND		4.4	0.56	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
Dichlorodifluoromethane	ND		4.4	0.36	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
Ethylbenzene	ND		4.4	0.30	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
Isopropylbenzene	ND		4.4	0.66	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
m,p-Xylene	ND		8.7	0.73	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
Methyl acetate	ND		22	2.6	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
Methyl tert-butyl ether	ND		4.4	0.43	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
Methylcyclohexane	ND		4.4	0.66	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
Methylene Chloride	ND		4.4	2.0	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
n-Butylbenzene	ND		4.4	0.38	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
N-Propylbenzene	ND		4.4	0.35	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
o-Xylene	ND		4.4	0.57	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
sec-Butylbenzene	ND		4.4	0.38	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
Styrene	ND		4.4	0.22	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1

Client Sample ID: SB1 (0.5-1)
Date Collected: 07/26/22 16:20
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-3
Matrix: Solid
Percent Solids: 82.4

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		4.4	0.45	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
Tetrachloroethene	ND		4.4	0.59	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
Toluene	**0.35**	**J**	4.4	0.33	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
trans-1,2-Dichloroethene	ND		4.4	0.45	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
trans-1,3-Dichloropropene	ND		4.4	1.9	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
Trichloroethene	ND		4.4	0.96	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
Trichlorofluoromethane	ND		4.4	0.41	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
Vinyl chloride	ND		4.4	0.53	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1
Xylenes, Total	ND		8.7	0.73	ug/Kg	☼	07/28/22 11:00	08/02/22 22:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*100*		*71 - 125*	*07/28/22 11:00*	*08/02/22 22:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*64 - 126*	*07/28/22 11:00*	*08/02/22 22:47*	*1*
4-Bromofluorobenzene (Surr)	*93*		*72 - 126*	*07/28/22 11:00*	*08/02/22 22:47*	*1*
Dibromofluoromethane (Surr)	*111*		*60 - 140*	*07/28/22 11:00*	*08/02/22 22:47*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		200	55	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
2,4,6-Trichlorophenol	ND		200	41	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
2,4-Dichlorophenol	ND		200	22	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
2,4-Dimethylphenol	ND		200	49	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
2,4-Dinitrophenol	ND		2000	950	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
2,4-Dinitrotoluene	ND		200	42	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
2,6-Dinitrotoluene	ND		200	24	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
2-Chloronaphthalene	ND		200	34	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
2-Chlorophenol	ND		400	37	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
2-Methylnaphthalene	ND		200	41	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
2-Methylphenol	ND		200	24	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
2-Nitroaniline	ND		400	30	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
2-Nitrophenol	ND		200	58	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
3,3'-Dichlorobenzidine	ND		400	240	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
3-Nitroaniline	ND		400	57	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
4,6-Dinitro-2-methylphenol	ND		400	200	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
4-Bromophenyl phenyl ether	ND		200	29	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
4-Chloro-3-methylphenol	ND		200	51	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
4-Chloroaniline	ND		200	51	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
4-Chlorophenyl phenyl ether	ND		200	25	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
4-Methylphenol	ND		400	24	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
4-Nitroaniline	ND		400	110	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
4-Nitrophenol	ND		400	140	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Acenaphthene	ND		200	30	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Acenaphthylene	ND		200	27	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Acetophenone	ND		200	28	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Anthracene	ND		200	51	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Atrazine	ND		200	71	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Benzaldehyde	ND		200	160	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Benzo[a]anthracene	ND		200	20	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Benzo[a]pyrene	ND		200	30	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Benzo[b]fluoranthene	ND		200	33	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200156-1

Client Sample ID: SB1 (0.5-1)
Date Collected: 07/26/22 16:20
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-3
Matrix: Solid
Percent Solids: 82.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		200	22	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Benzo[k]fluoranthene	ND		200	27	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Biphenyl	ND		200	30	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
bis (2-chloroisopropyl) ether	ND		200	41	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Bis(2-chloroethoxy)methane	ND		200	43	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Bis(2-chloroethyl)ether	ND		200	27	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Bis(2-ethylhexyl) phthalate	ND		200	70	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Butyl benzyl phthalate	ND		200	34	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Caprolactam	ND		200	61	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Carbazole	ND		200	24	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Chrysene	ND		200	46	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Dibenz(a,h)anthracene	ND		200	36	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Dibenzofuran	ND		200	24	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Diethyl phthalate	ND		200	27	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Dimethyl phthalate	ND		200	24	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Di-n-butyl phthalate	ND		200	35	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Di-n-octyl phthalate	ND		200	24	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Fluoranthene	ND		200	22	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Fluorene	ND		200	24	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Hexachlorobenzene	ND		200	28	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Hexachlorobutadiene	ND		200	30	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Hexachlorocyclopentadiene	ND		200	28	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Hexachloroethane	ND		200	27	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Indeno[1,2,3-cd]pyrene	ND		200	25	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Isophorone	ND		200	43	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Naphthalene	ND		200	27	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Nitrobenzene	ND		200	23	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
N-Nitrosodi-n-propylamine	ND		200	35	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
N-Nitrosodiphenylamine	ND		200	170	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Pentachlorophenol	ND		400	200	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Phenanthrene	ND		200	30	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Phenol	ND		200	31	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1
Pyrene	ND		200	24	ug/Kg	☼	07/29/22 15:47	08/03/22 16:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*94*		*54 - 120*	*07/29/22 15:47*	*08/03/22 16:45*	*1*
2-Fluorobiphenyl	*77*		*60 - 120*	*07/29/22 15:47*	*08/03/22 16:45*	*1*
2-Fluorophenol	*70*		*52 - 120*	*07/29/22 15:47*	*08/03/22 16:45*	*1*
Nitrobenzene-d5	*67*		*53 - 120*	*07/29/22 15:47*	*08/03/22 16:45*	*1*
Phenol-d5	*68*		*54 - 120*	*07/29/22 15:47*	*08/03/22 16:45*	*1*
p-Terphenyl-d14	*91*		*79 - 130*	*07/29/22 15:47*	*08/03/22 16:45*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**9170**		11.5	5.1	mg/Kg	☼	08/01/22 11:03	08/02/22 17:06	1
Antimony	**1.4**	**J**	17.3	0.46	mg/Kg	☼	08/01/22 11:03	08/02/22 17:06	1
Arsenic	**7.9**		2.3	0.46	mg/Kg	☼	08/01/22 11:03	08/02/22 17:06	1
Barium	**125**		0.58	0.13	mg/Kg	☼	08/01/22 11:03	08/02/22 17:06	1
Beryllium	**0.47**		0.23	0.032	mg/Kg	☼	08/01/22 11:03	08/03/22 15:49	1
Cadmium	**0.47**		0.23	0.035	mg/Kg	☼	08/01/22 11:03	08/02/22 17:06	1

Client Sample ID: SB1 (0.5-1)

Lab Sample ID: 480-200156-3
Date Collected: 07/26/22 16:20
Matrix: Solid
Date Received: 07/28/22 10:00
Percent Solids: 82.4

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1960		57.5	3.8	mg/Kg	☼	08/01/22 11:03	08/02/22 17:06	1
Chromium	11.3		0.58	0.23	mg/Kg	☼	08/01/22 11:03	08/02/22 17:06	1
Cobalt	8.3		0.58	0.058	mg/Kg	☼	08/01/22 11:03	08/02/22 17:06	1
Copper	10.6		1.2	0.24	mg/Kg	☼	08/01/22 11:03	08/02/22 17:06	1
Iron	18600		11.5	4.0	mg/Kg	☼	08/01/22 11:03	08/02/22 17:06	1
Lead	17.8		1.2	0.28	mg/Kg	☼	08/01/22 11:03	08/02/22 17:06	1
Magnesium	3110	B	23.0	1.1	mg/Kg	☼	08/01/22 11:03	08/02/22 17:06	1
Manganese	585	B	0.23	0.037	mg/Kg	☼	08/01/22 11:03	08/02/22 17:06	1
Nickel	18.7		5.8	0.26	mg/Kg	☼	08/01/22 11:03	08/02/22 17:06	1
Potassium	1030		34.5	23.0	mg/Kg	☼	08/01/22 11:03	08/02/22 17:06	1
Selenium	0.64	J B	4.6	0.46	mg/Kg	☼	08/01/22 11:03	08/02/22 17:06	1
Silver	ND		0.69	0.23	mg/Kg	☼	08/01/22 11:03	08/02/22 17:06	1
Sodium	123	J	161	15.0	mg/Kg	☼	08/01/22 11:03	08/02/22 17:06	1
Thallium	ND		6.9	0.35	mg/Kg	☼	08/01/22 11:03	08/02/22 17:06	1
Vanadium	13.1		0.58	0.13	mg/Kg	☼	08/01/22 11:03	08/02/22 17:06	1
Zinc	66.4		2.3	0.74	mg/Kg	☼	08/01/22 11:03	08/02/22 17:06	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.042		0.025	0.0057	mg/Kg	☼	08/02/22 09:35	08/02/22 14:36	1

Client Sample ID: SB1 (1-2)

Lab Sample ID: 480-200156-4
Date Collected: 07/26/22 16:25
Matrix: Solid
Date Received: 07/28/22 10:00
Percent Solids: 87.6

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		3.9	0.39	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
1,1,1-Trichloroethane	ND		3.9	0.29	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
1,1,2,2-Tetrachloroethane	ND		3.9	0.64	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		3.9	0.90	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
1,1,2-Trichloroethane	ND		3.9	0.51	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
1,1-Dichloroethane	ND		3.9	0.48	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
1,1-Dichloroethene	ND		3.9	0.48	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
1,2,3-Trimethylbenzene	ND		3.9	0.80	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
1,2,4-Trichlorobenzene	ND		3.9	0.24	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
1,2,4-Trimethylbenzene	ND		3.9	0.75	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
1,2-Dibromo-3-Chloropropane	ND		3.9	2.0	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
1,2-Dibromoethane	ND		3.9	0.50	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
1,2-Dichlorobenzene	ND		3.9	0.31	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
1,2-Dichloroethane	ND		3.9	0.20	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
1,2-Dichloropropane	ND		3.9	2.0	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
1,3,5-Trimethylbenzene	ND		3.9	0.25	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
1,3-Dichlorobenzene	ND		3.9	0.20	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
1,4-Dichlorobenzene	ND		3.9	0.55	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
2-Butanone (MEK)	ND		20	1.4	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
2-Hexanone	ND		20	2.0	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
4-Methyl-2-pentanone (MIBK)	ND		20	1.3	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
Acetone	ND		20	3.3	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
Benzene	ND		3.9	0.19	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1

Client Sample ID: SB1 (1-2)
Date Collected: 07/26/22 16:25
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-4
Matrix: Solid
Percent Solids: 87.6

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		3.9	0.53	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
Bromoform	ND		3.9	2.0	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
Bromomethane	ND		3.9	0.35	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
Carbon disulfide	ND		3.9	2.0	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
Carbon tetrachloride	ND		3.9	0.38	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
Chlorobenzene	ND		3.9	0.52	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
Chloroethane	ND		3.9	0.89	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
Chloroform	ND		3.9	0.24	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
Chloromethane	ND		3.9	0.24	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
cis-1,2-Dichloroethene	ND		3.9	0.50	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
cis-1,3-Dichloropropene	ND		3.9	0.57	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
Cyclohexane	ND		3.9	0.55	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
Dibromochloromethane	ND		3.9	0.50	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
Dichlorodifluoromethane	ND		3.9	0.32	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
Ethylbenzene	ND		3.9	0.27	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
Isopropylbenzene	ND		3.9	0.59	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
m,p-Xylene	ND		7.9	0.66	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
Methyl acetate	ND		20	2.4	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
Methyl tert-butyl ether	ND		3.9	0.39	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
Methylcyclohexane	ND		3.9	0.60	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
Methylene Chloride	ND		3.9	1.8	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
n-Butylbenzene	ND		3.9	0.34	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
N-Propylbenzene	ND		3.9	0.31	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
o-Xylene	ND		3.9	0.51	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
sec-Butylbenzene	ND		3.9	0.34	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
Styrene	ND		3.9	0.20	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
tert-Butylbenzene	ND		3.9	0.41	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
Tetrachloroethene	ND		3.9	0.53	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
Toluene	ND		3.9	0.30	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
trans-1,2-Dichloroethene	ND		3.9	0.41	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
trans-1,3-Dichloropropene	ND		3.9	1.7	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
Trichloroethene	ND		3.9	0.86	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
Trichlorofluoromethane	ND		3.9	0.37	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
Vinyl chloride	ND		3.9	0.48	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1
Xylenes, Total	ND		7.9	0.66	ug/Kg	☼	07/28/22 11:00	08/02/22 23:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*104*		*71 - 125*	*07/28/22 11:00*	*08/02/22 23:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*64 - 126*	*07/28/22 11:00*	*08/02/22 23:12*	*1*
4-Bromofluorobenzene (Surr)	*84*		*72 - 126*	*07/28/22 11:00*	*08/02/22 23:12*	*1*
Dibromofluoromethane (Surr)	*112*		*60 - 140*	*07/28/22 11:00*	*08/02/22 23:12*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		190	51	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
2,4,6-Trichlorophenol	ND		190	38	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
2,4-Dichlorophenol	ND		190	20	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
2,4-Dimethylphenol	ND		190	46	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
2,4-Dinitrophenol	ND		1800	870	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
2,4-Dinitrotoluene	ND		190	39	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1

Client Sample ID: SB1 (1-2)
Date Collected: 07/26/22 16:25
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-4
Matrix: Solid
Percent Solids: 87.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		190	22	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
2-Chloronaphthalene	ND		190	31	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
2-Chlorophenol	ND		370	34	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
2-Methylnaphthalene	ND		190	38	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
2-Methylphenol	ND		190	22	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
2-Nitroaniline	ND		370	28	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
2-Nitrophenol	ND		190	53	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
3,3'-Dichlorobenzidine	ND		370	220	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
3-Nitroaniline	ND		370	52	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
4,6-Dinitro-2-methylphenol	ND		370	190	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
4-Bromophenyl phenyl ether	ND		190	27	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
4-Chloro-3-methylphenol	ND		190	47	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
4-Chloroaniline	ND		190	47	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
4-Chlorophenyl phenyl ether	ND		190	23	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
4-Methylphenol	ND		370	22	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
4-Nitroaniline	ND		370	99	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
4-Nitrophenol	ND		370	130	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Acenaphthene	ND		190	28	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Acenaphthylene	ND		190	24	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Acetophenone	ND		190	26	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Anthracene	ND		190	47	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Atrazine	ND		190	66	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Benzaldehyde	ND		190	150	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Benzo[a]anthracene	ND		190	19	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Benzo[a]pyrene	ND		190	28	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Benzo[b]fluoranthene	ND		190	30	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Benzo[g,h,i]perylene	ND		190	20	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Benzo[k]fluoranthene	ND		190	24	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Biphenyl	ND		190	28	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
bis (2-chloroisopropyl) ether	ND		190	38	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Bis(2-chloroethoxy)methane	ND		190	40	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Bis(2-chloroethyl)ether	ND		190	24	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Bis(2-ethylhexyl) phthalate	ND		190	64	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Butyl benzyl phthalate	ND		190	31	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Caprolactam	ND		190	57	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Carbazole	ND		190	22	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Chrysene	ND		190	42	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Dibenz(a,h)anthracene	ND		190	33	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Dibenzofuran	ND		190	22	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Diethyl phthalate	ND		190	24	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Dimethyl phthalate	ND		190	22	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Di-n-butyl phthalate	ND		190	32	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Di-n-octyl phthalate	ND		190	22	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Fluoranthene	ND		190	20	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Fluorene	ND		190	22	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Hexachlorobenzene	ND		190	26	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Hexachlorobutadiene	ND		190	28	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Hexachlorocyclopentadiene	ND		190	26	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Hexachloroethane	ND		190	24	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1

Client Sample ID: SB1 (1-2)
Date Collected: 07/26/22 16:25
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-4
Matrix: Solid
Percent Solids: 87.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	ND		190	23	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Isophorone	ND		190	40	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Naphthalene	ND		190	24	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Nitrobenzene	ND		190	21	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
N-Nitrosodi-n-propylamine	ND		190	32	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
N-Nitrosodiphenylamine	ND		190	150	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Pentachlorophenol	ND		370	190	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Phenanthrene	ND		190	28	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Phenol	ND		190	29	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1
Pyrene	ND		190	22	ug/Kg	☼	07/29/22 15:47	08/03/22 17:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*94*		*54 - 120*	*07/29/22 15:47*	*08/03/22 17:09*	*1*
2-Fluorobiphenyl	*83*		*60 - 120*	*07/29/22 15:47*	*08/03/22 17:09*	*1*
2-Fluorophenol	*72*		*52 - 120*	*07/29/22 15:47*	*08/03/22 17:09*	*1*
Nitrobenzene-d5	*74*		*53 - 120*	*07/29/22 15:47*	*08/03/22 17:09*	*1*
Phenol-d5	*76*		*54 - 120*	*07/29/22 15:47*	*08/03/22 17:09*	*1*
p-Terphenyl-d14	*95*		*79 - 130*	*07/29/22 15:47*	*08/03/22 17:09*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8530**		11.9	5.3	mg/Kg	☼	08/01/22 11:03	08/02/22 17:10	1
Antimony	**1.1**	**J**	17.9	0.48	mg/Kg	☼	08/01/22 11:03	08/02/22 17:10	1
Arsenic	**6.8**		2.4	0.48	mg/Kg	☼	08/01/22 11:03	08/02/22 17:10	1
Barium	**117**		0.60	0.13	mg/Kg	☼	08/01/22 11:03	08/02/22 17:10	1
Beryllium	**0.44**		0.24	0.033	mg/Kg	☼	08/01/22 11:03	08/03/22 15:53	1
Cadmium	**1.3**		0.24	0.036	mg/Kg	☼	08/01/22 11:03	08/02/22 17:10	1
Calcium	**1810**		59.7	3.9	mg/Kg	☼	08/01/22 11:03	08/02/22 17:10	1
Chromium	**13.3**		0.60	0.24	mg/Kg	☼	08/01/22 11:03	08/02/22 17:10	1
Cobalt	**8.0**		0.60	0.060	mg/Kg	☼	08/01/22 11:03	08/02/22 17:10	1
Copper	**9.9**		1.2	0.25	mg/Kg	☼	08/01/22 11:03	08/02/22 17:10	1
Iron	**17000**		11.9	4.2	mg/Kg	☼	08/01/22 11:03	08/02/22 17:10	1
Lead	**33.7**		1.2	0.29	mg/Kg	☼	08/01/22 11:03	08/02/22 17:10	1
Magnesium	**2840**	**B**	23.9	1.1	mg/Kg	☼	08/01/22 11:03	08/02/22 17:10	1
Manganese	**535**	**B**	0.24	0.038	mg/Kg	☼	08/01/22 11:03	08/02/22 17:10	1
Nickel	**17.4**		6.0	0.27	mg/Kg	☼	08/01/22 11:03	08/02/22 17:10	1
Potassium	**967**		35.8	23.9	mg/Kg	☼	08/01/22 11:03	08/02/22 17:10	1
Selenium	**0.72**	**J B**	4.8	0.48	mg/Kg	☼	08/01/22 11:03	08/02/22 17:10	1
Silver	ND		0.72	0.24	mg/Kg	☼	08/01/22 11:03	08/02/22 17:10	1
Sodium	**135**	**J**	167	15.5	mg/Kg	☼	08/01/22 11:03	08/02/22 17:10	1
Thallium	ND		7.2	0.36	mg/Kg	☼	08/01/22 11:03	08/02/22 17:10	1
Vanadium	**11.9**		0.60	0.13	mg/Kg	☼	08/01/22 11:03	08/02/22 17:10	1
Zinc	**95.6**		2.4	0.76	mg/Kg	☼	08/01/22 11:03	08/02/22 17:10	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.025**		0.020	0.0047	mg/Kg	☼	08/02/22 09:35	08/02/22 14:37	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200156-1

Client Sample ID: SB1 (15-16)
Date Collected: 07/27/22 09:26
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-5
Matrix: Solid
Percent Solids: 92.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		180	50	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
2,4,6-Trichlorophenol	ND		180	37	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
2,4-Dichlorophenol	ND		180	19	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
2,4-Dimethylphenol	ND		180	44	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
2,4-Dinitrophenol	ND		1800	850	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
2,4-Dinitrotoluene	ND		180	38	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
2,6-Dinitrotoluene	ND		180	22	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
2-Chloronaphthalene	ND		180	30	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
2-Chlorophenol	ND		360	34	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
2-Methylnaphthalene	ND		180	37	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
2-Methylphenol	ND		180	22	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
2-Nitroaniline	ND		360	27	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
2-Nitrophenol	ND		180	52	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
3,3'-Dichlorobenzidine	ND		360	220	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
3-Nitroaniline	ND		360	51	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
4,6-Dinitro-2-methylphenol	ND		360	180	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
4-Bromophenyl phenyl ether	ND		180	26	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
4-Chloro-3-methylphenol	ND		180	45	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
4-Chloroaniline	ND		180	45	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
4-Chlorophenyl phenyl ether	ND		180	23	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
4-Methylphenol	ND		360	22	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
4-Nitroaniline	ND		360	96	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
4-Nitrophenol	ND		360	130	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Acenaphthene	ND		180	27	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Acenaphthylene	ND		180	24	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Acetophenone	ND		180	25	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Anthracene	ND		180	45	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Atrazine	ND		180	64	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Benzaldehyde	ND		180	150	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Benzo[a]anthracene	ND		180	18	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Benzo[a]pyrene	ND		180	27	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Benzo[b]fluoranthene	ND		180	29	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Benzo[g,h,i]perylene	ND		180	19	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Benzo[k]fluoranthene	ND		180	24	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Biphenyl	ND		180	27	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
bis (2-chloroisopropyl) ether	ND		180	37	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Bis(2-chloroethoxy)methane	ND		180	39	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Bis(2-chloroethyl)ether	ND		180	24	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Bis(2-ethylhexyl) phthalate	ND		180	63	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Butyl benzyl phthalate	ND		180	30	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Caprolactam	ND		180	55	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Carbazole	ND		180	22	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Chrysene	ND		180	41	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Dibenz(a,h)anthracene	ND		180	32	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Dibenzofuran	ND		180	22	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Diethyl phthalate	ND		180	24	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Dimethyl phthalate	ND		180	22	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Di-n-butyl phthalate	ND		180	31	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Di-n-octyl phthalate	ND		180	22	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1

Client Sample ID: SB1 (15-16)
Date Collected: 07/27/22 09:26
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-5
Matrix: Solid
Percent Solids: 92.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		180	19	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Fluorene	ND		180	22	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Hexachlorobenzene	ND		180	25	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Hexachlorobutadiene	ND		180	27	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Hexachlorocyclopentadiene	ND		180	25	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Hexachloroethane	ND		180	24	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Indeno[1,2,3-cd]pyrene	ND		180	23	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Isophorone	ND		180	39	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Naphthalene	ND		180	24	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Nitrobenzene	ND		180	21	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
N-Nitrosodi-n-propylamine	ND		180	31	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
N-Nitrosodiphenylamine	ND		180	150	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Pentachlorophenol	ND		360	180	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Phenanthrene	ND		180	27	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Phenol	ND		180	28	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1
Pyrene	ND		180	22	ug/Kg	☼	08/05/22 08:21	08/10/22 21:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*97*		*54 - 120*	*08/05/22 08:21*	*08/10/22 21:51*	*1*
2-Fluorobiphenyl	*85*		*60 - 120*	*08/05/22 08:21*	*08/10/22 21:51*	*1*
2-Fluorophenol	*69*		*52 - 120*	*08/05/22 08:21*	*08/10/22 21:51*	*1*
Nitrobenzene-d5	*70*		*53 - 120*	*08/05/22 08:21*	*08/10/22 21:51*	*1*
Phenol-d5	*72*		*54 - 120*	*08/05/22 08:21*	*08/10/22 21:51*	*1*
p-Terphenyl-d14	*92*		*79 - 130*	*08/05/22 08:21*	*08/10/22 21:51*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**7070**		11.2	4.9	mg/Kg	☼	08/01/22 11:03	08/02/22 17:14	1
Antimony	**0.80**	**J**	16.8	0.45	mg/Kg	☼	08/01/22 11:03	08/02/22 17:14	1
Arsenic	**8.9**		2.2	0.45	mg/Kg	☼	08/01/22 11:03	08/02/22 17:14	1
Barium	**82.3**		0.56	0.12	mg/Kg	☼	08/01/22 11:03	08/02/22 17:14	1
Beryllium	**0.26**		0.22	0.031	mg/Kg	☼	08/01/22 11:03	08/03/22 15:57	1
Cadmium	**0.13**	**J**	0.22	0.034	mg/Kg	☼	08/01/22 11:03	08/02/22 17:14	1
Calcium	**1340**		55.9	3.7	mg/Kg	☼	08/01/22 11:03	08/02/22 17:14	1
Chromium	**11.5**		0.56	0.22	mg/Kg	☼	08/01/22 11:03	08/02/22 17:14	1
Cobalt	**7.4**		0.56	0.056	mg/Kg	☼	08/01/22 11:03	08/02/22 17:14	1
Copper	**19.8**		1.1	0.23	mg/Kg	☼	08/01/22 11:03	08/02/22 17:14	1
Iron	**20500**		11.2	3.9	mg/Kg	☼	08/01/22 11:03	08/02/22 17:14	1
Lead	**8.5**		1.1	0.27	mg/Kg	☼	08/01/22 11:03	08/02/22 17:14	1
Magnesium	**2370**	**B**	22.4	1.0	mg/Kg	☼	08/01/22 11:03	08/02/22 17:14	1
Manganese	**682**	**B**	0.22	0.036	mg/Kg	☼	08/01/22 11:03	08/02/22 17:14	1
Nickel	**17.5**		5.6	0.26	mg/Kg	☼	08/01/22 11:03	08/02/22 17:14	1
Potassium	**341**		33.5	22.4	mg/Kg	☼	08/01/22 11:03	08/02/22 17:14	1
Selenium	ND		4.5	0.45	mg/Kg	☼	08/01/22 11:03	08/02/22 17:14	1
Silver	ND		0.67	0.22	mg/Kg	☼	08/01/22 11:03	08/02/22 17:14	1
Sodium	**112**	**J**	157	14.5	mg/Kg	☼	08/01/22 11:03	08/02/22 17:14	1
Thallium	ND		6.7	0.34	mg/Kg	☼	08/01/22 11:03	08/02/22 17:14	1
Vanadium	**11.6**		0.56	0.12	mg/Kg	☼	08/01/22 11:03	08/02/22 17:14	1
Zinc	**56.6**		2.2	0.72	mg/Kg	☼	08/01/22 11:03	08/02/22 17:14	1

Client Sample ID: SB1 (15-16)

Date Collected: 07/27/22 09:26
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-5
Matrix: Solid
Percent Solids: 92.0

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0050	J	0.020	0.0046	mg/Kg	☼	08/02/22 09:35	08/02/22 14:39	1

Client Sample ID: SB1 (15-16)

Date Collected: 07/26/22 16:45
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-6
Matrix: Solid
Percent Solids: 87.3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.4	0.54	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
1,1,1-Trichloroethane	ND		5.4	0.39	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
1,1,2,2-Tetrachloroethane	ND		5.4	0.87	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.4	1.2	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
1,1,2-Trichloroethane	ND		5.4	0.70	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
1,1-Dichloroethane	ND		5.4	0.66	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
1,1-Dichloroethene	ND		5.4	0.66	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
1,2,3-Trimethylbenzene	ND		5.4	1.1	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
1,2,4-Trichlorobenzene	ND		5.4	0.33	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
1,2,4-Trimethylbenzene	ND		5.4	1.0	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
1,2-Dibromo-3-Chloropropane	ND		5.4	2.7	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
1,2-Dibromoethane	ND		5.4	0.69	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
1,2-Dichlorobenzene	ND		5.4	0.42	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
1,2-Dichloroethane	ND		5.4	0.27	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
1,2-Dichloropropane	ND		5.4	2.7	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
1,3,5-Trimethylbenzene	ND		5.4	0.35	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
1,3-Dichlorobenzene	ND		5.4	0.28	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
1,4-Dichlorobenzene	ND		5.4	0.75	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
2-Butanone (MEK)	4.2	J	27	2.0	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
2-Hexanone	ND		27	2.7	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
4-Methyl-2-pentanone (MIBK)	ND		27	1.8	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
Acetone	11	J	27	4.5	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
Benzene	0.52	J	5.4	0.26	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
Bromodichloromethane	ND		5.4	0.72	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
Bromoform	ND		5.4	2.7	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
Bromomethane	ND		5.4	0.48	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
Carbon disulfide	ND		5.4	2.7	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
Carbon tetrachloride	ND		5.4	0.52	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
Chlorobenzene	ND		5.4	0.71	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
Chloroethane	ND		5.4	1.2	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
Chloroform	ND		5.4	0.33	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
Chloromethane	ND		5.4	0.33	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
cis-1,2-Dichloroethene	ND		5.4	0.69	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
cis-1,3-Dichloropropene	ND		5.4	0.78	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
Cyclohexane	ND		5.4	0.75	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
Dibromochloromethane	ND		5.4	0.69	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
Dichlorodifluoromethane	ND		5.4	0.45	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
Ethylbenzene	ND		5.4	0.37	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
Isopropylbenzene	ND		5.4	0.81	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
m,p-Xylene	ND		11	0.91	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
Methyl acetate	ND		27	3.3	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
Methyl tert-butyl ether	ND		5.4	0.53	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1

Client Sample ID: SB1 (15-16)

Lab Sample ID: 480-200156-6

Date Collected: 07/26/22 16:45
Matrix: Solid
Date Received: 07/28/22 10:00
Percent Solids: 87.3

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylcyclohexane	ND		5.4	0.82	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
Methylene Chloride	ND		5.4	2.5	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
n-Butylbenzene	ND		5.4	0.47	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
N-Propylbenzene	ND		5.4	0.43	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
o-Xylene	ND		5.4	0.70	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
sec-Butylbenzene	ND		5.4	0.47	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
Styrene	ND		5.4	0.27	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
tert-Butylbenzene	ND		5.4	0.56	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
Tetrachloroethene	ND		5.4	0.72	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
Toluene	**0.79**	**J**	5.4	0.41	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
trans-1,2-Dichloroethene	ND		5.4	0.56	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
trans-1,3-Dichloropropene	ND		5.4	2.4	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
Trichloroethene	ND		5.4	1.2	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
Trichlorofluoromethane	ND		5.4	0.51	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
Vinyl chloride	ND		5.4	0.66	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1
Xylenes, Total	ND		11	0.91	ug/Kg	☼	07/28/22 11:00	08/02/22 23:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*64 - 126*	*07/28/22 11:00*	*08/02/22 23:36*	*1*
4-Bromofluorobenzene (Surr)	*99*		*72 - 126*	*07/28/22 11:00*	*08/02/22 23:36*	*1*
Dibromofluoromethane (Surr)	*107*		*60 - 140*	*07/28/22 11:00*	*08/02/22 23:36*	*1*
Toluene-d8 (Surr)	*97*		*71 - 125*	*07/28/22 11:00*	*08/02/22 23:36*	*1*

Client Sample ID: ERB_72722

Lab Sample ID: 480-200156-7

Date Collected: 07/27/22 10:20
Matrix: Water
Date Received: 07/28/22 10:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			07/29/22 19:39	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/29/22 19:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/29/22 19:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/29/22 19:39	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/29/22 19:39	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/29/22 19:39	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/29/22 19:39	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			07/29/22 19:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/29/22 19:39	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			07/29/22 19:39	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/29/22 19:39	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/29/22 19:39	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/29/22 19:39	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/29/22 19:39	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/29/22 19:39	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			07/29/22 19:39	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/29/22 19:39	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/29/22 19:39	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/29/22 19:39	1
2-Hexanone	ND		5.0	1.2	ug/L			07/29/22 19:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/29/22 19:39	1

Client Sample ID: ERB_72722
Date Collected: 07/27/22 10:20
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-7
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		10	3.0	ug/L			07/29/22 19:39	1
Benzene	ND		1.0	0.41	ug/L			07/29/22 19:39	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/29/22 19:39	1
Bromoform	ND		1.0	0.26	ug/L			07/29/22 19:39	1
Bromomethane	ND		1.0	0.69	ug/L			07/29/22 19:39	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/29/22 19:39	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/29/22 19:39	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/29/22 19:39	1
Chloroethane	ND		1.0	0.32	ug/L			07/29/22 19:39	1
Chloroform	ND		1.0	0.34	ug/L			07/29/22 19:39	1
Chloromethane	ND		1.0	0.35	ug/L			07/29/22 19:39	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/29/22 19:39	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/29/22 19:39	1
Cyclohexane	ND		1.0	0.18	ug/L			07/29/22 19:39	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/29/22 19:39	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/29/22 19:39	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/29/22 19:39	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/29/22 19:39	1
m,p-Xylene	ND		2.0	0.66	ug/L			07/29/22 19:39	1
Methyl acetate	ND		2.5	1.3	ug/L			07/29/22 19:39	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/29/22 19:39	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/29/22 19:39	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/29/22 19:39	1
n-Butylbenzene	ND		1.0	0.64	ug/L			07/29/22 19:39	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/29/22 19:39	1
o-Xylene	ND		1.0	0.76	ug/L			07/29/22 19:39	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			07/29/22 19:39	1
Styrene	ND		1.0	0.73	ug/L			07/29/22 19:39	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			07/29/22 19:39	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/29/22 19:39	1
Toluene	ND		1.0	0.51	ug/L			07/29/22 19:39	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/29/22 19:39	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/29/22 19:39	1
Trichloroethene	ND		1.0	0.46	ug/L			07/29/22 19:39	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/29/22 19:39	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/29/22 19:39	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/29/22 19:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*77 - 120*		*07/29/22 19:39*	*1*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*07/29/22 19:39*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*07/29/22 19:39*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*07/29/22 19:39*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		07/29/22 14:39	08/01/22 17:39	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*40*		*15 - 110*	*07/29/22 14:39*	*08/01/22 17:39*	*1*

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200156-1

Client Sample ID: ERB_72722
Date Collected: 07/27/22 10:20
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-7
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		07/29/22 14:33	08/01/22 18:13	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		07/29/22 14:33	08/01/22 18:13	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		07/29/22 14:33	08/01/22 18:13	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		07/29/22 14:33	08/01/22 18:13	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		07/29/22 14:33	08/01/22 18:13	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		07/29/22 14:33	08/01/22 18:13	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		07/29/22 14:33	08/01/22 18:13	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		07/29/22 14:33	08/01/22 18:13	1
2-Chlorophenol	ND		5.0	0.53	ug/L		07/29/22 14:33	08/01/22 18:13	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		07/29/22 14:33	08/01/22 18:13	1
2-Methylphenol	ND		5.0	0.40	ug/L		07/29/22 14:33	08/01/22 18:13	1
2-Nitroaniline	ND		10	0.42	ug/L		07/29/22 14:33	08/01/22 18:13	1
2-Nitrophenol	ND		5.0	0.48	ug/L		07/29/22 14:33	08/01/22 18:13	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		07/29/22 14:33	08/01/22 18:13	1
3-Nitroaniline	ND		10	0.48	ug/L		07/29/22 14:33	08/01/22 18:13	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		07/29/22 14:33	08/01/22 18:13	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		07/29/22 14:33	08/01/22 18:13	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		07/29/22 14:33	08/01/22 18:13	1
4-Chloroaniline	ND		5.0	0.59	ug/L		07/29/22 14:33	08/01/22 18:13	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		07/29/22 14:33	08/01/22 18:13	1
4-Methylphenol	ND		10	0.36	ug/L		07/29/22 14:33	08/01/22 18:13	1
4-Nitroaniline	ND	*+	10	0.25	ug/L		07/29/22 14:33	08/01/22 18:13	1
4-Nitrophenol	ND		10	1.5	ug/L		07/29/22 14:33	08/01/22 18:13	1
Acenaphthene	ND		5.0	0.41	ug/L		07/29/22 14:33	08/01/22 18:13	1
Acenaphthylene	ND		5.0	0.38	ug/L		07/29/22 14:33	08/01/22 18:13	1
Acetophenone	ND		5.0	0.54	ug/L		07/29/22 14:33	08/01/22 18:13	1
Anthracene	ND		5.0	0.28	ug/L		07/29/22 14:33	08/01/22 18:13	1
Atrazine	ND		5.0	0.46	ug/L		07/29/22 14:33	08/01/22 18:13	1
Benzaldehyde	ND		5.0	0.27	ug/L		07/29/22 14:33	08/01/22 18:13	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		07/29/22 14:33	08/01/22 18:13	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		07/29/22 14:33	08/01/22 18:13	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		07/29/22 14:33	08/01/22 18:13	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		07/29/22 14:33	08/01/22 18:13	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		07/29/22 14:33	08/01/22 18:13	1
Biphenyl	ND		5.0	0.65	ug/L		07/29/22 14:33	08/01/22 18:13	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		07/29/22 14:33	08/01/22 18:13	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		07/29/22 14:33	08/01/22 18:13	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		07/29/22 14:33	08/01/22 18:13	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		07/29/22 14:33	08/01/22 18:13	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		07/29/22 14:33	08/01/22 18:13	1
Caprolactam	ND		5.0	2.2	ug/L		07/29/22 14:33	08/01/22 18:13	1
Carbazole	ND	*+	5.0	0.30	ug/L		07/29/22 14:33	08/01/22 18:13	1
Chrysene	ND		5.0	0.33	ug/L		07/29/22 14:33	08/01/22 18:13	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		07/29/22 14:33	08/01/22 18:13	1
Dibenzofuran	ND		10	0.51	ug/L		07/29/22 14:33	08/01/22 18:13	1
Diethyl phthalate	ND		5.0	0.22	ug/L		07/29/22 14:33	08/01/22 18:13	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		07/29/22 14:33	08/01/22 18:13	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		07/29/22 14:33	08/01/22 18:13	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		07/29/22 14:33	08/01/22 18:13	1

Client Sample ID: ERB_72722
Date Collected: 07/27/22 10:20
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-7
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		5.0	0.40	ug/L		07/29/22 14:33	08/01/22 18:13	1
Fluorene	ND		5.0	0.36	ug/L		07/29/22 14:33	08/01/22 18:13	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		07/29/22 14:33	08/01/22 18:13	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		07/29/22 14:33	08/01/22 18:13	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		07/29/22 14:33	08/01/22 18:13	1
Hexachloroethane	ND		5.0	0.59	ug/L		07/29/22 14:33	08/01/22 18:13	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		07/29/22 14:33	08/01/22 18:13	1
Isophorone	ND		5.0	0.43	ug/L		07/29/22 14:33	08/01/22 18:13	1
Naphthalene	ND		5.0	0.76	ug/L		07/29/22 14:33	08/01/22 18:13	1
Nitrobenzene	ND		5.0	0.29	ug/L		07/29/22 14:33	08/01/22 18:13	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		07/29/22 14:33	08/01/22 18:13	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		07/29/22 14:33	08/01/22 18:13	1
Pentachlorophenol	ND		10	2.2	ug/L		07/29/22 14:33	08/01/22 18:13	1
Phenanthrene	ND		5.0	0.44	ug/L		07/29/22 14:33	08/01/22 18:13	1
Phenol	ND		5.0	0.39	ug/L		07/29/22 14:33	08/01/22 18:13	1
Pyrene	ND		5.0	0.34	ug/L		07/29/22 14:33	08/01/22 18:13	1
1,4-Dioxane	ND		10	1.1	ug/L		07/29/22 14:33	08/01/22 18:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*82*		*41 - 120*	*07/29/22 14:33*	*08/01/22 18:13*	*1*
2-Fluorobiphenyl	*87*		*48 - 120*	*07/29/22 14:33*	*08/01/22 18:13*	*1*
2-Fluorophenol	*66*		*35 - 120*	*07/29/22 14:33*	*08/01/22 18:13*	*1*
Nitrobenzene-d5	*80*		*46 - 120*	*07/29/22 14:33*	*08/01/22 18:13*	*1*
Phenol-d5	*52*		*22 - 120*	*07/29/22 14:33*	*08/01/22 18:13*	*1*
p-Terphenyl-d14	*109*		*60 - 148*	*07/29/22 14:33*	*08/01/22 18:13*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		08/01/22 08:49	08/01/22 17:26	1
Antimony	ND		0.020	0.0068	mg/L		08/01/22 08:49	08/01/22 17:26	1
Arsenic	ND		0.015	0.0056	mg/L		08/01/22 08:49	08/01/22 17:26	1
Barium	ND		0.0020	0.00070	mg/L		08/01/22 08:49	08/01/22 17:26	1
Beryllium	ND		0.0020	0.00030	mg/L		08/01/22 08:49	08/01/22 17:26	1
Cadmium	ND		0.0020	0.00050	mg/L		08/01/22 08:49	08/01/22 17:26	1
Calcium	ND		0.50	0.10	mg/L		08/01/22 08:49	08/01/22 17:26	1
Chromium	ND		0.0040	0.0010	mg/L		08/01/22 08:49	08/01/22 17:26	1
Cobalt	ND		0.0040	0.00063	mg/L		08/01/22 08:49	08/01/22 17:26	1
Copper	ND		0.010	0.0016	mg/L		08/01/22 08:49	08/01/22 17:26	1
Iron	ND		0.050	0.019	mg/L		08/01/22 08:49	08/01/22 17:26	1
Lead	ND		0.010	0.0030	mg/L		08/01/22 08:49	08/01/22 17:26	1
Magnesium	ND		0.20	0.043	mg/L		08/01/22 08:49	08/01/22 17:26	1
Manganese	**0.00063**	**J**	0.0030	0.00040	mg/L		08/01/22 08:49	08/01/22 17:26	1
Nickel	ND		0.010	0.0013	mg/L		08/01/22 08:49	08/01/22 17:26	1
Potassium	ND		0.50	0.10	mg/L		08/01/22 08:49	08/01/22 17:26	1
Selenium	ND		0.025	0.0087	mg/L		08/01/22 08:49	08/01/22 17:26	1
Silver	ND		0.0060	0.0017	mg/L		08/01/22 08:49	08/01/22 17:26	1
Sodium	ND		1.0	0.32	mg/L		08/01/22 08:49	08/01/22 17:26	1
Thallium	ND		0.020	0.010	mg/L		08/01/22 08:49	08/01/22 17:26	1
Vanadium	ND		0.0050	0.0015	mg/L		08/01/22 08:49	08/01/22 17:26	1
Zinc	ND		0.010	0.0015	mg/L		08/01/22 08:49	08/01/22 17:26	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200156-1

Client Sample ID: ERB_72722

Lab Sample ID: 480-200156-7
Date Collected: 07/27/22 10:20
Matrix: Water
Date Received: 07/28/22 10:00

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		08/01/22 10:12	08/01/22 13:07	1

Client Sample ID: SS7 (0-6)

Lab Sample ID: 480-200156-8
Date Collected: 07/27/22 16:50
Matrix: Solid
Date Received: 07/28/22 10:00
Percent Solids: 90.9

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	*3	5.9	0.59	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
1,1,1-Trichloroethane	ND		5.9	0.43	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
1,1,2,2-Tetrachloroethane	ND	*3	5.9	0.95	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.9	1.3	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
1,1,2-Trichloroethane	ND	*3	5.9	0.76	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
1,1-Dichloroethane	ND		5.9	0.72	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
1,1-Dichloroethene	ND		5.9	0.72	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
1,2,3-Trimethylbenzene	ND	*3	5.9	1.2	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
1,2,4-Trichlorobenzene	ND	*3	5.9	0.36	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
1,2,4-Trimethylbenzene	ND	*3	5.9	1.1	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
1,2-Dibromo-3-Chloropropane	ND	*3	5.9	2.9	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
1,2-Dibromoethane	ND	*3	5.9	0.75	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
1,2-Dichlorobenzene	ND	*3	5.9	0.46	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
1,2-Dichloroethane	ND		5.9	0.29	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
1,2-Dichloropropane	ND		5.9	2.9	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
1,3,5-Trimethylbenzene	ND	*3	5.9	0.38	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
1,3-Dichlorobenzene	ND	*3	5.9	0.30	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
1,4-Dichlorobenzene	ND	*3	5.9	0.82	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
2-Butanone (MEK)	ND		29	2.1	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
2-Hexanone	ND	*3	29	2.9	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
4-Methyl-2-pentanone (MIBK)	ND	*3	29	1.9	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
Acetone	ND		29	4.9	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
Benzene	ND		5.9	0.29	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
Bromodichloromethane	ND		5.9	0.79	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
Bromoform	ND	*3 *+	5.9	2.9	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
Bromomethane	ND		5.9	0.53	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
Carbon disulfide	ND		5.9	2.9	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
Carbon tetrachloride	ND		5.9	0.57	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
Chlorobenzene	ND	*3	5.9	0.77	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
Chloroethane	ND		5.9	1.3	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
Chloroform	ND		5.9	0.36	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
Chloromethane	ND		5.9	0.35	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
cis-1,2-Dichloroethene	ND		5.9	0.75	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
cis-1,3-Dichloropropene	ND		5.9	0.84	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
Cyclohexane	ND		5.9	0.82	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
Dibromochloromethane	ND	*3 *+	5.9	0.75	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
Dichlorodifluoromethane	ND		5.9	0.48	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
Ethylbenzene	ND	*3	5.9	0.40	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
Isopropylbenzene	ND	*3	5.9	0.88	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
m,p-Xylene	ND	*3	12	0.99	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
Methyl acetate	ND		29	3.5	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
Methyl tert-butyl ether	ND		5.9	0.58	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1

Client Sample ID: SS7 (0-6)
Date Collected: 07/27/22 16:50
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-8
Matrix: Solid
Percent Solids: 90.9

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylcyclohexane	ND		5.9	0.89	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
Methylene Chloride	ND		5.9	2.7	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
n-Butylbenzene	ND	*3	5.9	0.51	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
N-Propylbenzene	ND	*3	5.9	0.47	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
o-Xylene	ND	*3	5.9	0.77	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
sec-Butylbenzene	ND	*3	5.9	0.51	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
Styrene	ND	*3	5.9	0.29	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
tert-Butylbenzene	ND	*3 *+	5.9	0.61	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
Tetrachloroethene	ND	*3 *+	5.9	0.79	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
Toluene	ND	*3	5.9	0.44	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
trans-1,2-Dichloroethene	ND		5.9	0.61	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
trans-1,3-Dichloropropene	ND	*3	5.9	2.6	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
Trichloroethene	ND		5.9	1.3	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
Trichlorofluoromethane	ND		5.9	0.55	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
Vinyl chloride	ND		5.9	0.72	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1
Xylenes, Total	ND		12	0.99	ug/Kg	☼	07/28/22 11:00	08/03/22 22:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*127*	**3 S1+*	*71 - 125*	*07/28/22 11:00*	*08/03/22 22:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*64 - 126*	*07/28/22 11:00*	*08/03/22 22:31*	*1*
4-Bromofluorobenzene (Surr)	*73*	**3*	*72 - 126*	*07/28/22 11:00*	*08/03/22 22:31*	*1*
Dibromofluoromethane (Surr)	*113*		*60 - 140*	*07/28/22 11:00*	*08/03/22 22:31*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		110	59	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
2,4,5-Trichlorophenol	ND		180	49	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
2,4,6-Trichlorophenol	ND		180	36	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
2,4-Dichlorophenol	ND		180	19	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
2,4-Dimethylphenol	ND		180	44	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
2,4-Dinitrophenol	ND		1800	840	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
2,4-Dinitrotoluene	ND		180	38	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
2,6-Dinitrotoluene	ND		180	21	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
2-Chloronaphthalene	ND		180	30	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
2-Chlorophenol	ND		350	33	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
2-Methylnaphthalene	ND		180	36	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
2-Methylphenol	ND		180	21	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
2-Nitroaniline	ND		350	27	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
2-Nitrophenol	ND		180	52	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
3,3'-Dichlorobenzidine	ND		350	210	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
3-Nitroaniline	ND		350	50	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
4,6-Dinitro-2-methylphenol	ND		350	180	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
4-Bromophenyl phenyl ether	ND		180	26	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
4-Chloro-3-methylphenol	ND		180	45	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
4-Chloroaniline	ND		180	45	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
4-Chlorophenyl phenyl ether	ND		180	23	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
4-Methylphenol	ND		350	21	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
4-Nitroaniline	ND		350	96	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
4-Nitrophenol	ND		350	130	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Acenaphthene	ND		180	27	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1

Client Sample ID: SS7 (0-6)
Date Collected: 07/27/22 16:50
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-8
Matrix: Solid
Percent Solids: 90.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	**79**	**J**	180	24	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Acetophenone	ND		180	25	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Anthracene	**48**	**J**	180	45	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Atrazine	ND		180	63	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Benzaldehyde	ND		180	140	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Benzo[a]anthracene	**280**		180	18	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Benzo[a]pyrene	**240**		180	27	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Benzo[b]fluoranthene	**450**		180	29	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Benzo[g,h,i]perylene	**210**		180	19	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Benzo[k]fluoranthene	**170**	**J**	180	24	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Biphenyl	ND		180	27	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
bis (2-chloroisopropyl) ether	ND		180	36	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Bis(2-chloroethoxy)methane	ND		180	39	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Bis(2-chloroethyl)ether	ND		180	24	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Bis(2-ethylhexyl) phthalate	ND		180	62	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Butyl benzyl phthalate	ND		180	30	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Caprolactam	ND		180	55	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Carbazole	ND		180	21	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Chrysene	**350**		180	41	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Dibenz(a,h)anthracene	**71**	**J**	180	32	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Dibenzofuran	**26**	**J**	180	21	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Diethyl phthalate	ND		180	24	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Dimethyl phthalate	ND		180	21	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Di-n-butyl phthalate	ND		180	31	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Di-n-octyl phthalate	ND		180	21	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Fluoranthene	**500**		180	19	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Fluorene	ND		180	21	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Hexachlorobenzene	ND		180	25	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Hexachlorobutadiene	ND		180	27	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Hexachlorocyclopentadiene	ND		180	25	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Hexachloroethane	ND		180	24	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Indeno[1,2,3-cd]pyrene	**210**		180	23	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Isophorone	ND		180	39	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Naphthalene	**34**	**J**	180	24	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Nitrobenzene	ND		180	20	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
N-Nitrosodi-n-propylamine	ND		180	31	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
N-Nitrosodiphenylamine	ND		180	150	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Pentachlorophenol	ND		350	180	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Phenanthrene	**160**	**J**	180	27	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Phenol	ND		180	28	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1
Pyrene	**410**		180	21	ug/Kg	☼	07/29/22 15:47	08/03/22 17:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*103*		*54 - 120*	*07/29/22 15:47*	*08/03/22 17:57*	*1*
2-Fluorobiphenyl	*86*		*60 - 120*	*07/29/22 15:47*	*08/03/22 17:57*	*1*
2-Fluorophenol	*74*		*52 - 120*	*07/29/22 15:47*	*08/03/22 17:57*	*1*
Nitrobenzene-d5	*67*		*53 - 120*	*07/29/22 15:47*	*08/03/22 17:57*	*1*
Phenol-d5	*80*		*54 - 120*	*07/29/22 15:47*	*08/03/22 17:57*	*1*
p-Terphenyl-d14	*95*		*79 - 130*	*07/29/22 15:47*	*08/03/22 17:57*	*1*

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200156-1

Client Sample ID: SS7 (0-6)
Date Collected: 07/27/22 16:50
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-8
Matrix: Solid
Percent Solids: 90.9

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.53	0.35	ug/Kg	☼	08/04/22 08:35	08/04/22 22:45	1
Perfluoropentanoic acid (PFPeA)	ND		0.21	0.058	ug/Kg	☼	08/04/22 08:35	08/04/22 22:45	1
Perfluorohexanoic acid (PFHxA)	**0.15**	**J I**	0.21	0.048	ug/Kg	☼	08/04/22 08:35	08/04/22 22:45	1
Perfluoroheptanoic acid (PFHpA)	**0.053**	**J**	0.21	0.041	ug/Kg	☼	08/04/22 08:35	08/04/22 22:45	1
Perfluorooctanoic acid (PFOA)	**0.092**	**J**	0.21	0.061	ug/Kg	☼	08/04/22 08:35	08/04/22 22:45	1
Perfluorononanoic acid (PFNA)	**0.078**	**J**	0.21	0.036	ug/Kg	☼	08/04/22 08:35	08/04/22 22:45	1
Perfluorodecanoic acid (PFDA)	**0.043**	**J**	0.21	0.029	ug/Kg	☼	08/04/22 08:35	08/04/22 22:45	1
Perfluoroundecanoic acid (PFUnA)	**0.051**	**J**	0.21	0.028	ug/Kg	☼	08/04/22 08:35	08/04/22 22:45	1
Perfluorododecanoic acid (PFDoA)	**0.026**	**J**	0.21	0.026	ug/Kg	☼	08/04/22 08:35	08/04/22 22:45	1
Perfluorotridecanoic acid (PFTriA)	**0.026**	**J**	0.21	0.026	ug/Kg	☼	08/04/22 08:35	08/04/22 22:45	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.21	0.027	ug/Kg	☼	08/04/22 08:35	08/04/22 22:45	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.21	0.035	ug/Kg	☼	08/04/22 08:35	08/04/22 22:45	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.21	0.043	ug/Kg	☼	08/04/22 08:35	08/04/22 22:45	1
Perfluoroheptanesulfonic acid (PFHpS)	**0.075**	**J**	0.21	0.024	ug/Kg	☼	08/04/22 08:35	08/04/22 22:45	1
Perfluorooctanesulfonic acid (PFOS)	**0.12**	**J I**	0.21	0.12	ug/Kg	☼	08/04/22 08:35	08/04/22 22:45	1
Perfluorodecanesulfonic acid (PFDS)	**0.021**	**J**	0.21	0.020	ug/Kg	☼	08/04/22 08:35	08/04/22 22:45	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.21	0.036	ug/Kg	☼	08/04/22 08:35	08/04/22 22:45	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.1	0.12	ug/Kg	☼	08/04/22 08:35	08/04/22 22:45	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.1	0.087	ug/Kg	☼	08/04/22 08:35	08/04/22 22:45	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.1	0.060	ug/Kg	☼	08/04/22 08:35	08/04/22 22:45	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.1	0.039	ug/Kg	☼	08/04/22 08:35	08/04/22 22:45	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*86*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:45*	*1*
13C4 PFHpA	*91*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:45*	*1*
13C4 PFOA	*91*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:45*	*1*
13C4 PFOS	*80*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:45*	*1*
13C5 PFNA	*85*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:45*	*1*
13C4 PFBA	*92*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:45*	*1*
13C2 PFHxA	*93*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:45*	*1*
13C2 PFDA	*89*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:45*	*1*
13C2 PFUnA	*89*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:45*	*1*
13C2 PFDoA	*91*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:45*	*1*
13C8 FOSA	*75*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:45*	*1*
13C5 PFPeA	*95*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:45*	*1*
13C2 PFTeDA	*97*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:45*	*1*
d3-NMeFOSAA	*75*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:45*	*1*
d5-NEtFOSAA	*80*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:45*	*1*
M2-6:2 FTS	*95*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:45*	*1*
M2-8:2 FTS	*97*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:45*	*1*
13C3 PFBS	*82*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:45*	*1*

Client Sample ID: SS7 (0-6)

Date Collected: 07/27/22 16:50
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-8

Matrix: Solid
Percent Solids: 90.9

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8700		11.2	4.9	mg/Kg	☼	08/01/22 11:03	08/02/22 17:18	1
Antimony	1.4	J	16.8	0.45	mg/Kg	☼	08/01/22 11:03	08/02/22 17:18	1
Arsenic	10.7		2.2	0.45	mg/Kg	☼	08/01/22 11:03	08/02/22 17:18	1
Barium	77.8		0.56	0.12	mg/Kg	☼	08/01/22 11:03	08/02/22 17:18	1
Beryllium	0.40		0.22	0.031	mg/Kg	☼	08/01/22 11:03	08/03/22 16:01	1
Cadmium	0.21	J	0.22	0.034	mg/Kg	☼	08/01/22 11:03	08/02/22 17:18	1
Calcium	2820		56.0	3.7	mg/Kg	☼	08/01/22 11:03	08/02/22 17:18	1
Chromium	11.9		0.56	0.22	mg/Kg	☼	08/01/22 11:03	08/02/22 17:18	1
Cobalt	8.7		0.56	0.056	mg/Kg	☼	08/01/22 11:03	08/02/22 17:18	1
Copper	38.9		1.1	0.24	mg/Kg	☼	08/01/22 11:03	08/02/22 17:18	1
Iron	22800		11.2	3.9	mg/Kg	☼	08/01/22 11:03	08/02/22 17:18	1
Lead	51.5		1.1	0.27	mg/Kg	☼	08/01/22 11:03	08/02/22 17:18	1
Magnesium	2760	B	22.4	1.0	mg/Kg	☼	08/01/22 11:03	08/02/22 17:18	1
Manganese	407	B	0.22	0.036	mg/Kg	☼	08/01/22 11:03	08/02/22 17:18	1
Nickel	20.4		5.6	0.26	mg/Kg	☼	08/01/22 11:03	08/02/22 17:18	1
Potassium	508		33.6	22.4	mg/Kg	☼	08/01/22 11:03	08/02/22 17:18	1
Selenium	ND		4.5	0.45	mg/Kg	☼	08/01/22 11:03	08/02/22 17:18	1
Silver	ND		0.67	0.22	mg/Kg	☼	08/01/22 11:03	08/02/22 17:18	1
Sodium	33.3	J	157	14.6	mg/Kg	☼	08/01/22 11:03	08/02/22 17:18	1
Thallium	ND		6.7	0.34	mg/Kg	☼	08/01/22 11:03	08/02/22 17:18	1
Vanadium	14.6		0.56	0.12	mg/Kg	☼	08/01/22 11:03	08/02/22 17:18	1
Zinc	69.5		2.2	0.72	mg/Kg	☼	08/01/22 11:03	08/02/22 17:18	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.081		0.022	0.0051	mg/Kg	☼	08/02/22 09:35	08/02/22 14:40	1

Client Sample ID: SS7 (6-12)

Date Collected: 07/27/22 17:05
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-9

Matrix: Solid
Percent Solids: 96.3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	*3	5.5	0.55	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
1,1,1-Trichloroethane	ND		5.5	0.40	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
1,1,2,2-Tetrachloroethane	ND	*3	5.5	0.89	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.5	1.2	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
1,1,2-Trichloroethane	ND	*3	5.5	0.71	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
1,1-Dichloroethane	ND		5.5	0.67	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
1,1-Dichloroethene	ND		5.5	0.67	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
1,2,3-Trimethylbenzene	ND	*3	5.5	1.1	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
1,2,4-Trichlorobenzene	ND	*3	5.5	0.33	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
1,2,4-Trimethylbenzene	ND	*3	5.5	1.1	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
1,2-Dibromo-3-Chloropropane	ND	*3	5.5	2.7	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
1,2-Dibromoethane	ND	*3	5.5	0.70	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
1,2-Dichlorobenzene	ND	*3	5.5	0.43	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
1,2-Dichloroethane	ND		5.5	0.28	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
1,2-Dichloropropane	ND		5.5	2.7	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
1,3,5-Trimethylbenzene	ND	*3	5.5	0.35	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
1,3-Dichlorobenzene	ND	*3	5.5	0.28	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1

Client Sample ID: SS7 (6-12)
Date Collected: 07/27/22 17:05
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-9
Matrix: Solid
Percent Solids: 96.3

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND	*3	5.5	0.77	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
2-Butanone (MEK)	ND		27	2.0	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
2-Hexanone	ND	*3	27	2.7	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
4-Methyl-2-pentanone (MIBK)	ND	*3	27	1.8	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
Acetone	ND		27	4.6	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
Benzene	ND		5.5	0.27	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
Bromodichloromethane	ND		5.5	0.73	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
Bromoform	ND	*3 *+	5.5	2.7	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
Bromomethane	ND		5.5	0.49	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
Carbon disulfide	ND		5.5	2.7	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
Carbon tetrachloride	ND		5.5	0.53	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
Chlorobenzene	ND	*3	5.5	0.72	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
Chloroethane	ND		5.5	1.2	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
Chloroform	ND		5.5	0.34	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
Chloromethane	ND		5.5	0.33	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
cis-1,2-Dichloroethene	ND		5.5	0.70	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
cis-1,3-Dichloropropene	ND		5.5	0.79	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
Cyclohexane	ND		5.5	0.77	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
Dibromochloromethane	ND	*3 *+	5.5	0.70	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
Dichlorodifluoromethane	ND		5.5	0.45	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
Ethylbenzene	ND	*3	5.5	0.38	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
Isopropylbenzene	ND	*3	5.5	0.83	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
m,p-Xylene	ND	*3	11	0.92	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
Methyl acetate	ND		27	3.3	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
Methyl tert-butyl ether	ND		5.5	0.54	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
Methylcyclohexane	ND		5.5	0.83	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
Methylene Chloride	ND		5.5	2.5	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
n-Butylbenzene	ND	*3	5.5	0.48	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
N-Propylbenzene	ND	*3	5.5	0.44	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
o-Xylene	ND	*3	5.5	0.72	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
sec-Butylbenzene	ND	*3	5.5	0.48	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
Styrene	ND	*3	5.5	0.27	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
tert-Butylbenzene	ND	*3 *+	5.5	0.57	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
Tetrachloroethene	ND	*3 *+	5.5	0.74	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
Toluene	ND	*3	5.5	0.41	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
trans-1,2-Dichloroethene	ND		5.5	0.57	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
trans-1,3-Dichloropropene	ND	*3	5.5	2.4	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
Trichloroethene	ND		5.5	1.2	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
Trichlorofluoromethane	ND		5.5	0.52	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
Vinyl chloride	ND		5.5	0.67	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1
Xylenes, Total	ND		11	0.92	ug/Kg	☼	07/28/22 11:00	08/03/22 22:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*132*	**3 S1+*	*71 - 125*	*07/28/22 11:00*	*08/03/22 22:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*64 - 126*	*07/28/22 11:00*	*08/03/22 22:56*	*1*
4-Bromofluorobenzene (Surr)	*69*	**3 S1-*	*72 - 126*	*07/28/22 11:00*	*08/03/22 22:56*	*1*
Dibromofluoromethane (Surr)	*111*		*60 - 140*	*07/28/22 11:00*	*08/03/22 22:56*	*1*

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200156-1

Client Sample ID: SS7 (6-12)
Date Collected: 07/27/22 17:05
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-9
Matrix: Solid
Percent Solids: 96.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		510	280	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
2,4,5-Trichlorophenol	ND		870	240	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
2,4,6-Trichlorophenol	ND		870	170	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
2,4-Dichlorophenol	ND		870	92	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
2,4-Dimethylphenol	ND		870	210	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
2,4-Dinitrophenol	ND		8500	4000	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
2,4-Dinitrotoluene	ND		870	180	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
2,6-Dinitrotoluene	ND		870	100	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
2-Chloronaphthalene	ND		870	140	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
2-Chlorophenol	ND		1700	160	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
2-Methylnaphthalene	ND		870	170	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
2-Methylphenol	ND		870	100	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
2-Nitroaniline	ND		1700	130	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
2-Nitrophenol	ND		870	250	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
3,3'-Dichlorobenzidine	ND		1700	1000	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
3-Nitroaniline	ND		1700	240	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
4,6-Dinitro-2-methylphenol	ND		1700	870	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
4-Bromophenyl phenyl ether	ND		870	120	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
4-Chloro-3-methylphenol	ND		870	220	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
4-Chloroaniline	ND		870	220	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
4-Chlorophenyl phenyl ether	ND		870	110	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
4-Methylphenol	ND		1700	100	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
4-Nitroaniline	ND		1700	460	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
4-Nitrophenol	ND		1700	610	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Acenaphthene	ND		870	130	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Acenaphthylene	**120**	**J**	870	110	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Acetophenone	ND		870	120	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Anthracene	ND		870	220	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Atrazine	ND		870	300	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Benzaldehyde	ND		870	690	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Benzo[a]anthracene	**430**	**J**	870	87	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Benzo[a]pyrene	**490**	**J**	870	130	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Benzo[b]fluoranthene	**730**	**J**	870	140	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Benzo[g,h,i]perylene	**410**	**J**	870	92	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Benzo[k]fluoranthene	**250**	**J**	870	110	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Biphenyl	ND		870	130	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
bis (2-chloroisopropyl) ether	ND		870	170	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Bis(2-chloroethoxy)methane	ND		870	180	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Bis(2-chloroethyl)ether	ND		870	110	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Bis(2-ethylhexyl) phthalate	ND		870	300	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Butyl benzyl phthalate	ND		870	140	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Caprolactam	ND		870	260	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Carbazole	ND		870	100	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Chrysene	**480**	**J**	870	190	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Dibenz(a,h)anthracene	**160**	**J**	870	150	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Dibenzofuran	ND		870	100	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Diethyl phthalate	ND		870	110	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Dimethyl phthalate	ND		870	100	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Di-n-butyl phthalate	ND		870	150	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5

Client Sample ID: SS7 (6-12)
Date Collected: 07/27/22 17:05
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-9
Matrix: Solid
Percent Solids: 96.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	ND		870	100	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Fluoranthene	**730**	**J**	870	92	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Fluorene	ND		870	100	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Hexachlorobenzene	ND		870	120	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Hexachlorobutadiene	ND		870	130	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Hexachlorocyclopentadiene	ND		870	120	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Hexachloroethane	ND		870	110	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Indeno[1,2,3-cd]pyrene	**420**	**J**	870	110	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Isophorone	ND		870	180	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Naphthalene	ND		870	110	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Nitrobenzene	ND		870	97	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
N-Nitrosodi-n-propylamine	ND		870	150	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
N-Nitrosodiphenylamine	ND		870	710	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Pentachlorophenol	ND		1700	870	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Phenanthrene	**290**	**J**	870	130	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Phenol	ND		870	130	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5
Pyrene	**630**	**J**	870	100	ug/Kg	☼	07/29/22 15:47	08/03/22 18:21	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*83*		*54 - 120*	*07/29/22 15:47*	*08/03/22 18:21*	*5*
2-Fluorobiphenyl	*86*		*60 - 120*	*07/29/22 15:47*	*08/03/22 18:21*	*5*
2-Fluorophenol	*66*		*52 - 120*	*07/29/22 15:47*	*08/03/22 18:21*	*5*
Nitrobenzene-d5	*68*		*53 - 120*	*07/29/22 15:47*	*08/03/22 18:21*	*5*
Phenol-d5	*71*		*54 - 120*	*07/29/22 15:47*	*08/03/22 18:21*	*5*
p-Terphenyl-d14	*90*		*79 - 130*	*07/29/22 15:47*	*08/03/22 18:21*	*5*

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.51	0.34	ug/Kg	☼	08/04/22 08:35	08/04/22 22:53	1
Perfluoropentanoic acid (PFPeA)	ND		0.20	0.056	ug/Kg	☼	08/04/22 08:35	08/04/22 22:53	1
Perfluorohexanoic acid (PFHxA)	ND		0.20	0.047	ug/Kg	☼	08/04/22 08:35	08/04/22 22:53	1
Perfluoroheptanoic acid (PFHpA)	ND		0.20	0.040	ug/Kg	☼	08/04/22 08:35	08/04/22 22:53	1
Perfluorooctanoic acid (PFOA)	**0.060**	**J**	0.20	0.059	ug/Kg	☼	08/04/22 08:35	08/04/22 22:53	1
Perfluorononanoic acid (PFNA)	ND		0.20	0.035	ug/Kg	☼	08/04/22 08:35	08/04/22 22:53	1
Perfluorodecanoic acid (PFDA)	ND		0.20	0.029	ug/Kg	☼	08/04/22 08:35	08/04/22 22:53	1
Perfluoroundecanoic acid (PFUnA)	ND		0.20	0.028	ug/Kg	☼	08/04/22 08:35	08/04/22 22:53	1
Perfluorododecanoic acid (PFDoA)	ND		0.20	0.026	ug/Kg	☼	08/04/22 08:35	08/04/22 22:53	1
Perfluorotridecanoic acid (PFTriA)	ND		0.20	0.026	ug/Kg	☼	08/04/22 08:35	08/04/22 22:53	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.20	0.027	ug/Kg	☼	08/04/22 08:35	08/04/22 22:53	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.20	0.034	ug/Kg	☼	08/04/22 08:35	08/04/22 22:53	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.20	0.042	ug/Kg	☼	08/04/22 08:35	08/04/22 22:53	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.20	0.024	ug/Kg	☼	08/04/22 08:35	08/04/22 22:53	1
Perfluorooctanesulfonic acid (PFOS)	**0.12**	**J**	0.20	0.11	ug/Kg	☼	08/04/22 08:35	08/04/22 22:53	1
Perfluorodecanesulfonic acid (PFDS)	**0.022**	**J**	0.20	0.019	ug/Kg	☼	08/04/22 08:35	08/04/22 22:53	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.20	0.035	ug/Kg	☼	08/04/22 08:35	08/04/22 22:53	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.0	0.11	ug/Kg	☼	08/04/22 08:35	08/04/22 22:53	1

Client Sample ID: SS7 (6-12)
Date Collected: 07/27/22 17:05
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-9
Matrix: Solid
Percent Solids: 96.3

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.0	0.085	ug/Kg	☼	08/04/22 08:35	08/04/22 22:53	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.0	0.058	ug/Kg	☼	08/04/22 08:35	08/04/22 22:53	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.0	0.038	ug/Kg	☼	08/04/22 08:35	08/04/22 22:53	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*83*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:53*	*1*
13C4 PFHpA	*92*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:53*	*1*
13C4 PFOA	*94*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:53*	*1*
13C4 PFOS	*81*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:53*	*1*
13C5 PFNA	*89*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:53*	*1*
13C4 PFBA	*90*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:53*	*1*
13C2 PFHxA	*94*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:53*	*1*
13C2 PFDA	*89*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:53*	*1*
13C2 PFUnA	*87*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:53*	*1*
13C2 PFDoA	*89*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:53*	*1*
13C8 FOSA	*73*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:53*	*1*
13C5 PFPeA	*95*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:53*	*1*
13C2 PFTeDA	*104*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:53*	*1*
d3-NMeFOSAA	*77*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:53*	*1*
d5-NEtFOSAA	*78*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:53*	*1*
M2-6:2 FTS	*89*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:53*	*1*
M2-8:2 FTS	*90*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:53*	*1*
13C3 PFBS	*83*		*50 - 150*	*08/04/22 08:35*	*08/04/22 22:53*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8520**		10.3	4.6	mg/Kg	☼	08/01/22 11:03	08/02/22 17:22	1
Antimony	**1.2**	**J**	15.5	0.41	mg/Kg	☼	08/01/22 11:03	08/02/22 17:22	1
Arsenic	**14.6**		2.1	0.41	mg/Kg	☼	08/01/22 11:03	08/02/22 17:22	1
Barium	**107**		0.52	0.11	mg/Kg	☼	08/01/22 11:03	08/02/22 17:22	1
Beryllium	**0.44**		0.21	0.029	mg/Kg	☼	08/01/22 11:03	08/03/22 16:05	1
Cadmium	**0.51**		0.21	0.031	mg/Kg	☼	08/01/22 11:03	08/02/22 17:22	1
Calcium	**13100**		51.7	3.4	mg/Kg	☼	08/01/22 11:03	08/02/22 17:22	1
Chromium	**13.7**		0.52	0.21	mg/Kg	☼	08/01/22 11:03	08/02/22 17:22	1
Cobalt	**9.2**		0.52	0.052	mg/Kg	☼	08/01/22 11:03	08/02/22 17:22	1
Copper	**45.7**		1.0	0.22	mg/Kg	☼	08/01/22 11:03	08/02/22 17:22	1
Iron	**23900**		10.3	3.6	mg/Kg	☼	08/01/22 11:03	08/02/22 17:22	1
Lead	**140**		1.0	0.25	mg/Kg	☼	08/01/22 11:03	08/02/22 17:22	1
Magnesium	**6700**	**B**	20.7	0.96	mg/Kg	☼	08/01/22 11:03	08/02/22 17:22	1
Manganese	**531**	**B**	0.21	0.033	mg/Kg	☼	08/01/22 11:03	08/02/22 17:22	1
Nickel	**20.4**		5.2	0.24	mg/Kg	☼	08/01/22 11:03	08/02/22 17:22	1
Potassium	**521**		31.0	20.7	mg/Kg	☼	08/01/22 11:03	08/02/22 17:22	1
Selenium	ND		4.1	0.41	mg/Kg	☼	08/01/22 11:03	08/02/22 17:22	1
Silver	ND		0.62	0.21	mg/Kg	☼	08/01/22 11:03	08/02/22 17:22	1
Sodium	**50.7**	**J**	145	13.5	mg/Kg	☼	08/01/22 11:03	08/02/22 17:22	1
Thallium	ND		6.2	0.31	mg/Kg	☼	08/01/22 11:03	08/02/22 17:22	1
Vanadium	**16.6**		0.52	0.11	mg/Kg	☼	08/01/22 11:03	08/02/22 17:22	1
Zinc	**86.5**		2.1	0.66	mg/Kg	☼	08/01/22 11:03	08/02/22 17:22	1

Client Sample ID: SS7 (6-12)

Lab Sample ID: 480-200156-9
Date Collected: 07/27/22 17:05
Matrix: Solid
Date Received: 07/28/22 10:00
Percent Solids: 96.3

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.14**		0.021	0.0048	mg/Kg	☼	08/02/22 09:35	08/02/22 14:41	1

Client Sample ID: SS7 (12-24)

Lab Sample ID: 480-200156-10
Date Collected: 07/27/22 17:10
Matrix: Solid
Date Received: 07/28/22 10:00
Percent Solids: 93.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	*3	5.5	0.55	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
1,1,1-Trichloroethane	ND		5.5	0.40	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
1,1,2,2-Tetrachloroethane	ND	*3	5.5	0.89	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.5	1.3	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
1,1,2-Trichloroethane	ND	*3	5.5	0.72	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
1,1-Dichloroethane	ND		5.5	0.67	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
1,1-Dichloroethene	ND		5.5	0.67	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
1,2,3-Trimethylbenzene	ND	*3	5.5	1.1	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
1,2,4-Trichlorobenzene	ND	*3	5.5	0.33	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
1,2,4-Trimethylbenzene	ND	*3	5.5	1.1	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
1,2-Dibromo-3-Chloropropane	ND	*3	5.5	2.8	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
1,2-Dibromoethane	ND	*3	5.5	0.71	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
1,2-Dichlorobenzene	ND	*3	5.5	0.43	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
1,2-Dichloroethane	ND		5.5	0.28	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
1,2-Dichloropropane	ND		5.5	2.8	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
1,3,5-Trimethylbenzene	ND	*3	5.5	0.35	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
1,3-Dichlorobenzene	ND	*3	5.5	0.28	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
1,4-Dichlorobenzene	ND	*3	5.5	0.77	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
2-Butanone (MEK)	ND		28	2.0	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
2-Hexanone	ND	*3	28	2.8	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
4-Methyl-2-pentanone (MIBK)	ND	*3	28	1.8	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
Acetone	**7.9**	**J**	28	4.6	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
Benzene	ND		5.5	0.27	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
Bromodichloromethane	ND		5.5	0.74	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
Bromoform	ND	*3 *+	5.5	2.8	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
Bromomethane	ND		5.5	0.50	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
Carbon disulfide	ND		5.5	2.8	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
Carbon tetrachloride	ND		5.5	0.53	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
Chlorobenzene	ND	*3	5.5	0.73	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
Chloroethane	ND		5.5	1.2	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
Chloroform	ND		5.5	0.34	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
Chloromethane	ND		5.5	0.33	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
cis-1,2-Dichloroethene	ND		5.5	0.70	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
cis-1,3-Dichloropropene	ND		5.5	0.79	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
Cyclohexane	ND		5.5	0.77	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
Dibromochloromethane	ND	*3 *+	5.5	0.70	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
Dichlorodifluoromethane	ND		5.5	0.45	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
Ethylbenzene	ND	*3	5.5	0.38	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
Isopropylbenzene	ND	*3	5.5	0.83	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
m,p-Xylene	ND	*3	11	0.92	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
Methyl acetate	**4.7**	**J**	28	3.3	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
Methyl tert-butyl ether	ND		5.5	0.54	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1

Client Sample ID: SS7 (12-24)
Date Collected: 07/27/22 17:10
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-10
Matrix: Solid
Percent Solids: 93.4

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylcyclohexane	ND		5.5	0.84	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
Methylene Chloride	ND		5.5	2.5	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
n-Butylbenzene	ND	*3	5.5	0.48	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
N-Propylbenzene	ND	*3	5.5	0.44	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
o-Xylene	ND	*3	5.5	0.72	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
sec-Butylbenzene	ND	*3	5.5	0.48	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
Styrene	ND	*3	5.5	0.28	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
tert-Butylbenzene	ND	*3 *+	5.5	0.57	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
Tetrachloroethene	ND	*3 *+	5.5	0.74	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
Toluene	ND	*3	5.5	0.42	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
trans-1,2-Dichloroethene	ND		5.5	0.57	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
trans-1,3-Dichloropropene	ND	*3	5.5	2.4	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
Trichloroethene	ND		5.5	1.2	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
Trichlorofluoromethane	ND		5.5	0.52	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
Vinyl chloride	ND		5.5	0.67	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1
Xylenes, Total	ND		11	0.92	ug/Kg	☼	07/28/22 11:00	08/03/22 23:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*152*	**3 S1+*	*71 - 125*	*07/28/22 11:00*	*08/03/22 23:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*119*		*64 - 126*	*07/28/22 11:00*	*08/03/22 23:20*	*1*
4-Bromofluorobenzene (Surr)	*57*	**3 S1-*	*72 - 126*	*07/28/22 11:00*	*08/03/22 23:20*	*1*
Dibromofluoromethane (Surr)	*131*		*60 - 140*	*07/28/22 11:00*	*08/03/22 23:20*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		1100	580	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
2,4,5-Trichlorophenol	ND		1800	480	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
2,4,6-Trichlorophenol	ND		1800	360	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
2,4-Dichlorophenol	ND		1800	190	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
2,4-Dimethylphenol	ND		1800	430	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
2,4-Dinitrophenol	ND		17000	8200	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
2,4-Dinitrotoluene	ND		1800	370	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
2,6-Dinitrotoluene	ND		1800	210	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
2-Chloronaphthalene	ND		1800	290	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
2-Chlorophenol	ND		3500	330	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
2-Methylnaphthalene	ND		1800	360	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
2-Methylphenol	ND		1800	210	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
2-Nitroaniline	ND		3500	260	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
2-Nitrophenol	ND		1800	500	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
3,3'-Dichlorobenzidine	ND		3500	2100	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
3-Nitroaniline	ND		3500	490	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
4,6-Dinitro-2-methylphenol	ND		3500	1800	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
4-Bromophenyl phenyl ether	ND		1800	250	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
4-Chloro-3-methylphenol	ND		1800	440	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
4-Chloroaniline	ND		1800	440	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
4-Chlorophenyl phenyl ether	ND		1800	220	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
4-Methylphenol	ND		3500	210	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
4-Nitroaniline	ND		3500	930	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
4-Nitrophenol	ND		3500	1200	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Acenaphthene	ND		1800	260	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10

Client Sample ID: SS7 (12-24)
Date Collected: 07/27/22 17:10
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-10
Matrix: Solid
Percent Solids: 93.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	**420**	**J**	1800	230	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Acetophenone	ND		1800	240	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Anthracene	**800**	**J**	1800	440	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Atrazine	ND		1800	620	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Benzaldehyde	ND		1800	1400	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Benzo[a]anthracene	**1900**		1800	180	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Benzo[a]pyrene	**1900**		1800	260	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Benzo[b]fluoranthene	**2600**		1800	280	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Benzo[g,h,i]perylene	**1400**	**J**	1800	190	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Benzo[k]fluoranthene	**1100**	**J**	1800	230	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Biphenyl	ND		1800	260	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
bis (2-chloroisopropyl) ether	ND		1800	360	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Bis(2-chloroethoxy)methane	ND		1800	380	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Bis(2-chloroethyl)ether	ND		1800	230	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Bis(2-ethylhexyl) phthalate	ND		1800	610	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Butyl benzyl phthalate	ND		1800	290	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Caprolactam	ND		1800	540	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Carbazole	**370**	**J**	1800	210	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Chrysene	**2000**		1800	400	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Dibenz(a,h)anthracene	**430**	**J**	1800	320	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Dibenzofuran	ND		1800	210	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Diethyl phthalate	ND		1800	230	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Dimethyl phthalate	ND		1800	210	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Di-n-butyl phthalate	ND		1800	300	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Di-n-octyl phthalate	ND		1800	210	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Fluoranthene	**4400**		1800	190	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Fluorene	**290**	**J**	1800	210	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Hexachlorobenzene	ND		1800	240	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Hexachlorobutadiene	ND		1800	260	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Hexachlorocyclopentadiene	ND		1800	240	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Hexachloroethane	ND		1800	230	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Indeno[1,2,3-cd]pyrene	**1500**	**J**	1800	220	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Isophorone	ND		1800	380	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Naphthalene	ND		1800	230	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Nitrobenzene	ND		1800	200	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
N-Nitrosodi-n-propylamine	ND		1800	300	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
N-Nitrosodiphenylamine	ND		1800	1400	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Pentachlorophenol	ND		3500	1800	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Phenanthrene	**2900**		1800	260	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Phenol	ND		1800	270	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10
Pyrene	**3400**		1800	210	ug/Kg	☼	07/29/22 15:47	08/03/22 18:45	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*91*		*54 - 120*	*07/29/22 15:47*	*08/03/22 18:45*	*10*
2-Fluorobiphenyl	*85*		*60 - 120*	*07/29/22 15:47*	*08/03/22 18:45*	*10*
2-Fluorophenol	*70*		*52 - 120*	*07/29/22 15:47*	*08/03/22 18:45*	*10*
Nitrobenzene-d5	*67*		*53 - 120*	*07/29/22 15:47*	*08/03/22 18:45*	*10*
Phenol-d5	*74*		*54 - 120*	*07/29/22 15:47*	*08/03/22 18:45*	*10*
p-Terphenyl-d14	*88*		*79 - 130*	*07/29/22 15:47*	*08/03/22 18:45*	*10*

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200156-1

Client Sample ID: SS7 (12-24)
Date Collected: 07/27/22 17:10
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-10
Matrix: Solid
Percent Solids: 93.4

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.53	0.35	ug/Kg	☼	08/04/22 08:35	08/04/22 23:01	1
Perfluoropentanoic acid (PFPeA)	ND		0.21	0.059	ug/Kg	☼	08/04/22 08:35	08/04/22 23:01	1
Perfluorohexanoic acid (PFHxA)	ND		0.21	0.049	ug/Kg	☼	08/04/22 08:35	08/04/22 23:01	1
Perfluoroheptanoic acid (PFHpA)	ND		0.21	0.042	ug/Kg	☼	08/04/22 08:35	08/04/22 23:01	1
Perfluorooctanoic acid (PFOA)	ND		0.21	0.062	ug/Kg	☼	08/04/22 08:35	08/04/22 23:01	1
Perfluorononanoic acid (PFNA)	ND		0.21	0.036	ug/Kg	☼	08/04/22 08:35	08/04/22 23:01	1
Perfluorodecanoic acid (PFDA)	ND		0.21	0.030	ug/Kg	☼	08/04/22 08:35	08/04/22 23:01	1
Perfluoroundecanoic acid (PFUnA)	ND		0.21	0.029	ug/Kg	☼	08/04/22 08:35	08/04/22 23:01	1
Perfluorododecanoic acid (PFDoA)	ND		0.21	0.027	ug/Kg	☼	08/04/22 08:35	08/04/22 23:01	1
Perfluorotridecanoic acid (PFTriA)	ND		0.21	0.027	ug/Kg	☼	08/04/22 08:35	08/04/22 23:01	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.21	0.028	ug/Kg	☼	08/04/22 08:35	08/04/22 23:01	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.21	0.035	ug/Kg	☼	08/04/22 08:35	08/04/22 23:01	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.21	0.044	ug/Kg	☼	08/04/22 08:35	08/04/22 23:01	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.21	0.024	ug/Kg	☼	08/04/22 08:35	08/04/22 23:01	1
Perfluorooctanesulfonic acid (PFOS)	**0.23**		0.21	0.12	ug/Kg	☼	08/04/22 08:35	08/04/22 23:01	1
Perfluorodecanesulfonic acid (PFDS)	**0.072**	**J**	0.21	0.020	ug/Kg	☼	08/04/22 08:35	08/04/22 23:01	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.21	0.036	ug/Kg	☼	08/04/22 08:35	08/04/22 23:01	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.1	0.12	ug/Kg	☼	08/04/22 08:35	08/04/22 23:01	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.1	0.088	ug/Kg	☼	08/04/22 08:35	08/04/22 23:01	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.1	0.061	ug/Kg	☼	08/04/22 08:35	08/04/22 23:01	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.1	0.039	ug/Kg	☼	08/04/22 08:35	08/04/22 23:01	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*85*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:01*	*1*
13C4 PFHpA	*94*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:01*	*1*
13C4 PFOA	*92*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:01*	*1*
13C4 PFOS	*85*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:01*	*1*
13C5 PFNA	*98*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:01*	*1*
13C4 PFBA	*94*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:01*	*1*
13C2 PFHxA	*95*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:01*	*1*
13C2 PFDA	*102*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:01*	*1*
13C2 PFUnA	*104*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:01*	*1*
13C2 PFDoA	*109*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:01*	*1*
13C8 FOSA	*78*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:01*	*1*
13C5 PFPeA	*95*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:01*	*1*
13C2 PFTeDA	*119*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:01*	*1*
d3-NMeFOSAA	*77*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:01*	*1*
d5-NEtFOSAA	*91*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:01*	*1*
M2-6:2 FTS	*90*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:01*	*1*
M2-8:2 FTS	*95*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:01*	*1*
13C3 PFBS	*86*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:01*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8610**		10.7	4.7	mg/Kg	☼	08/01/22 11:03	08/02/22 17:26	1

Client Sample ID: SS7 (12-24)

Date Collected: 07/27/22 17:10
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-10

Matrix: Solid
Percent Solids: 93.4

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	1.0	J	16.1	0.43	mg/Kg	☼	08/01/22 11:03	08/02/22 17:26	1
Arsenic	16.3		2.1	0.43	mg/Kg	☼	08/01/22 11:03	08/02/22 17:26	1
Barium	88.2		0.54	0.12	mg/Kg	☼	08/01/22 11:03	08/02/22 17:26	1
Beryllium	0.48		0.21	0.030	mg/Kg	☼	08/01/22 11:03	08/03/22 16:09	1
Cadmium	0.75		0.21	0.032	mg/Kg	☼	08/01/22 11:03	08/02/22 17:26	1
Calcium	13700		53.6	3.5	mg/Kg	☼	08/01/22 11:03	08/02/22 17:26	1
Chromium	13.1		0.54	0.21	mg/Kg	☼	08/01/22 11:03	08/02/22 17:26	1
Cobalt	8.7		0.54	0.054	mg/Kg	☼	08/01/22 11:03	08/02/22 17:26	1
Copper	40.8		1.1	0.22	mg/Kg	☼	08/01/22 11:03	08/02/22 17:26	1
Iron	21600		10.7	3.7	mg/Kg	☼	08/01/22 11:03	08/02/22 17:26	1
Lead	299		1.1	0.26	mg/Kg	☼	08/01/22 11:03	08/02/22 17:26	1
Magnesium	3940	B	21.4	0.99	mg/Kg	☼	08/01/22 11:03	08/02/22 17:26	1
Manganese	436	B	0.21	0.034	mg/Kg	☼	08/01/22 11:03	08/02/22 17:26	1
Nickel	20.2		5.4	0.25	mg/Kg	☼	08/01/22 11:03	08/02/22 17:26	1
Potassium	1040		32.1	21.4	mg/Kg	☼	08/01/22 11:03	08/02/22 17:26	1
Selenium	0.74	J B	4.3	0.43	mg/Kg	☼	08/01/22 11:03	08/02/22 17:26	1
Silver	ND		0.64	0.21	mg/Kg	☼	08/01/22 11:03	08/02/22 17:26	1
Sodium	87.5	J	150	13.9	mg/Kg	☼	08/01/22 11:03	08/02/22 17:26	1
Thallium	ND		6.4	0.32	mg/Kg	☼	08/01/22 11:03	08/02/22 17:26	1
Vanadium	19.7		0.54	0.12	mg/Kg	☼	08/01/22 11:03	08/02/22 17:26	1
Zinc	104		2.1	0.69	mg/Kg	☼	08/01/22 11:03	08/02/22 17:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.26		0.021	0.0047	mg/Kg	☼	08/02/22 09:35	08/02/22 14:43	1

Client Sample ID: SS7 (0-2)

Date Collected: 07/27/22 17:25
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-11

Matrix: Solid
Percent Solids: 85.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		8.6	0.86	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
1,1,1-Trichloroethane	ND		8.6	0.62	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
1,1,2,2-Tetrachloroethane	ND	*3	8.6	1.4	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.6	2.0	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
1,1,2-Trichloroethane	ND		8.6	1.1	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
1,1-Dichloroethane	ND		8.6	1.0	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
1,1-Dichloroethene	ND		8.6	1.0	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
1,2,3-Trimethylbenzene	ND	*3	8.6	1.7	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
1,2,4-Trichlorobenzene	ND	*3	8.6	0.52	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
1,2,4-Trimethylbenzene	ND	*3	8.6	1.6	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
1,2-Dibromo-3-Chloropropane	ND	*3	8.6	4.3	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
1,2-Dibromoethane	ND		8.6	1.1	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
1,2-Dichlorobenzene	ND	*3	8.6	0.67	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
1,2-Dichloroethane	ND		8.6	0.43	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
1,2-Dichloropropane	ND		8.6	4.3	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
1,3,5-Trimethylbenzene	ND	*3	8.6	0.55	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
1,3-Dichlorobenzene	ND	*3	8.6	0.44	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
1,4-Dichlorobenzene	ND	*3	8.6	1.2	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1

Client Sample ID: SS7 (0-2)
Date Collected: 07/27/22 17:25
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-11
Matrix: Solid
Percent Solids: 85.2

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	ND		43	3.1	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
2-Hexanone	ND		43	4.3	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
4-Methyl-2-pentanone (MIBK)	ND		43	2.8	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
Acetone	ND		43	7.2	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
Benzene	ND		8.6	0.42	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
Bromodichloromethane	ND		8.6	1.1	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
Bromoform	ND	*+	8.6	4.3	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
Bromomethane	ND		8.6	0.77	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
Carbon disulfide	ND		8.6	4.3	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
Carbon tetrachloride	ND		8.6	0.83	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
Chlorobenzene	ND		8.6	1.1	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
Chloroethane	ND		8.6	1.9	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
Chloroform	ND		8.6	0.53	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
Chloromethane	ND		8.6	0.52	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
cis-1,2-Dichloroethene	ND		8.6	1.1	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
cis-1,3-Dichloropropene	ND		8.6	1.2	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
Cyclohexane	ND		8.6	1.2	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
Dibromochloromethane	ND	*+	8.6	1.1	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
Dichlorodifluoromethane	ND		8.6	0.71	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
Ethylbenzene	ND		8.6	0.59	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
Isopropylbenzene	ND	*3	8.6	1.3	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
m,p-Xylene	ND		17	1.4	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
Methyl acetate	ND		43	5.2	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
Methyl tert-butyl ether	ND		8.6	0.84	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
Methylcyclohexane	ND		8.6	1.3	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
Methylene Chloride	ND		8.6	3.9	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
n-Butylbenzene	ND	*3	8.6	0.75	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
N-Propylbenzene	ND	*3	8.6	0.69	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
o-Xylene	ND		8.6	1.1	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
sec-Butylbenzene	ND	*3	8.6	0.75	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
Styrene	ND		8.6	0.43	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
tert-Butylbenzene	ND	*3 *+	8.6	0.89	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
Tetrachloroethene	ND	*+	8.6	1.1	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
Toluene	ND		8.6	0.65	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
trans-1,2-Dichloroethene	ND		8.6	0.88	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
trans-1,3-Dichloropropene	ND		8.6	3.8	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
Trichloroethene	ND		8.6	1.9	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
Trichlorofluoromethane	ND		8.6	0.81	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
Vinyl chloride	ND		8.6	1.0	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1
Xylenes, Total	ND		17	1.4	ug/Kg	☼	07/28/22 11:00	08/03/22 23:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*122*		*71 - 125*	*07/28/22 11:00*	*08/03/22 23:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*64 - 126*	*07/28/22 11:00*	*08/03/22 23:45*	*1*
4-Bromofluorobenzene (Surr)	*73*		*72 - 126*	*07/28/22 11:00*	*08/03/22 23:45*	*1*
Dibromofluoromethane (Surr)	*111*		*60 - 140*	*07/28/22 11:00*	*08/03/22 23:45*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		120	64	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1

Client Sample ID: SS7 (0-2)
Date Collected: 07/27/22 17:25
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-11
Matrix: Solid
Percent Solids: 85.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		200	53	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
2,4,6-Trichlorophenol	ND		200	39	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
2,4-Dichlorophenol	ND		200	21	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
2,4-Dimethylphenol	ND		200	48	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
2,4-Dinitrophenol	ND		1900	910	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
2,4-Dinitrotoluene	ND		200	41	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
2,6-Dinitrotoluene	ND		200	23	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
2-Chloronaphthalene	ND		200	33	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
2-Chlorophenol	ND		380	36	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
2-Methylnaphthalene	ND		200	39	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
2-Methylphenol	ND		200	23	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
2-Nitroaniline	ND		380	29	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
2-Nitrophenol	ND		200	56	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
3,3'-Dichlorobenzidine	ND		380	230	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
3-Nitroaniline	ND		380	55	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
4,6-Dinitro-2-methylphenol	ND		380	200	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
4-Bromophenyl phenyl ether	ND		200	28	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
4-Chloro-3-methylphenol	ND		200	49	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
4-Chloroaniline	ND		200	49	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
4-Chlorophenyl phenyl ether	ND		200	24	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
4-Methylphenol	ND		380	23	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
4-Nitroaniline	ND		380	100	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
4-Nitrophenol	ND		380	140	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Acenaphthene	ND		200	29	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Acenaphthylene	**71**	**J**	200	26	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Acetophenone	ND		200	27	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Anthracene	ND		200	49	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Atrazine	ND		200	69	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Benzaldehyde	ND		200	160	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Benzo[a]anthracene	**180**	**J**	200	20	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Benzo[a]pyrene	**190**	**J**	200	29	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Benzo[b]fluoranthene	**320**		200	31	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Benzo[g,h,i]perylene	**150**	**J**	200	21	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Benzo[k]fluoranthene	**130**	**J**	200	26	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Biphenyl	ND		200	29	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
bis (2-chloroisopropyl) ether	ND		200	39	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Bis(2-chloroethoxy)methane	ND		200	42	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Bis(2-chloroethyl)ether	ND		200	26	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Bis(2-ethylhexyl) phthalate	ND		200	67	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Butyl benzyl phthalate	ND		200	33	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Caprolactam	ND		200	59	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Carbazole	ND		200	23	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Chrysene	**250**		200	44	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Dibenz(a,h)anthracene	**51**	**J**	200	35	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Dibenzofuran	ND		200	23	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Diethyl phthalate	ND		200	26	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Dimethyl phthalate	ND		200	23	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Di-n-butyl phthalate	ND		200	34	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Di-n-octyl phthalate	ND		200	23	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1

Client Sample ID: SS7 (0-2)
Date Collected: 07/27/22 17:25
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-11
Matrix: Solid
Percent Solids: 85.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	**290**		200	21	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Fluorene	ND		200	23	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Hexachlorobenzene	ND		200	27	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Hexachlorobutadiene	ND		200	29	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Hexachlorocyclopentadiene	ND		200	27	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Hexachloroethane	ND		200	26	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Indeno[1,2,3-cd]pyrene	**140**	**J**	200	24	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Isophorone	ND		200	42	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Naphthalene	ND		200	26	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Nitrobenzene	ND		200	22	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
N-Nitrosodi-n-propylamine	ND		200	34	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
N-Nitrosodiphenylamine	ND		200	160	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Pentachlorophenol	ND		380	200	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Phenanthrene	**120**	**J**	200	29	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Phenol	ND		200	30	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1
Pyrene	**250**		200	23	ug/Kg	☼	07/29/22 15:47	08/03/22 19:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*107*		*54 - 120*	*07/29/22 15:47*	*08/03/22 19:10*	*1*
2-Fluorobiphenyl	*90*		*60 - 120*	*07/29/22 15:47*	*08/03/22 19:10*	*1*
2-Fluorophenol	*70*		*52 - 120*	*07/29/22 15:47*	*08/03/22 19:10*	*1*
Nitrobenzene-d5	*65*		*53 - 120*	*07/29/22 15:47*	*08/03/22 19:10*	*1*
Phenol-d5	*82*		*54 - 120*	*07/29/22 15:47*	*08/03/22 19:10*	*1*
p-Terphenyl-d14	*97*		*79 - 130*	*07/29/22 15:47*	*08/03/22 19:10*	*1*

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.56	0.37	ug/Kg	☼	08/04/22 08:35	08/04/22 23:09	1
Perfluoropentanoic acid (PFPeA)	ND		0.23	0.062	ug/Kg	☼	08/04/22 08:35	08/04/22 23:09	1
Perfluorohexanoic acid (PFHxA)	**0.13**	**J I**	0.23	0.052	ug/Kg	☼	08/04/22 08:35	08/04/22 23:09	1
Perfluoroheptanoic acid (PFHpA)	ND		0.23	0.044	ug/Kg	☼	08/04/22 08:35	08/04/22 23:09	1
Perfluorooctanoic acid (PFOA)	ND		0.23	0.065	ug/Kg	☼	08/04/22 08:35	08/04/22 23:09	1
Perfluorononanoic acid (PFNA)	**0.063**	**J**	0.23	0.038	ug/Kg	☼	08/04/22 08:35	08/04/22 23:09	1
Perfluorodecanoic acid (PFDA)	**0.039**	**J I**	0.23	0.032	ug/Kg	☼	08/04/22 08:35	08/04/22 23:09	1
Perfluoroundecanoic acid (PFUnA)	**0.042**	**J**	0.23	0.030	ug/Kg	☼	08/04/22 08:35	08/04/22 23:09	1
Perfluorododecanoic acid (PFDoA)	ND		0.23	0.028	ug/Kg	☼	08/04/22 08:35	08/04/22 23:09	1
Perfluorotridecanoic acid (PFTriA)	ND		0.23	0.028	ug/Kg	☼	08/04/22 08:35	08/04/22 23:09	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.23	0.029	ug/Kg	☼	08/04/22 08:35	08/04/22 23:09	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.23	0.037	ug/Kg	☼	08/04/22 08:35	08/04/22 23:09	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.23	0.046	ug/Kg	☼	08/04/22 08:35	08/04/22 23:09	1
Perfluoroheptanesulfonic acid (PFHpS)	**0.068**	**J**	0.23	0.026	ug/Kg	☼	08/04/22 08:35	08/04/22 23:09	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.23	0.12	ug/Kg	☼	08/04/22 08:35	08/04/22 23:09	1
Perfluorodecanesulfonic acid (PFDS)	**0.036**	**J**	0.23	0.021	ug/Kg	☼	08/04/22 08:35	08/04/22 23:09	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.23	0.038	ug/Kg	☼	08/04/22 08:35	08/04/22 23:09	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.3	0.12	ug/Kg	☼	08/04/22 08:35	08/04/22 23:09	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.3	0.094	ug/Kg	☼	08/04/22 08:35	08/04/22 23:09	1

Client Sample ID: SS7 (0-2)
Date Collected: 07/27/22 17:25
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-11
Matrix: Solid
Percent Solids: 85.2

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.3	0.064	ug/Kg	☼	08/04/22 08:35	08/04/22 23:09	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.3	0.042	ug/Kg	☼	08/04/22 08:35	08/04/22 23:09	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*83*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:09*	*1*
13C4 PFHpA	*87*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:09*	*1*
13C4 PFOA	*90*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:09*	*1*
13C4 PFOS	*78*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:09*	*1*
13C5 PFNA	*86*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:09*	*1*
13C4 PFBA	*85*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:09*	*1*
13C2 PFHxA	*89*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:09*	*1*
13C2 PFDA	*84*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:09*	*1*
13C2 PFUnA	*87*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:09*	*1*
13C2 PFDoA	*96*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:09*	*1*
13C8 FOSA	*75*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:09*	*1*
13C5 PFPeA	*89*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:09*	*1*
13C2 PFTeDA	*96*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:09*	*1*
d3-NMeFOSAA	*73*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:09*	*1*
d5-NEtFOSAA	*78*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:09*	*1*
M2-6:2 FTS	*96*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:09*	*1*
M2-8:2 FTS	*103*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:09*	*1*
13C3 PFBS	*79*		*50 - 150*	*08/04/22 08:35*	*08/04/22 23:09*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8790**		12.2	5.4	mg/Kg	☼	08/03/22 13:24	08/04/22 20:59	1
Antimony	**0.91**	**J**	18.3	0.49	mg/Kg	☼	08/03/22 13:24	08/04/22 20:59	1
Arsenic	**10**		2.4	0.49	mg/Kg	☼	08/03/22 13:24	08/04/22 20:59	1
Barium	**95.7**		0.61	0.13	mg/Kg	☼	08/03/22 13:24	08/04/22 20:59	1
Beryllium	**0.49**		0.24	0.034	mg/Kg	☼	08/03/22 13:24	08/04/22 20:59	1
Cadmium	ND		0.24	0.037	mg/Kg	☼	08/03/22 13:24	08/04/22 20:59	1
Calcium	**2060**		61.1	4.0	mg/Kg	☼	08/03/22 13:24	08/04/22 20:59	1
Chromium	**11.6**		0.61	0.24	mg/Kg	☼	08/03/22 13:24	08/04/22 20:59	1
Cobalt	**7.9**		0.61	0.061	mg/Kg	☼	08/03/22 13:24	08/04/22 20:59	1
Copper	**28.3**		1.2	0.26	mg/Kg	☼	08/03/22 13:24	08/04/22 20:59	1
Iron	**18100**		12.2	4.3	mg/Kg	☼	08/03/22 13:24	08/04/22 20:59	1
Lead	**42.8**		1.2	0.29	mg/Kg	☼	08/03/22 13:24	08/04/22 20:59	1
Magnesium	**2380**	**B**	24.4	1.1	mg/Kg	☼	08/03/22 13:24	08/04/22 20:59	1
Manganese	**415**	**B**	0.24	0.039	mg/Kg	☼	08/03/22 13:24	08/04/22 20:59	1
Nickel	**17.3**		6.1	0.28	mg/Kg	☼	08/03/22 13:24	08/04/22 20:59	1
Potassium	**1480**	**^+**	36.7	24.4	mg/Kg	☼	08/03/22 13:24	08/04/22 20:59	1
Selenium	**0.76**	**J**	4.9	0.49	mg/Kg	☼	08/03/22 13:24	08/04/22 20:59	1
Silver	ND		0.73	0.24	mg/Kg	☼	08/03/22 13:24	08/04/22 20:59	1
Sodium	**48.5**	**J**	171	15.9	mg/Kg	☼	08/03/22 13:24	08/05/22 12:49	1
Thallium	ND		7.3	0.37	mg/Kg	☼	08/03/22 13:24	08/04/22 20:59	1
Vanadium	**14.7**		0.61	0.13	mg/Kg	☼	08/03/22 13:24	08/04/22 20:59	1
Zinc	**61.0**		2.4	0.78	mg/Kg	☼	08/03/22 13:24	08/04/22 20:59	1

Client Sample ID: SS7 (0-2)

Lab Sample ID: 480-200156-11
Date Collected: 07/27/22 17:25
Matrix: Solid
Date Received: 07/28/22 10:00
Percent Solids: 85.2

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.064		0.024	0.0056	mg/Kg	☼	08/02/22 09:35	08/02/22 14:44	1

Client Sample ID: FB2_072722

Lab Sample ID: 480-200156-12
Date Collected: 07/27/22 18:05
Matrix: Water
Date Received: 07/28/22 10:00

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		07/29/22 14:39	08/01/22 18:01	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*41*		*15 - 110*	*07/29/22 14:39*	*08/01/22 18:01*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		07/29/22 14:33	08/01/22 18:41	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		07/29/22 14:33	08/01/22 18:41	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		07/29/22 14:33	08/01/22 18:41	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		07/29/22 14:33	08/01/22 18:41	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		07/29/22 14:33	08/01/22 18:41	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		07/29/22 14:33	08/01/22 18:41	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		07/29/22 14:33	08/01/22 18:41	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		07/29/22 14:33	08/01/22 18:41	1
2-Chlorophenol	ND		5.0	0.53	ug/L		07/29/22 14:33	08/01/22 18:41	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		07/29/22 14:33	08/01/22 18:41	1
2-Methylphenol	ND		5.0	0.40	ug/L		07/29/22 14:33	08/01/22 18:41	1
2-Nitroaniline	ND		10	0.42	ug/L		07/29/22 14:33	08/01/22 18:41	1
2-Nitrophenol	ND		5.0	0.48	ug/L		07/29/22 14:33	08/01/22 18:41	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		07/29/22 14:33	08/01/22 18:41	1
3-Nitroaniline	ND		10	0.48	ug/L		07/29/22 14:33	08/01/22 18:41	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		07/29/22 14:33	08/01/22 18:41	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		07/29/22 14:33	08/01/22 18:41	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		07/29/22 14:33	08/01/22 18:41	1
4-Chloroaniline	ND		5.0	0.59	ug/L		07/29/22 14:33	08/01/22 18:41	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		07/29/22 14:33	08/01/22 18:41	1
4-Methylphenol	ND		10	0.36	ug/L		07/29/22 14:33	08/01/22 18:41	1
4-Nitroaniline	ND	*+	10	0.25	ug/L		07/29/22 14:33	08/01/22 18:41	1
4-Nitrophenol	ND		10	1.5	ug/L		07/29/22 14:33	08/01/22 18:41	1
Acenaphthene	ND		5.0	0.41	ug/L		07/29/22 14:33	08/01/22 18:41	1
Acenaphthylene	ND		5.0	0.38	ug/L		07/29/22 14:33	08/01/22 18:41	1
Acetophenone	ND		5.0	0.54	ug/L		07/29/22 14:33	08/01/22 18:41	1
Anthracene	ND		5.0	0.28	ug/L		07/29/22 14:33	08/01/22 18:41	1
Atrazine	ND		5.0	0.46	ug/L		07/29/22 14:33	08/01/22 18:41	1
Benzaldehyde	ND		5.0	0.27	ug/L		07/29/22 14:33	08/01/22 18:41	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		07/29/22 14:33	08/01/22 18:41	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		07/29/22 14:33	08/01/22 18:41	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		07/29/22 14:33	08/01/22 18:41	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		07/29/22 14:33	08/01/22 18:41	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		07/29/22 14:33	08/01/22 18:41	1
Biphenyl	ND		5.0	0.65	ug/L		07/29/22 14:33	08/01/22 18:41	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		07/29/22 14:33	08/01/22 18:41	1

Client Sample ID: FB2_072722

Date Collected: 07/27/22 18:05
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-12

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		07/29/22 14:33	08/01/22 18:41	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		07/29/22 14:33	08/01/22 18:41	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		07/29/22 14:33	08/01/22 18:41	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		07/29/22 14:33	08/01/22 18:41	1
Caprolactam	ND		5.0	2.2	ug/L		07/29/22 14:33	08/01/22 18:41	1
Carbazole	ND	*+	5.0	0.30	ug/L		07/29/22 14:33	08/01/22 18:41	1
Chrysene	ND		5.0	0.33	ug/L		07/29/22 14:33	08/01/22 18:41	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		07/29/22 14:33	08/01/22 18:41	1
Dibenzofuran	ND		10	0.51	ug/L		07/29/22 14:33	08/01/22 18:41	1
Diethyl phthalate	ND		5.0	0.22	ug/L		07/29/22 14:33	08/01/22 18:41	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		07/29/22 14:33	08/01/22 18:41	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		07/29/22 14:33	08/01/22 18:41	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		07/29/22 14:33	08/01/22 18:41	1
Fluoranthene	ND		5.0	0.40	ug/L		07/29/22 14:33	08/01/22 18:41	1
Fluorene	ND		5.0	0.36	ug/L		07/29/22 14:33	08/01/22 18:41	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		07/29/22 14:33	08/01/22 18:41	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		07/29/22 14:33	08/01/22 18:41	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		07/29/22 14:33	08/01/22 18:41	1
Hexachloroethane	ND		5.0	0.59	ug/L		07/29/22 14:33	08/01/22 18:41	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		07/29/22 14:33	08/01/22 18:41	1
Isophorone	ND		5.0	0.43	ug/L		07/29/22 14:33	08/01/22 18:41	1
Naphthalene	ND		5.0	0.76	ug/L		07/29/22 14:33	08/01/22 18:41	1
Nitrobenzene	ND		5.0	0.29	ug/L		07/29/22 14:33	08/01/22 18:41	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		07/29/22 14:33	08/01/22 18:41	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		07/29/22 14:33	08/01/22 18:41	1
Pentachlorophenol	ND		10	2.2	ug/L		07/29/22 14:33	08/01/22 18:41	1
Phenanthrene	ND		5.0	0.44	ug/L		07/29/22 14:33	08/01/22 18:41	1
Phenol	ND		5.0	0.39	ug/L		07/29/22 14:33	08/01/22 18:41	1
Pyrene	ND		5.0	0.34	ug/L		07/29/22 14:33	08/01/22 18:41	1
1,4-Dioxane	ND		10	1.1	ug/L		07/29/22 14:33	08/01/22 18:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*90*		*41 - 120*	*07/29/22 14:33*	*08/01/22 18:41*	*1*
2-Fluorobiphenyl	*93*		*48 - 120*	*07/29/22 14:33*	*08/01/22 18:41*	*1*
2-Fluorophenol	*65*		*35 - 120*	*07/29/22 14:33*	*08/01/22 18:41*	*1*
Nitrobenzene-d5	*84*		*46 - 120*	*07/29/22 14:33*	*08/01/22 18:41*	*1*
Phenol-d5	*50*		*22 - 120*	*07/29/22 14:33*	*08/01/22 18:41*	*1*
p-Terphenyl-d14	*107*		*60 - 148*	*07/29/22 14:33*	*08/01/22 18:41*	*1*

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.2	1.0	ng/L		08/04/22 11:45	08/04/22 17:34	1
Perfluoropentanoic acid (PFPeA)	ND		1.7	0.57	ng/L		08/04/22 11:45	08/04/22 17:34	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	0.55	ng/L		08/04/22 11:45	08/04/22 17:34	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7	0.46	ng/L		08/04/22 11:45	08/04/22 17:34	1
Perfluorooctanoic acid (PFOA)	ND		1.7	0.64	ng/L		08/04/22 11:45	08/04/22 17:34	1
Perfluorononanoic acid (PFNA)	ND		1.7	0.41	ng/L		08/04/22 11:45	08/04/22 17:34	1
Perfluorodecanoic acid (PFDA)	ND		1.7	0.39	ng/L		08/04/22 11:45	08/04/22 17:34	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.46	ng/L		08/04/22 11:45	08/04/22 17:34	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.41	ng/L		08/04/22 11:45	08/04/22 17:34	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200156-1

Client Sample ID: FB2_072722
Date Collected: 07/27/22 18:05
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-12
Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorotridecanoic acid (PFTriA)	ND		1.7	0.41	ng/L		08/04/22 11:45	08/04/22 17:34	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.54	ng/L		08/04/22 11:45	08/04/22 17:34	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	0.52	ng/L		08/04/22 11:45	08/04/22 17:34	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	0.46	ng/L		08/04/22 11:45	08/04/22 17:34	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.7	0.35	ng/L		08/04/22 11:45	08/04/22 17:34	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7	0.72	ng/L		08/04/22 11:45	08/04/22 17:34	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.34	ng/L		08/04/22 11:45	08/04/22 17:34	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.7	0.78	ng/L		08/04/22 11:45	08/04/22 17:34	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.2	1.6	ng/L		08/04/22 11:45	08/04/22 17:34	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.2	1.4	ng/L		08/04/22 11:45	08/04/22 17:34	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		4.2	1.1	ng/L		08/04/22 11:45	08/04/22 17:34	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		1.7	0.65	ng/L		08/04/22 11:45	08/04/22 17:34	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*95*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:34*	*1*
13C4 PFHpA	*100*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:34*	*1*
13C4 PFOA	*103*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:34*	*1*
13C4 PFOS	*92*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:34*	*1*
13C5 PFNA	*103*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:34*	*1*
13C4 PFBA	*98*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:34*	*1*
13C2 PFHxA	*105*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:34*	*1*
13C2 PFDA	*98*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:34*	*1*
13C2 PFUnA	*95*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:34*	*1*
13C2 PFDoA	*87*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:34*	*1*
13C8 FOSA	*82*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:34*	*1*
13C5 PFPeA	*104*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:34*	*1*
13C2 PFTeDA	*95*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:34*	*1*
d3-NMeFOSAA	*77*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:34*	*1*
d5-NEtFOSAA	*82*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:34*	*1*
M2-6:2 FTS	*95*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:34*	*1*
M2-8:2 FTS	*93*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:34*	*1*
13C3 PFBS	*97*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:34*	*1*

Surrogate Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200156-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(71-125)	(64-126)	(72-126)	(60-140)
480-200156-2	SB1 (0-0.5)	107	104	87	106
480-200156-3	SB1 (0.5-1)	100	109	93	111
480-200156-4	SB1 (1-2)	104	107	84	112
480-200156-6	SB1 (15-16)	97	106	99	107
480-200156-8	SS7 (0-6)	127 *3 S1+	107	73 *3	113
480-200156-9	SS7 (6-12)	132 *3 S1+	110	69 *3 S1-	111
480-200156-10	SS7 (12-24)	152 *3 S1+	119	57 *3 S1-	131
480-200156-11	SS7 (0-2)	122	107	73	111
LCS 480-635934/1-A	Lab Control Sample	99	100	100	104
LCS 480-636092/1-A	Lab Control Sample	97	105	98	103
MB 480-635934/2-A	Method Blank	96	101	99	107
MB 480-636092/3-A	Method Blank	96	102	100	107

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-200156-1	FB_072722	109	90	101	102
480-200156-7	ERB_72722	109	92	99	98
LCS 480-635431/6	Lab Control Sample	105	96	101	101
MB 480-635431/8	Method Blank	108	96	97	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(54-120)	(60-120)	(52-120)	(53-120)	(54-120)	(79-130)
480-200156-2	SB1 (0-0.5)	92	79	71	69	73	85
480-200156-3	SB1 (0.5-1)	94	77	70	67	68	91
480-200156-4	SB1 (1-2)	94	83	72	74	76	95
480-200156-5	SB1 (15-16)	97	85	69	70	72	92
480-200156-8	SS7 (0-6)	103	86	74	67	80	95
480-200156-9	SS7 (6-12)	83	86	66	68	71	90
480-200156-10	SS7 (12-24)	91	85	70	67	74	88

Surrogate Summary

Client: Integral Consulting Inc
Job ID: 480-200156-1
Project/Site: EF1017 - Refractories

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(54-120)	(60-120)	(52-120)	(53-120)	(54-120)	(79-130)
480-200156-11	SS7 (0-2)	107	90	70	65	82	97
LCS 480-635559/2-A	Lab Control Sample	89	83	68	67	70	88
LCS 480-636295/2-A	Lab Control Sample	101	79	67	66	71	94
MB 480-635559/1-A	Method Blank	95	80	68	67	73	97
MB 480-636295/1-A	Method Blank	79	84	69	68	71	90

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHd14 = p-Terphenyl-d14

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(41-120)	(48-120)	(35-120)	(46-120)	(22-120)	(60-148)
480-200156-1	FB_072722	85	91	66	79	52	104
480-200156-7	ERB_72722	82	87	66	80	52	109
480-200156-12	FB2_072722	90	93	65	84	50	107
LCS 480-635534/2-A	Lab Control Sample	103	89	68	85	55	100
MB 480-635534/1-A	Method Blank	69	76	55	67	42	92

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHd14 = p-Terphenyl-d14

Isotope Dilution Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200156-1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	DXE (15-110)							
480-200156-7	ERB_72722	40							
480-200156-12	FB2_072722	41							
LCS 480-635537/2-A	Lab Control Sample	43							
MB 480-635537/1-A	Method Blank	34							

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 537 IDA - EPA 537 Isotope Dilution

Matrix: Solid **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFHxS (50-150)	C4PFHA (50-150)	PFOA (50-150)	PFOS (50-150)	PFNA (50-150)	PFBA (50-150)	PFHxA (50-150)	PFDA (50-150)
480-200156-8	SS7 (0-6)	86	91	91	80	85	92	93	89
480-200156-9	SS7 (6-12)	83	92	94	81	89	90	94	89
480-200156-10	SS7 (12-24)	85	94	92	85	98	94	95	102
480-200156-11	SS7 (0-2)	83	87	90	78	86	85	89	84
LCS 200-182357/2-A	Lab Control Sample	87	91	94	80	90	92	90	82
MB 200-182357/1-A	Method Blank	93	96	97	89	97	95	97	93

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFUnA (50-150)	PFDoA (50-150)	PFOSA (50-150)	PFPeA (50-150)	PFTDA (50-150)	d3NMFOS (50-150)	d5NEFOS (50-150)	M262FTS (50-150)
480-200156-8	SS7 (0-6)	89	91	75	95	97	75	80	95
480-200156-9	SS7 (6-12)	87	89	73	95	104	77	78	89
480-200156-10	SS7 (12-24)	104	109	78	95	119	77	91	90
480-200156-11	SS7 (0-2)	87	96	75	89	96	73	78	96
LCS 200-182357/2-A	Lab Control Sample	69	64	61	93	82	58	55	91
MB 200-182357/1-A	Method Blank	83	84	74	98	99	77	71	95

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	M282FTS (50-150)	C3PFBS (50-150)						
480-200156-8	SS7 (0-6)	97	82						
480-200156-9	SS7 (6-12)	90	83						
480-200156-10	SS7 (12-24)	95	86						
480-200156-11	SS7 (0-2)	103	79						
LCS 200-182357/2-A	Lab Control Sample	81	87						
MB 200-182357/1-A	Method Blank	91	88						

Surrogate Legend

PFHxS = 18O2 PFHxS
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFOS = 13C4 PFOS
PFNA = 13C5 PFNA
PFBA = 13C4 PFBA
PFHxA = 13C2 PFHxA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA

PFOSA = 13C8 FOSA
PFPeA = 13C5 PFPeA
PFTDA = 13C2 PFTeDA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
C3PFBS = 13C3 PFBS

Method: 537 IDA - EPA 537 Isotope Dilution

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFHxS	C4PFHA	PFOA	PFOS	PFNA	PFBA	PFHxA	PFDA
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)
480-200156-12	FB2_072722	95	100	103	92	103	98	105	98
LCS 200-182374/2-A	Lab Control Sample	98	99	102	90	93	101	99	91
LCSD 200-182374/3-A	Lab Control Sample Dup	101	106	104	100	107	108	106	101
MB 200-182374/1-A	Method Blank	96	105	101	90	95	99	101	95

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFUnA	PFDoA	PFOSA	PFPeA	PFTDA	d3NMFOS	d5NEFOS	M262FTS
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)
480-200156-12	FB2_072722	95	87	82	104	95	77	82	95
LCS 200-182374/2-A	Lab Control Sample	87	85	76	102	91	82	73	96
LCSD 200-182374/3-A	Lab Control Sample Dup	99	91	81	112	95	92	79	101
MB 200-182374/1-A	Method Blank	91	81	74	103	88	71	72	95

		Percent Isotope Dilution Recovery (Acceptance Limits)	
		M282FTS	C3PFBS
Lab Sample ID	Client Sample ID	(50-150)	(50-150)
480-200156-12	FB2_072722	93	97
LCS 200-182374/2-A	Lab Control Sample	93	92
LCSD 200-182374/3-A	Lab Control Sample Dup	102	104
MB 200-182374/1-A	Method Blank	93	96

Surrogate Legend

PFHxS = 18O2 PFHxS
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFOS = 13C4 PFOS
PFNA = 13C5 PFNA
PFBA = 13C4 PFBA
PFHxA = 13C2 PFHxA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFOSA = 13C8 FOSA
PFPeA = 13C5 PFPeA
PFTDA = 13C2 PFTeDA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
C3PFBS = 13C3 PFBS

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-635431/8
Matrix: Water
Analysis Batch: 635431

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			07/29/22 12:19	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			07/29/22 12:19	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			07/29/22 12:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			07/29/22 12:19	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			07/29/22 12:19	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			07/29/22 12:19	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			07/29/22 12:19	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			07/29/22 12:19	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			07/29/22 12:19	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			07/29/22 12:19	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			07/29/22 12:19	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			07/29/22 12:19	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			07/29/22 12:19	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			07/29/22 12:19	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			07/29/22 12:19	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			07/29/22 12:19	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			07/29/22 12:19	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			07/29/22 12:19	1
2-Butanone (MEK)	ND		10	1.3	ug/L			07/29/22 12:19	1
2-Hexanone	ND		5.0	1.2	ug/L			07/29/22 12:19	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			07/29/22 12:19	1
Acetone	ND		10	3.0	ug/L			07/29/22 12:19	1
Benzene	ND		1.0	0.41	ug/L			07/29/22 12:19	1
Bromodichloromethane	ND		1.0	0.39	ug/L			07/29/22 12:19	1
Bromoform	ND		1.0	0.26	ug/L			07/29/22 12:19	1
Bromomethane	ND		1.0	0.69	ug/L			07/29/22 12:19	1
Carbon disulfide	ND		1.0	0.19	ug/L			07/29/22 12:19	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			07/29/22 12:19	1
Chlorobenzene	ND		1.0	0.75	ug/L			07/29/22 12:19	1
Chloroethane	ND		1.0	0.32	ug/L			07/29/22 12:19	1
Chloroform	ND		1.0	0.34	ug/L			07/29/22 12:19	1
Chloromethane	ND		1.0	0.35	ug/L			07/29/22 12:19	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			07/29/22 12:19	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			07/29/22 12:19	1
Cyclohexane	ND		1.0	0.18	ug/L			07/29/22 12:19	1
Dibromochloromethane	ND		1.0	0.32	ug/L			07/29/22 12:19	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			07/29/22 12:19	1
Ethylbenzene	ND		1.0	0.74	ug/L			07/29/22 12:19	1
Isopropylbenzene	ND		1.0	0.79	ug/L			07/29/22 12:19	1
m,p-Xylene	ND		2.0	0.66	ug/L			07/29/22 12:19	1
Methyl acetate	ND		2.5	1.3	ug/L			07/29/22 12:19	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			07/29/22 12:19	1
Methylcyclohexane	ND		1.0	0.16	ug/L			07/29/22 12:19	1
Methylene Chloride	ND		1.0	0.44	ug/L			07/29/22 12:19	1
n-Butylbenzene	ND		1.0	0.64	ug/L			07/29/22 12:19	1
N-Propylbenzene	ND		1.0	0.69	ug/L			07/29/22 12:19	1
o-Xylene	ND		1.0	0.76	ug/L			07/29/22 12:19	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			07/29/22 12:19	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-635431/8
Matrix: Water
Analysis Batch: 635431

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0	0.73	ug/L			07/29/22 12:19	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			07/29/22 12:19	1
Tetrachloroethene	ND		1.0	0.36	ug/L			07/29/22 12:19	1
Toluene	ND		1.0	0.51	ug/L			07/29/22 12:19	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			07/29/22 12:19	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			07/29/22 12:19	1
Trichloroethene	ND		1.0	0.46	ug/L			07/29/22 12:19	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			07/29/22 12:19	1
Vinyl chloride	ND		1.0	0.90	ug/L			07/29/22 12:19	1
Xylenes, Total	ND		2.0	0.66	ug/L			07/29/22 12:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*77 - 120*		*07/29/22 12:19*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*07/29/22 12:19*	*1*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*07/29/22 12:19*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*07/29/22 12:19*	*1*

Lab Sample ID: LCS 480-635431/6
Matrix: Water
Analysis Batch: 635431

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	25.0	23.8		ug/L		95	80 - 120
1,1,1-Trichloroethane	25.0	23.0		ug/L		92	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.3		ug/L		97	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.4		ug/L		94	61 - 148
1,1,2-Trichloroethane	25.0	24.9		ug/L		99	76 - 122
1,1-Dichloroethane	25.0	24.3		ug/L		97	77 - 120
1,1-Dichloroethene	25.0	23.0		ug/L		92	66 - 127
1,2,4-Trichlorobenzene	25.0	20.0		ug/L		80	79 - 122
1,2,4-Trimethylbenzene	25.0	22.7		ug/L		91	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	21.4		ug/L		86	56 - 134
1,2-Dibromoethane	25.0	24.2		ug/L		97	77 - 120
1,2-Dichlorobenzene	25.0	22.3		ug/L		89	80 - 124
1,2-Dichloroethane	25.0	24.8		ug/L		99	75 - 120
1,2-Dichloropropane	25.0	24.3		ug/L		97	76 - 120
1,3,5-Trimethylbenzene	25.0	22.7		ug/L		91	77 - 121
1,3-Dichlorobenzene	25.0	22.7		ug/L		91	77 - 120
1,4-Dichlorobenzene	25.0	22.2		ug/L		89	80 - 120
2-Butanone (MEK)	125	129		ug/L		103	57 - 140
2-Hexanone	125	126		ug/L		101	65 - 127
4-Methyl-2-pentanone (MIBK)	125	118		ug/L		95	71 - 125
Acetone	125	160		ug/L		128	56 - 142
Benzene	25.0	23.6		ug/L		95	71 - 124
Bromodichloromethane	25.0	24.5		ug/L		98	80 - 122
Bromoform	25.0	22.1		ug/L		88	61 - 132
Bromomethane	25.0	23.3		ug/L		93	55 - 144
Carbon disulfide	25.0	21.3		ug/L		85	59 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-635431/6
Matrix: Water
Analysis Batch: 635431

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon tetrachloride	25.0	22.2		ug/L		89	72 - 134
Chlorobenzene	25.0	23.0		ug/L		92	80 - 120
Chloroethane	25.0	22.5		ug/L		90	69 - 136
Chloroform	25.0	24.0		ug/L		96	73 - 127
Chloromethane	25.0	20.0		ug/L		80	68 - 124
cis-1,2-Dichloroethene	25.0	24.0		ug/L		96	74 - 124
cis-1,3-Dichloropropene	25.0	24.2		ug/L		97	74 - 124
Cyclohexane	25.0	20.8		ug/L		83	59 - 135
Dibromochloromethane	25.0	23.4		ug/L		93	75 - 125
Dichlorodifluoromethane	25.0	17.4		ug/L		70	59 - 135
Ethylbenzene	25.0	22.9		ug/L		91	77 - 123
Isopropylbenzene	25.0	21.8		ug/L		87	77 - 122
m,p-Xylene	25.0	22.5		ug/L		90	76 - 122
Methyl acetate	50.0	47.7		ug/L		95	74 - 133
Methyl tert-butyl ether	25.0	24.8		ug/L		99	77 - 120
Methylcyclohexane	25.0	21.3		ug/L		85	68 - 134
Methylene Chloride	25.0	25.0		ug/L		100	75 - 124
n-Butylbenzene	25.0	22.1		ug/L		88	71 - 128
N-Propylbenzene	25.0	22.4		ug/L		89	75 - 127
o-Xylene	25.0	22.7		ug/L		91	76 - 122
sec-Butylbenzene	25.0	21.9		ug/L		88	74 - 127
Styrene	25.0	23.6		ug/L		94	80 - 120
tert-Butylbenzene	25.0	21.8		ug/L		87	75 - 123
Tetrachloroethene	25.0	21.3		ug/L		85	74 - 122
Toluene	25.0	22.7		ug/L		91	80 - 122
trans-1,2-Dichloroethene	25.0	23.9		ug/L		95	73 - 127
trans-1,3-Dichloropropene	25.0	24.9		ug/L		100	80 - 120
Trichloroethene	25.0	22.9		ug/L		92	74 - 123
Trichlorofluoromethane	25.0	23.8		ug/L		95	62 - 150
Vinyl chloride	25.0	20.8		ug/L		83	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*
Dibromofluoromethane (Surr)	*101*		*75 - 123*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: MB 480-635934/2-A
Matrix: Solid
Analysis Batch: 635938

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635934

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.50	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		08/02/22 17:08	08/02/22 20:38	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-635934/2-A
Matrix: Solid
Analysis Batch: 635938

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635934

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
1,2,3-Trimethylbenzene	ND		5.0	1.0	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
2-Hexanone	ND		25	2.5	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
Acetone	ND		25	4.2	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
Benzene	ND		5.0	0.25	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
Bromoform	ND		5.0	2.5	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
Bromomethane	ND		5.0	0.45	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
Chloroethane	ND		5.0	1.1	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
Chloroform	ND		5.0	0.31	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
Chloromethane	ND		5.0	0.30	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
Cyclohexane	ND		5.0	0.70	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
m,p-Xylene	ND		10	0.84	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
Methyl acetate	ND		25	3.0	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
o-Xylene	ND		5.0	0.65	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
Styrene	ND		5.0	0.25	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
Toluene	ND		5.0	0.38	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
Trichloroethene	ND		5.0	1.1	ug/Kg		08/02/22 17:08	08/02/22 20:38	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-635934/2-A
Matrix: Solid
Analysis Batch: 635938

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635934

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		08/02/22 17:08	08/02/22 20:38	1
Xylenes, Total	ND		10	0.84	ug/Kg		08/02/22 17:08	08/02/22 20:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*64 - 126*	*08/02/22 17:08*	*08/02/22 20:38*	*1*
4-Bromofluorobenzene (Surr)	*99*		*72 - 126*	*08/02/22 17:08*	*08/02/22 20:38*	*1*
Dibromofluoromethane (Surr)	*107*		*60 - 140*	*08/02/22 17:08*	*08/02/22 20:38*	*1*
Toluene-d8 (Surr)	*96*		*71 - 125*	*08/02/22 17:08*	*08/02/22 20:38*	*1*

Lab Sample ID: LCS 480-635934/1-A
Matrix: Solid
Analysis Batch: 635938

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635934

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	53.8		ug/Kg		108	74 - 127
1,1,1-Trichloroethane	50.0	47.5		ug/Kg		95	77 - 121
1,1,2,2-Tetrachloroethane	50.0	47.4		ug/Kg		95	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	47.3		ug/Kg		95	60 - 140
1,1,2-Trichloroethane	50.0	48.7		ug/Kg		97	78 - 122
1,1-Dichloroethane	50.0	45.4		ug/Kg		91	73 - 126
1,1-Dichloroethene	50.0	44.9		ug/Kg		90	59 - 125
1,2,4-Trichlorobenzene	50.0	47.2		ug/Kg		94	64 - 120
1,2,4-Trimethylbenzene	50.0	45.2		ug/Kg		90	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	50.5		ug/Kg		101	63 - 124
1,2-Dibromoethane	50.0	49.3		ug/Kg		99	78 - 120
1,2-Dichlorobenzene	50.0	45.7		ug/Kg		91	75 - 120
1,2-Dichloroethane	50.0	46.9		ug/Kg		94	77 - 122
1,2-Dichloropropane	50.0	45.0		ug/Kg		90	75 - 124
1,3,5-Trimethylbenzene	50.0	45.5		ug/Kg		91	74 - 120
1,3-Dichlorobenzene	50.0	45.8		ug/Kg		92	74 - 120
1,4-Dichlorobenzene	50.0	45.6		ug/Kg		91	73 - 120
2-Butanone (MEK)	250	239		ug/Kg		96	70 - 134
2-Hexanone	250	251		ug/Kg		100	59 - 130
4-Methyl-2-pentanone (MIBK)	250	256		ug/Kg		102	65 - 133
Acetone	250	222		ug/Kg		89	61 - 137
Benzene	50.0	44.6		ug/Kg		89	79 - 127
Bromodichloromethane	50.0	50.6		ug/Kg		101	80 - 122
Bromoform	50.0	61.5		ug/Kg		123	68 - 126
Bromomethane	50.0	55.3		ug/Kg		111	37 - 149
Carbon disulfide	50.0	43.5		ug/Kg		87	64 - 131
Carbon tetrachloride	50.0	51.6		ug/Kg		103	75 - 135
Chlorobenzene	50.0	47.5		ug/Kg		95	76 - 124
Chloroethane	50.0	52.3		ug/Kg		105	69 - 135
Chloroform	50.0	45.2		ug/Kg		90	80 - 120
Chloromethane	50.0	53.0		ug/Kg		106	63 - 127
cis-1,2-Dichloroethene	50.0	45.1		ug/Kg		90	81 - 120
cis-1,3-Dichloropropene	50.0	45.2		ug/Kg		90	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-635934/1-A
Matrix: Solid
Analysis Batch: 635938

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635934

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyclohexane	50.0	45.7		ug/Kg		91	65 - 120
Dibromochloromethane	50.0	59.2		ug/Kg		118	76 - 125
Dichlorodifluoromethane	50.0	47.6		ug/Kg		95	57 - 142
Ethylbenzene	50.0	47.1		ug/Kg		94	80 - 120
Isopropylbenzene	50.0	45.5		ug/Kg		91	72 - 120
m,p-Xylene	50.0	46.8		ug/Kg		94	70 - 130
Methyl acetate	100	91.4		ug/Kg		91	55 - 136
Methyl tert-butyl ether	50.0	43.0		ug/Kg		86	63 - 125
Methylcyclohexane	50.0	44.4		ug/Kg		89	60 - 140
Methylene Chloride	50.0	47.8		ug/Kg		96	61 - 127
n-Butylbenzene	50.0	44.1		ug/Kg		88	70 - 120
N-Propylbenzene	50.0	44.5		ug/Kg		89	70 - 130
o-Xylene	50.0	47.2		ug/Kg		94	70 - 130
sec-Butylbenzene	50.0	44.7		ug/Kg		89	74 - 120
Styrene	50.0	46.8		ug/Kg		94	80 - 120
tert-Butylbenzene	50.0	45.7		ug/Kg		91	73 - 120
Tetrachloroethene	50.0	49.8		ug/Kg		100	74 - 122
Toluene	50.0	46.0		ug/Kg		92	74 - 128
trans-1,2-Dichloroethene	50.0	45.8		ug/Kg		92	78 - 126
trans-1,3-Dichloropropene	50.0	47.4		ug/Kg		95	73 - 123
Trichloroethene	50.0	45.9		ug/Kg		92	77 - 129
Trichlorofluoromethane	50.0	55.4		ug/Kg		111	65 - 146
Vinyl chloride	50.0	49.8		ug/Kg		100	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*64 - 126*
4-Bromofluorobenzene (Surr)	*100*		*72 - 126*
Dibromofluoromethane (Surr)	*104*		*60 - 140*
Toluene-d8 (Surr)	*99*		*71 - 125*

Lab Sample ID: MB 480-636092/3-A
Matrix: Solid
Analysis Batch: 636094

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 636092

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.50	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
1,2,3-Trimethylbenzene	ND		5.0	1.0	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		08/03/22 17:05	08/03/22 21:07	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-636092/3-A
Matrix: Solid
Analysis Batch: 636094

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 636092

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
2-Hexanone	ND		25	2.5	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
Acetone	ND		25	4.2	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
Benzene	ND		5.0	0.25	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
Bromoform	ND		5.0	2.5	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
Bromomethane	ND		5.0	0.45	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
Chloroethane	ND		5.0	1.1	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
Chloroform	ND		5.0	0.31	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
Chloromethane	ND		5.0	0.30	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
Cyclohexane	ND		5.0	0.70	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
m,p-Xylene	ND		10	0.84	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
Methyl acetate	ND		25	3.0	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
o-Xylene	ND		5.0	0.65	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
Styrene	ND		5.0	0.25	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
Toluene	ND		5.0	0.38	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
Trichloroethene	ND		5.0	1.1	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		08/03/22 17:05	08/03/22 21:07	1
Xylenes, Total	ND		10	0.84	ug/Kg		08/03/22 17:05	08/03/22 21:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*64 - 126*	*08/03/22 17:05*	*08/03/22 21:07*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-636092/3-A
Matrix: Solid
Analysis Batch: 636094

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 636092

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*100*		*72 - 126*	*08/03/22 17:05*	*08/03/22 21:07*	*1*
Dibromofluoromethane (Surr)	*107*		*60 - 140*	*08/03/22 17:05*	*08/03/22 21:07*	*1*
Toluene-d8 (Surr)	*96*		*71 - 125*	*08/03/22 17:05*	*08/03/22 21:07*	*1*

Lab Sample ID: LCS 480-636092/1-A
Matrix: Solid
Analysis Batch: 636094

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 636092

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	60.0		ug/Kg		120	74 - 127
1,1,1-Trichloroethane	50.0	58.9		ug/Kg		118	77 - 121
1,1,2,2-Tetrachloroethane	50.0	52.0		ug/Kg		104	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	59.5		ug/Kg		119	60 - 140
1,1,2-Trichloroethane	50.0	52.4		ug/Kg		105	78 - 122
1,1-Dichloroethane	50.0	54.3		ug/Kg		109	73 - 126
1,1-Dichloroethene	50.0	57.4		ug/Kg		115	59 - 125
1,2,4-Trichlorobenzene	50.0	54.9		ug/Kg		110	64 - 120
1,2,4-Trimethylbenzene	50.0	55.7		ug/Kg		111	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	57.3		ug/Kg		115	63 - 124
1,2-Dibromoethane	50.0	52.4		ug/Kg		105	78 - 120
1,2-Dichlorobenzene	50.0	53.2		ug/Kg		106	75 - 120
1,2-Dichloroethane	50.0	51.0		ug/Kg		102	77 - 122
1,2-Dichloropropane	50.0	51.5		ug/Kg		103	75 - 124
1,3,5-Trimethylbenzene	50.0	57.1		ug/Kg		114	74 - 120
1,3-Dichlorobenzene	50.0	54.2		ug/Kg		108	74 - 120
1,4-Dichlorobenzene	50.0	53.5		ug/Kg		107	73 - 120
2-Butanone (MEK)	250	237		ug/Kg		95	70 - 134
2-Hexanone	250	252		ug/Kg		101	59 - 130
4-Methyl-2-pentanone (MIBK)	250	260		ug/Kg		104	65 - 133
Acetone	250	238		ug/Kg		95	61 - 137
Benzene	50.0	52.5		ug/Kg		105	79 - 127
Bromodichloromethane	50.0	58.3		ug/Kg		117	80 - 122
Bromoform	50.0	67.3	*+	ug/Kg		135	68 - 126
Bromomethane	50.0	53.2		ug/Kg		106	37 - 149
Carbon disulfide	50.0	55.2		ug/Kg		110	64 - 131
Carbon tetrachloride	50.0	64.6		ug/Kg		129	75 - 135
Chlorobenzene	50.0	55.2		ug/Kg		110	76 - 124
Chloroethane	50.0	54.6		ug/Kg		109	69 - 135
Chloroform	50.0	51.5		ug/Kg		103	80 - 120
Chloromethane	50.0	52.7		ug/Kg		105	63 - 127
cis-1,2-Dichloroethene	50.0	52.3		ug/Kg		105	81 - 120
cis-1,3-Dichloropropene	50.0	53.0		ug/Kg		106	80 - 120
Cyclohexane	50.0	58.5		ug/Kg		117	65 - 120
Dibromochloromethane	50.0	65.1	*+	ug/Kg		130	76 - 125
Dichlorodifluoromethane	50.0	48.7		ug/Kg		97	57 - 142
Ethylbenzene	50.0	55.4		ug/Kg		111	80 - 120
Isopropylbenzene	50.0	57.7		ug/Kg		115	72 - 120
m,p-Xylene	50.0	55.4		ug/Kg		111	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-636092/1-A
Matrix: Solid
Analysis Batch: 636094

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 636092

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methyl acetate	100	99.5		ug/Kg		99	55 - 136
Methyl tert-butyl ether	50.0	46.1		ug/Kg		92	63 - 125
Methylcyclohexane	50.0	56.7		ug/Kg		113	60 - 140
Methylene Chloride	50.0	54.6		ug/Kg		109	61 - 127
n-Butylbenzene	50.0	56.7		ug/Kg		113	70 - 120
N-Propylbenzene	50.0	56.5		ug/Kg		113	70 - 130
o-Xylene	50.0	55.0		ug/Kg		110	70 - 130
sec-Butylbenzene	50.0	58.3		ug/Kg		117	74 - 120
Styrene	50.0	52.3		ug/Kg		105	80 - 120
tert-Butylbenzene	50.0	60.4	*+	ug/Kg		121	73 - 120
Tetrachloroethene	50.0	63.3	*+	ug/Kg		127	74 - 122
Toluene	50.0	53.0		ug/Kg		106	74 - 128
trans-1,2-Dichloroethene	50.0	55.1		ug/Kg		110	78 - 126
trans-1,3-Dichloropropene	50.0	53.1		ug/Kg		106	73 - 123
Trichloroethene	50.0	54.4		ug/Kg		109	77 - 129
Trichlorofluoromethane	50.0	60.8		ug/Kg		122	65 - 146
Vinyl chloride	50.0	52.3		ug/Kg		105	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*64 - 126*
4-Bromofluorobenzene (Surr)	*98*		*72 - 126*
Dibromofluoromethane (Surr)	*103*		*60 - 140*
Toluene-d8 (Surr)	*97*		*71 - 125*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-635534/1-A
Matrix: Water
Analysis Batch: 635707

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635534

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		07/29/22 14:33	08/01/22 15:55	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		07/29/22 14:33	08/01/22 15:55	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		07/29/22 14:33	08/01/22 15:55	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		07/29/22 14:33	08/01/22 15:55	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		07/29/22 14:33	08/01/22 15:55	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		07/29/22 14:33	08/01/22 15:55	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		07/29/22 14:33	08/01/22 15:55	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		07/29/22 14:33	08/01/22 15:55	1
2-Chlorophenol	ND		5.0	0.53	ug/L		07/29/22 14:33	08/01/22 15:55	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		07/29/22 14:33	08/01/22 15:55	1
2-Methylphenol	ND		5.0	0.40	ug/L		07/29/22 14:33	08/01/22 15:55	1
2-Nitroaniline	ND		10	0.42	ug/L		07/29/22 14:33	08/01/22 15:55	1
2-Nitrophenol	ND		5.0	0.48	ug/L		07/29/22 14:33	08/01/22 15:55	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		07/29/22 14:33	08/01/22 15:55	1
3-Nitroaniline	ND		10	0.48	ug/L		07/29/22 14:33	08/01/22 15:55	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		07/29/22 14:33	08/01/22 15:55	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		07/29/22 14:33	08/01/22 15:55	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		07/29/22 14:33	08/01/22 15:55	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-635534/1-A
Matrix: Water
Analysis Batch: 635707

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635534

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND		5.0	0.59	ug/L		07/29/22 14:33	08/01/22 15:55	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		07/29/22 14:33	08/01/22 15:55	1
4-Methylphenol	ND		10	0.36	ug/L		07/29/22 14:33	08/01/22 15:55	1
4-Nitroaniline	ND		10	0.25	ug/L		07/29/22 14:33	08/01/22 15:55	1
4-Nitrophenol	ND		10	1.5	ug/L		07/29/22 14:33	08/01/22 15:55	1
Acenaphthene	ND		5.0	0.41	ug/L		07/29/22 14:33	08/01/22 15:55	1
Acenaphthylene	ND		5.0	0.38	ug/L		07/29/22 14:33	08/01/22 15:55	1
Acetophenone	ND		5.0	0.54	ug/L		07/29/22 14:33	08/01/22 15:55	1
Anthracene	ND		5.0	0.28	ug/L		07/29/22 14:33	08/01/22 15:55	1
Atrazine	ND		5.0	0.46	ug/L		07/29/22 14:33	08/01/22 15:55	1
Benzaldehyde	ND		5.0	0.27	ug/L		07/29/22 14:33	08/01/22 15:55	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		07/29/22 14:33	08/01/22 15:55	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		07/29/22 14:33	08/01/22 15:55	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		07/29/22 14:33	08/01/22 15:55	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		07/29/22 14:33	08/01/22 15:55	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		07/29/22 14:33	08/01/22 15:55	1
Biphenyl	ND		5.0	0.65	ug/L		07/29/22 14:33	08/01/22 15:55	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		07/29/22 14:33	08/01/22 15:55	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		07/29/22 14:33	08/01/22 15:55	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		07/29/22 14:33	08/01/22 15:55	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		07/29/22 14:33	08/01/22 15:55	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		07/29/22 14:33	08/01/22 15:55	1
Caprolactam	ND		5.0	2.2	ug/L		07/29/22 14:33	08/01/22 15:55	1
Carbazole	ND		5.0	0.30	ug/L		07/29/22 14:33	08/01/22 15:55	1
Chrysene	ND		5.0	0.33	ug/L		07/29/22 14:33	08/01/22 15:55	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		07/29/22 14:33	08/01/22 15:55	1
Dibenzofuran	ND		10	0.51	ug/L		07/29/22 14:33	08/01/22 15:55	1
Diethyl phthalate	ND		5.0	0.22	ug/L		07/29/22 14:33	08/01/22 15:55	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		07/29/22 14:33	08/01/22 15:55	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		07/29/22 14:33	08/01/22 15:55	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		07/29/22 14:33	08/01/22 15:55	1
Fluoranthene	ND		5.0	0.40	ug/L		07/29/22 14:33	08/01/22 15:55	1
Fluorene	ND		5.0	0.36	ug/L		07/29/22 14:33	08/01/22 15:55	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		07/29/22 14:33	08/01/22 15:55	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		07/29/22 14:33	08/01/22 15:55	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		07/29/22 14:33	08/01/22 15:55	1
Hexachloroethane	ND		5.0	0.59	ug/L		07/29/22 14:33	08/01/22 15:55	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		07/29/22 14:33	08/01/22 15:55	1
Isophorone	ND		5.0	0.43	ug/L		07/29/22 14:33	08/01/22 15:55	1
Naphthalene	ND		5.0	0.76	ug/L		07/29/22 14:33	08/01/22 15:55	1
Nitrobenzene	ND		5.0	0.29	ug/L		07/29/22 14:33	08/01/22 15:55	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		07/29/22 14:33	08/01/22 15:55	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		07/29/22 14:33	08/01/22 15:55	1
Pentachlorophenol	ND		10	2.2	ug/L		07/29/22 14:33	08/01/22 15:55	1
Phenanthrene	ND		5.0	0.44	ug/L		07/29/22 14:33	08/01/22 15:55	1
Phenol	ND		5.0	0.39	ug/L		07/29/22 14:33	08/01/22 15:55	1
Pyrene	ND		5.0	0.34	ug/L		07/29/22 14:33	08/01/22 15:55	1
1,4-Dioxane	ND		10	1.1	ug/L		07/29/22 14:33	08/01/22 15:55	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-635534/1-A
Matrix: Water
Analysis Batch: 635707

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635534

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol	69		41 - 120	07/29/22 14:33	08/01/22 15:55	1
2-Fluorobiphenyl	76		48 - 120	07/29/22 14:33	08/01/22 15:55	1
2-Fluorophenol	55		35 - 120	07/29/22 14:33	08/01/22 15:55	1
Nitrobenzene-d5	67		46 - 120	07/29/22 14:33	08/01/22 15:55	1
Phenol-d5	42		22 - 120	07/29/22 14:33	08/01/22 15:55	1
p-Terphenyl-d14	92		60 - 148	07/29/22 14:33	08/01/22 15:55	1

Lab Sample ID: LCS 480-635534/2-A
Matrix: Water
Analysis Batch: 635707

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635534

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	32.0	31.3		ug/L		98	65 - 126
2,4,6-Trichlorophenol	32.0	30.8		ug/L		96	64 - 120
2,4-Dichlorophenol	32.0	29.3		ug/L		91	63 - 120
2,4-Dimethylphenol	32.0	28.4		ug/L		89	47 - 120
2,4-Dinitrophenol	64.0	65.8		ug/L		103	31 - 137
2,4-Dinitrotoluene	32.0	33.4		ug/L		104	69 - 120
2,6-Dinitrotoluene	32.0	32.2		ug/L		101	68 - 120
2-Chloronaphthalene	32.0	27.0		ug/L		84	58 - 120
2-Chlorophenol	32.0	26.8		ug/L		84	48 - 120
2-Methylnaphthalene	32.0	24.9		ug/L		78	59 - 120
2-Methylphenol	32.0	26.5		ug/L		83	39 - 120
2-Nitroaniline	32.0	31.5		ug/L		98	54 - 127
2-Nitrophenol	32.0	28.6		ug/L		89	52 - 125
3,3'-Dichlorobenzidine	64.0	57.6		ug/L		90	49 - 135
3-Nitroaniline	32.0	27.4		ug/L		86	51 - 120
4,6-Dinitro-2-methylphenol	64.0	70.2		ug/L		110	46 - 136
4-Bromophenyl phenyl ether	32.0	32.2		ug/L		101	65 - 120
4-Chloro-3-methylphenol	32.0	30.6		ug/L		96	61 - 123
4-Chloroaniline	32.0	20.8		ug/L		65	30 - 120
4-Chlorophenyl phenyl ether	32.0	30.4		ug/L		95	62 - 120
4-Methylphenol	32.0	26.3		ug/L		82	29 - 131
4-Nitroaniline	32.0	39.0	*+	ug/L		122	65 - 120
4-Nitrophenol	64.0	55.3		ug/L		86	45 - 120
Acenaphthene	32.0	28.8		ug/L		90	60 - 120
Acenaphthylene	32.0	29.6		ug/L		92	63 - 120
Acetophenone	32.0	27.6		ug/L		86	45 - 120
Anthracene	32.0	33.1		ug/L		104	67 - 120
Atrazine	64.0	70.0		ug/L		109	71 - 130
Benzaldehyde	64.0	54.5		ug/L		85	10 - 140
Benzo[a]anthracene	32.0	30.6		ug/L		96	70 - 121
Benzo[a]pyrene	32.0	32.3		ug/L		101	60 - 123
Benzo[b]fluoranthene	32.0	32.6		ug/L		102	66 - 126
Benzo[g,h,i]perylene	32.0	31.4		ug/L		98	66 - 150
Benzo[k]fluoranthene	32.0	31.7		ug/L		99	65 - 124
Biphenyl	32.0	27.2		ug/L		85	59 - 120
bis (2-chloroisopropyl) ether	32.0	27.4		ug/L		86	21 - 136

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-635534/2-A
Matrix: Water
Analysis Batch: 635707

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635534

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bis(2-chloroethoxy)methane	32.0	27.8		ug/L		87	50 - 128
Bis(2-chloroethyl)ether	32.0	26.3		ug/L		82	44 - 120
Bis(2-ethylhexyl) phthalate	32.0	32.7		ug/L		102	63 - 139
Butyl benzyl phthalate	32.0	33.3		ug/L		104	70 - 129
Caprolactam	64.0	26.4		ug/L		41	22 - 120
Carbazole	32.0	47.9	*+	ug/L		150	66 - 123
Chrysene	32.0	30.4		ug/L		95	69 - 120
Dibenz(a,h)anthracene	32.0	32.5		ug/L		101	65 - 135
Dibenzofuran	32.0	29.9		ug/L		93	66 - 120
Diethyl phthalate	32.0	31.9		ug/L		100	59 - 127
Dimethyl phthalate	32.0	31.6		ug/L		99	68 - 120
Di-n-butyl phthalate	32.0	34.8		ug/L		109	69 - 131
Di-n-octyl phthalate	32.0	32.0		ug/L		100	63 - 140
Fluoranthene	32.0	34.2		ug/L		107	69 - 126
Fluorene	32.0	30.9		ug/L		96	66 - 120
Hexachlorobenzene	32.0	31.6		ug/L		99	61 - 120
Hexachlorobutadiene	32.0	22.2		ug/L		69	35 - 120
Hexachlorocyclopentadiene	32.0	21.0		ug/L		66	31 - 120
Hexachloroethane	32.0	22.5		ug/L		70	43 - 120
Indeno[1,2,3-cd]pyrene	32.0	32.4		ug/L		101	69 - 146
Isophorone	32.0	29.8		ug/L		93	55 - 120
Naphthalene	32.0	26.6		ug/L		83	57 - 120
Nitrobenzene	32.0	27.7		ug/L		86	53 - 123
N-Nitrosodi-n-propylamine	32.0	28.6		ug/L		89	32 - 140
Pentachlorophenol	64.0	62.0		ug/L		97	29 - 136
Phenanthrene	32.0	31.2		ug/L		98	68 - 120
Phenol	32.0	17.7		ug/L		55	17 - 120
Pyrene	32.0	32.3		ug/L		101	70 - 125
1,4-Dioxane	32.0	19.0		ug/L		59	10 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*103*		*41 - 120*
2-Fluorobiphenyl	*89*		*48 - 120*
2-Fluorophenol	*68*		*35 - 120*
Nitrobenzene-d5	*85*		*46 - 120*
Phenol-d5	*55*		*22 - 120*
p-Terphenyl-d14	*100*		*60 - 148*

Lab Sample ID: MB 480-635559/1-A
Matrix: Solid
Analysis Batch: 635875

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635559

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		170	45	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
2,4,6-Trichlorophenol	ND		170	33	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
2,4-Dimethylphenol	ND		170	40	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
2,4-Dinitrophenol	ND		1600	760	ug/Kg		07/29/22 15:47	08/02/22 19:41	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-635559/1-A
Matrix: Solid
Analysis Batch: 635875

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635559

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		170	34	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
2,6-Dinitrotoluene	ND		170	19	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
2-Chloronaphthalene	ND		170	27	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
2-Chlorophenol	ND		320	30	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
2-Methylnaphthalene	ND		170	33	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
2-Methylphenol	ND		170	19	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
2-Nitroaniline	ND		320	24	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
2-Nitrophenol	ND		170	47	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
3,3'-Dichlorobenzidine	ND		320	190	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
3-Nitroaniline	ND		320	46	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
4,6-Dinitro-2-methylphenol	ND		320	170	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
4-Bromophenyl phenyl ether	ND		170	23	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
4-Chloro-3-methylphenol	ND		170	41	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
4-Chloroaniline	ND		170	41	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
4-Chlorophenyl phenyl ether	ND		170	20	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
4-Methylphenol	ND		320	19	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
4-Nitroaniline	ND		320	87	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
4-Nitrophenol	ND		320	120	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Acenaphthene	ND		170	24	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Acenaphthylene	ND		170	21	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Acetophenone	ND		170	22	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Anthracene	ND		170	41	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Atrazine	ND		170	57	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Benzaldehyde	ND		170	130	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Benzo[a]anthracene	ND		170	17	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Benzo[a]pyrene	ND		170	24	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Benzo[b]fluoranthene	ND		170	26	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Benzo[k]fluoranthene	ND		170	21	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Biphenyl	ND		170	24	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
bis (2-chloroisopropyl) ether	ND		170	33	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Bis(2-chloroethoxy)methane	ND		170	35	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Bis(2-chloroethyl)ether	ND		170	21	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Bis(2-ethylhexyl) phthalate	ND		170	56	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Butyl benzyl phthalate	ND		170	27	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Caprolactam	ND		170	50	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Carbazole	ND		170	19	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Chrysene	ND		170	37	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Dibenz(a,h)anthracene	ND		170	29	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Dibenzofuran	ND		170	19	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Diethyl phthalate	ND		170	21	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Dimethyl phthalate	ND		170	19	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Di-n-butyl phthalate	ND		170	28	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Di-n-octyl phthalate	ND		170	19	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Fluoranthene	ND		170	18	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Fluorene	ND		170	19	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Hexachlorobenzene	ND		170	22	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Hexachlorobutadiene	ND		170	24	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Hexachlorocyclopentadiene	ND		170	22	ug/Kg		07/29/22 15:47	08/02/22 19:41	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-635559/1-A
Matrix: Solid
Analysis Batch: 635875

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635559

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	ND		170	21	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Indeno[1,2,3-cd]pyrene	ND		170	20	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Isophorone	ND		170	35	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Naphthalene	ND		170	21	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Nitrobenzene	ND		170	18	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
N-Nitrosodi-n-propylamine	ND		170	28	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
N-Nitrosodiphenylamine	ND		170	130	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Pentachlorophenol	ND		320	170	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Phenanthrene	ND		170	24	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Phenol	ND		170	25	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
Pyrene	ND		170	19	ug/Kg		07/29/22 15:47	08/02/22 19:41	1
1,4-Dioxane	ND		97	54	ug/Kg		07/29/22 15:47	08/02/22 19:41	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*95*		*54 - 120*	*07/29/22 15:47*	*08/02/22 19:41*	*1*
2-Fluorobiphenyl	*80*		*60 - 120*	*07/29/22 15:47*	*08/02/22 19:41*	*1*
2-Fluorophenol	*68*		*52 - 120*	*07/29/22 15:47*	*08/02/22 19:41*	*1*
Nitrobenzene-d5	*67*		*53 - 120*	*07/29/22 15:47*	*08/02/22 19:41*	*1*
Phenol-d5	*73*		*54 - 120*	*07/29/22 15:47*	*08/02/22 19:41*	*1*
p-Terphenyl-d14	*97*		*79 - 130*	*07/29/22 15:47*	*08/02/22 19:41*	*1*

Lab Sample ID: LCS 480-635559/2-A
Matrix: Solid
Analysis Batch: 636030

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635559

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	1640	1350		ug/Kg		82	59 - 126
2,4,6-Trichlorophenol	1640	1360		ug/Kg		83	59 - 123
2,4-Dichlorophenol	1640	1350		ug/Kg		82	61 - 120
2,4-Dimethylphenol	1640	1250		ug/Kg		76	59 - 120
2,4-Dinitrophenol	3280	2680		ug/Kg		82	41 - 146
2,4-Dinitrotoluene	1640	1380		ug/Kg		84	63 - 120
2,6-Dinitrotoluene	1640	1310		ug/Kg		80	66 - 120
2-Chloronaphthalene	1640	1340		ug/Kg		81	57 - 120
2-Chlorophenol	1640	1200		ug/Kg		73	53 - 120
2-Methylnaphthalene	1640	1150		ug/Kg		70	59 - 120
2-Methylphenol	1640	1260		ug/Kg		77	54 - 120
2-Nitroaniline	1640	1290		ug/Kg		79	61 - 120
2-Nitrophenol	1640	1220		ug/Kg		74	56 - 120
3,3'-Dichlorobenzidine	3280	2490		ug/Kg		76	54 - 120
3-Nitroaniline	1640	1100		ug/Kg		67	48 - 120
4,6-Dinitro-2-methylphenol	3280	3070		ug/Kg		94	49 - 122
4-Bromophenyl phenyl ether	1640	1560		ug/Kg		95	58 - 120
4-Chloro-3-methylphenol	1640	1270		ug/Kg		77	61 - 120
4-Chloroaniline	1640	1060		ug/Kg		64	38 - 120
4-Chlorophenyl phenyl ether	1640	1340		ug/Kg		82	63 - 124
4-Methylphenol	1640	1240		ug/Kg		76	55 - 120
4-Nitroaniline	1640	1250		ug/Kg		76	56 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-635559/2-A
Matrix: Solid
Analysis Batch: 636030

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635559

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4-Nitrophenol	3280	2530		ug/Kg		77	43 - 147
Acenaphthene	1640	1280		ug/Kg		78	62 - 120
Acenaphthylene	1640	1300		ug/Kg		80	58 - 121
Acetophenone	1640	1210		ug/Kg		74	54 - 120
Anthracene	1640	1480		ug/Kg		90	62 - 120
Atrazine	3280	2850		ug/Kg		87	60 - 127
Benzaldehyde	3280	2440		ug/Kg		74	10 - 150
Benzo[a]anthracene	1640	1470		ug/Kg		90	65 - 120
Benzo[a]pyrene	1640	1480		ug/Kg		90	64 - 120
Benzo[b]fluoranthene	1640	1380		ug/Kg		84	64 - 120
Benzo[g,h,i]perylene	1640	1590		ug/Kg		97	45 - 145
Benzo[k]fluoranthene	1640	1620		ug/Kg		99	65 - 120
Biphenyl	1640	1310		ug/Kg		80	59 - 120
bis (2-chloroisopropyl) ether	1640	1110		ug/Kg		68	44 - 120
Bis(2-chloroethoxy)methane	1640	1170		ug/Kg		71	55 - 120
Bis(2-chloroethyl)ether	1640	1160		ug/Kg		70	45 - 120
Bis(2-ethylhexyl) phthalate	1640	1410		ug/Kg		86	61 - 133
Butyl benzyl phthalate	1640	1430		ug/Kg		87	61 - 129
Caprolactam	3280	2700		ug/Kg		82	47 - 120
Carbazole	1640	1480		ug/Kg		90	65 - 120
Chrysene	1640	1450		ug/Kg		88	64 - 120
Dibenz(a,h)anthracene	1640	1580		ug/Kg		96	54 - 132
Dibenzofuran	1640	1270		ug/Kg		78	63 - 120
Diethyl phthalate	1640	1420		ug/Kg		86	66 - 120
Dimethyl phthalate	1640	1340		ug/Kg		81	65 - 124
Di-n-butyl phthalate	1640	1490		ug/Kg		91	58 - 130
Di-n-octyl phthalate	1640	1430		ug/Kg		87	57 - 133
Fluoranthene	1640	1550		ug/Kg		95	62 - 120
Fluorene	1640	1350		ug/Kg		83	63 - 120
Hexachlorobenzene	1640	1580		ug/Kg		96	60 - 120
Hexachlorobutadiene	1640	1260		ug/Kg		77	45 - 120
Hexachlorocyclopentadiene	1640	1050		ug/Kg		64	47 - 120
Hexachloroethane	1640	1070		ug/Kg		65	41 - 120
Indeno[1,2,3-cd]pyrene	1640	1590		ug/Kg		97	56 - 134
Isophorone	1640	1230		ug/Kg		75	56 - 120
Naphthalene	1640	1220		ug/Kg		74	55 - 120
Nitrobenzene	1640	1140		ug/Kg		70	54 - 120
N-Nitrosodi-n-propylamine	1640	1130		ug/Kg		69	52 - 120
Pentachlorophenol	3280	2940		ug/Kg		90	51 - 120
Phenanthrene	1640	1410		ug/Kg		86	60 - 120
Phenol	1640	1130		ug/Kg		69	53 - 120
Pyrene	1640	1520		ug/Kg		93	61 - 133
1,4-Dioxane	1640	618		ug/Kg		38	23 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*89*		*54 - 120*
2-Fluorobiphenyl	*83*		*60 - 120*
2-Fluorophenol	*68*		*52 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-635559/2-A
Matrix: Solid
Analysis Batch: 636030

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635559

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Nitrobenzene-d5	67		53 - 120
Phenol-d5	70		54 - 120
p-Terphenyl-d14	88		79 - 130

Lab Sample ID: MB 480-636295/1-A
Matrix: Solid
Analysis Batch: 636828

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 636295

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		170	45	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
2,4,6-Trichlorophenol	ND		170	33	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
2,4-Dimethylphenol	ND		170	40	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
2,4-Dinitrophenol	ND		1600	770	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
2,4-Dinitrotoluene	ND		170	34	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
2-Chloronaphthalene	ND		170	27	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
2-Chlorophenol	ND		320	30	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
2-Methylnaphthalene	ND		170	33	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
2-Methylphenol	ND		170	20	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
2-Nitroaniline	ND		320	25	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
2-Nitrophenol	ND		170	47	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
3,3'-Dichlorobenzidine	ND		320	200	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
3-Nitroaniline	ND		320	46	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
4,6-Dinitro-2-methylphenol	ND		320	170	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
4-Bromophenyl phenyl ether	ND		170	24	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
4-Chloro-3-methylphenol	ND		170	41	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
4-Chloroaniline	ND		170	41	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
4-Chlorophenyl phenyl ether	ND		170	21	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
4-Methylphenol	ND		320	20	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
4-Nitroaniline	ND		320	87	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
4-Nitrophenol	ND		320	120	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Acenaphthene	ND		170	25	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Acenaphthylene	ND		170	22	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Acetophenone	ND		170	23	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Anthracene	ND		170	41	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Atrazine	ND		170	58	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Benzaldehyde	ND		170	130	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Benzo[a]anthracene	ND		170	17	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Benzo[a]pyrene	ND		170	25	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Biphenyl	ND		170	25	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
bis (2-chloroisopropyl) ether	ND		170	33	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Bis(2-chloroethoxy)methane	ND		170	35	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Bis(2-chloroethyl)ether	ND		170	22	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Bis(2-ethylhexyl) phthalate	ND		170	57	ug/Kg		08/05/22 08:21	08/10/22 14:16	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-636295/1-A
Matrix: Solid
Analysis Batch: 636828

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 636295

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Butyl benzyl phthalate	ND		170	27	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Caprolactam	ND		170	50	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Carbazole	ND		170	20	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Chrysene	ND		170	37	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Dibenz(a,h)anthracene	ND		170	29	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Dibenzofuran	ND		170	20	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Diethyl phthalate	ND		170	22	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Dimethyl phthalate	ND		170	20	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Di-n-butyl phthalate	ND		170	28	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Di-n-octyl phthalate	ND		170	20	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Fluoranthene	ND		170	18	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Fluorene	ND		170	20	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Hexachlorobenzene	ND		170	23	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Hexachlorobutadiene	ND		170	25	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Hexachlorocyclopentadiene	ND		170	23	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Hexachloroethane	ND		170	22	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Isophorone	ND		170	35	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Naphthalene	ND		170	22	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Nitrobenzene	ND		170	19	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
N-Nitrosodi-n-propylamine	ND		170	28	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
N-Nitrosodiphenylamine	ND		170	140	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Pentachlorophenol	ND		320	170	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Phenanthrene	ND		170	25	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Phenol	ND		170	26	ug/Kg		08/05/22 08:21	08/10/22 14:16	1
Pyrene	ND		170	20	ug/Kg		08/05/22 08:21	08/10/22 14:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*79*		*54 - 120*	*08/05/22 08:21*	*08/10/22 14:16*	*1*
2-Fluorobiphenyl	*84*		*60 - 120*	*08/05/22 08:21*	*08/10/22 14:16*	*1*
2-Fluorophenol	*69*		*52 - 120*	*08/05/22 08:21*	*08/10/22 14:16*	*1*
Nitrobenzene-d5	*68*		*53 - 120*	*08/05/22 08:21*	*08/10/22 14:16*	*1*
Phenol-d5	*71*		*54 - 120*	*08/05/22 08:21*	*08/10/22 14:16*	*1*
p-Terphenyl-d14	*90*		*79 - 130*	*08/05/22 08:21*	*08/10/22 14:16*	*1*

Lab Sample ID: LCS 480-636295/2-A
Matrix: Solid
Analysis Batch: 636828

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 636295

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	1660	1410		ug/Kg		85	59 - 126
2,4,6-Trichlorophenol	1660	1340		ug/Kg		81	59 - 123
2,4-Dichlorophenol	1660	1350		ug/Kg		81	61 - 120
2,4-Dimethylphenol	1660	1220		ug/Kg		74	59 - 120
2,4-Dinitrophenol	3320	2970		ug/Kg		89	41 - 146
2,4-Dinitrotoluene	1660	1410		ug/Kg		85	63 - 120
2,6-Dinitrotoluene	1660	1390		ug/Kg		84	66 - 120
2-Chloronaphthalene	1660	1310		ug/Kg		79	57 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-636295/2-A
Matrix: Solid
Analysis Batch: 636828

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 636295

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Chlorophenol	1660	1250		ug/Kg		75	53 - 120
2-Methylnaphthalene	1660	1130		ug/Kg		68	59 - 120
2-Methylphenol	1660	1240		ug/Kg		75	54 - 120
2-Nitroaniline	1660	1280		ug/Kg		77	61 - 120
2-Nitrophenol	1660	1320		ug/Kg		80	56 - 120
3,3'-Dichlorobenzidine	3320	2870		ug/Kg		87	54 - 120
3-Nitroaniline	1660	1320		ug/Kg		80	48 - 120
4,6-Dinitro-2-methylphenol	3320	3340		ug/Kg		101	49 - 122
4-Bromophenyl phenyl ether	1660	1600		ug/Kg		96	58 - 120
4-Chloro-3-methylphenol	1660	1230		ug/Kg		74	61 - 120
4-Chloroaniline	1660	1150		ug/Kg		70	38 - 120
4-Chlorophenyl phenyl ether	1660	1360		ug/Kg		82	63 - 124
4-Methylphenol	1660	1300		ug/Kg		78	55 - 120
4-Nitroaniline	1660	1460		ug/Kg		88	56 - 120
4-Nitrophenol	3320	2940		ug/Kg		89	43 - 147
Acenaphthene	1660	1240		ug/Kg		75	62 - 120
Acenaphthylene	1660	1310		ug/Kg		79	58 - 121
Acetophenone	1660	1170		ug/Kg		70	54 - 120
Anthracene	1660	1520		ug/Kg		92	62 - 120
Atrazine	3320	3070		ug/Kg		93	60 - 127
Benzaldehyde	3320	2380		ug/Kg		72	10 - 150
Benzo[a]anthracene	1660	1530		ug/Kg		92	65 - 120
Benzo[a]pyrene	1660	1610		ug/Kg		97	64 - 120
Benzo[b]fluoranthene	1660	1440		ug/Kg		87	64 - 120
Benzo[g,h,i]perylene	1660	1660		ug/Kg		100	45 - 145
Benzo[k]fluoranthene	1660	1770		ug/Kg		107	65 - 120
Biphenyl	1660	1250		ug/Kg		75	59 - 120
bis (2-chloroisopropyl) ether	1660	1090		ug/Kg		66	44 - 120
Bis(2-chloroethoxy)methane	1660	1150		ug/Kg		69	55 - 120
Bis(2-chloroethyl)ether	1660	1140		ug/Kg		69	45 - 120
Bis(2-ethylhexyl) phthalate	1660	1490		ug/Kg		90	61 - 133
Butyl benzyl phthalate	1660	1530		ug/Kg		92	61 - 129
Caprolactam	3320	3000		ug/Kg		90	47 - 120
Carbazole	1660	1640		ug/Kg		99	65 - 120
Chrysene	1660	1530		ug/Kg		92	64 - 120
Dibenz(a,h)anthracene	1660	1670		ug/Kg		101	54 - 132
Dibenzofuran	1660	1300		ug/Kg		79	63 - 120
Diethyl phthalate	1660	1510		ug/Kg		91	66 - 120
Dimethyl phthalate	1660	1380		ug/Kg		83	65 - 124
Di-n-butyl phthalate	1660	1640		ug/Kg		99	58 - 130
Di-n-octyl phthalate	1660	1480		ug/Kg		90	57 - 133
Fluoranthene	1660	1690		ug/Kg		102	62 - 120
Fluorene	1660	1360		ug/Kg		82	63 - 120
Hexachlorobenzene	1660	1590		ug/Kg		96	60 - 120
Hexachlorobutadiene	1660	1290		ug/Kg		78	45 - 120
Hexachlorocyclopentadiene	1660	933		ug/Kg		56	47 - 120
Hexachloroethane	1660	1060		ug/Kg		64	41 - 120
Indeno[1,2,3-cd]pyrene	1660	1670		ug/Kg		101	56 - 134
Isophorone	1660	1190		ug/Kg		72	56 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-636295/2-A
Matrix: Solid
Analysis Batch: 636828

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 636295

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Naphthalene	1660	1260		ug/Kg		76	55 - 120
Nitrobenzene	1660	1120		ug/Kg		68	54 - 120
N-Nitrosodi-n-propylamine	1660	1190		ug/Kg		72	52 - 120
Pentachlorophenol	3320	3530		ug/Kg		106	51 - 120
Phenanthrene	1660	1520		ug/Kg		92	60 - 120
Phenol	1660	1110		ug/Kg		67	53 - 120
Pyrene	1660	1570		ug/Kg		94	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*101*		*54 - 120*
2-Fluorobiphenyl	*79*		*60 - 120*
2-Fluorophenol	*67*		*52 - 120*
Nitrobenzene-d5	*66*		*53 - 120*
Phenol-d5	*71*		*54 - 120*
p-Terphenyl-d14	*94*		*79 - 130*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-635537/1-A
Matrix: Water
Analysis Batch: 635708

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635537

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		07/29/22 14:39	08/01/22 15:50	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*34*		*15 - 110*	*07/29/22 14:39*	*08/01/22 15:50*	*1*

Lab Sample ID: LCS 480-635537/2-A
Matrix: Water
Analysis Batch: 635708

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635537

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	2.00	2.25		ug/L		112	40 - 140

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*43*		*15 - 110*

Method: 537 IDA - EPA 537 Isotope Dilution

Lab Sample ID: MB 200-182357/1-A
Matrix: Solid
Analysis Batch: 182390

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 182357

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.50	0.33	ug/Kg		08/04/22 08:35	08/04/22 20:42	1
Perfluoropentanoic acid (PFPeA)	ND		0.20	0.055	ug/Kg		08/04/22 08:35	08/04/22 20:42	1
Perfluorohexanoic acid (PFHxA)	ND		0.20	0.046	ug/Kg		08/04/22 08:35	08/04/22 20:42	1
Perfluoroheptanoic acid (PFHpA)	ND		0.20	0.039	ug/Kg		08/04/22 08:35	08/04/22 20:42	1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: MB 200-182357/1-A
Matrix: Solid
Analysis Batch: 182390

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 182357

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorooctanoic acid (PFOA)	ND		0.20	0.058	ug/Kg		08/04/22 08:35	08/04/22 20:42	1
Perfluorononanoic acid (PFNA)	ND		0.20	0.034	ug/Kg		08/04/22 08:35	08/04/22 20:42	1
Perfluorodecanoic acid (PFDA)	ND		0.20	0.028	ug/Kg		08/04/22 08:35	08/04/22 20:42	1
Perfluoroundecanoic acid (PFUnA)	ND		0.20	0.027	ug/Kg		08/04/22 08:35	08/04/22 20:42	1
Perfluorododecanoic acid (PFDoA)	ND		0.20	0.025	ug/Kg		08/04/22 08:35	08/04/22 20:42	1
Perfluorotridecanoic acid (PFTriA)	ND		0.20	0.025	ug/Kg		08/04/22 08:35	08/04/22 20:42	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.20	0.026	ug/Kg		08/04/22 08:35	08/04/22 20:42	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.20	0.033	ug/Kg		08/04/22 08:35	08/04/22 20:42	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.20	0.041	ug/Kg		08/04/22 08:35	08/04/22 20:42	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.20	0.023	ug/Kg		08/04/22 08:35	08/04/22 20:42	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.20	0.11	ug/Kg		08/04/22 08:35	08/04/22 20:42	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.20	0.019	ug/Kg		08/04/22 08:35	08/04/22 20:42	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.20	0.034	ug/Kg		08/04/22 08:35	08/04/22 20:42	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.0	0.11	ug/Kg		08/04/22 08:35	08/04/22 20:42	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.0	0.083	ug/Kg		08/04/22 08:35	08/04/22 20:42	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.0	0.057	ug/Kg		08/04/22 08:35	08/04/22 20:42	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.0	0.037	ug/Kg		08/04/22 08:35	08/04/22 20:42	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*93*		*50 - 150*	*08/04/22 08:35*	*08/04/22 20:42*	*1*
13C4 PFHpA	*96*		*50 - 150*	*08/04/22 08:35*	*08/04/22 20:42*	*1*
13C4 PFOA	*97*		*50 - 150*	*08/04/22 08:35*	*08/04/22 20:42*	*1*
13C4 PFOS	*89*		*50 - 150*	*08/04/22 08:35*	*08/04/22 20:42*	*1*
13C5 PFNA	*97*		*50 - 150*	*08/04/22 08:35*	*08/04/22 20:42*	*1*
13C4 PFBA	*95*		*50 - 150*	*08/04/22 08:35*	*08/04/22 20:42*	*1*
13C2 PFHxA	*97*		*50 - 150*	*08/04/22 08:35*	*08/04/22 20:42*	*1*
13C2 PFDA	*93*		*50 - 150*	*08/04/22 08:35*	*08/04/22 20:42*	*1*
13C2 PFUnA	*83*		*50 - 150*	*08/04/22 08:35*	*08/04/22 20:42*	*1*
13C2 PFDoA	*84*		*50 - 150*	*08/04/22 08:35*	*08/04/22 20:42*	*1*
13C8 FOSA	*74*		*50 - 150*	*08/04/22 08:35*	*08/04/22 20:42*	*1*
13C5 PFPeA	*98*		*50 - 150*	*08/04/22 08:35*	*08/04/22 20:42*	*1*
13C2 PFTeDA	*99*		*50 - 150*	*08/04/22 08:35*	*08/04/22 20:42*	*1*
d3-NMeFOSAA	*77*		*50 - 150*	*08/04/22 08:35*	*08/04/22 20:42*	*1*
d5-NEtFOSAA	*71*		*50 - 150*	*08/04/22 08:35*	*08/04/22 20:42*	*1*
M2-6:2 FTS	*95*		*50 - 150*	*08/04/22 08:35*	*08/04/22 20:42*	*1*
M2-8:2 FTS	*91*		*50 - 150*	*08/04/22 08:35*	*08/04/22 20:42*	*1*
13C3 PFBS	*88*		*50 - 150*	*08/04/22 08:35*	*08/04/22 20:42*	*1*

Lab Sample ID: LCS 200-182357/2-A
Matrix: Solid
Analysis Batch: 182390

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 182357

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	2.00	1.94		ug/Kg		97	60 - 140
Perfluoropentanoic acid (PFPeA)	2.00	1.98		ug/Kg		99	60 - 140

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 200-182357/2-A
Matrix: Solid
Analysis Batch: 182390

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 182357

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorohexanoic acid (PFHxA)	2.00	2.02		ug/Kg		101	60 - 140
Perfluoroheptanoic acid (PFHpA)	2.00	1.95		ug/Kg		98	60 - 140
Perfluorooctanoic acid (PFOA)	2.00	2.00		ug/Kg		100	60 - 140
Perfluorononanoic acid (PFNA)	2.00	1.89		ug/Kg		94	60 - 140
Perfluorodecanoic acid (PFDA)	2.00	1.97		ug/Kg		99	60 - 140
Perfluoroundecanoic acid (PFUnA)	2.00	1.94		ug/Kg		97	60 - 140
Perfluorododecanoic acid (PFDoA)	2.00	2.02		ug/Kg		101	60 - 140
Perfluorotridecanoic acid (PFTriA)	2.00	2.12		ug/Kg		106	60 - 140
Perfluorotetradecanoic acid (PFTeA)	2.00	2.08		ug/Kg		104	60 - 140
Perfluorobutanesulfonic acid (PFBS)	1.77	1.75		ug/Kg		99	60 - 140
Perfluorohexanesulfonic acid (PFHxS)	1.82	1.76		ug/Kg		97	60 - 140
Perfluoroheptanesulfonic acid (PFHpS)	1.90	2.02		ug/Kg		106	60 - 140
Perfluorooctanesulfonic acid (PFOS)	1.86	1.87		ug/Kg		101	60 - 140
Perfluorodecanesulfonic acid (PFDS)	1.93	1.40		ug/Kg		73	60 - 140
Perfluorooctanesulfonamide (PFOSA)	2.00	1.94		ug/Kg		97	60 - 140
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.00	2.10		ug/Kg		105	60 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.00	1.92	J	ug/Kg		96	60 - 140
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	1.90	1.99	J	ug/Kg		105	50 - 150
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	1.92	1.90	J	ug/Kg		99	60 - 140

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
18O2 PFHxS	*87*		*50 - 150*
13C4 PFHpA	*91*		*50 - 150*
13C4 PFOA	*94*		*50 - 150*
13C4 PFOS	*80*		*50 - 150*
13C5 PFNA	*90*		*50 - 150*
13C4 PFBA	*92*		*50 - 150*
13C2 PFHxA	*90*		*50 - 150*
13C2 PFDA	*82*		*50 - 150*
13C2 PFUnA	*69*		*50 - 150*
13C2 PFDoA	*64*		*50 - 150*
13C8 FOSA	*61*		*50 - 150*
13C5 PFPeA	*93*		*50 - 150*
13C2 PFTeDA	*82*		*50 - 150*
d3-NMeFOSAA	*58*		*50 - 150*
d5-NEtFOSAA	*55*		*50 - 150*
M2-6:2 FTS	*91*		*50 - 150*
M2-8:2 FTS	*81*		*50 - 150*

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 200-182357/2-A
Matrix: Solid
Analysis Batch: 182390

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 182357

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C3 PFBS	87		50 - 150

Lab Sample ID: MB 200-182374/1-A
Matrix: Water
Analysis Batch: 182386

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 182374

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		5.0	1.2	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.68	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.65	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.54	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.76	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.49	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.46	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.55	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.49	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.48	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.64	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.62	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.55	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		2.0	0.41	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.85	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.40	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluorooctanesulfonamide (PFOSA)	ND		2.0	0.92	ng/L		08/04/22 11:45	08/04/22 17:09	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		5.0	1.9	ng/L		08/04/22 11:45	08/04/22 17:09	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		5.0	1.6	ng/L		08/04/22 11:45	08/04/22 17:09	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		5.0	1.3	ng/L		08/04/22 11:45	08/04/22 17:09	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.0	0.77	ng/L		08/04/22 11:45	08/04/22 17:09	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	96		50 - 150	08/04/22 11:45	08/04/22 17:09	1
13C4 PFHpA	105		50 - 150	08/04/22 11:45	08/04/22 17:09	1
13C4 PFOA	101		50 - 150	08/04/22 11:45	08/04/22 17:09	1
13C4 PFOS	90		50 - 150	08/04/22 11:45	08/04/22 17:09	1
13C5 PFNA	95		50 - 150	08/04/22 11:45	08/04/22 17:09	1
13C4 PFBA	99		50 - 150	08/04/22 11:45	08/04/22 17:09	1
13C2 PFHxA	101		50 - 150	08/04/22 11:45	08/04/22 17:09	1
13C2 PFDA	95		50 - 150	08/04/22 11:45	08/04/22 17:09	1
13C2 PFUnA	91		50 - 150	08/04/22 11:45	08/04/22 17:09	1
13C2 PFDoA	81		50 - 150	08/04/22 11:45	08/04/22 17:09	1
13C8 FOSA	74		50 - 150	08/04/22 11:45	08/04/22 17:09	1
13C5 PFPeA	103		50 - 150	08/04/22 11:45	08/04/22 17:09	1
13C2 PFTeDA	88		50 - 150	08/04/22 11:45	08/04/22 17:09	1
d3-NMeFOSAA	71		50 - 150	08/04/22 11:45	08/04/22 17:09	1
d5-NEtFOSAA	72		50 - 150	08/04/22 11:45	08/04/22 17:09	1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: MB 200-182374/1-A
Matrix: Water
Analysis Batch: 182386

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 182374

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
M2-6:2 FTS	95		50 - 150	08/04/22 11:45	08/04/22 17:09	1
M2-8:2 FTS	93		50 - 150	08/04/22 11:45	08/04/22 17:09	1
13C3 PFBS	96		50 - 150	08/04/22 11:45	08/04/22 17:09	1

Lab Sample ID: LCS 200-182374/2-A
Matrix: Water
Analysis Batch: 182386

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 182374

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	80.0	80.4		ng/L		100	70 - 130
Perfluoropentanoic acid (PFPeA)	80.0	79.5		ng/L		99	70 - 130
Perfluorohexanoic acid (PFHxA)	80.0	82.0		ng/L		102	70 - 130
Perfluoroheptanoic acid (PFHpA)	80.0	83.1		ng/L		104	70 - 130
Perfluorooctanoic acid (PFOA)	80.0	82.3		ng/L		103	70 - 130
Perfluorononanoic acid (PFNA)	80.0	82.8		ng/L		104	70 - 130
Perfluorodecanoic acid (PFDA)	80.0	84.4		ng/L		105	70 - 130
Perfluoroundecanoic acid (PFUnA)	80.0	84.7		ng/L		106	70 - 130
Perfluorododecanoic acid (PFDoA)	80.0	84.9		ng/L		106	70 - 130
Perfluorotridecanoic acid (PFTriA)	80.0	83.2		ng/L		104	70 - 130
Perfluorotetradecanoic acid (PFTeA)	80.0	86.8		ng/L		108	70 - 130
Perfluorobutanesulfonic acid (PFBS)	70.7	72.7		ng/L		103	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	72.8	72.9		ng/L		100	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	76.2	82.5		ng/L		108	70 - 130
Perfluorooctanesulfonic acid (PFOS)	74.2	81.2		ng/L		109	70 - 130
Perfluorodecanesulfonic acid (PFDS)	77.1	72.0		ng/L		93	70 - 130
Perfluorooctanesulfonamide (PFOSA)	80.0	81.8		ng/L		102	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	80.0	83.9		ng/L		105	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	80.0	79.8		ng/L		100	70 - 130
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	75.8	81.5		ng/L		108	60 - 140
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	76.6	83.5		ng/L		109	70 - 130

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
18O2 PFHxS	98		50 - 150
13C4 PFHpA	99		50 - 150
13C4 PFOA	102		50 - 150
13C4 PFOS	90		50 - 150
13C5 PFNA	93		50 - 150
13C4 PFBA	101		50 - 150

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 200-182374/2-A
Matrix: Water
Analysis Batch: 182386

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 182374

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C2 PFHxA	99		50 - 150
13C2 PFDA	91		50 - 150
13C2 PFUnA	87		50 - 150
13C2 PFDoA	85		50 - 150
13C8 FOSA	76		50 - 150
13C5 PFPeA	102		50 - 150
13C2 PFTeDA	91		50 - 150
d3-NMeFOSAA	82		50 - 150
d5-NEtFOSAA	73		50 - 150
M2-6:2 FTS	96		50 - 150
M2-8:2 FTS	93		50 - 150
13C3 PFBS	92		50 - 150

Lab Sample ID: LCSD 200-182374/3-A
Matrix: Water
Analysis Batch: 182386

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 182374

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)			80.0	80.0		ng/L		100	70 - 130	0	30
Perfluoropentanoic acid (PFPeA)			80.0	83.3		ng/L		104	70 - 130	5	30
Perfluorohexanoic acid (PFHxA)			80.0	86.2		ng/L		108	70 - 130	5	30
Perfluoroheptanoic acid (PFHpA)			80.0	83.5		ng/L		104	70 - 130	0	30
Perfluorooctanoic acid (PFOA)			80.0	83.2		ng/L		104	70 - 130	1	30
Perfluorononanoic acid (PFNA)			80.0	83.6		ng/L		105	70 - 130	1	30
Perfluorodecanoic acid (PFDA)			80.0	83.6		ng/L		104	70 - 130	1	30
Perfluoroundecanoic acid (PFUnA)			80.0	84.5		ng/L		106	70 - 130	0	30
Perfluorododecanoic acid (PFDoA)			80.0	83.6		ng/L		104	70 - 130	2	30
Perfluorotridecanoic acid (PFTriA)			80.0	81.8		ng/L		102	70 - 130	2	30
Perfluorotetradecanoic acid (PFTeA)			80.0	83.5		ng/L		104	70 - 130	4	30
Perfluorobutanesulfonic acid (PFBS)			70.7	73.4		ng/L		104	70 - 130	1	30
Perfluorohexanesulfonic acid (PFHxS)			72.8	76.0		ng/L		104	70 - 130	4	30
Perfluoroheptanesulfonic acid (PFHpS)			76.2	80.3		ng/L		105	70 - 130	3	30
Perfluorooctanesulfonic acid (PFOS)			74.2	80.7		ng/L		109	70 - 130	1	30
Perfluorodecanesulfonic acid (PFDS)			77.1	70.6		ng/L		92	70 - 130	2	30
Perfluorooctanesulfonamide (PFOSA)			80.0	82.7		ng/L		103	70 - 130	1	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)			80.0	81.7		ng/L		102	70 - 130	3	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			80.0	83.4		ng/L		104	70 - 130	4	30
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)			75.8	85.2		ng/L		112	60 - 140	4	30

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCSD 200-182374/3-A
Matrix: Water
Analysis Batch: 182386

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 182374

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)			76.6	77.6		ng/L		101	70 - 130	7	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
18O2 PFHxS	*101*		*50 - 150*
13C4 PFHpA	*106*		*50 - 150*
13C4 PFOA	*104*		*50 - 150*
13C4 PFOS	*100*		*50 - 150*
13C5 PFNA	*107*		*50 - 150*
13C4 PFBA	*108*		*50 - 150*
13C2 PFHxA	*106*		*50 - 150*
13C2 PFDA	*101*		*50 - 150*
13C2 PFUnA	*99*		*50 - 150*
13C2 PFDoA	*91*		*50 - 150*
13C8 FOSA	*81*		*50 - 150*
13C5 PFPeA	*112*		*50 - 150*
13C2 PFTeDA	*95*		*50 - 150*
d3-NMeFOSAA	*92*		*50 - 150*
d5-NEtFOSAA	*79*		*50 - 150*
M2-6:2 FTS	*101*		*50 - 150*
M2-8:2 FTS	*102*		*50 - 150*
13C3 PFBS	*104*		*50 - 150*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-635468/1-A
Matrix: Solid
Analysis Batch: 635981

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635468

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		9.8	4.3	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Antimony	ND		14.7	0.39	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Arsenic	ND		2.0	0.39	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Barium	ND		0.49	0.11	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Beryllium	ND		0.20	0.027	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Cadmium	ND		0.20	0.029	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Calcium	ND		49.1	3.2	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Chromium	ND		0.49	0.20	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Cobalt	ND		0.49	0.049	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Copper	ND		0.98	0.21	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Iron	ND		9.8	3.4	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Lead	ND		0.98	0.24	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Magnesium	1.11	J	19.6	0.91	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Manganese	0.0510	J	0.20	0.031	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Nickel	ND		4.9	0.23	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Potassium	ND		29.4	19.6	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Selenium	0.686	J	3.9	0.39	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Silver	ND		0.59	0.20	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Sodium	ND		137	12.8	mg/Kg		08/01/22 11:03	08/02/22 14:51	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 480-635468/1-A
Matrix: Solid
Analysis Batch: 635981

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635468

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		5.9	0.29	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Vanadium	ND		0.49	0.11	mg/Kg		08/01/22 11:03	08/02/22 14:51	1
Zinc	ND		2.0	0.63	mg/Kg		08/01/22 11:03	08/02/22 14:51	1

Lab Sample ID: LCSSRM 480-635468/2-A
Matrix: Solid
Analysis Batch: 635981

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635468

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	8630	7431		mg/Kg		86.1	50.6 - 149.5
Antimony	129	192.0		mg/Kg		148.9	19.8 - 250.4
Arsenic	84.5	74.95		mg/Kg		88.7	70.1 - 130.2
Barium	249	214.4		mg/Kg		86.1	75.1 - 124.9
Beryllium	163	142.1		mg/Kg		87.2	74.8 - 125.2
Cadmium	99.0	88.95		mg/Kg		89.8	74.9 - 125.3
Calcium	4760	4128		mg/Kg		86.7	72.7 - 127.5
Chromium	122	107.1		mg/Kg		87.8	70.2 - 130.3
Cobalt	61.7	59.73		mg/Kg		96.8	75.0 - 125.1
Copper	61.5	54.20		mg/Kg		88.1	75.0 - 124.9
Iron	14500	14260		mg/Kg		98.4	35.8 - 164.1
Lead	123	118.1		mg/Kg		96.0	71.8 - 128.5
Magnesium	2360	2174		mg/Kg		92.1	62.7 - 137.7
Manganese	456	410.8		mg/Kg		90.1	76.8 - 123.5
Nickel	135	129.4		mg/Kg		95.9	70.1 - 130.4
Potassium	2090	1791		mg/Kg		85.7	59.3 - 140.7
Selenium	121	105.6		mg/Kg		87.3	66.4 - 133.9
Silver	33.6	36.83		mg/Kg		109.6	68.5 - 131.3
Sodium	136	123.9	J	mg/Kg		91.1	35.4 - 164.0
Thallium	144	142.2		mg/Kg		98.8	70.1 - 129.9
Vanadium	186	165.2		mg/Kg		88.8	74.2 - 126.3
Zinc	295	266.3		mg/Kg		90.3	70.2 - 130.2

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 480-635547/1-A
Matrix: Water
Analysis Batch: 635823

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635547

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		08/01/22 08:49	08/01/22 17:15	1
Antimony	ND		0.020	0.0068	mg/L		08/01/22 08:49	08/01/22 17:15	1
Arsenic	ND		0.015	0.0056	mg/L		08/01/22 08:49	08/01/22 17:15	1
Barium	ND		0.0020	0.00070	mg/L		08/01/22 08:49	08/01/22 17:15	1
Beryllium	ND		0.0020	0.00030	mg/L		08/01/22 08:49	08/01/22 17:15	1
Cadmium	ND		0.0020	0.00050	mg/L		08/01/22 08:49	08/01/22 17:15	1
Calcium	ND		0.50	0.10	mg/L		08/01/22 08:49	08/01/22 17:15	1
Chromium	ND		0.0040	0.0010	mg/L		08/01/22 08:49	08/01/22 17:15	1
Cobalt	ND		0.0040	0.00063	mg/L		08/01/22 08:49	08/01/22 17:15	1
Copper	ND		0.010	0.0016	mg/L		08/01/22 08:49	08/01/22 17:15	1
Iron	ND		0.050	0.019	mg/L		08/01/22 08:49	08/01/22 17:15	1
Lead	ND		0.010	0.0030	mg/L		08/01/22 08:49	08/01/22 17:15	1
Magnesium	ND		0.20	0.043	mg/L		08/01/22 08:49	08/01/22 17:15	1
Manganese	ND		0.0030	0.00040	mg/L		08/01/22 08:49	08/01/22 17:15	1
Nickel	ND		0.010	0.0013	mg/L		08/01/22 08:49	08/01/22 17:15	1
Potassium	ND		0.50	0.10	mg/L		08/01/22 08:49	08/01/22 17:15	1
Selenium	ND		0.025	0.0087	mg/L		08/01/22 08:49	08/01/22 17:15	1
Silver	ND		0.0060	0.0017	mg/L		08/01/22 08:49	08/01/22 17:15	1
Sodium	ND		1.0	0.32	mg/L		08/01/22 08:49	08/01/22 17:15	1
Thallium	ND		0.020	0.010	mg/L		08/01/22 08:49	08/01/22 17:15	1
Vanadium	ND		0.0050	0.0015	mg/L		08/01/22 08:49	08/01/22 17:15	1
Zinc	ND		0.010	0.0015	mg/L		08/01/22 08:49	08/01/22 17:15	1

Lab Sample ID: LCS 480-635547/2-A
Matrix: Water
Analysis Batch: 635823

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635547

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	10.0	9.80		mg/L		98	80 - 120
Antimony	0.200	0.197		mg/L		99	80 - 120
Arsenic	0.200	0.196		mg/L		98	80 - 120
Barium	0.200	0.204		mg/L		102	80 - 120
Beryllium	0.200	0.202		mg/L		101	80 - 120
Cadmium	0.200	0.191		mg/L		95	80 - 120
Calcium	10.0	9.62		mg/L		96	80 - 120
Chromium	0.200	0.197		mg/L		98	80 - 120
Cobalt	0.200	0.193		mg/L		96	80 - 120
Copper	0.200	0.197		mg/L		99	80 - 120
Iron	10.0	9.82		mg/L		98	80 - 120
Lead	0.200	0.192		mg/L		96	80 - 120
Magnesium	10.0	10.02		mg/L		100	80 - 120
Manganese	0.200	0.195		mg/L		97	80 - 120
Nickel	0.200	0.189		mg/L		94	80 - 120
Potassium	10.0	9.62		mg/L		96	80 - 120
Selenium	0.200	0.186		mg/L		93	80 - 120
Silver	0.0500	0.0460		mg/L		92	80 - 120
Sodium	10.0	9.54		mg/L		95	80 - 120
Thallium	0.200	0.198		mg/L		99	80 - 120
Vanadium	0.200	0.191		mg/L		96	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-635547/2-A
Matrix: Water
Analysis Batch: 635823

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635547

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	0.200	0.195		mg/L		98	80 - 120

Lab Sample ID: MB 480-636002/1-A
Matrix: Solid
Analysis Batch: 636329

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 636002

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		9.6	4.2	mg/Kg		08/03/22 13:24	08/04/22 15:43	1
Antimony	ND		14.5	0.39	mg/Kg		08/03/22 13:24	08/04/22 15:43	1
Arsenic	ND		1.9	0.39	mg/Kg		08/03/22 13:24	08/04/22 15:43	1
Barium	ND		0.48	0.11	mg/Kg		08/03/22 13:24	08/04/22 15:43	1
Beryllium	ND		0.19	0.027	mg/Kg		08/03/22 13:24	08/04/22 15:43	1
Cadmium	ND		0.19	0.029	mg/Kg		08/03/22 13:24	08/04/22 15:43	1
Calcium	ND		48.2	3.2	mg/Kg		08/03/22 13:24	08/04/22 15:43	1
Chromium	ND		0.48	0.19	mg/Kg		08/03/22 13:24	08/04/22 15:43	1
Cobalt	ND		0.48	0.048	mg/Kg		08/03/22 13:24	08/04/22 15:43	1
Copper	ND		0.96	0.20	mg/Kg		08/03/22 13:24	08/04/22 15:43	1
Iron	ND		9.6	3.4	mg/Kg		08/03/22 13:24	08/04/22 15:43	1
Lead	ND		0.96	0.23	mg/Kg		08/03/22 13:24	08/04/22 15:43	1
Magnesium	1.47	J	19.3	0.89	mg/Kg		08/03/22 13:24	08/04/22 15:43	1
Manganese	0.0328	J	0.19	0.031	mg/Kg		08/03/22 13:24	08/04/22 15:43	1
Nickel	ND		4.8	0.22	mg/Kg		08/03/22 13:24	08/04/22 15:43	1
Potassium	ND		28.9	19.3	mg/Kg		08/03/22 13:24	08/04/22 15:43	1
Selenium	ND		3.9	0.39	mg/Kg		08/03/22 13:24	08/04/22 15:43	1
Silver	ND		0.58	0.19	mg/Kg		08/03/22 13:24	08/04/22 15:43	1
Sodium	ND		135	12.5	mg/Kg		08/03/22 13:24	08/04/22 15:43	1
Thallium	ND		5.8	0.29	mg/Kg		08/03/22 13:24	08/04/22 15:43	1
Vanadium	ND		0.48	0.11	mg/Kg		08/03/22 13:24	08/04/22 15:43	1
Zinc	ND		1.9	0.62	mg/Kg		08/03/22 13:24	08/04/22 15:43	1

Lab Sample ID: LCDSRM 480-636002/3-A
Matrix: Solid
Analysis Batch: 636329

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 636002

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	8630	9344		mg/Kg		108.3	50.6 - 149.5	2	20
Antimony	129	87.62		mg/Kg		67.9	19.8 - 250.4	5	20
Arsenic	84.5	69.42		mg/Kg		82.2	70.1 - 130.2	5	20
Barium	249	217.2		mg/Kg		87.2	75.1 - 124.9	1	20
Beryllium	163	144.8		mg/Kg		88.9	74.8 - 125.2	6	20
Cadmium	99.0	83.84		mg/Kg		84.7	74.9 - 125.3	1	20
Calcium	4760	4011		mg/Kg		84.3	72.7 - 127.5	2	20
Chromium	122	105.2		mg/Kg		86.2	70.2 - 130.3	3	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCDSRM 480-636002/3-A
Matrix: Solid
Analysis Batch: 636329

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 636002

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt	61.7	59.37		mg/Kg		96.2	75.0 - 125.1	5	20
Copper	61.5	50.53		mg/Kg		82.2	75.0 - 124.9	3	20
Iron	14500	12580		mg/Kg		86.7	35.8 - 164.1	10	20
Lead	123	112.7		mg/Kg		91.6	71.8 - 128.5	10	20
Magnesium	2360	2139		mg/Kg		90.6	62.7 - 137.7	3	20
Manganese	456	382.6		mg/Kg		83.9	76.8 - 123.5	1	20
Nickel	135	129.6		mg/Kg		96.0	70.1 - 130.4	3	20
Potassium	2090	2148	^+	mg/Kg		102.8	59.3 - 140.7	0	20
Selenium	121	95.80		mg/Kg		79.2	66.4 - 133.9	3	20
Silver	33.6	35.16		mg/Kg		104.7	68.5 - 131.3	3	20
Thallium	144	145.3		mg/Kg		100.9	70.1 - 129.9	2	20
Vanadium	186	157.4		mg/Kg		84.6	74.2 - 126.3	5	20
Zinc	295	232.5		mg/Kg		78.8	70.2 - 130.2	3	20

Lab Sample ID: LCDSRM 480-636002/3-A
Matrix: Solid
Analysis Batch: 636409

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 636002

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Sodium	136	179.9		mg/Kg		132.3	35.4 - 164.0	12	20

Lab Sample ID: LCSSRM 480-636002/2-A
Matrix: Solid
Analysis Batch: 636329

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 636002

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	8630	9523		mg/Kg		110.3	50.6 - 149.5
Antimony	129	83.27		mg/Kg		64.6	19.8 - 250.4
Arsenic	84.5	72.74		mg/Kg		86.1	70.1 - 130.2
Barium	249	219.1		mg/Kg		88.0	75.1 - 124.9
Beryllium	163	136.2		mg/Kg		83.5	74.8 - 125.2
Cadmium	99.0	83.16		mg/Kg		84.0	74.9 - 125.3
Calcium	4760	4104		mg/Kg		86.2	72.7 - 127.5

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-636002/2-A
Matrix: Solid
Analysis Batch: 636329

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 636002

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Chromium	122	108.5		mg/Kg		89.0	70.2 - 130.3
Cobalt	61.7	62.25		mg/Kg		100.9	75.0 - 125.1
Copper	61.5	51.94		mg/Kg		84.5	75.0 - 124.9
Iron	14500	13900		mg/Kg		95.9	35.8 - 164.1
Lead	123	124.8		mg/Kg		101.5	71.8 - 128.5
Magnesium	2360	2203		mg/Kg		93.3	62.7 - 137.7
Manganese	456	388.0		mg/Kg		85.1	76.8 - 123.5
Nickel	135	133.6		mg/Kg		99.0	70.1 - 130.4
Potassium	2090	2152		mg/Kg		102.9	59.3 - 140.7
Selenium	121	98.65		mg/Kg		81.5	66.4 - 133.9
Silver	33.6	36.21		mg/Kg		107.8	68.5 - 131.3
Sodium	136	160.3		mg/Kg		117.9	35.4 - 164.0
Thallium	144	148.1		mg/Kg		102.9	70.1 - 129.9
Vanadium	186	165.3		mg/Kg		88.8	74.2 - 126.3
Zinc	295	238.9		mg/Kg		81.0	70.2 - 130.2

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-635642/1-A
Matrix: Water
Analysis Batch: 635727

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635642

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		08/01/22 10:12	08/01/22 12:57	1

Lab Sample ID: LCS 480-635642/2-A
Matrix: Water
Analysis Batch: 635727

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635642

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00667	0.00683		mg/L		102	80 - 120

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-635740/1-A
Matrix: Solid
Analysis Batch: 635900

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635740

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0046	mg/Kg		08/02/22 09:35	08/02/22 14:20	1

Lab Sample ID: LCSSRM 480-635740/2-A ^10
Matrix: Solid
Analysis Batch: 635900

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635740

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	18.9	23.02		mg/Kg		121.8	59.8 - 139.7

GC/MS VOA

Analysis Batch: 635431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-1	FB_072722	Total/NA	Water	8260C	
480-200156-7	ERB_72722	Total/NA	Water	8260C	
MB 480-635431/8	Method Blank	Total/NA	Water	8260C	
LCS 480-635431/6	Lab Control Sample	Total/NA	Water	8260C	

Prep Batch: 635934

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-3	SB1 (0.5-1)	Total/NA	Solid	5035A_L	
480-200156-4	SB1 (1-2)	Total/NA	Solid	5035A_L	
480-200156-6	SB1 (15-16)	Total/NA	Solid	5035A_L	
MB 480-635934/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-635934/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

Analysis Batch: 635938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-3	SB1 (0.5-1)	Total/NA	Solid	8260C	635934
480-200156-4	SB1 (1-2)	Total/NA	Solid	8260C	635934
480-200156-6	SB1 (15-16)	Total/NA	Solid	8260C	635934
MB 480-635934/2-A	Method Blank	Total/NA	Solid	8260C	635934
LCS 480-635934/1-A	Lab Control Sample	Total/NA	Solid	8260C	635934

Prep Batch: 636092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-2	SB1 (0-0.5)	Total/NA	Solid	5035A_L	
480-200156-8	SS7 (0-6)	Total/NA	Solid	5035A_L	
480-200156-9	SS7 (6-12)	Total/NA	Solid	5035A_L	
480-200156-10	SS7 (12-24)	Total/NA	Solid	5035A_L	
480-200156-11	SS7 (0-2)	Total/NA	Solid	5035A_L	
MB 480-636092/3-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-636092/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

Analysis Batch: 636094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-2	SB1 (0-0.5)	Total/NA	Solid	8260C	636092
480-200156-8	SS7 (0-6)	Total/NA	Solid	8260C	636092
480-200156-9	SS7 (6-12)	Total/NA	Solid	8260C	636092
480-200156-10	SS7 (12-24)	Total/NA	Solid	8260C	636092
480-200156-11	SS7 (0-2)	Total/NA	Solid	8260C	636092
MB 480-636092/3-A	Method Blank	Total/NA	Solid	8260C	636092
LCS 480-636092/1-A	Lab Control Sample	Total/NA	Solid	8260C	636092

GC/MS Semi VOA

Prep Batch: 635534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-1	FB_072722	Total/NA	Water	3510C	
480-200156-7	ERB_72722	Total/NA	Water	3510C	
480-200156-12	FB2_072722	Total/NA	Water	3510C	
MB 480-635534/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-635534/2-A	Lab Control Sample	Total/NA	Water	3510C	

GC/MS Semi VOA

Prep Batch: 635537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-7	ERB_72722	Total/NA	Water	3510C	
480-200156-12	FB2_072722	Total/NA	Water	3510C	
MB 480-635537/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-635537/2-A	Lab Control Sample	Total/NA	Water	3510C	

Prep Batch: 635559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-2	SB1 (0-0.5)	Total/NA	Solid	3550C	
480-200156-3	SB1 (0.5-1)	Total/NA	Solid	3550C	
480-200156-4	SB1 (1-2)	Total/NA	Solid	3550C	
480-200156-8	SS7 (0-6)	Total/NA	Solid	3550C	
480-200156-9	SS7 (6-12)	Total/NA	Solid	3550C	
480-200156-10	SS7 (12-24)	Total/NA	Solid	3550C	
480-200156-11	SS7 (0-2)	Total/NA	Solid	3550C	
MB 480-635559/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-635559/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 635707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-1	FB_072722	Total/NA	Water	8270D	635534
480-200156-7	ERB_72722	Total/NA	Water	8270D	635534
480-200156-12	FB2_072722	Total/NA	Water	8270D	635534
MB 480-635534/1-A	Method Blank	Total/NA	Water	8270D	635534
LCS 480-635534/2-A	Lab Control Sample	Total/NA	Water	8270D	635534

Analysis Batch: 635708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-7	ERB_72722	Total/NA	Water	8270D SIM ID	635537
480-200156-12	FB2_072722	Total/NA	Water	8270D SIM ID	635537
MB 480-635537/1-A	Method Blank	Total/NA	Water	8270D SIM ID	635537
LCS 480-635537/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	635537

Analysis Batch: 635875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-635559/1-A	Method Blank	Total/NA	Solid	8270D	635559

Analysis Batch: 636030

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-2	SB1 (0-0.5)	Total/NA	Solid	8270D	635559
480-200156-3	SB1 (0.5-1)	Total/NA	Solid	8270D	635559
480-200156-4	SB1 (1-2)	Total/NA	Solid	8270D	635559
480-200156-8	SS7 (0-6)	Total/NA	Solid	8270D	635559
480-200156-9	SS7 (6-12)	Total/NA	Solid	8270D	635559
480-200156-10	SS7 (12-24)	Total/NA	Solid	8270D	635559
480-200156-11	SS7 (0-2)	Total/NA	Solid	8270D	635559
LCS 480-635559/2-A	Lab Control Sample	Total/NA	Solid	8270D	635559

Prep Batch: 636295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-5	SB1 (15-16)	Total/NA	Solid	3550C	
MB 480-636295/1-A	Method Blank	Total/NA	Solid	3550C	

GC/MS Semi VOA (Continued)

Prep Batch: 636295 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-636295/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 636828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-5	SB1 (15-16)	Total/NA	Solid	8270D	636295
MB 480-636295/1-A	Method Blank	Total/NA	Solid	8270D	636295
LCS 480-636295/2-A	Lab Control Sample	Total/NA	Solid	8270D	636295

LCMS

Prep Batch: 182357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-8	SS7 (0-6)	Total/NA	Solid	SHAKE	
480-200156-9	SS7 (6-12)	Total/NA	Solid	SHAKE	
480-200156-10	SS7 (12-24)	Total/NA	Solid	SHAKE	
480-200156-11	SS7 (0-2)	Total/NA	Solid	SHAKE	
MB 200-182357/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 200-182357/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Prep Batch: 182374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-12	FB2_072722	Total/NA	Water	3535	
MB 200-182374/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-182374/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 200-182374/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 182386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-12	FB2_072722	Total/NA	Water	537 IDA	182374
MB 200-182374/1-A	Method Blank	Total/NA	Water	537 IDA	182374
LCS 200-182374/2-A	Lab Control Sample	Total/NA	Water	537 IDA	182374
LCSD 200-182374/3-A	Lab Control Sample Dup	Total/NA	Water	537 IDA	182374

Analysis Batch: 182390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-8	SS7 (0-6)	Total/NA	Solid	537 IDA	182357
480-200156-9	SS7 (6-12)	Total/NA	Solid	537 IDA	182357
480-200156-10	SS7 (12-24)	Total/NA	Solid	537 IDA	182357
480-200156-11	SS7 (0-2)	Total/NA	Solid	537 IDA	182357
MB 200-182357/1-A	Method Blank	Total/NA	Solid	537 IDA	182357
LCS 200-182357/2-A	Lab Control Sample	Total/NA	Solid	537 IDA	182357

Metals

Prep Batch: 635468

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-2	SB1 (0-0.5)	Total/NA	Solid	3050B	
480-200156-3	SB1 (0.5-1)	Total/NA	Solid	3050B	
480-200156-4	SB1 (1-2)	Total/NA	Solid	3050B	
480-200156-5	SB1 (15-16)	Total/NA	Solid	3050B	
480-200156-8	SS7 (0-6)	Total/NA	Solid	3050B	
480-200156-9	SS7 (6-12)	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 635468 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-10	SS7 (12-24)	Total/NA	Solid	3050B	
MB 480-635468/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-635468/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 635547

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-1	FB_072722	Total/NA	Water	3005A	
480-200156-7	ERB_72722	Total/NA	Water	3005A	
MB 480-635547/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-635547/2-A	Lab Control Sample	Total/NA	Water	3005A	

Prep Batch: 635642

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-1	FB_072722	Total/NA	Water	7470A	
480-200156-7	ERB_72722	Total/NA	Water	7470A	
MB 480-635642/1-A	Method Blank	Total/NA	Water	7470A	
LCS 480-635642/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 635727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-1	FB_072722	Total/NA	Water	7470A	635642
480-200156-7	ERB_72722	Total/NA	Water	7470A	635642
MB 480-635642/1-A	Method Blank	Total/NA	Water	7470A	635642
LCS 480-635642/2-A	Lab Control Sample	Total/NA	Water	7470A	635642

Prep Batch: 635740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-2	SB1 (0-0.5)	Total/NA	Solid	7471B	
480-200156-3	SB1 (0.5-1)	Total/NA	Solid	7471B	
480-200156-4	SB1 (1-2)	Total/NA	Solid	7471B	
480-200156-5	SB1 (15-16)	Total/NA	Solid	7471B	
480-200156-8	SS7 (0-6)	Total/NA	Solid	7471B	
480-200156-9	SS7 (6-12)	Total/NA	Solid	7471B	
480-200156-10	SS7 (12-24)	Total/NA	Solid	7471B	
480-200156-11	SS7 (0-2)	Total/NA	Solid	7471B	
MB 480-635740/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-635740/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 635823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-1	FB_072722	Total/NA	Water	6010C	635547
480-200156-7	ERB_72722	Total/NA	Water	6010C	635547
MB 480-635547/1-A	Method Blank	Total/NA	Water	6010C	635547
LCS 480-635547/2-A	Lab Control Sample	Total/NA	Water	6010C	635547

Analysis Batch: 635900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-2	SB1 (0-0.5)	Total/NA	Solid	7471B	635740
480-200156-3	SB1 (0.5-1)	Total/NA	Solid	7471B	635740
480-200156-4	SB1 (1-2)	Total/NA	Solid	7471B	635740
480-200156-5	SB1 (15-16)	Total/NA	Solid	7471B	635740

Metals (Continued)

Analysis Batch: 635900 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-8	SS7 (0-6)	Total/NA	Solid	7471B	635740
480-200156-9	SS7 (6-12)	Total/NA	Solid	7471B	635740
480-200156-10	SS7 (12-24)	Total/NA	Solid	7471B	635740
480-200156-11	SS7 (0-2)	Total/NA	Solid	7471B	635740
MB 480-635740/1-A	Method Blank	Total/NA	Solid	7471B	635740
LCSSRM 480-635740/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	635740

Analysis Batch: 635981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-2	SB1 (0-0.5)	Total/NA	Solid	6010C	635468
480-200156-3	SB1 (0.5-1)	Total/NA	Solid	6010C	635468
480-200156-4	SB1 (1-2)	Total/NA	Solid	6010C	635468
480-200156-5	SB1 (15-16)	Total/NA	Solid	6010C	635468
480-200156-8	SS7 (0-6)	Total/NA	Solid	6010C	635468
480-200156-9	SS7 (6-12)	Total/NA	Solid	6010C	635468
480-200156-10	SS7 (12-24)	Total/NA	Solid	6010C	635468
MB 480-635468/1-A	Method Blank	Total/NA	Solid	6010C	635468
LCSSRM 480-635468/2-A	Lab Control Sample	Total/NA	Solid	6010C	635468

Prep Batch: 636002

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-11	SS7 (0-2)	Total/NA	Solid	3050B	
MB 480-636002/1-A	Method Blank	Total/NA	Solid	3050B	
LCDSRM 480-636002/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 480-636002/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 636161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-2	SB1 (0-0.5)	Total/NA	Solid	6010C	635468
480-200156-3	SB1 (0.5-1)	Total/NA	Solid	6010C	635468
480-200156-4	SB1 (1-2)	Total/NA	Solid	6010C	635468
480-200156-5	SB1 (15-16)	Total/NA	Solid	6010C	635468
480-200156-8	SS7 (0-6)	Total/NA	Solid	6010C	635468
480-200156-9	SS7 (6-12)	Total/NA	Solid	6010C	635468
480-200156-10	SS7 (12-24)	Total/NA	Solid	6010C	635468

Analysis Batch: 636329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-11	SS7 (0-2)	Total/NA	Solid	6010C	636002
MB 480-636002/1-A	Method Blank	Total/NA	Solid	6010C	636002
LCDSRM 480-636002/3-A	Lab Control Sample Dup	Total/NA	Solid	6010C	636002
LCSSRM 480-636002/2-A	Lab Control Sample	Total/NA	Solid	6010C	636002

Analysis Batch: 636409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-11	SS7 (0-2)	Total/NA	Solid	6010C	636002
LCDSRM 480-636002/3-A	Lab Control Sample Dup	Total/NA	Solid	6010C	636002

QC Association Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200156-1

General Chemistry

Analysis Batch: 635381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200156-2	SB1 (0-0.5)	Total/NA	Solid	Moisture	
480-200156-3	SB1 (0.5-1)	Total/NA	Solid	Moisture	
480-200156-4	SB1 (1-2)	Total/NA	Solid	Moisture	
480-200156-5	SB1 (15-16)	Total/NA	Solid	Moisture	
480-200156-6	SB1 (15-16)	Total/NA	Solid	Moisture	
480-200156-8	SS7 (0-6)	Total/NA	Solid	Moisture	
480-200156-9	SS7 (6-12)	Total/NA	Solid	Moisture	
480-200156-10	SS7 (12-24)	Total/NA	Solid	Moisture	
480-200156-11	SS7 (0-2)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200156-1

Client Sample ID: FB_072722
Date Collected: 07/27/22 08:30
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	635431	CB	EET BUF	07/29/22 19:15
Total/NA	Prep	3510C			635534	CMC	EET BUF	07/29/22 14:33
Total/NA	Analysis	8270D		1	635707	PJQ	EET BUF	08/01/22 19:36
Total/NA	Prep	3005A			635547	NVK	EET BUF	08/01/22 08:49
Total/NA	Analysis	6010C		1	635823	BMB	EET BUF	08/01/22 17:22
Total/NA	Prep	7470A			635642	NVK	EET BUF	08/01/22 10:12
Total/NA	Analysis	7470A		1	635727	NVK	EET BUF	08/01/22 13:06

Client Sample ID: SB1 (0-0.5)
Date Collected: 07/26/22 16:15
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	635381	IMZ	EET BUF	07/28/22 16:03

Client Sample ID: SB1 (0-0.5)
Date Collected: 07/26/22 16:15
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-2
Matrix: Solid
Percent Solids: 88.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			636092	CDC	EET BUF	07/28/22 11:00
Total/NA	Analysis	8260C		1	636094	CDC	EET BUF	08/03/22 22:07
Total/NA	Prep	3550C			635559	SJM	EET BUF	07/29/22 15:47
Total/NA	Analysis	8270D		1	636030	PJQ	EET BUF	08/03/22 16:21
Total/NA	Prep	3050B			635468	NZG	EET BUF	08/01/22 11:03
Total/NA	Analysis	6010C		1	635981	BMB	EET BUF	08/02/22 17:03
Total/NA	Prep	3050B			635468	NZG	EET BUF	08/01/22 11:03
Total/NA	Analysis	6010C		1	636161	BMB	EET BUF	08/03/22 15:46
Total/NA	Prep	7471B			635740	NVK	EET BUF	08/02/22 09:35
Total/NA	Analysis	7471B		1	635900	NVK	EET BUF	08/02/22 14:32

Client Sample ID: SB1 (0.5-1)
Date Collected: 07/26/22 16:20
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	635381	IMZ	EET BUF	07/28/22 16:03

Client Sample ID: SB1 (0.5-1)
Date Collected: 07/26/22 16:20
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-3
Matrix: Solid
Percent Solids: 82.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			635934	CDC	EET BUF	07/28/22 11:00
Total/NA	Analysis	8260C		1	635938	CDC	EET BUF	08/02/22 22:47

Client Sample ID: SB1 (0.5-1)
Date Collected: 07/26/22 16:20
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-3
Matrix: Solid
Percent Solids: 82.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			635559	SJM	EET BUF	07/29/22 15:47
Total/NA	Analysis	8270D		1	636030	PJQ	EET BUF	08/03/22 16:45
Total/NA	Prep	3050B			635468	NZG	EET BUF	08/01/22 11:03
Total/NA	Analysis	6010C		1	635981	BMB	EET BUF	08/02/22 17:06
Total/NA	Prep	3050B			635468	NZG	EET BUF	08/01/22 11:03
Total/NA	Analysis	6010C		1	636161	BMB	EET BUF	08/03/22 15:49
Total/NA	Prep	7471B			635740	NVK	EET BUF	08/02/22 09:35
Total/NA	Analysis	7471B		1	635900	NVK	EET BUF	08/02/22 14:36

Client Sample ID: SB1 (1-2)
Date Collected: 07/26/22 16:25
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	635381	IMZ	EET BUF	07/28/22 16:03

Client Sample ID: SB1 (1-2)
Date Collected: 07/26/22 16:25
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-4
Matrix: Solid
Percent Solids: 87.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			635934	CDC	EET BUF	07/28/22 11:00
Total/NA	Analysis	8260C		1	635938	CDC	EET BUF	08/02/22 23:12
Total/NA	Prep	3550C			635559	SJM	EET BUF	07/29/22 15:47
Total/NA	Analysis	8270D		1	636030	PJQ	EET BUF	08/03/22 17:09
Total/NA	Prep	3050B			635468	NZG	EET BUF	08/01/22 11:03
Total/NA	Analysis	6010C		1	635981	BMB	EET BUF	08/02/22 17:10
Total/NA	Prep	3050B			635468	NZG	EET BUF	08/01/22 11:03
Total/NA	Analysis	6010C		1	636161	BMB	EET BUF	08/03/22 15:53
Total/NA	Prep	7471B			635740	NVK	EET BUF	08/02/22 09:35
Total/NA	Analysis	7471B		1	635900	NVK	EET BUF	08/02/22 14:37

Client Sample ID: SB1 (15-16)
Date Collected: 07/27/22 09:26
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	635381	IMZ	EET BUF	07/28/22 16:03

Client Sample ID: SB1 (15-16)
Date Collected: 07/27/22 09:26
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-5
Matrix: Solid
Percent Solids: 92.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			636295	MS	EET BUF	08/05/22 08:21
Total/NA	Analysis	8270D		1	636828	PJQ	EET BUF	08/10/22 21:51

Client Sample ID: SB1 (15-16)
Date Collected: 07/27/22 09:26
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-5
Matrix: Solid
Percent Solids: 92.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			635468	NZG	EET BUF	08/01/22 11:03
Total/NA	Analysis	6010C		1	635981	BMB	EET BUF	08/02/22 17:14
Total/NA	Prep	3050B			635468	NZG	EET BUF	08/01/22 11:03
Total/NA	Analysis	6010C		1	636161	BMB	EET BUF	08/03/22 15:57
Total/NA	Prep	7471B			635740	NVK	EET BUF	08/02/22 09:35
Total/NA	Analysis	7471B		1	635900	NVK	EET BUF	08/02/22 14:39

Client Sample ID: SB1 (15-16)
Date Collected: 07/26/22 16:45
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	635381	IMZ	EET BUF	07/28/22 16:03

Client Sample ID: SB1 (15-16)
Date Collected: 07/26/22 16:45
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-6
Matrix: Solid
Percent Solids: 87.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			635934	CDC	EET BUF	07/28/22 11:00
Total/NA	Analysis	8260C		1	635938	CDC	EET BUF	08/02/22 23:36

Client Sample ID: ERB_72722
Date Collected: 07/27/22 10:20
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	635431	CB	EET BUF	07/29/22 19:39
Total/NA	Prep	3510C			635534	CMC	EET BUF	07/29/22 14:33
Total/NA	Analysis	8270D		1	635707	PJQ	EET BUF	08/01/22 18:13
Total/NA	Prep	3510C			635537	CMC	EET BUF	07/29/22 14:39
Total/NA	Analysis	8270D SIM ID		1	635708	PJQ	EET BUF	08/01/22 17:39
Total/NA	Prep	3005A			635547	NVK	EET BUF	08/01/22 08:49
Total/NA	Analysis	6010C		1	635823	BMB	EET BUF	08/01/22 17:26
Total/NA	Prep	7470A			635642	NVK	EET BUF	08/01/22 10:12
Total/NA	Analysis	7470A		1	635727	NVK	EET BUF	08/01/22 13:07

Client Sample ID: SS7 (0-6)
Date Collected: 07/27/22 16:50
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	635381	IMZ	EET BUF	07/28/22 16:03

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200156-1

Client Sample ID: SS7 (0-6)

Lab Sample ID: 480-200156-8
Date Collected: 07/27/22 16:50
Matrix: Solid
Date Received: 07/28/22 10:00
Percent Solids: 90.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			636092	CDC	EET BUF	07/28/22 11:00
Total/NA	Analysis	8260C		1	636094	CDC	EET BUF	08/03/22 22:31
Total/NA	Prep	3550C			635559	SJM	EET BUF	07/29/22 15:47
Total/NA	Analysis	8270D		1	636030	PJQ	EET BUF	08/03/22 17:57
Total/NA	Prep	SHAKE			182357	KFW	EET BUR	08/04/22 08:35
Total/NA	Analysis	537 IDA		1	182390	ND	EET BUR	08/04/22 22:45
Total/NA	Prep	3050B			635468	NZG	EET BUF	08/01/22 11:03
Total/NA	Analysis	6010C		1	635981	BMB	EET BUF	08/02/22 17:18
Total/NA	Prep	3050B			635468	NZG	EET BUF	08/01/22 11:03
Total/NA	Analysis	6010C		1	636161	BMB	EET BUF	08/03/22 16:01
Total/NA	Prep	7471B			635740	NVK	EET BUF	08/02/22 09:35
Total/NA	Analysis	7471B		1	635900	NVK	EET BUF	08/02/22 14:40

Client Sample ID: SS7 (6-12)

Lab Sample ID: 480-200156-9
Date Collected: 07/27/22 17:05
Matrix: Solid
Date Received: 07/28/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	635381	IMZ	EET BUF	07/28/22 16:03

Client Sample ID: SS7 (6-12)

Lab Sample ID: 480-200156-9
Date Collected: 07/27/22 17:05
Matrix: Solid
Date Received: 07/28/22 10:00
Percent Solids: 96.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			636092	CDC	EET BUF	07/28/22 11:00
Total/NA	Analysis	8260C		1	636094	CDC	EET BUF	08/03/22 22:56
Total/NA	Prep	3550C			635559	SJM	EET BUF	07/29/22 15:47
Total/NA	Analysis	8270D		5	636030	PJQ	EET BUF	08/03/22 18:21
Total/NA	Prep	SHAKE			182357	KFW	EET BUR	08/04/22 08:35
Total/NA	Analysis	537 IDA		1	182390	ND	EET BUR	08/04/22 22:53
Total/NA	Prep	3050B			635468	NZG	EET BUF	08/01/22 11:03
Total/NA	Analysis	6010C		1	635981	BMB	EET BUF	08/02/22 17:22
Total/NA	Prep	3050B			635468	NZG	EET BUF	08/01/22 11:03
Total/NA	Analysis	6010C		1	636161	BMB	EET BUF	08/03/22 16:05
Total/NA	Prep	7471B			635740	NVK	EET BUF	08/02/22 09:35
Total/NA	Analysis	7471B		1	635900	NVK	EET BUF	08/02/22 14:41

Client Sample ID: SS7 (12-24)

Lab Sample ID: 480-200156-10
Date Collected: 07/27/22 17:10
Matrix: Solid
Date Received: 07/28/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	635381	IMZ	EET BUF	07/28/22 16:03

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200156-1

Client Sample ID: SS7 (12-24)
Date Collected: 07/27/22 17:10
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-10
Matrix: Solid
Percent Solids: 93.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			636092	CDC	EET BUF	07/28/22 11:00
Total/NA	Analysis	8260C		1	636094	CDC	EET BUF	08/03/22 23:20
Total/NA	Prep	3550C			635559	SJM	EET BUF	07/29/22 15:47
Total/NA	Analysis	8270D		10	636030	PJQ	EET BUF	08/03/22 18:45
Total/NA	Prep	SHAKE			182357	KFW	EET BUR	08/04/22 08:35
Total/NA	Analysis	537 IDA		1	182390	ND	EET BUR	08/04/22 23:01
Total/NA	Prep	3050B			635468	NZG	EET BUF	08/01/22 11:03
Total/NA	Analysis	6010C		1	635981	BMB	EET BUF	08/02/22 17:26
Total/NA	Prep	3050B			635468	NZG	EET BUF	08/01/22 11:03
Total/NA	Analysis	6010C		1	636161	BMB	EET BUF	08/03/22 16:09
Total/NA	Prep	7471B			635740	NVK	EET BUF	08/02/22 09:35
Total/NA	Analysis	7471B		1	635900	NVK	EET BUF	08/02/22 14:43

Client Sample ID: SS7 (0-2)
Date Collected: 07/27/22 17:25
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	635381	IMZ	EET BUF	07/28/22 16:03

Client Sample ID: SS7 (0-2)
Date Collected: 07/27/22 17:25
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-11
Matrix: Solid
Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			636092	CDC	EET BUF	07/28/22 11:00
Total/NA	Analysis	8260C		1	636094	CDC	EET BUF	08/03/22 23:45
Total/NA	Prep	3550C			635559	SJM	EET BUF	07/29/22 15:47
Total/NA	Analysis	8270D		1	636030	PJQ	EET BUF	08/03/22 19:10
Total/NA	Prep	SHAKE			182357	KFW	EET BUR	08/04/22 08:35
Total/NA	Analysis	537 IDA		1	182390	ND	EET BUR	08/04/22 23:09
Total/NA	Prep	3050B			636002	NZG	EET BUF	08/03/22 13:24
Total/NA	Analysis	6010C		1	636409	BMB	EET BUF	08/05/22 12:49
Total/NA	Prep	3050B			636002	NZG	EET BUF	08/03/22 13:24
Total/NA	Analysis	6010C		1	636329	BMB	EET BUF	08/04/22 20:59
Total/NA	Prep	7471B			635740	NVK	EET BUF	08/02/22 09:35
Total/NA	Analysis	7471B		1	635900	NVK	EET BUF	08/02/22 14:44

Client Sample ID: FB2_072722
Date Collected: 07/27/22 18:05
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			635534	CMC	EET BUF	07/29/22 14:33
Total/NA	Analysis	8270D		1	635707	PJQ	EET BUF	08/01/22 18:41

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200156-1

Client Sample ID: FB2_072722

Date Collected: 07/27/22 18:05
Date Received: 07/28/22 10:00

Lab Sample ID: 480-200156-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			635537	CMC	EET BUF	07/29/22 14:39
Total/NA	Analysis	8270D SIM ID		1	635708	PJQ	EET BUF	08/01/22 18:01
Total/NA	Prep	3535			182374	CM	EET BUR	08/04/22 11:45
Total/NA	Analysis	537 IDA		1	182386	ND	EET BUR	08/04/22 17:34

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200156-1

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	1,2,3-Trimethylbenzene
8260C	5035A_L	Solid	1,2,3-Trimethylbenzene
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Laboratory: Eurofins Burlington

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2336	02-25-23
Connecticut	State	PH-0751	09-30-23
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	05-17-23
Florida	NELAP	E87467	06-30-23
Minnesota	NELAP	050-999-436	12-31-22
New Hampshire	NELAP	2006	12-18-22
New Jersey	NELAP	VT972	06-30-23
New York	NELAP	10391	04-01-23
Pennsylvania	NELAP	68-00489	04-30-23
Rhode Island	State	LAO00298	12-30-22
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00272	10-30-23
Vermont	State	VT4000	02-10-23
Virginia	NELAP	460209	12-14-22
Wisconsin	State	399133350	08-31-22

Method Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200156-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	EET BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	EET BUF
537 IDA	EPA 537 Isotope Dilution	EPA	EET BUR
6010C	Metals (ICP)	SW846	EET BUF
7470A	Mercury (CVAA)	SW846	EET BUF
7471B	Mercury (CVAA)	SW846	EET BUF
Moisture	Percent Moisture	EPA	EET BUF
3005A	Preparation, Total Metals	SW846	EET BUF
3050B	Preparation, Metals	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
3535	Solid-Phase Extraction (SPE)	SW846	EET BUR
3550C	Ultrasonic Extraction	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF
5035A_L	Closed System Purge and Trap	SW846	EET BUF
7470A	Preparation, Mercury	SW846	EET BUF
7471B	Preparation, Mercury	SW846	EET BUF
SHAKE	Shake Extraction with Ultrasonic Bath Extraction	SW846	EET BUR

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Sample Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200156-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-200156-1	FB_072722	Water	07/27/22 08:30	07/28/22 10:00
480-200156-2	SB1 (0-0.5)	Solid	07/26/22 16:15	07/28/22 10:00
480-200156-3	SB1 (0.5-1)	Solid	07/26/22 16:20	07/28/22 10:00
480-200156-4	SB1 (1-2)	Solid	07/26/22 16:25	07/28/22 10:00
480-200156-5	SB1 (15-16)	Solid	07/27/22 09:26	07/28/22 10:00
480-200156-6	SB1 (15-16)	Solid	07/26/22 16:45	07/28/22 10:00
480-200156-7	ERB_72722	Water	07/27/22 10:20	07/28/22 10:00
480-200156-8	SS7 (0-6)	Solid	07/27/22 16:50	07/28/22 10:00
480-200156-9	SS7 (6-12)	Solid	07/27/22 17:05	07/28/22 10:00
480-200156-10	SS7 (12-24)	Solid	07/27/22 17:10	07/28/22 10:00
480-200156-11	SS7 (0-2)	Solid	07/27/22 17:25	07/28/22 10:00
480-200156-12	FB2_072722	Water	07/27/22 18:05	07/28/22 10:00

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: K. Zatwarnicki	Lab PM: Beninati, John	Carrier Tracking No(s):	COC No: 480-175097-37694.1
Client Contact: Mr. Glenn Esler	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Integral Consulting Inc	PWSID:			Job #:
Address: 319 SW Washington Ave Suite 1150	Due Date Requested:			
City: Portland	TAT Requested (days): per Quote			
State, Zip: OR, 97204	Compliance Project: Δ Yes Δ No			
Phone: 503-943-3617(Tel)	PO #: Purchase Order not required			
Email: gesler@integral-corp.com	WO #:			
Project Name: EF1017 - Refractories - ~~Surface Soil~~	Project #: 48025298			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs (LL)	6010C, 7471B	8270D - TCL SVOCs ~~- to include 1,4 Dioxane~~	PFC_IDA - PFAS - NY 21 Analytes	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	N	N	N	X	
FB_072722	7/27/22	0830	—	BLANK	N	N	3	1	2		5	
SB1 (0-0.5)	7/26/22	1615	G	Soil			1	1	1		3	1 terra core kit
SB1 (0.5-1)	7/26/22	1620	G	Soil			1	1	1		3	" "
SB1 (1-2)	7/26/22	1625	G	Soil			1	1	1		3	" "
SB1 (15-16)	7/27/22	0926	G	Soil				1	1		2	
SB1 (15-16)	7/26/22	1645	G	Soil			1				1	1 terra core kit

480-200156 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) NYSDEC Cat B / Integral Specific EDD

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Katelyn Zatwarnicki	7/27/22 1730	Integral	[illegible]	7/28/22 1000	TTB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: #1 2.6

Ver: 06/08/2021

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: K. Zatwarnicki	Lab PM: Beninati, John	Carrier Tracking No(s):	COC No: 480-175097-37694.2
Client Contact: Mr. Glenn Esler	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Integral Consulting Inc	PWSID:			Job #:
Address: 319 SW Washington Ave Suite 1150	Due Date Requested:			
City: Portland	TAT Requested (days): per Quote			
State, Zip: OR, 97204	Compliance Project: Δ Yes Δ No			
Phone: 503-943-3617(Tel)	PO #: Purchase Order not required			
Email: gesler@integral-corp.com	WO #:			
Project Name: EF1017 - Refractories ~~Surface Soil~~	Project #: 48025298			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs (LL)	6010C, 7471B	8270D - TCL SVOCs - to include 1,4 Dioxane	PFC_IDA - PFAS - NY 21 Analytes	Total Number of containers	Special Instructions/Note:
		Preservation Code:					N	N	N	N		
ERB_072722	7/27/22	1020	-	BLANK	N	N	3	1	2		6	
SS7(0-6)		1650	G	Soil			1	1	1	1	4	hold PFAS samples
SS7(6-12)		1705					1	1	1	1	4	hold PFAS samples
SS7(12-24)		1710					1	1	1	1	4	hold PFAS samples
SS7(0-2)	↓	1725	↓	↓	↓	↓	1	1	1	1	4	hold PFAS samples
FB2_072722	7/27/22	1805	-	Blank					2	2	2	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) NYSDEC Cat B / Integral Specific EDD

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Kalelyn Zatwarnicki	7/27/22 1745	Integral	C Wallace	7/28/22 1000	DAS
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

8/12/2022

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

480-200156 Chain of Custody

Eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Beninati, John		997.1
Client Contact: Shipping/Receiving	Phone	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New York		Job #: 480-200156-1
Address: 530 Community Drive, Suite 11,	Due Date Requested: 8/10/2022			
City: South Burlington	TAT Requested (days):			
State, Zip: VT, 05403				
Phone: 802-660-1990(Tel) 802-660-1919(Fax)	PO #:			
Email:	WO #:			
Project Name: EF1017 - Refractories	Project #: 48025298			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA/Shake_Bath_14D PFAS - NY 21 Analytes	PFC_IDA/3535_IVWT PFAS - NY 21 Analytes	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
SS7 (0-6) (480-200156-8)	7/27/22	16:50 Eastern		Solid			X		1	
SS7 (6-12) (480-200156-9)	7/27/22	17:05 Eastern		Solid			X		1	
SS7 (12-24) (480-200156-10)	7/27/22	17:10 Eastern		Solid			X		1	
SS7 (0-2) (480-200156-11)	7/27/22	17.25 Eastern		Solid			X		1	
FB2_072722 (480-200156-12)	7/27/22	18:05 Eastern		Water				X	2	

Note. Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratones This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing Northeast, LLC.

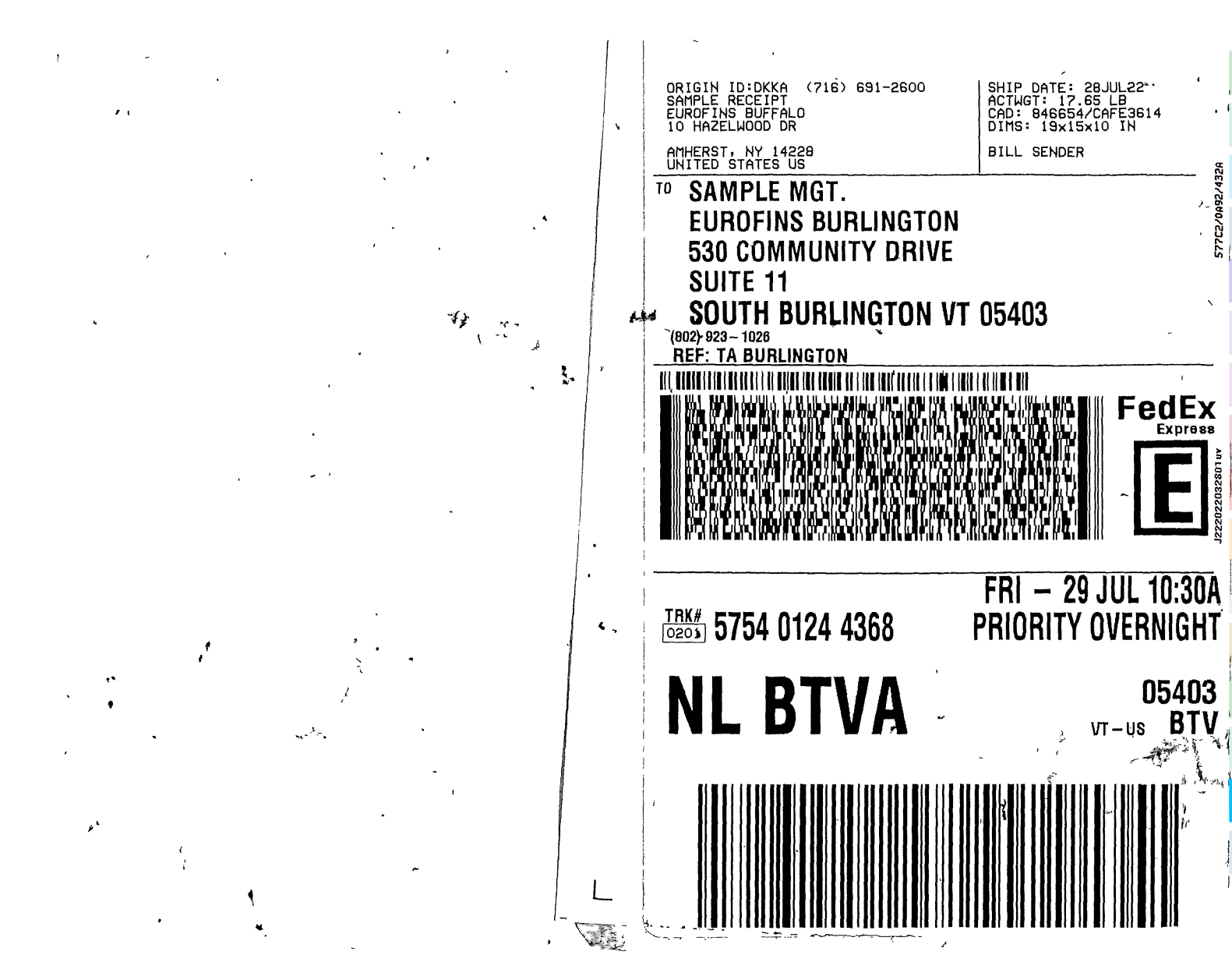
Possible Hazard Identification: Unconfirmed	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	7-28-22 1600	TAL			
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
				8/1/22 1030	EMSL

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021



ORIGIN ID:DKKA (716) 691-2600
SAMPLE RECEIPT
EUROFINS BUFFALO
10 HAZELWOOD DR

AMHERST, NY 14228
UNITED STATES US

SHIP DATE: 28JUL22
ACTWGT: 17.65 LB
CAD: 8466654/CAFE3614
DIMS: 19x15x10 IN

BILL SENDER

TO SAMPLE MGT.
EUROFINS BURLINGTON
530 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 923-1026
REF: TA BURLINGTON

FedEx Express

TRK# 0201 5754 0124 4368

FRI - 29 JUL 10:30A
PRIORITY OVERNIGHT

NL BTVA

05403
VT-US BTV

Login Sample Receipt Checklist

Client: Integral Consulting Inc

Job Number: 480-200156-1

Login Number: 200156
List Number: 1
Creator: Sabuda, Brendan D

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.6 #1 ice
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	FREEZE TIME: 1100 7/28
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: Integral Consulting Inc

Job Number: 480-200156-1

Login Number: 200156
List Number: 2
Creator: Cunningham, Caroline R

List Source: Eurofins Burlington
List Creation: 08/03/22 09:00 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	1979791
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Water present in cooler; indicates evidence of melted ice.
Cooler Temperature is acceptable.	False	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	23.3ºC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-200248-1
Client Project/Site: EF1017 - Refractories

For:
Integral Consulting Inc
319 SW Washington Ave
Suite 1150
Portland, Oregon 97204

Attn: Mr. Glenn Esler

Authorized for release by:
8/22/2022 10:33:15 AM
Rebecca Jones, Project Management Assistant I
(716)504-9884
Rebecca.Jones@et.eurofinsus.com

Designee for

John Beninati, Project Manager
(716)504-9874
John.Beninati@et.eurofinsus.com

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 5
Detection Summary 8
Client Sample Results 19
Surrogate Summary 84
Isotope Dilution Summary 87
QC Sample Results 90
QC Association Summary 147
Lab Chronicle 156
Certification Summary 165
Method Summary 166
Sample Summary 167
Chain of Custody 168
Receipt Checklists 176

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.

LCMS

Qualifier	Qualifier Description
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-200248-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-200248-1

Comments
No additional comments.

Receipt
The samples were received on 7/30/2022 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 6 coolers at receipt time were 3.0º C, 3.1º C, 3.7º C, 4.1º C, 4.2º C and 4.6º C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-636948 recovered above the upper control limit for 1,1,2-Trichloro-1,2,2-trifluoroethane and Trichlorofluoromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: FDUP2_072922 (480-200248-6) and SB6 (1-2) (480-200248-18).

Method 8260C: Internal standard (ISTD) and Surrogate response for the following samples were outside control limits: SB6 (1-2) (480-200248-18), SB6 (1-2) (480-200248-18[MS]) and SB6 (1-2) (480-200248-18[MSD]). The sample(s) was re-extracted and/or re-analyzed and ISTD and Surrogate response was outside control limits.

Method 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 480-636757 and analytical batch 480-636948 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. The associated samples are impacted: SB6 (1-2) (480-200248-18[MS]) and SB6 (1-2) (480-200248-18[MSD]).

Method 8260C: Internal standard and/or surrogate responses for the following samples were outside control limits: SB6 (0-0.5) (480-200248-1), SB6 (0.5-1) (480-200248-2), SS5 (0-2) (480-200248-7) and SS6 (0-2) (480-200248-13). The samples were re-analyzed and responses were outside control limits.

Method 8260C: Internal standard (ISTD) response for the following samples were outside control limits: SS6 (6-12) (480-200248-15) and SS6 (12-24) (480-200248-16). The sample(s) were re-extracted and/or re-analyzed and ISTD response were outside control limits.

Method 8260C: Internal standard and surrogate responses for the following samples were outside control limits: SS6 (0-6) (480-200248-14) and FDUP_072922 (480-200248-17). The sample(s) were re-extracted and/or re-analyzed and responses were outside control limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270D: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 480-635797 and analytical batch 480-636252 recovered outside control limits for the following analytes: Carbazole and Naphthalene. These analytes were biased high in the LCS and were not detected in the associated samples or are below the client reporting limit; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-636252 recovered above the upper control limit for Carbazole. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: ERB_072822 (480-200248-11).

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 480-635797 and analytical batch 480-636252 recovered outside control limits for the following analytes: Acetophenone.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 480-635797 and analytical batch 480-636252 recovered outside control limits for the following analytes: Naphthalene.

Job ID: 480-200248-1 (Continued)

Laboratory: Eurofins Buffalo (Continued)

Method 8270D: The laboratory control sample duplicate (LCSD) for preparation batch 480-635797 and analytical batch 480-636252 recovered outside control limits for the following analytes: Naphthalene. The associated sample(s) was re-prepared and/or re-analyzed outside holding time. Both sets of data have been reported: FB_072922 (480-200248-12).

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-636678 recovered outside acceptance criteria, low biased, for Hexachlorocyclopentadiene and Pentachlorophenol. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270D: The following samples were diluted due to color and appearance: SB6 (0-0.5) (480-200248-1), SB6 (0.5-1) (480-200248-2), SS5 (0-2) (480-200248-7), FDUP_072922 (480-200248-17), SB6 (1-2) (480-200248-18), SB6 (1-2) (480-200248-18[MS]) and SB6 (1-2) (480-200248-18[MSD]). Elevated reporting limits (RL) are provided.

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: SB6 (0.5-1) (480-200248-2). These results have been reported and qualified.

Method 8270D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 480-636076 and analytical batch 480-636722 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8270D: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 480-636076 and analytical batch 480-636722 was outside control limits. Sample matrix interference and/or non-homogeneity is suspected.

Method 8270D: The following sample was diluted due to color, appearance, and viscosity: SS5 (6-12) (480-200248-9). Elevated reporting limits (RL) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6010C: The serial dilution and post spike (480-200248-B-18-A PDS) and (480-200248-B-18-A SD ^5), associated with batch 480-636010, exceeded the quality control limits for Total Cobalt and Nickel. Sample matrix is suspected, therefore, no corrective action was necessary.

Method 6010C: The serial dilution (480-200248-B-18-A SD ^5) associated with batch 480-636536, exhibited results outside the quality control limits for Total Arsenic. However, the post digestion spike (PDS) was compliant, therefore no corrective action was necessary.

Method 6010C: The recovery of post spike, (480-200248-B-18-A PDS), associated with batch 480-636536, exhibited results outside quality control limits for Total Aluminum, Iron, and Zinc. However, the serial dilution (SD) of this sample was compliant, therefore no corrective action was necessary.

Method 6010C: The following samples were diluted due to the presence of Total Iron which interferes with Chromium, Manganese, Nickel, and Vanadium: SS6 (6-12) (480-200248-15) and SS6 (12-24) (480-200248-16). Elevated reporting limits (RLs) are provided.

Method 6010C: The serial dilution (480-200248-B-18-A SD ^5) associated with batch 480-637198, exhibited a result outside the quality control limits for Total Potassium. However, the post digestion spike (PDS) was compliant, therefore no corrective action was necessary.

Method 6010C: The recovery of post spike, (480-200248-B-18-A PDS), associated with batch 480-637198, exhibited a result outside quality control limits for Total Manganese. However, the serial dilution (SD) of this sample was compliant, therefore no corrective action was necessary.

Method 6010C: The following samples were diluted due to the presence of Iron which interferes with Lead: SS6 (0-6) (480-200248-14), SS6 (6-12) (480-200248-15) and SS6 (12-24) (480-200248-16). Elevated reporting limits (RLs) are provided.

Method 6010C: The MS/MSD spike analyte Lead was taken a pre-prep sample and was performed on the following sample: (480-200248-B-17-A MS) and (480-200248-B-17-A MSD). .

Job ID: 480-200248-1 (Continued)

Laboratory: Eurofins Buffalo (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

LCMS

Method 537 (modified): Method 537 (modified): The “I” qualifier associated with samples SB6 (0-0.5) (480-200248-1), SB6 (0.5-1) (480-200248-2) and FDUP_072922 (480-200248-17) is applied because the transition mass ratio for the indicated analyte(s) was outside of the established ratio limits. The qualitative identification has some degree of uncertainty, however analyst judgment was used to positively identify the analyte(s).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-635797.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client Sample ID: SB6 (0-0.5)

Lab Sample ID: 480-200248-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.61	J *3	7.5	0.56	ug/Kg	1	☼	8260C	Total/NA
Acenaphthene	150	J	940	140	ug/Kg	5	☼	8270D	Total/NA
Acenaphthylene	870	J	940	120	ug/Kg	5	☼	8270D	Total/NA
Anthracene	890	J	940	230	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	2700		940	94	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	2500		940	140	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	3100		940	150	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	1700		940	100	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	1200		940	120	ug/Kg	5	☼	8270D	Total/NA
Carbazole	140	J	940	110	ug/Kg	5	☼	8270D	Total/NA
Chrysene	2500		940	210	ug/Kg	5	☼	8270D	Total/NA
Dibenz(a,h)anthracene	640	J	940	170	ug/Kg	5	☼	8270D	Total/NA
Dibenzofuran	270	J	940	110	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	4900		940	100	ug/Kg	5	☼	8270D	Total/NA
Fluorene	630	J	940	110	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	1700		940	120	ug/Kg	5	☼	8270D	Total/NA
Naphthalene	120	J	940	120	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	3600		940	140	ug/Kg	5	☼	8270D	Total/NA
Pyrene	4400		940	110	ug/Kg	5	☼	8270D	Total/NA
Perfluorohexanoic acid (PFHxA)	0.13	J I	0.22	0.051	ug/Kg	1	☼	537 IDA	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.046	J	0.22	0.044	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorooctanoic acid (PFOA)	0.097	J	0.22	0.065	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorononanoic acid (PFNA)	0.072	J	0.22	0.038	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorodecanoic acid (PFDA)	0.043	J	0.22	0.031	ug/Kg	1	☼	537 IDA	Total/NA
Perfluoroundecanoic acid (PFUnA)	0.039	J	0.22	0.030	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.21	J I	0.22	0.12	ug/Kg	1	☼	537 IDA	Total/NA
Aluminum	9040		12.0	5.3	mg/Kg	1	☼	6010C	Total/NA
Antimony	3.3	J	18.0	0.48	mg/Kg	1	☼	6010C	Total/NA
Arsenic	10.6		2.4	0.48	mg/Kg	1	☼	6010C	Total/NA
Barium	210		0.60	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.59		0.24	0.034	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.40		0.24	0.036	mg/Kg	1	☼	6010C	Total/NA
Calcium	2590	B	60.1	4.0	mg/Kg	1	☼	6010C	Total/NA
Chromium	13.6		0.60	0.24	mg/Kg	1	☼	6010C	Total/NA
Cobalt	8.8		0.60	0.060	mg/Kg	1	☼	6010C	Total/NA
Copper	44.0		1.2	0.25	mg/Kg	1	☼	6010C	Total/NA
Iron	20000		12.0	4.2	mg/Kg	1	☼	6010C	Total/NA
Lead	121		1.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2370	B	24.0	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	416	B	0.24	0.038	mg/Kg	1	☼	6010C	Total/NA
Nickel	19.2		6.0	0.28	mg/Kg	1	☼	6010C	Total/NA
Potassium	1310		36.0	24.0	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.65	J	4.8	0.48	mg/Kg	1	☼	6010C	Total/NA
Sodium	49.8	J	168	15.6	mg/Kg	1	☼	6010C	Total/NA
Vanadium	17.3		0.60	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	138		2.4	0.77	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.19		0.022	0.0051	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB6 (0.5-1) — Lab Sample ID: 480-200248-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	480	J	1800	370	ug/Kg	10	☼	8270D	Total/NA
Acenaphthylene	1400	J	1800	240	ug/Kg	10	☼	8270D	Total/NA
Anthracene	17000		1800	450	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]anthracene	6500		1800	180	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]pyrene	5000		1800	270	ug/Kg	10	☼	8270D	Total/NA
Benzo[b]fluoranthene	6100		1800	290	ug/Kg	10	☼	8270D	Total/NA
Benzo[g,h,i]perylene	3500		1800	190	ug/Kg	10	☼	8270D	Total/NA
Benzo[k]fluoranthene	2400		1800	240	ug/Kg	10	☼	8270D	Total/NA
Carbazole	250	J	1800	220	ug/Kg	10	☼	8270D	Total/NA
Chrysene	6500		1800	410	ug/Kg	10	☼	8270D	Total/NA
Dibenz(a,h)anthracene	900	J	1800	320	ug/Kg	10	☼	8270D	Total/NA
Fluoranthene	11000		1800	190	ug/Kg	10	☼	8270D	Total/NA
Fluorene	1200	J	1800	220	ug/Kg	10	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	3200		1800	230	ug/Kg	10	☼	8270D	Total/NA
Naphthalene	290	J	1800	240	ug/Kg	10	☼	8270D	Total/NA
Phenanthrene	8200		1800	270	ug/Kg	10	☼	8270D	Total/NA
Pyrene	14000		1800	220	ug/Kg	10	☼	8270D	Total/NA
Perfluorohexanoic acid (PFHxA)	0.066	J	0.22	0.050	ug/Kg	1	☼	537 IDA	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.045	J	0.22	0.042	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorooctanoic acid (PFOA)	0.13	J	0.22	0.063	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorononanoic acid (PFNA)	0.050	J	0.22	0.037	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.10	J I	0.22	0.044	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.41		0.22	0.12	ug/Kg	1	☼	537 IDA	Total/NA
Aluminum	7650		11.4	5.0	mg/Kg	1	☼	6010C	Total/NA
Antimony	5.4	J	17.2	0.46	mg/Kg	1	☼	6010C	Total/NA
Arsenic	18.3		2.3	0.46	mg/Kg	1	☼	6010C	Total/NA
Barium	426		0.57	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.74		0.23	0.032	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.74		0.23	0.034	mg/Kg	1	☼	6010C	Total/NA
Calcium	4930	B	57.2	3.8	mg/Kg	1	☼	6010C	Total/NA
Chromium	15.5		0.57	0.23	mg/Kg	1	☼	6010C	Total/NA
Cobalt	9.0		0.57	0.057	mg/Kg	1	☼	6010C	Total/NA
Copper	93.8		1.1	0.24	mg/Kg	1	☼	6010C	Total/NA
Iron	21100		11.4	4.0	mg/Kg	1	☼	6010C	Total/NA
Lead	273		1.1	0.27	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2300	B	22.9	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	344	B	0.23	0.037	mg/Kg	1	☼	6010C	Total/NA
Nickel	21.1		5.7	0.26	mg/Kg	1	☼	6010C	Total/NA
Potassium	1080		34.3	22.9	mg/Kg	1	☼	6010C	Total/NA
Selenium	2.1	J	4.6	0.46	mg/Kg	1	☼	6010C	Total/NA
Sodium	92.5	J	160	14.9	mg/Kg	1	☼	6010C	Total/NA
Vanadium	22.3		0.57	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	281		2.3	0.73	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.32		0.022	0.0051	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB6 (13-15) — Lab Sample ID: 480-200248-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	20	J	26	1.9	ug/Kg	1	☼	8260C	Total/NA
Acetone	94		26	4.3	ug/Kg	1	☼	8260C	Total/NA
Methyl acetate	3.5	J	26	3.1	ug/Kg	1	☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB6 (13-15) (Continued)

Lab Sample ID: 480-200248-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	65	J	220	33	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	89	J	220	22	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	98	J	220	33	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	60	J	220	35	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	50	J	220	24	ug/Kg	1	☼	8270D	Total/NA
Chrysene	92	J	220	50	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	130	J	220	24	ug/Kg	1	☼	8270D	Total/NA
Fluorene	49	J	220	26	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	45	J	220	28	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	160	J	220	33	ug/Kg	1	☼	8270D	Total/NA
Pyrene	210	J	220	26	ug/Kg	1	☼	8270D	Total/NA
Aluminum	15500		13.0	5.7	mg/Kg	1	☼	6010C	Total/NA
Antimony	1.1	J	19.5	0.52	mg/Kg	1	☼	6010C	Total/NA
Arsenic	7.7		2.6	0.52	mg/Kg	1	☼	6010C	Total/NA
Barium	147		0.65	0.14	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.78		0.26	0.036	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.19	J	0.26	0.039	mg/Kg	1	☼	6010C	Total/NA
Calcium	1490	B	65.1	4.3	mg/Kg	1	☼	6010C	Total/NA
Chromium	18.4		0.65	0.26	mg/Kg	1	☼	6010C	Total/NA
Cobalt	13.7		0.65	0.065	mg/Kg	1	☼	6010C	Total/NA
Copper	17.2		1.3	0.27	mg/Kg	1	☼	6010C	Total/NA
Iron	24300		13.0	4.6	mg/Kg	1	☼	6010C	Total/NA
Lead	18.2		1.3	0.31	mg/Kg	1	☼	6010C	Total/NA
Magnesium	3850	B	26.0	1.2	mg/Kg	1	☼	6010C	Total/NA
Manganese	566	B	0.26	0.042	mg/Kg	1	☼	6010C	Total/NA
Nickel	30.0		6.5	0.30	mg/Kg	1	☼	6010C	Total/NA
Potassium	2120		39.0	26.0	mg/Kg	1	☼	6010C	Total/NA
Sodium	82.8	J	182	16.9	mg/Kg	1	☼	6010C	Total/NA
Vanadium	22.0		0.65	0.14	mg/Kg	1	☼	6010C	Total/NA
Zinc	76.5		2.6	0.83	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.035		0.026	0.0060	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: FDUP2_072922

Lab Sample ID: 480-200248-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	9.0	J	22	3.8	ug/Kg	1	☼	8260C	Total/NA
Methylene Chloride	2.1	J	4.5	2.1	ug/Kg	1	☼	8260C	Total/NA
Aluminum	9360		9.9	4.3	mg/Kg	1	☼	6010C	Total/NA
Antimony	1.0	J	14.8	0.39	mg/Kg	1	☼	6010C	Total/NA
Arsenic	5.9		2.0	0.39	mg/Kg	1	☼	6010C	Total/NA
Barium	49.7		0.49	0.11	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.41		0.20	0.028	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.14	J	0.20	0.030	mg/Kg	1	☼	6010C	Total/NA
Calcium	17300	B	49.3	3.3	mg/Kg	1	☼	6010C	Total/NA
Chromium	13.9		0.49	0.20	mg/Kg	1	☼	6010C	Total/NA
Cobalt	8.2		0.49	0.049	mg/Kg	1	☼	6010C	Total/NA
Copper	28.3		0.99	0.21	mg/Kg	1	☼	6010C	Total/NA
Iron	25100		9.9	3.4	mg/Kg	1	☼	6010C	Total/NA
Lead	22.8		0.99	0.24	mg/Kg	1	☼	6010C	Total/NA
Magnesium	5390	B	19.7	0.91	mg/Kg	1	☼	6010C	Total/NA
Manganese	528	B	0.20	0.032	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FDUP2_072922 (Continued)

Lab Sample ID: 480-200248-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Nickel	20.6		4.9	0.23	mg/Kg	1	☼	6010C	Total/NA
Potassium	1070		29.6	19.7	mg/Kg	1	☼	6010C	Total/NA
Sodium	66.4	J	138	12.8	mg/Kg	1	☼	6010C	Total/NA
Vanadium	18.5		0.49	0.11	mg/Kg	1	☼	6010C	Total/NA
Zinc	65.4		2.0	0.63	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.052		0.021	0.0048	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS5 (0-2)

Lab Sample ID: 480-200248-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	16	J	42	7.1	ug/Kg	1	☼	8260C	Total/NA
Acenaphthylene	250	J	920	120	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	550	J	920	92	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	390	J	920	140	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	890	J	920	150	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	480	J	920	97	ug/Kg	5	☼	8270D	Total/NA
Chrysene	680	J	920	210	ug/Kg	5	☼	8270D	Total/NA
Dibenz(a,h)anthracene	170	J	920	160	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	770	J	920	97	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	470	J	920	110	ug/Kg	5	☼	8270D	Total/NA
Pyrene	1300		920	110	ug/Kg	5	☼	8270D	Total/NA
Aluminum	9330		11.7	5.1	mg/Kg	1	☼	6010C	Total/NA
Antimony	0.82	J	17.5	0.47	mg/Kg	1	☼	6010C	Total/NA
Arsenic	3.3		2.3	0.47	mg/Kg	1	☼	6010C	Total/NA
Barium	102		0.58	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.36		0.23	0.033	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.26		0.23	0.035	mg/Kg	1	☼	6010C	Total/NA
Calcium	2200	B	58.3	3.8	mg/Kg	1	☼	6010C	Total/NA
Chromium	10.6		0.58	0.23	mg/Kg	1	☼	6010C	Total/NA
Cobalt	23.3		0.58	0.058	mg/Kg	1	☼	6010C	Total/NA
Copper	334		1.2	0.24	mg/Kg	1	☼	6010C	Total/NA
Iron	11700		11.7	4.1	mg/Kg	1	☼	6010C	Total/NA
Lead	26.9		1.2	0.28	mg/Kg	1	☼	6010C	Total/NA
Magnesium	1780	B	23.3	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	314	B	0.23	0.037	mg/Kg	1	☼	6010C	Total/NA
Nickel	14.0		5.8	0.27	mg/Kg	1	☼	6010C	Total/NA
Potassium	1070		35.0	23.3	mg/Kg	1	☼	6010C	Total/NA
Silver	10.2		0.70	0.23	mg/Kg	1	☼	6010C	Total/NA
Sodium	113	J	163	15.2	mg/Kg	1	☼	6010C	Total/NA
Vanadium	12.5		0.58	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	69.2		2.3	0.75	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.059		0.021	0.0048	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS5 (0-6)

Lab Sample ID: 480-200248-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	56	J	180	37	ug/Kg	1	☼	8270D	Total/NA
Acenaphthylene	450		180	24	ug/Kg	1	☼	8270D	Total/NA
Anthracene	180		180	45	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	920		180	18	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	650		180	27	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	1200		180	29	ug/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS5 (0-6) (Continued)

Lab Sample ID: 480-200248-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[g,h,i]perylene	600		180	19	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	520		180	24	ug/Kg	1	☼	8270D	Total/NA
Butyl benzyl phthalate	410		180	30	ug/Kg	1	☼	8270D	Total/NA
Chrysene	1100		180	41	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	200		180	32	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	1200		180	19	ug/Kg	1	☼	8270D	Total/NA
Fluorene	48	J	180	22	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	590		180	23	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	70	J	180	24	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	380		180	27	ug/Kg	1	☼	8270D	Total/NA
Pyrene	1900		180	22	ug/Kg	1	☼	8270D	Total/NA
Aluminum	12100	B	11.5	5.0	mg/Kg	1	☼	6010C	Total/NA
Antimony	0.66	J	17.2	0.46	mg/Kg	1	☼	6010C	Total/NA
Arsenic	7.5		2.3	0.46	mg/Kg	1	☼	6010C	Total/NA
Barium	154	B	0.57	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.48		0.23	0.032	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.12	J	0.23	0.034	mg/Kg	1	☼	6010C	Total/NA
Calcium	1970		57.3	3.8	mg/Kg	1	☼	6010C	Total/NA
Chromium	14.3		0.57	0.23	mg/Kg	1	☼	6010C	Total/NA
Cobalt	21.3		0.57	0.057	mg/Kg	1	☼	6010C	Total/NA
Copper	153		1.1	0.24	mg/Kg	1	☼	6010C	Total/NA
Iron	17400		11.5	4.0	mg/Kg	1	☼	6010C	Total/NA
Lead	37.5		1.0	0.25	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2510	B	22.9	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	437	B	0.23	0.037	mg/Kg	1	☼	6010C	Total/NA
Nickel	18.9		5.7	0.26	mg/Kg	1	☼	6010C	Total/NA
Potassium	1490		34.4	22.9	mg/Kg	1	☼	6010C	Total/NA
Silver	2.7		0.69	0.23	mg/Kg	1	☼	6010C	Total/NA
Sodium	52.9	J	161	14.9	mg/Kg	1	☼	6010C	Total/NA
Vanadium	18.8		0.57	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	98.2	B	2.3	0.73	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.090		0.022	0.0051	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS5 (6-12)

Lab Sample ID: 480-200248-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	340	J	890	110	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	980		890	89	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	590	J	890	130	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	1200		890	140	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	670	J	890	94	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	490	J	890	110	ug/Kg	5	☼	8270D	Total/NA
Chrysene	1100		890	200	ug/Kg	5	☼	8270D	Total/NA
Dibenz(a,h)anthracene	170	J	890	160	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	1300		890	94	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	580	J	890	110	ug/Kg	5	☼	8270D	Total/NA
Naphthalene	110	J	890	110	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	520	J	890	130	ug/Kg	5	☼	8270D	Total/NA
Pyrene	2200		890	100	ug/Kg	5	☼	8270D	Total/NA
Aluminum	10500	B	10.9	4.8	mg/Kg	1	☼	6010C	Total/NA
Antimony	1.2	J	16.3	0.44	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS5 (6-12) (Continued) — Lab Sample ID: 480-200248-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	7.2		2.2	0.44	mg/Kg	1	☼	6010C	Total/NA
Barium	106	B	0.54	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.48		0.22	0.031	mg/Kg	1	☼	6010C	Total/NA
Calcium	7570		54.5	3.6	mg/Kg	1	☼	6010C	Total/NA
Chromium	18.0		0.54	0.22	mg/Kg	1	☼	6010C	Total/NA
Cobalt	9.6		0.54	0.054	mg/Kg	1	☼	6010C	Total/NA
Copper	62.5		1.1	0.23	mg/Kg	1	☼	6010C	Total/NA
Iron	28100		10.9	3.8	mg/Kg	1	☼	6010C	Total/NA
Lead	38.1		1.1	0.27	mg/Kg	1	☼	6010C	Total/NA
Magnesium	3400	B	21.8	1.0	mg/Kg	1	☼	6010C	Total/NA
Manganese	805	B	0.22	0.035	mg/Kg	1	☼	6010C	Total/NA
Nickel	21.1		5.4	0.25	mg/Kg	1	☼	6010C	Total/NA
Potassium	1310		32.7	21.8	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.95	J	4.4	0.44	mg/Kg	1	☼	6010C	Total/NA
Sodium	60.2	J	153	14.2	mg/Kg	1	☼	6010C	Total/NA
Vanadium	25.2		0.54	0.12	mg/Kg	1	☼	6010C	Total/NA
Zinc	67.8	B	2.2	0.70	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.061		0.021	0.0048	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS5 (12-24) — Lab Sample ID: 480-200248-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	20	J	21	3.6	ug/Kg	1	☼	8260C	Total/NA
Aluminum	9840	B	10.4	4.6	mg/Kg	1	☼	6010C	Total/NA
Antimony	0.61	J	15.6	0.41	mg/Kg	1	☼	6010C	Total/NA
Arsenic	6.2		2.1	0.41	mg/Kg	1	☼	6010C	Total/NA
Barium	56.1	B	0.52	0.11	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.42		0.21	0.029	mg/Kg	1	☼	6010C	Total/NA
Calcium	19800		51.9	3.4	mg/Kg	1	☼	6010C	Total/NA
Chromium	13.8		0.52	0.21	mg/Kg	1	☼	6010C	Total/NA
Cobalt	9.2		0.52	0.052	mg/Kg	1	☼	6010C	Total/NA
Copper	26.6		1.0	0.22	mg/Kg	1	☼	6010C	Total/NA
Iron	22000		10.4	3.6	mg/Kg	1	☼	6010C	Total/NA
Lead	17.0		1.1	0.26	mg/Kg	1	☼	6010C	Total/NA
Magnesium	5780	B	20.7	0.96	mg/Kg	1	☼	6010C	Total/NA
Manganese	490	B	0.21	0.033	mg/Kg	1	☼	6010C	Total/NA
Nickel	23.5		5.2	0.24	mg/Kg	1	☼	6010C	Total/NA
Potassium	1280		31.1	20.7	mg/Kg	1	☼	6010C	Total/NA
Sodium	48.8	J	145	13.5	mg/Kg	1	☼	6010C	Total/NA
Vanadium	16.9		0.52	0.11	mg/Kg	1	☼	6010C	Total/NA
Zinc	67.1	B	2.1	0.66	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.014	J	0.021	0.0048	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: ERB_072822 — Lab Sample ID: 480-200248-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	2.5	J *+ *1	5.2	0.79	ug/L	1		8270D	Total/NA
Manganese	0.00062	J B	0.0030	0.00040	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FB_072922 — Lab Sample ID: 480-200248-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Methylnaphthalene	2.2	J	5.0	0.60	ug/L	1		8270D	Total/NA
Naphthalene	16	*+ *1	5.0	0.76	ug/L	1		8270D	Total/NA
Naphthalene - RE	2.2	J H	5.0	0.76	ug/L	1		8270D	Total/NA
Calcium	0.15	J	0.50	0.10	mg/L	1		6010C	Total/NA
Manganese	0.0011	J B	0.0030	0.00040	mg/L	1		6010C	Total/NA

Client Sample ID: SS6 (0-2) — Lab Sample ID: 480-200248-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	6.8	J	29	4.9	ug/Kg	1	☼	8260C	Total/NA
Acenaphthylene	130	J	180	23	ug/Kg	1	☼	8270D	Total/NA
Anthracene	110	J	180	44	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	410		180	18	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	440		180	26	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	710		180	28	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	380		180	19	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	220		180	23	ug/Kg	1	☼	8270D	Total/NA
Carbazole	35	J	180	21	ug/Kg	1	☼	8270D	Total/NA
Chrysene	570		180	40	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	96	J	180	31	ug/Kg	1	☼	8270D	Total/NA
Dibenzofuran	34	J	180	21	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	720		180	19	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	340		180	22	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	45	J	180	23	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	320		180	26	ug/Kg	1	☼	8270D	Total/NA
Pyrene	780		180	21	ug/Kg	1	☼	8270D	Total/NA
Aluminum	8210	B	10.4	4.6	mg/Kg	1	☼	6010C	Total/NA
Antimony	1.3	J	15.6	0.42	mg/Kg	1	☼	6010C	Total/NA
Arsenic	24.1		2.1	0.42	mg/Kg	1	☼	6010C	Total/NA
Barium	92.8	B	0.52	0.11	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.49		0.21	0.029	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.097	J	0.21	0.031	mg/Kg	1	☼	6010C	Total/NA
Calcium	1830		51.9	3.4	mg/Kg	1	☼	6010C	Total/NA
Chromium	13.1		0.52	0.21	mg/Kg	1	☼	6010C	Total/NA
Cobalt	8.4		0.52	0.052	mg/Kg	1	☼	6010C	Total/NA
Copper	47.8		1.0	0.22	mg/Kg	1	☼	6010C	Total/NA
Iron	24500		10.4	3.6	mg/Kg	1	☼	6010C	Total/NA
Lead	90.9		1.1	0.27	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2090	B	20.8	0.96	mg/Kg	1	☼	6010C	Total/NA
Manganese	478	B	0.21	0.033	mg/Kg	1	☼	6010C	Total/NA
Nickel	18.9		5.2	0.24	mg/Kg	1	☼	6010C	Total/NA
Potassium	1420		31.2	20.8	mg/Kg	1	☼	6010C	Total/NA
Selenium	1.2	J	4.2	0.42	mg/Kg	1	☼	6010C	Total/NA
Sodium	26.2	J	145	13.5	mg/Kg	1	☼	6010C	Total/NA
Vanadium	15.4		0.52	0.11	mg/Kg	1	☼	6010C	Total/NA
Zinc	65.6	B	2.1	0.66	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.067		0.020	0.0047	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS6 (0-6) — Lab Sample ID: 480-200248-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	69	J	190	24	ug/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS6 (0-6) (Continued)

Lab Sample ID: 480-200248-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	63	J	190	46	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	220		190	19	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	230		190	27	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	340		190	30	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	200		190	20	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	120	J	190	24	ug/Kg	1	☼	8270D	Total/NA
Chrysene	330		190	42	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	54	J	190	33	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	360		190	20	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	180	J	190	23	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	30	J	190	24	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	210		190	27	ug/Kg	1	☼	8270D	Total/NA
Pyrene	410		190	22	ug/Kg	1	☼	8270D	Total/NA
Aluminum	6930	B	11.4	5.0	mg/Kg	1	☼	6010C	Total/NA
Antimony	1.6	J	17.2	0.46	mg/Kg	1	☼	6010C	Total/NA
Arsenic	15.7		2.3	0.46	mg/Kg	1	☼	6010C	Total/NA
Barium	70.5	B	0.57	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.46		0.23	0.032	mg/Kg	1	☼	6010C	Total/NA
Calcium	1480		57.2	3.8	mg/Kg	1	☼	6010C	Total/NA
Chromium	14.2		0.57	0.23	mg/Kg	1	☼	6010C	Total/NA
Cobalt	7.0		0.57	0.057	mg/Kg	1	☼	6010C	Total/NA
Copper	83.8		1.1	0.24	mg/Kg	1	☼	6010C	Total/NA
Iron	44500		11.4	4.0	mg/Kg	1	☼	6010C	Total/NA
Lead	656		5.5	1.3	mg/Kg	5	☼	6010C	Total/NA
Magnesium	1250	B	22.9	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	415	B	0.23	0.037	mg/Kg	1	☼	6010C	Total/NA
Nickel	14.6		5.7	0.26	mg/Kg	1	☼	6010C	Total/NA
Potassium	1210		34.3	22.9	mg/Kg	1	☼	6010C	Total/NA
Selenium	2.3	J	4.6	0.46	mg/Kg	1	☼	6010C	Total/NA
Sodium	39.7	J	160	14.9	mg/Kg	1	☼	6010C	Total/NA
Vanadium	18.8		0.57	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	50.4	B	2.3	0.73	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.073		0.021	0.0049	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS6 (6-12)

Lab Sample ID: 480-200248-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	2.9	J	25	1.9	ug/Kg	1	☼	8260C	Total/NA
Acetone	7.7	J	25	4.3	ug/Kg	1	☼	8260C	Total/NA
Methylene Chloride	12		5.1	2.3	ug/Kg	1	☼	8260C	Total/NA
Benzo[a]anthracene	56	J	180	18	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	45	J	180	26	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	78	J	180	28	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	34	J	180	19	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	38	J	180	23	ug/Kg	1	☼	8270D	Total/NA
Chrysene	66	J	180	39	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	120	J	180	19	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	27	J	180	22	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	56	J	180	26	ug/Kg	1	☼	8270D	Total/NA
Pyrene	96	J	180	21	ug/Kg	1	☼	8270D	Total/NA
Aluminum	6350	B	10.6	4.7	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS6 (6-12) (Continued)

Lab Sample ID: 480-200248-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	7.4	J	15.9	0.42	mg/Kg	1	☼	6010C	Total/NA
Arsenic	6.6		2.1	0.42	mg/Kg	1	☼	6010C	Total/NA
Barium	38.0	B	0.53	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.33		0.21	0.030	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.33		0.21	0.032	mg/Kg	1	☼	6010C	Total/NA
Calcium	833		52.9	3.5	mg/Kg	1	☼	6010C	Total/NA
Chromium	16.3		0.53	0.21	mg/Kg	1	☼	6010C	Total/NA
Cobalt	7.2		0.53	0.053	mg/Kg	1	☼	6010C	Total/NA
Copper	67.9		1.1	0.22	mg/Kg	1	☼	6010C	Total/NA
Iron	95800		21.2	7.4	mg/Kg	2	☼	6010C	Total/NA
Lead	84.0		5.3	1.3	mg/Kg	5	☼	6010C	Total/NA
Magnesium	981	B	21.2	0.98	mg/Kg	1	☼	6010C	Total/NA
Manganese	874	B	0.42	0.068	mg/Kg	2	☼	6010C	Total/NA
Nickel	12.3		10.6	0.49	mg/Kg	2	☼	6010C	Total/NA
Potassium	847		31.7	21.2	mg/Kg	1	☼	6010C	Total/NA
Selenium	1.1	J	4.2	0.42	mg/Kg	1	☼	6010C	Total/NA
Sodium	50.9	J	148	13.8	mg/Kg	1	☼	6010C	Total/NA
Vanadium	27.7		1.1	0.23	mg/Kg	2	☼	6010C	Total/NA
Zinc	43.3	B	2.1	0.68	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.029		0.021	0.0048	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS6 (12-24)

Lab Sample ID: 480-200248-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	5.5	J	24	1.8	ug/Kg	1	☼	8260C	Total/NA
Acetone	23	J	24	4.1	ug/Kg	1	☼	8260C	Total/NA
Benzene	0.26	J	4.9	0.24	ug/Kg	1	☼	8260C	Total/NA
Benzo[b]fluoranthene	52	J	180	28	ug/Kg	1	☼	8270D	Total/NA
Aluminum	5410	B	10.4	4.6	mg/Kg	1	☼	6010C	Total/NA
Antimony	10.2	J	15.6	0.41	mg/Kg	1	☼	6010C	Total/NA
Arsenic	3.4		2.1	0.41	mg/Kg	1	☼	6010C	Total/NA
Barium	22.6	B	0.52	0.11	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.23		0.21	0.029	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.38		0.21	0.031	mg/Kg	1	☼	6010C	Total/NA
Calcium	572		51.9	3.4	mg/Kg	1	☼	6010C	Total/NA
Chromium	24.5		0.52	0.21	mg/Kg	1	☼	6010C	Total/NA
Cobalt	7.3		0.52	0.052	mg/Kg	1	☼	6010C	Total/NA
Copper	36.8		1.0	0.22	mg/Kg	1	☼	6010C	Total/NA
Iron	137000		51.9	18.2	mg/Kg	5	☼	6010C	Total/NA
Lead	74.4		5.2	1.2	mg/Kg	5	☼	6010C	Total/NA
Magnesium	825	B	20.7	0.96	mg/Kg	1	☼	6010C	Total/NA
Manganese	1950	B	1.0	0.17	mg/Kg	5	☼	6010C	Total/NA
Nickel	11.3	J	25.9	1.2	mg/Kg	5	☼	6010C	Total/NA
Potassium	554		31.1	20.7	mg/Kg	1	☼	6010C	Total/NA
Selenium	1.1	J	4.1	0.41	mg/Kg	1	☼	6010C	Total/NA
Sodium	56.4	J	145	13.5	mg/Kg	1	☼	6010C	Total/NA
Vanadium	40.3		2.6	0.57	mg/Kg	5	☼	6010C	Total/NA
Zinc	41.4	B	2.1	0.66	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.016	J	0.021	0.0048	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Client Sample ID: FDUP_072922 — Lab Sample ID: 480-200248-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	750	J	920	120	ug/Kg	5	☼	8270D	Total/NA
Anthracene	570	J	920	230	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	2100		920	92	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	2200		920	140	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	2400		920	150	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	1000		920	98	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	1300		920	120	ug/Kg	5	☼	8270D	Total/NA
Chrysene	2300		920	210	ug/Kg	5	☼	8270D	Total/NA
Dibenz(a,h)anthracene	380	J	920	160	ug/Kg	5	☼	8270D	Total/NA
Di-n-butyl phthalate	170	J	920	160	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	4000		920	98	ug/Kg	5	☼	8270D	Total/NA
Fluorene	130	J	920	110	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	1100		920	110	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	1300		920	140	ug/Kg	5	☼	8270D	Total/NA
Pyrene	3300		920	110	ug/Kg	5	☼	8270D	Total/NA
Perfluorohexanoic acid (PFHxA)	0.10	J I	0.22	0.051	ug/Kg	1	☼	537 IDA	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.052	J	0.22	0.043	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorooctanoic acid (PFOA)	0.10	J	0.22	0.064	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorononanoic acid (PFNA)	0.080	J	0.22	0.038	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorodecanoic acid (PFDA)	0.042	J	0.22	0.031	ug/Kg	1	☼	537 IDA	Total/NA
Perfluoroundecanoic acid (PFUnA)	0.045	J	0.22	0.030	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.25	I	0.22	0.12	ug/Kg	1	☼	537 IDA	Total/NA
Aluminum	8240	B	11.5	5.1	mg/Kg	1	☼	6010C	Total/NA
Antimony	2.5	J	17.2	0.46	mg/Kg	1	☼	6010C	Total/NA
Arsenic	10.3		2.3	0.46	mg/Kg	1	☼	6010C	Total/NA
Barium	198	B	0.57	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.52		0.23	0.032	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.25		0.23	0.034	mg/Kg	1	☼	6010C	Total/NA
Calcium	2470		57.4	3.8	mg/Kg	1	☼	6010C	Total/NA
Chromium	13.4		0.57	0.23	mg/Kg	1	☼	6010C	Total/NA
Cobalt	8.5		0.57	0.057	mg/Kg	1	☼	6010C	Total/NA
Copper	43.0		1.1	0.24	mg/Kg	1	☼	6010C	Total/NA
Iron	19000		11.5	4.0	mg/Kg	1	☼	6010C	Total/NA
Lead	100		1.1	0.27	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2230	B	23.0	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	404	B	0.23	0.037	mg/Kg	1	☼	6010C	Total/NA
Nickel	18.8		5.7	0.26	mg/Kg	1	☼	6010C	Total/NA
Potassium	1360		34.4	23.0	mg/Kg	1	☼	6010C	Total/NA
Selenium	1.6	J	4.6	0.46	mg/Kg	1	☼	6010C	Total/NA
Sodium	30.0	J	161	14.9	mg/Kg	1	☼	6010C	Total/NA
Vanadium	16.3		0.57	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	134	B	2.3	0.73	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.18		0.022	0.0050	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB6 (1-2) — Lab Sample ID: 480-200248-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	3000	F1	1900	240	ug/Kg	10	☼	8270D	Total/NA
Anthracene	1700	J	1900	460	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]anthracene	8200		1900	190	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]pyrene	8900	F2	1900	280	ug/Kg	10	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample ID: SB6 (1-2) (Continued)

Lab Sample ID: 480-200248-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	10000	F2	1900	300	ug/Kg	10	☼	8270D	Total/NA
Benzo[g,h,i]perylene	6300	F1	1900	200	ug/Kg	10	☼	8270D	Total/NA
Benzo[k]fluoranthene	4100		1900	240	ug/Kg	10	☼	8270D	Total/NA
Carbazole	310	J	1900	220	ug/Kg	10	☼	8270D	Total/NA
Chrysene	7500		1900	420	ug/Kg	10	☼	8270D	Total/NA
Dibenz(a,h)anthracene	2100	F2	1900	330	ug/Kg	10	☼	8270D	Total/NA
Dibenzofuran	280	J F2	1900	220	ug/Kg	10	☼	8270D	Total/NA
Fluoranthene	13000		1900	200	ug/Kg	10	☼	8270D	Total/NA
Fluorene	570	J F2	1900	220	ug/Kg	10	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	5800	F1 F2	1900	230	ug/Kg	10	☼	8270D	Total/NA
Phenanthrene	5000	F1 F2	1900	280	ug/Kg	10	☼	8270D	Total/NA
Pyrene	12000		1900	220	ug/Kg	10	☼	8270D	Total/NA
Perfluorohexanoic acid (PFHxA)	0.053	J	0.22	0.050	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorooctanoic acid (PFOA)	0.14	J	0.22	0.063	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorobutanesulfonic acid (PFBS)	0.037	J	0.22	0.036	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.50		0.22	0.12	ug/Kg	1	☼	537 IDA	Total/NA
Aluminum	6570	B F1	10.9	4.8	mg/Kg	1	☼	6010C	Total/NA
Antimony	4.9	J F1	16.4	0.44	mg/Kg	1	☼	6010C	Total/NA
Arsenic	17.6		2.2	0.44	mg/Kg	1	☼	6010C	Total/NA
Barium	445	B	0.55	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.70		0.22	0.031	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.74		0.22	0.033	mg/Kg	1	☼	6010C	Total/NA
Calcium	4560	F1	54.5	3.6	mg/Kg	1	☼	6010C	Total/NA
Chromium	13.2		0.55	0.22	mg/Kg	1	☼	6010C	Total/NA
Cobalt	8.3		0.55	0.055	mg/Kg	1	☼	6010C	Total/NA
Copper	79.7	F1 F2	1.1	0.23	mg/Kg	1	☼	6010C	Total/NA
Iron	19400		10.9	3.8	mg/Kg	1	☼	6010C	Total/NA
Lead	2370		1.1	0.26	mg/Kg	1	☼	6010C	Total/NA
Magnesium	1910	B	21.8	1.0	mg/Kg	1	☼	6010C	Total/NA
Manganese	291	B	0.22	0.035	mg/Kg	1	☼	6010C	Total/NA
Nickel	18.4		5.5	0.25	mg/Kg	1	☼	6010C	Total/NA
Potassium	1030	F1	32.7	21.8	mg/Kg	1	☼	6010C	Total/NA
Selenium	2.8	J	4.4	0.44	mg/Kg	1	☼	6010C	Total/NA
Sodium	71.2	J	153	14.2	mg/Kg	1	☼	6010C	Total/NA
Vanadium	22.6		0.55	0.12	mg/Kg	1	☼	6010C	Total/NA
Zinc	333	B	2.2	0.70	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.44	F1	0.023	0.0052	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Client Sample ID: SB6 (0-0.5)
Date Collected: 07/29/22 08:50
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-1
Matrix: Solid
Percent Solids: 88.5

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	*3	7.5	0.75	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
1,1,1-Trichloroethane	ND		7.5	0.54	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
1,1,2,2-Tetrachloroethane	ND	*3	7.5	1.2	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.5	1.7	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
1,1,2-Trichloroethane	ND	*3	7.5	0.97	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
1,1-Dichloroethane	ND		7.5	0.91	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
1,1-Dichloroethene	ND		7.5	0.91	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
1,2,3-Trimethylbenzene	ND	*3	7.5	1.5	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
1,2,4-Trichlorobenzene	ND	*3	7.5	0.45	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
1,2,4-Trimethylbenzene	ND	*3	7.5	1.4	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
1,2-Dibromo-3-Chloropropane	ND	*3	7.5	3.7	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
1,2-Dibromoethane	ND	*3	7.5	0.96	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
1,2-Dichlorobenzene	ND	*3	7.5	0.58	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
1,2-Dichloroethane	ND		7.5	0.37	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
1,2-Dichloropropane	ND		7.5	3.7	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
1,3,5-Trimethylbenzene	ND	*3	7.5	0.48	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
1,3-Dichlorobenzene	ND	*3	7.5	0.38	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
1,4-Dichlorobenzene	ND	*3	7.5	1.0	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
2-Butanone (MEK)	ND		37	2.7	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
2-Hexanone	ND	*3	37	3.7	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
4-Methyl-2-pentanone (MIBK)	ND	*3	37	2.4	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
Acetone	ND		37	6.3	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
Benzene	ND		7.5	0.37	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
Bromodichloromethane	ND		7.5	1.0	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
Bromoform	ND	*3	7.5	3.7	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
Bromomethane	ND		7.5	0.67	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
Carbon disulfide	ND		7.5	3.7	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
Carbon tetrachloride	ND		7.5	0.72	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
Chlorobenzene	ND	*3	7.5	0.99	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
Chloroethane	ND		7.5	1.7	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
Chloroform	ND		7.5	0.46	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
Chloromethane	ND		7.5	0.45	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
cis-1,2-Dichloroethene	ND		7.5	0.96	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
cis-1,3-Dichloropropene	ND		7.5	1.1	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
Cyclohexane	ND		7.5	1.0	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
Dibromochloromethane	ND	*3	7.5	0.96	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
Dichlorodifluoromethane	ND		7.5	0.62	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
Ethylbenzene	ND	*3	7.5	0.51	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
Isopropylbenzene	ND	*3	7.5	1.1	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
m,p-Xylene	ND	*3	15	1.3	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
Methyl acetate	ND		37	4.5	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
Methyl tert-butyl ether	ND		7.5	0.73	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
Methylcyclohexane	ND		7.5	1.1	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
Methylene Chloride	ND		7.5	3.4	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
n-Butylbenzene	ND	*3	7.5	0.65	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
N-Propylbenzene	ND	*3	7.5	0.60	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
o-Xylene	ND	*3	7.5	0.97	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
sec-Butylbenzene	ND	*3	7.5	0.65	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
Styrene	ND	*3	7.5	0.37	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1

Client Sample ID: SB6 (0-0.5)
Date Collected: 07/29/22 08:50
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-1
Matrix: Solid
Percent Solids: 88.5

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND	*3	7.5	0.78	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
Tetrachloroethene	ND	*3	7.5	1.0	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
Toluene	**0.61**	**J *3**	7.5	0.56	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
trans-1,2-Dichloroethene	ND		7.5	0.77	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
trans-1,3-Dichloropropene	ND	*3	7.5	3.3	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
Trichloroethene	ND		7.5	1.6	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
Trichlorofluoromethane	ND		7.5	0.71	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
Vinyl chloride	ND		7.5	0.91	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1
Xylenes, Total	ND		15	1.3	ug/Kg	☼	07/30/22 12:00	08/11/22 15:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*64 - 126*	*07/30/22 12:00*	*08/11/22 15:10*	*1*
4-Bromofluorobenzene (Surr)	*71*	**3 S1-*	*72 - 126*	*07/30/22 12:00*	*08/11/22 15:10*	*1*
Dibromofluoromethane (Surr)	*114*		*60 - 140*	*07/30/22 12:00*	*08/11/22 15:10*	*1*
Toluene-d8 (Surr)	*134*	**3 S1+*	*71 - 125*	*07/30/22 12:00*	*08/11/22 15:10*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		560	310	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
2,4,5-Trichlorophenol	ND		940	260	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
2,4,6-Trichlorophenol	ND		940	190	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
2,4-Dichlorophenol	ND		940	100	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
2,4-Dimethylphenol	ND		940	230	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
2,4-Dinitrophenol	ND		9200	4400	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
2,4-Dinitrotoluene	ND		940	190	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
2,6-Dinitrotoluene	ND		940	110	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
2-Chloronaphthalene	ND		940	160	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
2-Chlorophenol	ND		1800	170	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
2-Methylnaphthalene	ND		940	190	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
2-Methylphenol	ND		940	110	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
2-Nitroaniline	ND		1800	140	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
2-Nitrophenol	ND		940	270	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
3,3'-Dichlorobenzidine	ND		1800	1100	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
3-Nitroaniline	ND		1800	260	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
4,6-Dinitro-2-methylphenol	ND		1800	940	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
4-Bromophenyl phenyl ether	ND		940	130	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
4-Chloro-3-methylphenol	ND		940	230	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
4-Chloroaniline	ND		940	230	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
4-Chlorophenyl phenyl ether	ND		940	120	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
4-Methylphenol	ND		1800	110	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
4-Nitroaniline	ND		1800	490	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
4-Nitrophenol	ND		1800	660	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Acenaphthene	**150**	**J**	940	140	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Acenaphthylene	**870**	**J**	940	120	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Acetophenone	ND		940	130	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Anthracene	**890**	**J**	940	230	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Atrazine	ND		940	330	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Benzaldehyde	ND		940	750	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Benzo[a]anthracene	**2700**		940	94	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Benzo[a]pyrene	**2500**		940	140	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5

Client Sample ID: SB6 (0-0.5)
Date Collected: 07/29/22 08:50
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-1
Matrix: Solid
Percent Solids: 88.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	**3100**		940	150	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Benzo[g,h,i]perylene	**1700**		940	100	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Benzo[k]fluoranthene	**1200**		940	120	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Biphenyl	ND		940	140	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
bis (2-chloroisopropyl) ether	ND		940	190	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Bis(2-chloroethoxy)methane	ND		940	200	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Bis(2-chloroethyl)ether	ND		940	120	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Bis(2-ethylhexyl) phthalate	ND		940	320	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Butyl benzyl phthalate	ND		940	160	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Caprolactam	ND		940	280	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Carbazole	**140**	**J**	940	110	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Chrysene	**2500**		940	210	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Dibenz(a,h)anthracene	**640**	**J**	940	170	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Dibenzofuran	**270**	**J**	940	110	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Diethyl phthalate	ND		940	120	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Dimethyl phthalate	ND		940	110	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Di-n-butyl phthalate	ND		940	160	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Di-n-octyl phthalate	ND		940	110	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Fluoranthene	**4900**		940	100	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Fluorene	**630**	**J**	940	110	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Hexachlorobenzene	ND		940	130	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Hexachlorobutadiene	ND		940	140	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Hexachlorocyclopentadiene	ND		940	130	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Hexachloroethane	ND		940	120	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Indeno[1,2,3-cd]pyrene	**1700**		940	120	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Isophorone	ND		940	200	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Naphthalene	**120**	**J**	940	120	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Nitrobenzene	ND		940	110	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
N-Nitrosodi-n-propylamine	ND		940	160	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
N-Nitrosodiphenylamine	ND		940	770	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Pentachlorophenol	ND		1800	940	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Phenanthrene	**3600**		940	140	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Phenol	ND		940	140	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5
Pyrene	**4400**		940	110	ug/Kg	☼	08/03/22 15:56	08/09/22 19:33	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*104*		*54 - 120*	*08/03/22 15:56*	*08/09/22 19:33*	*5*
2-Fluorobiphenyl (Surr)	*95*		*60 - 120*	*08/03/22 15:56*	*08/09/22 19:33*	*5*
2-Fluorophenol (Surr)	*80*		*52 - 120*	*08/03/22 15:56*	*08/09/22 19:33*	*5*
Nitrobenzene-d5 (Surr)	*76*		*53 - 120*	*08/03/22 15:56*	*08/09/22 19:33*	*5*
Phenol-d5 (Surr)	*85*		*54 - 120*	*08/03/22 15:56*	*08/09/22 19:33*	*5*
p-Terphenyl-d14 (Surr)	*97*		*79 - 130*	*08/03/22 15:56*	*08/09/22 19:33*	*5*

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.56	0.37	ug/Kg	☼	08/05/22 08:30	08/05/22 20:34	1
Perfluoropentanoic acid (PFPeA)	ND		0.22	0.061	ug/Kg	☼	08/05/22 08:30	08/05/22 20:34	1
Perfluorohexanoic acid (PFHxA)	**0.13**	**J I**	0.22	0.051	ug/Kg	☼	08/05/22 08:30	08/05/22 20:34	1
Perfluoroheptanoic acid (PFHpA)	**0.046**	**J**	0.22	0.044	ug/Kg	☼	08/05/22 08:30	08/05/22 20:34	1
Perfluorooctanoic acid (PFOA)	**0.097**	**J**	0.22	0.065	ug/Kg	☼	08/05/22 08:30	08/05/22 20:34	1

Client Sample ID: SB6 (0-0.5)
Date Collected: 07/29/22 08:50
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-1
Matrix: Solid
Percent Solids: 88.5

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	**0.072**	**J**	0.22	0.038	ug/Kg	☼	08/05/22 08:30	08/05/22 20:34	1
Perfluorodecanoic acid (PFDA)	**0.043**	**J**	0.22	0.031	ug/Kg	☼	08/05/22 08:30	08/05/22 20:34	1
Perfluoroundecanoic acid (PFUnA)	**0.039**	**J**	0.22	0.030	ug/Kg	☼	08/05/22 08:30	08/05/22 20:34	1
Perfluorododecanoic acid (PFDoA)	ND		0.22	0.028	ug/Kg	☼	08/05/22 08:30	08/05/22 20:34	1
Perfluorotridecanoic acid (PFTriA)	ND		0.22	0.028	ug/Kg	☼	08/05/22 08:30	08/05/22 20:34	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.22	0.029	ug/Kg	☼	08/05/22 08:30	08/05/22 20:34	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.22	0.037	ug/Kg	☼	08/05/22 08:30	08/05/22 20:34	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.22	0.046	ug/Kg	☼	08/05/22 08:30	08/05/22 20:34	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.22	0.026	ug/Kg	☼	08/05/22 08:30	08/05/22 20:34	1
Perfluorooctanesulfonic acid (PFOS)	**0.21**	**J I**	0.22	0.12	ug/Kg	☼	08/05/22 08:30	08/05/22 20:34	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.22	0.021	ug/Kg	☼	08/05/22 08:30	08/05/22 20:34	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.22	0.038	ug/Kg	☼	08/05/22 08:30	08/05/22 20:34	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.2	0.12	ug/Kg	☼	08/05/22 08:30	08/05/22 20:34	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.2	0.093	ug/Kg	☼	08/05/22 08:30	08/05/22 20:34	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.2	0.064	ug/Kg	☼	08/05/22 08:30	08/05/22 20:34	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.2	0.041	ug/Kg	☼	08/05/22 08:30	08/05/22 20:34	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*84*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:34*	*1*
13C4 PFHpA	*90*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:34*	*1*
13C4 PFOA	*87*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:34*	*1*
13C4 PFOS	*77*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:34*	*1*
13C5 PFNA	*92*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:34*	*1*
13C4 PFBA	*88*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:34*	*1*
13C2 PFHxA	*89*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:34*	*1*
13C2 PFDA	*89*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:34*	*1*
13C2 PFUnA	*92*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:34*	*1*
13C2 PFDoA	*94*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:34*	*1*
13C8 FOSA	*77*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:34*	*1*
13C5 PFPeA	*92*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:34*	*1*
13C2 PFTeDA	*106*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:34*	*1*
d3-NMeFOSAA	*78*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:34*	*1*
d5-NEtFOSAA	*85*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:34*	*1*
M2-6:2 FTS	*87*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:34*	*1*
M2-8:2 FTS	*91*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:34*	*1*
13C3 PFBS	*77*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:34*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**9040**		12.0	5.3	mg/Kg	☼	08/03/22 13:24	08/04/22 23:39	1
Antimony	**3.3**	**J**	18.0	0.48	mg/Kg	☼	08/03/22 13:24	08/04/22 23:39	1
Arsenic	**10.6**		2.4	0.48	mg/Kg	☼	08/03/22 13:24	08/04/22 23:39	1
Barium	**210**		0.60	0.13	mg/Kg	☼	08/03/22 13:24	08/04/22 23:39	1
Beryllium	**0.59**		0.24	0.034	mg/Kg	☼	08/03/22 13:24	08/04/22 23:39	1
Cadmium	**0.40**		0.24	0.036	mg/Kg	☼	08/03/22 13:24	08/04/22 23:39	1

Client Sample ID: SB6 (0-0.5)

Date Collected: 07/29/22 08:50
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-1

Matrix: Solid
Percent Solids: 88.5

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	2590	B	60.1	4.0	mg/Kg	☼	08/03/22 13:24	08/04/22 23:39	1
Chromium	13.6		0.60	0.24	mg/Kg	☼	08/03/22 13:24	08/04/22 23:39	1
Cobalt	8.8		0.60	0.060	mg/Kg	☼	08/03/22 13:24	08/04/22 23:39	1
Copper	44.0		1.2	0.25	mg/Kg	☼	08/03/22 13:24	08/04/22 23:39	1
Iron	20000		12.0	4.2	mg/Kg	☼	08/03/22 13:24	08/04/22 23:39	1
Lead	121		1.2	0.29	mg/Kg	☼	08/03/22 13:24	08/04/22 23:39	1
Magnesium	2370	B	24.0	1.1	mg/Kg	☼	08/03/22 13:24	08/04/22 23:39	1
Manganese	416	B	0.24	0.038	mg/Kg	☼	08/03/22 13:24	08/04/22 23:39	1
Nickel	19.2		6.0	0.28	mg/Kg	☼	08/03/22 13:24	08/04/22 23:39	1
Potassium	1310		36.0	24.0	mg/Kg	☼	08/03/22 13:24	08/04/22 23:39	1
Selenium	0.65	J	4.8	0.48	mg/Kg	☼	08/03/22 13:24	08/04/22 23:39	1
Silver	ND		0.72	0.24	mg/Kg	☼	08/03/22 13:24	08/04/22 23:39	1
Sodium	49.8	J	168	15.6	mg/Kg	☼	08/03/22 13:24	08/04/22 23:39	1
Thallium	ND		7.2	0.36	mg/Kg	☼	08/03/22 13:24	08/04/22 23:39	1
Vanadium	17.3		0.60	0.13	mg/Kg	☼	08/03/22 13:24	08/04/22 23:39	1
Zinc	138		2.4	0.77	mg/Kg	☼	08/03/22 13:24	08/04/22 23:39	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.19		0.022	0.0051	mg/Kg	☼	08/04/22 10:17	08/04/22 13:00	1

Client Sample ID: SB6 (0.5-1)

Date Collected: 07/29/22 09:05
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-2

Matrix: Solid
Percent Solids: 91.8

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	*3	7.0	0.70	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
1,1,1-Trichloroethane	ND		7.0	0.51	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
1,1,2,2-Tetrachloroethane	ND	*3	7.0	1.1	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.0	1.6	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
1,1,2-Trichloroethane	ND	*3	7.0	0.91	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
1,1-Dichloroethane	ND		7.0	0.85	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
1,1-Dichloroethene	ND		7.0	0.85	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
1,2,3-Trimethylbenzene	ND	*3	7.0	1.4	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
1,2,4-Trichlorobenzene	ND	*3	7.0	0.42	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
1,2,4-Trimethylbenzene	ND	*3	7.0	1.3	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
1,2-Dibromo-3-Chloropropane	ND	*3	7.0	3.5	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
1,2-Dibromoethane	ND	*3	7.0	0.89	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
1,2-Dichlorobenzene	ND	*3	7.0	0.55	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
1,2-Dichloroethane	ND		7.0	0.35	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
1,2-Dichloropropane	ND		7.0	3.5	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
1,3,5-Trimethylbenzene	ND	*3	7.0	0.45	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
1,3-Dichlorobenzene	ND	*3	7.0	0.36	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
1,4-Dichlorobenzene	ND	*3	7.0	0.98	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
2-Butanone (MEK)	ND		35	2.6	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
2-Hexanone	ND	*3	35	3.5	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
4-Methyl-2-pentanone (MIBK)	ND	*3	35	2.3	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
Acetone	ND		35	5.9	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
Benzene	ND		7.0	0.34	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1

Client Sample ID: SB6 (0.5-1)
Date Collected: 07/29/22 09:05
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-2
Matrix: Solid
Percent Solids: 91.8

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		7.0	0.93	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
Bromoform	ND	*3	7.0	3.5	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
Bromomethane	ND		7.0	0.63	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
Carbon disulfide	ND		7.0	3.5	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
Carbon tetrachloride	ND		7.0	0.67	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
Chlorobenzene	ND	*3	7.0	0.92	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
Chloroethane	ND		7.0	1.6	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
Chloroform	ND		7.0	0.43	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
Chloromethane	ND		7.0	0.42	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
cis-1,2-Dichloroethene	ND		7.0	0.89	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
cis-1,3-Dichloropropene	ND		7.0	1.0	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
Cyclohexane	ND		7.0	0.98	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
Dibromochloromethane	ND	*3	7.0	0.89	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
Dichlorodifluoromethane	ND		7.0	0.58	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
Ethylbenzene	ND	*3	7.0	0.48	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
Isopropylbenzene	ND	*3	7.0	1.1	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
m,p-Xylene	ND	*3	14	1.2	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
Methyl acetate	ND		35	4.2	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
Methyl tert-butyl ether	ND		7.0	0.68	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
Methylcyclohexane	ND		7.0	1.1	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
Methylene Chloride	ND		7.0	3.2	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
n-Butylbenzene	ND	*3	7.0	0.61	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
N-Propylbenzene	ND	*3	7.0	0.56	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
o-Xylene	ND	*3	7.0	0.91	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
sec-Butylbenzene	ND	*3	7.0	0.61	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
Styrene	ND	*3	7.0	0.35	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
tert-Butylbenzene	ND	*3	7.0	0.72	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
Tetrachloroethene	ND	*3	7.0	0.94	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
Toluene	ND	*3	7.0	0.53	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
trans-1,2-Dichloroethene	ND		7.0	0.72	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
trans-1,3-Dichloropropene	ND	*3	7.0	3.1	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
Trichloroethene	ND		7.0	1.5	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
Trichlorofluoromethane	ND		7.0	0.66	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
Vinyl chloride	ND		7.0	0.85	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1
Xylenes, Total	ND		14	1.2	ug/Kg	☼	07/30/22 12:00	08/11/22 15:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*64 - 126*	*07/30/22 12:00*	*08/11/22 15:34*	*1*
4-Bromofluorobenzene (Surr)	*64*	*3 S1-	*72 - 126*	*07/30/22 12:00*	*08/11/22 15:34*	*1*
Dibromofluoromethane (Surr)	*119*		*60 - 140*	*07/30/22 12:00*	*08/11/22 15:34*	*1*
Toluene-d8 (Surr)	*146*	*3 S1+	*71 - 125*	*07/30/22 12:00*	*08/11/22 15:34*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		1100	600	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
2,4,5-Trichlorophenol	ND		1800	500	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
2,4,6-Trichlorophenol	ND		1800	370	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
2,4-Dichlorophenol	ND		1800	190	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
2,4-Dimethylphenol	ND		1800	440	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
2,4-Dinitrophenol	ND		18000	8500	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10

Client Sample ID: SB6 (0.5-1)
Date Collected: 07/29/22 09:05
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-2
Matrix: Solid
Percent Solids: 91.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		1800	380	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
2,6-Dinitrotoluene	ND		1800	220	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
2-Chloronaphthalene	ND		1800	300	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
2-Chlorophenol	ND		3600	340	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
2-Methylnaphthalene	**480**	**J**	1800	370	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
2-Methylphenol	ND		1800	220	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
2-Nitroaniline	ND		3600	270	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
2-Nitrophenol	ND		1800	520	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
3,3'-Dichlorobenzidine	ND		3600	2200	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
3-Nitroaniline	ND		3600	510	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
4,6-Dinitro-2-methylphenol	ND		3600	1800	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
4-Bromophenyl phenyl ether	ND		1800	260	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
4-Chloro-3-methylphenol	ND		1800	450	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
4-Chloroaniline	ND		1800	450	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
4-Chlorophenyl phenyl ether	ND		1800	230	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
4-Methylphenol	ND		3600	220	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
4-Nitroaniline	ND		3600	960	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
4-Nitrophenol	ND		3600	1300	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Acenaphthene	ND		1800	270	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Acenaphthylene	**1400**	**J**	1800	240	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Acetophenone	ND		1800	250	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Anthracene	**17000**		1800	450	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Atrazine	ND		1800	640	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Benzaldehyde	ND		1800	1500	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Benzo[a]anthracene	**6500**		1800	180	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Benzo[a]pyrene	**5000**		1800	270	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Benzo[b]fluoranthene	**6100**		1800	290	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Benzo[g,h,i]perylene	**3500**		1800	190	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Benzo[k]fluoranthene	**2400**		1800	240	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Biphenyl	ND		1800	270	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
bis (2-chloroisopropyl) ether	ND		1800	370	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Bis(2-chloroethoxy)methane	ND		1800	390	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Bis(2-chloroethyl)ether	ND		1800	240	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Bis(2-ethylhexyl) phthalate	ND		1800	630	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Butyl benzyl phthalate	ND		1800	300	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Caprolactam	ND		1800	550	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Carbazole	**250**	**J**	1800	220	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Chrysene	**6500**		1800	410	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Dibenz(a,h)anthracene	**900**	**J**	1800	320	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Dibenzofuran	ND		1800	220	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Diethyl phthalate	ND		1800	240	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Dimethyl phthalate	ND		1800	220	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Di-n-butyl phthalate	ND		1800	310	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Di-n-octyl phthalate	ND		1800	220	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Fluoranthene	**11000**		1800	190	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Fluorene	**1200**	**J**	1800	220	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Hexachlorobenzene	ND		1800	250	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Hexachlorobutadiene	ND		1800	270	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Hexachlorocyclopentadiene	ND		1800	250	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10

Client Sample ID: SB6 (0.5-1)
Date Collected: 07/29/22 09:05
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-2
Matrix: Solid
Percent Solids: 91.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	ND		1800	240	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Indeno[1,2,3-cd]pyrene	**3200**		1800	230	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Isophorone	ND		1800	390	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Naphthalene	**290**	**J**	1800	240	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Nitrobenzene	ND		1800	210	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
N-Nitrosodi-n-propylamine	ND		1800	310	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
N-Nitrosodiphenylamine	ND		1800	1500	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Pentachlorophenol	ND		3600	1800	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Phenanthrene	**8200**		1800	270	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Phenol	ND		1800	280	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10
Pyrene	**14000**		1800	220	ug/Kg	☼	08/03/22 15:56	08/09/22 19:58	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*85*		*54 - 120*	*08/03/22 15:56*	*08/09/22 19:58*	*10*
2-Fluorobiphenyl (Surr)	*75*		*60 - 120*	*08/03/22 15:56*	*08/09/22 19:58*	*10*
2-Fluorophenol (Surr)	*54*		*52 - 120*	*08/03/22 15:56*	*08/09/22 19:58*	*10*
Nitrobenzene-d5 (Surr)	*57*		*53 - 120*	*08/03/22 15:56*	*08/09/22 19:58*	*10*
Phenol-d5 (Surr)	*55*		*54 - 120*	*08/03/22 15:56*	*08/09/22 19:58*	*10*
p-Terphenyl-d14 (Surr)	*73*	*S1-*	*79 - 130*	*08/03/22 15:56*	*08/09/22 19:58*	*10*

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.54	0.36	ug/Kg	☼	08/05/22 08:30	08/05/22 20:42	1
Perfluoropentanoic acid (PFPeA)	ND		0.22	0.060	ug/Kg	☼	08/05/22 08:30	08/05/22 20:42	1
Perfluorohexanoic acid (PFHxA)	**0.066**	**J**	0.22	0.050	ug/Kg	☼	08/05/22 08:30	08/05/22 20:42	1
Perfluoroheptanoic acid (PFHpA)	**0.045**	**J**	0.22	0.042	ug/Kg	☼	08/05/22 08:30	08/05/22 20:42	1
Perfluorooctanoic acid (PFOA)	**0.13**	**J**	0.22	0.063	ug/Kg	☼	08/05/22 08:30	08/05/22 20:42	1
Perfluorononanoic acid (PFNA)	**0.050**	**J**	0.22	0.037	ug/Kg	☼	08/05/22 08:30	08/05/22 20:42	1
Perfluorodecanoic acid (PFDA)	ND		0.22	0.030	ug/Kg	☼	08/05/22 08:30	08/05/22 20:42	1
Perfluoroundecanoic acid (PFUnA)	ND		0.22	0.029	ug/Kg	☼	08/05/22 08:30	08/05/22 20:42	1
Perfluorododecanoic acid (PFDoA)	ND		0.22	0.027	ug/Kg	☼	08/05/22 08:30	08/05/22 20:42	1
Perfluorotridecanoic acid (PFTriA)	ND		0.22	0.027	ug/Kg	☼	08/05/22 08:30	08/05/22 20:42	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.22	0.028	ug/Kg	☼	08/05/22 08:30	08/05/22 20:42	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.22	0.036	ug/Kg	☼	08/05/22 08:30	08/05/22 20:42	1
Perfluorohexanesulfonic acid (PFHxS)	**0.10**	**J I**	0.22	0.044	ug/Kg	☼	08/05/22 08:30	08/05/22 20:42	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.22	0.025	ug/Kg	☼	08/05/22 08:30	08/05/22 20:42	1
Perfluorooctanesulfonic acid (PFOS)	**0.41**		0.22	0.12	ug/Kg	☼	08/05/22 08:30	08/05/22 20:42	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.22	0.021	ug/Kg	☼	08/05/22 08:30	08/05/22 20:42	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.22	0.037	ug/Kg	☼	08/05/22 08:30	08/05/22 20:42	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.2	0.12	ug/Kg	☼	08/05/22 08:30	08/05/22 20:42	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.2	0.090	ug/Kg	☼	08/05/22 08:30	08/05/22 20:42	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.2	0.062	ug/Kg	☼	08/05/22 08:30	08/05/22 20:42	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.2	0.040	ug/Kg	☼	08/05/22 08:30	08/05/22 20:42	1

Client Sample ID: SB6 (0.5-1)

Date Collected: 07/29/22 09:05
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-2

Matrix: Solid
Percent Solids: 91.8

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	69		50 - 150	08/05/22 08:30	08/05/22 20:42	1
13C4 PFHpA	81		50 - 150	08/05/22 08:30	08/05/22 20:42	1
13C4 PFOA	86		50 - 150	08/05/22 08:30	08/05/22 20:42	1
13C4 PFOS	68		50 - 150	08/05/22 08:30	08/05/22 20:42	1
13C5 PFNA	85		50 - 150	08/05/22 08:30	08/05/22 20:42	1
13C4 PFBA	80		50 - 150	08/05/22 08:30	08/05/22 20:42	1
13C2 PFHxA	80		50 - 150	08/05/22 08:30	08/05/22 20:42	1
13C2 PFDA	86		50 - 150	08/05/22 08:30	08/05/22 20:42	1
13C2 PFUnA	90		50 - 150	08/05/22 08:30	08/05/22 20:42	1
13C2 PFDoA	93		50 - 150	08/05/22 08:30	08/05/22 20:42	1
13C8 FOSA	69		50 - 150	08/05/22 08:30	08/05/22 20:42	1
13C5 PFPeA	81		50 - 150	08/05/22 08:30	08/05/22 20:42	1
13C2 PFTeDA	99		50 - 150	08/05/22 08:30	08/05/22 20:42	1
d3-NMeFOSAA	75		50 - 150	08/05/22 08:30	08/05/22 20:42	1
d5-NEtFOSAA	84		50 - 150	08/05/22 08:30	08/05/22 20:42	1
M2-6:2 FTS	73		50 - 150	08/05/22 08:30	08/05/22 20:42	1
M2-8:2 FTS	83		50 - 150	08/05/22 08:30	08/05/22 20:42	1
13C3 PFBS	66		50 - 150	08/05/22 08:30	08/05/22 20:42	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	7650		11.4	5.0	mg/Kg	☼	08/03/22 13:24	08/04/22 23:43	1
Antimony	5.4	J	17.2	0.46	mg/Kg	☼	08/03/22 13:24	08/04/22 23:43	1
Arsenic	18.3		2.3	0.46	mg/Kg	☼	08/03/22 13:24	08/04/22 23:43	1
Barium	426		0.57	0.13	mg/Kg	☼	08/03/22 13:24	08/04/22 23:43	1
Beryllium	0.74		0.23	0.032	mg/Kg	☼	08/03/22 13:24	08/04/22 23:43	1
Cadmium	0.74		0.23	0.034	mg/Kg	☼	08/03/22 13:24	08/04/22 23:43	1
Calcium	4930	B	57.2	3.8	mg/Kg	☼	08/03/22 13:24	08/04/22 23:43	1
Chromium	15.5		0.57	0.23	mg/Kg	☼	08/03/22 13:24	08/04/22 23:43	1
Cobalt	9.0		0.57	0.057	mg/Kg	☼	08/03/22 13:24	08/04/22 23:43	1
Copper	93.8		1.1	0.24	mg/Kg	☼	08/03/22 13:24	08/04/22 23:43	1
Iron	21100		11.4	4.0	mg/Kg	☼	08/03/22 13:24	08/04/22 23:43	1
Lead	273		1.1	0.27	mg/Kg	☼	08/03/22 13:24	08/04/22 23:43	1
Magnesium	2300	B	22.9	1.1	mg/Kg	☼	08/03/22 13:24	08/04/22 23:43	1
Manganese	344	B	0.23	0.037	mg/Kg	☼	08/03/22 13:24	08/04/22 23:43	1
Nickel	21.1		5.7	0.26	mg/Kg	☼	08/03/22 13:24	08/04/22 23:43	1
Potassium	1080		34.3	22.9	mg/Kg	☼	08/03/22 13:24	08/04/22 23:43	1
Selenium	2.1	J	4.6	0.46	mg/Kg	☼	08/03/22 13:24	08/04/22 23:43	1
Silver	ND		0.69	0.23	mg/Kg	☼	08/03/22 13:24	08/04/22 23:43	1
Sodium	92.5	J	160	14.9	mg/Kg	☼	08/03/22 13:24	08/04/22 23:43	1
Thallium	ND		6.9	0.34	mg/Kg	☼	08/03/22 13:24	08/04/22 23:43	1
Vanadium	22.3		0.57	0.13	mg/Kg	☼	08/03/22 13:24	08/04/22 23:43	1
Zinc	281		2.3	0.73	mg/Kg	☼	08/03/22 13:24	08/04/22 23:43	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.32		0.022	0.0051	mg/Kg	☼	08/04/22 10:17	08/04/22 13:04	1

Client Sample ID: SB6 (13-15)
Date Collected: 07/29/22 09:30
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-3
Matrix: Solid
Percent Solids: 74.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.1	0.51	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
1,1,1-Trichloroethane	ND		5.1	0.37	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
1,1,2,2-Tetrachloroethane	ND		5.1	0.83	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.1	1.2	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
1,1,2-Trichloroethane	ND		5.1	0.66	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
1,1-Dichloroethane	ND		5.1	0.62	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
1,1-Dichloroethene	ND		5.1	0.63	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
1,2,3-Trimethylbenzene	ND		5.1	1.0	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
1,2,4-Trichlorobenzene	ND		5.1	0.31	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
1,2,4-Trimethylbenzene	ND		5.1	0.98	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
1,2-Dibromo-3-Chloropropane	ND		5.1	2.6	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
1,2-Dibromoethane	ND		5.1	0.66	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
1,2-Dichlorobenzene	ND		5.1	0.40	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
1,2-Dichloroethane	ND		5.1	0.26	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
1,2-Dichloropropane	ND		5.1	2.6	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
1,3,5-Trimethylbenzene	ND		5.1	0.33	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
1,3-Dichlorobenzene	ND		5.1	0.26	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
1,4-Dichlorobenzene	ND		5.1	0.72	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
2-Butanone (MEK)	**20**	**J**	26	1.9	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
2-Hexanone	ND		26	2.6	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
4-Methyl-2-pentanone (MIBK)	ND		26	1.7	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
Acetone	**94**		26	4.3	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
Benzene	ND		5.1	0.25	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
Bromodichloromethane	ND		5.1	0.68	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
Bromoform	ND		5.1	2.6	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
Bromomethane	ND		5.1	0.46	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
Carbon disulfide	ND		5.1	2.6	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
Carbon tetrachloride	ND		5.1	0.49	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
Chlorobenzene	ND		5.1	0.67	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
Chloroethane	ND		5.1	1.2	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
Chloroform	ND		5.1	0.32	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
Chloromethane	ND		5.1	0.31	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
cis-1,2-Dichloroethene	ND		5.1	0.65	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
cis-1,3-Dichloropropene	ND		5.1	0.74	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
Cyclohexane	ND		5.1	0.72	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
Dibromochloromethane	ND		5.1	0.65	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
Dichlorodifluoromethane	ND		5.1	0.42	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
Ethylbenzene	ND		5.1	0.35	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
Isopropylbenzene	ND		5.1	0.77	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
m,p-Xylene	ND		10	0.86	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
Methyl acetate	**3.5**	**J**	26	3.1	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
Methyl tert-butyl ether	ND		5.1	0.50	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
Methylcyclohexane	ND		5.1	0.78	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
Methylene Chloride	ND		5.1	2.4	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
n-Butylbenzene	ND		5.1	0.44	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
N-Propylbenzene	ND		5.1	0.41	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
o-Xylene	ND		5.1	0.67	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
sec-Butylbenzene	ND		5.1	0.44	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
Styrene	ND		5.1	0.26	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1

Client Sample ID: SB6 (13-15)
Date Collected: 07/29/22 09:30
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-3
Matrix: Solid
Percent Solids: 74.4

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		5.1	0.53	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
Tetrachloroethene	ND		5.1	0.69	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
Toluene	ND		5.1	0.39	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
trans-1,2-Dichloroethene	ND		5.1	0.53	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
trans-1,3-Dichloropropene	ND		5.1	2.2	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
Trichloroethene	ND		5.1	1.1	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
Trichlorofluoromethane	ND		5.1	0.48	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
Vinyl chloride	ND		5.1	0.62	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1
Xylenes, Total	ND		10	0.86	ug/Kg	☼	07/30/22 12:00	08/10/22 16:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*64 - 126*	*07/30/22 12:00*	*08/10/22 16:29*	*1*
4-Bromofluorobenzene (Surr)	*98*		*72 - 126*	*07/30/22 12:00*	*08/10/22 16:29*	*1*
Dibromofluoromethane (Surr)	*102*		*60 - 140*	*07/30/22 12:00*	*08/10/22 16:29*	*1*
Toluene-d8 (Surr)	*100*		*71 - 125*	*07/30/22 12:00*	*08/10/22 16:29*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		130	72	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
2,4,5-Trichlorophenol	ND		220	60	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
2,4,6-Trichlorophenol	ND		220	45	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
2,4-Dichlorophenol	ND		220	24	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
2,4-Dimethylphenol	ND		220	54	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
2,4-Dinitrophenol	ND		2200	1000	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
2,4-Dinitrotoluene	ND		220	46	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
2,6-Dinitrotoluene	ND		220	26	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
2-Chloronaphthalene	ND		220	37	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
2-Chlorophenol	ND		430	41	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
2-Methylnaphthalene	ND		220	45	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
2-Methylphenol	ND		220	26	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
2-Nitroaniline	ND		430	33	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
2-Nitrophenol	ND		220	63	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
3,3'-Dichlorobenzidine	ND		430	260	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
3-Nitroaniline	ND		430	62	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
4,6-Dinitro-2-methylphenol	ND		430	220	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
4-Bromophenyl phenyl ether	ND		220	31	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
4-Chloro-3-methylphenol	ND		220	55	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
4-Chloroaniline	ND		220	55	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
4-Chlorophenyl phenyl ether	ND		220	28	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
4-Methylphenol	ND		430	26	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
4-Nitroaniline	ND		430	120	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
4-Nitrophenol	ND		430	160	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Acenaphthene	**65**	**J**	220	33	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Acenaphthylene	ND		220	29	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Acetophenone	ND		220	30	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Anthracene	ND		220	55	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Atrazine	ND		220	77	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Benzaldehyde	ND		220	180	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Benzo[a]anthracene	**89**	**J**	220	22	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Benzo[a]pyrene	**98**	**J**	220	33	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Client Sample ID: SB6 (13-15)
Date Collected: 07/29/22 09:30
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-3
Matrix: Solid
Percent Solids: 74.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	**60**	**J**	220	35	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Benzo[g,h,i]perylene	**50**	**J**	220	24	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Benzo[k]fluoranthene	ND		220	29	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Biphenyl	ND		220	33	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
bis (2-chloroisopropyl) ether	ND		220	45	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Bis(2-chloroethoxy)methane	ND		220	47	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Bis(2-chloroethyl)ether	ND		220	29	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Bis(2-ethylhexyl) phthalate	ND		220	76	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Butyl benzyl phthalate	ND		220	37	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Caprolactam	ND		220	67	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Carbazole	ND		220	26	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Chrysene	**92**	**J**	220	50	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Dibenz(a,h)anthracene	ND		220	39	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Dibenzofuran	ND		220	26	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Diethyl phthalate	ND		220	29	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Dimethyl phthalate	ND		220	26	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Di-n-butyl phthalate	ND		220	38	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Di-n-octyl phthalate	ND		220	26	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Fluoranthene	**130**	**J**	220	24	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Fluorene	**49**	**J**	220	26	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Hexachlorobenzene	ND		220	30	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Hexachlorobutadiene	ND		220	33	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Hexachlorocyclopentadiene	ND		220	30	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Hexachloroethane	ND		220	29	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Indeno[1,2,3-cd]pyrene	**45**	**J**	220	28	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Isophorone	ND		220	47	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Naphthalene	ND		220	29	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Nitrobenzene	ND		220	25	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
N-Nitrosodi-n-propylamine	ND		220	38	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
N-Nitrosodiphenylamine	ND		220	180	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Pentachlorophenol	ND		430	220	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Phenanthrene	**160**	**J**	220	33	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Phenol	ND		220	34	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1
Pyrene	**210**	**J**	220	26	ug/Kg	☼	08/03/22 15:56	08/09/22 20:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*103*		*54 - 120*	*08/03/22 15:56*	*08/09/22 20:22*	*1*
2-Fluorobiphenyl (Surr)	*90*		*60 - 120*	*08/03/22 15:56*	*08/09/22 20:22*	*1*
2-Fluorophenol (Surr)	*68*		*52 - 120*	*08/03/22 15:56*	*08/09/22 20:22*	*1*
Nitrobenzene-d5 (Surr)	*69*		*53 - 120*	*08/03/22 15:56*	*08/09/22 20:22*	*1*
Phenol-d5 (Surr)	*68*		*54 - 120*	*08/03/22 15:56*	*08/09/22 20:22*	*1*
p-Terphenyl-d14 (Surr)	*95*		*79 - 130*	*08/03/22 15:56*	*08/09/22 20:22*	*1*

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.67	0.44	ug/Kg	☼	08/05/22 08:30	08/05/22 20:50	1
Perfluoropentanoic acid (PFPeA)	ND		0.27	0.074	ug/Kg	☼	08/05/22 08:30	08/05/22 20:50	1
Perfluorohexanoic acid (PFHxA)	ND		0.27	0.062	ug/Kg	☼	08/05/22 08:30	08/05/22 20:50	1
Perfluoroheptanoic acid (PFHpA)	ND		0.27	0.052	ug/Kg	☼	08/05/22 08:30	08/05/22 20:50	1
Perfluorooctanoic acid (PFOA)	ND		0.27	0.078	ug/Kg	☼	08/05/22 08:30	08/05/22 20:50	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Client Sample ID: SB6 (13-15)

Date Collected: 07/29/22 09:30
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-3

Matrix: Solid
Percent Solids: 74.4

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	ND		0.27	0.046	ug/Kg	☼	08/05/22 08:30	08/05/22 20:50	1
Perfluorodecanoic acid (PFDA)	ND		0.27	0.038	ug/Kg	☼	08/05/22 08:30	08/05/22 20:50	1
Perfluoroundecanoic acid (PFUnA)	ND		0.27	0.036	ug/Kg	☼	08/05/22 08:30	08/05/22 20:50	1
Perfluorododecanoic acid (PFDoA)	ND		0.27	0.034	ug/Kg	☼	08/05/22 08:30	08/05/22 20:50	1
Perfluorotridecanoic acid (PFTriA)	ND		0.27	0.034	ug/Kg	☼	08/05/22 08:30	08/05/22 20:50	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.27	0.035	ug/Kg	☼	08/05/22 08:30	08/05/22 20:50	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.27	0.044	ug/Kg	☼	08/05/22 08:30	08/05/22 20:50	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.27	0.055	ug/Kg	☼	08/05/22 08:30	08/05/22 20:50	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.27	0.031	ug/Kg	☼	08/05/22 08:30	08/05/22 20:50	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.27	0.15	ug/Kg	☼	08/05/22 08:30	08/05/22 20:50	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.27	0.026	ug/Kg	☼	08/05/22 08:30	08/05/22 20:50	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.27	0.046	ug/Kg	☼	08/05/22 08:30	08/05/22 20:50	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.7	0.15	ug/Kg	☼	08/05/22 08:30	08/05/22 20:50	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.7	0.11	ug/Kg	☼	08/05/22 08:30	08/05/22 20:50	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.7	0.077	ug/Kg	☼	08/05/22 08:30	08/05/22 20:50	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.7	0.050	ug/Kg	☼	08/05/22 08:30	08/05/22 20:50	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*74*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:50*	*1*
13C4 PFHpA	*78*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:50*	*1*
13C4 PFOA	*77*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:50*	*1*
13C4 PFOS	*66*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:50*	*1*
13C5 PFNA	*72*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:50*	*1*
13C4 PFBA	*77*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:50*	*1*
13C2 PFHxA	*80*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:50*	*1*
13C2 PFDA	*72*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:50*	*1*
13C2 PFUnA	*78*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:50*	*1*
13C2 PFDoA	*70*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:50*	*1*
13C8 FOSA	*66*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:50*	*1*
13C5 PFPeA	*79*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:50*	*1*
13C2 PFTeDA	*58*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:50*	*1*
d3-NMeFOSAA	*63*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:50*	*1*
d5-NEtFOSAA	*62*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:50*	*1*
M2-6:2 FTS	*67*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:50*	*1*
M2-8:2 FTS	*70*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:50*	*1*
13C3 PFBS	*75*		*50 - 150*	*08/05/22 08:30*	*08/05/22 20:50*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**15500**		13.0	5.7	mg/Kg	☼	08/03/22 13:24	08/04/22 23:47	1
Antimony	**1.1**	**J**	19.5	0.52	mg/Kg	☼	08/03/22 13:24	08/04/22 23:47	1
Arsenic	**7.7**		2.6	0.52	mg/Kg	☼	08/03/22 13:24	08/04/22 23:47	1
Barium	**147**		0.65	0.14	mg/Kg	☼	08/03/22 13:24	08/04/22 23:47	1
Beryllium	**0.78**		0.26	0.036	mg/Kg	☼	08/03/22 13:24	08/04/22 23:47	1
Cadmium	**0.19**	**J**	0.26	0.039	mg/Kg	☼	08/03/22 13:24	08/04/22 23:47	1
Calcium	**1490**	**B**	65.1	4.3	mg/Kg	☼	08/03/22 13:24	08/04/22 23:47	1
Chromium	**18.4**		0.65	0.26	mg/Kg	☼	08/03/22 13:24	08/04/22 23:47	1

Client Sample ID: SB6 (13-15)

Date Collected: 07/29/22 09:30
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-3

Matrix: Solid
Percent Solids: 74.4

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	13.7		0.65	0.065	mg/Kg	☼	08/03/22 13:24	08/04/22 23:47	1
Copper	17.2		1.3	0.27	mg/Kg	☼	08/03/22 13:24	08/04/22 23:47	1
Iron	24300		13.0	4.6	mg/Kg	☼	08/03/22 13:24	08/04/22 23:47	1
Lead	18.2		1.3	0.31	mg/Kg	☼	08/03/22 13:24	08/04/22 23:47	1
Magnesium	3850	B	26.0	1.2	mg/Kg	☼	08/03/22 13:24	08/04/22 23:47	1
Manganese	566	B	0.26	0.042	mg/Kg	☼	08/03/22 13:24	08/04/22 23:47	1
Nickel	30.0		6.5	0.30	mg/Kg	☼	08/03/22 13:24	08/04/22 23:47	1
Potassium	2120		39.0	26.0	mg/Kg	☼	08/03/22 13:24	08/04/22 23:47	1
Selenium	ND		5.2	0.52	mg/Kg	☼	08/03/22 13:24	08/04/22 23:47	1
Silver	ND		0.78	0.26	mg/Kg	☼	08/03/22 13:24	08/04/22 23:47	1
Sodium	82.8	J	182	16.9	mg/Kg	☼	08/03/22 13:24	08/04/22 23:47	1
Thallium	ND		7.8	0.39	mg/Kg	☼	08/03/22 13:24	08/04/22 23:47	1
Vanadium	22.0		0.65	0.14	mg/Kg	☼	08/03/22 13:24	08/04/22 23:47	1
Zinc	76.5		2.6	0.83	mg/Kg	☼	08/03/22 13:24	08/04/22 23:47	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.035		0.026	0.0060	mg/Kg	☼	08/04/22 10:17	08/04/22 13:06	1

Client Sample ID: FDUP2_072922

Date Collected: 07/29/22 13:50
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-6

Matrix: Solid
Percent Solids: 96.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.5	0.45	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
1,1,1-Trichloroethane	ND		4.5	0.33	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
1,1,2,2-Tetrachloroethane	ND		4.5	0.73	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.5	1.0	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
1,1,2-Trichloroethane	ND		4.5	0.58	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
1,1-Dichloroethane	ND		4.5	0.55	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
1,1-Dichloroethene	ND		4.5	0.55	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
1,2,3-Trimethylbenzene	ND		4.5	0.92	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
1,2,4-Trichlorobenzene	ND		4.5	0.27	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
1,2,4-Trimethylbenzene	ND		4.5	0.86	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
1,2-Dibromo-3-Chloropropane	ND		4.5	2.2	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
1,2-Dibromoethane	ND		4.5	0.58	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
1,2-Dichlorobenzene	ND		4.5	0.35	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
1,2-Dichloroethane	ND		4.5	0.23	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
1,2-Dichloropropane	ND		4.5	2.2	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
1,3,5-Trimethylbenzene	ND		4.5	0.29	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
1,3-Dichlorobenzene	ND		4.5	0.23	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
1,4-Dichlorobenzene	ND		4.5	0.63	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
2-Butanone (MEK)	ND		22	1.6	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
2-Hexanone	ND		22	2.2	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
4-Methyl-2-pentanone (MIBK)	ND		22	1.5	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
Acetone	9.0	J	22	3.8	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
Benzene	ND		4.5	0.22	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
Bromodichloromethane	ND		4.5	0.60	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
Bromoform	ND		4.5	2.2	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1

Client Sample ID: FDUP2_072922
Date Collected: 07/29/22 13:50
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-6
Matrix: Solid
Percent Solids: 96.4

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		4.5	0.40	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
Carbon disulfide	ND		4.5	2.2	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
Carbon tetrachloride	ND		4.5	0.43	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
Chlorobenzene	ND		4.5	0.59	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
Chloroethane	ND		4.5	1.0	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
Chloroform	ND		4.5	0.28	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
Chloromethane	ND		4.5	0.27	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
cis-1,2-Dichloroethene	ND		4.5	0.57	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
cis-1,3-Dichloropropene	ND		4.5	0.65	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
Cyclohexane	ND		4.5	0.63	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
Dibromochloromethane	ND		4.5	0.57	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
Dichlorodifluoromethane	ND		4.5	0.37	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
Ethylbenzene	ND		4.5	0.31	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
Isopropylbenzene	ND		4.5	0.68	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
m,p-Xylene	ND		9.0	0.75	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
Methyl acetate	ND		22	2.7	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
Methyl tert-butyl ether	ND		4.5	0.44	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
Methylcyclohexane	ND		4.5	0.68	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
Methylene Chloride	**2.1**	**J**	4.5	2.1	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
n-Butylbenzene	ND		4.5	0.39	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
N-Propylbenzene	ND		4.5	0.36	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
o-Xylene	ND		4.5	0.59	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
sec-Butylbenzene	ND		4.5	0.39	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
Styrene	ND		4.5	0.22	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
tert-Butylbenzene	ND		4.5	0.47	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
Tetrachloroethene	ND		4.5	0.60	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
Toluene	ND		4.5	0.34	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
trans-1,2-Dichloroethene	ND		4.5	0.46	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
trans-1,3-Dichloropropene	ND		4.5	2.0	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
Trichloroethene	ND		4.5	0.99	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
Trichlorofluoromethane	ND		4.5	0.42	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
Vinyl chloride	ND		4.5	0.55	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1
Xylenes, Total	ND		9.0	0.75	ug/Kg	☼	07/30/22 12:00	08/11/22 03:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*64 - 126*	*07/30/22 12:00*	*08/11/22 03:11*	*1*
4-Bromofluorobenzene (Surr)	*97*		*72 - 126*	*07/30/22 12:00*	*08/11/22 03:11*	*1*
Dibromofluoromethane (Surr)	*102*		*60 - 140*	*07/30/22 12:00*	*08/11/22 03:11*	*1*
Toluene-d8 (Surr)	*101*		*71 - 125*	*07/30/22 12:00*	*08/11/22 03:11*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		170	47	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
2,4,6-Trichlorophenol	ND		170	35	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
2,4-Dichlorophenol	ND		170	18	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
2,4-Dimethylphenol	ND		170	42	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
2,4-Dinitrophenol	ND		1700	800	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
2,4-Dinitrotoluene	ND		170	36	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
2,6-Dinitrotoluene	ND		170	21	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
2-Chloronaphthalene	ND		170	29	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Client Sample ID: FDUP2_072922
Date Collected: 07/29/22 13:50
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-6
Matrix: Solid
Percent Solids: 96.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	ND		340	32	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
2-Methylnaphthalene	ND		170	35	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
2-Methylphenol	ND		170	21	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
2-Nitroaniline	ND		340	26	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
2-Nitrophenol	ND		170	49	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
3,3'-Dichlorobenzidine	ND		340	210	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
3-Nitroaniline	ND		340	48	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
4,6-Dinitro-2-methylphenol	ND		340	170	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
4-Bromophenyl phenyl ether	ND		170	25	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
4-Chloro-3-methylphenol	ND		170	43	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
4-Chloroaniline	ND		170	43	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
4-Chlorophenyl phenyl ether	ND		170	22	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
4-Methylphenol	ND		340	21	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
4-Nitroaniline	ND		340	91	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
4-Nitrophenol	ND		340	120	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Acenaphthene	ND		170	26	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Acenaphthylene	ND		170	23	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Acetophenone	ND		170	24	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Anthracene	ND		170	43	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Atrazine	ND		170	60	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Benzaldehyde	ND		170	140	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Benzo[a]anthracene	ND		170	17	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Benzo[a]pyrene	ND		170	26	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Benzo[b]fluoranthene	ND		170	28	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Benzo[k]fluoranthene	ND		170	23	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Biphenyl	ND		170	26	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
bis (2-chloroisopropyl) ether	ND		170	35	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Bis(2-chloroethoxy)methane	ND		170	37	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Bis(2-chloroethyl)ether	ND		170	23	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Bis(2-ethylhexyl) phthalate	ND		170	59	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Butyl benzyl phthalate	ND		170	29	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Caprolactam	ND		170	52	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Carbazole	ND		170	21	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Chrysene	ND		170	39	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Dibenz(a,h)anthracene	ND		170	31	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Dibenzofuran	ND		170	21	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Diethyl phthalate	ND		170	23	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Dimethyl phthalate	ND		170	21	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Di-n-butyl phthalate	ND		170	30	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Di-n-octyl phthalate	ND		170	21	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Fluoranthene	ND		170	18	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Fluorene	ND		170	21	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Hexachlorobenzene	ND		170	24	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Hexachlorobutadiene	ND		170	26	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Hexachlorocyclopentadiene	ND		170	24	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Hexachloroethane	ND		170	23	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Indeno[1,2,3-cd]pyrene	ND		170	22	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Isophorone	ND		170	37	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1

Client Sample ID: FDUP2_072922

Date Collected: 07/29/22 13:50
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-6

Matrix: Solid
Percent Solids: 96.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		170	23	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Nitrobenzene	ND		170	19	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
N-Nitrosodi-n-propylamine	ND		170	30	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
N-Nitrosodiphenylamine	ND		170	140	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Pentachlorophenol	ND		340	170	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Phenanthrene	ND		170	26	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Phenol	ND		170	27	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1
Pyrene	ND		170	21	ug/Kg	☼	08/03/22 15:56	08/09/22 20:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*90*		*54 - 120*	*08/03/22 15:56*	*08/09/22 20:46*	*1*
2-Fluorobiphenyl (Surr)	*79*		*60 - 120*	*08/03/22 15:56*	*08/09/22 20:46*	*1*
2-Fluorophenol (Surr)	*70*		*52 - 120*	*08/03/22 15:56*	*08/09/22 20:46*	*1*
Nitrobenzene-d5 (Surr)	*63*		*53 - 120*	*08/03/22 15:56*	*08/09/22 20:46*	*1*
Phenol-d5 (Surr)	*71*		*54 - 120*	*08/03/22 15:56*	*08/09/22 20:46*	*1*
p-Terphenyl-d14 (Surr)	*88*		*79 - 130*	*08/03/22 15:56*	*08/09/22 20:46*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**9360**		9.9	4.3	mg/Kg	☼	08/03/22 13:24	08/05/22 00:02	1
Antimony	**1.0**	**J**	14.8	0.39	mg/Kg	☼	08/03/22 13:24	08/05/22 00:02	1
Arsenic	**5.9**		2.0	0.39	mg/Kg	☼	08/03/22 13:24	08/05/22 00:02	1
Barium	**49.7**		0.49	0.11	mg/Kg	☼	08/03/22 13:24	08/05/22 00:02	1
Beryllium	**0.41**		0.20	0.028	mg/Kg	☼	08/03/22 13:24	08/05/22 00:02	1
Cadmium	**0.14**	**J**	0.20	0.030	mg/Kg	☼	08/03/22 13:24	08/05/22 00:02	1
Calcium	**17300**	**B**	49.3	3.3	mg/Kg	☼	08/03/22 13:24	08/05/22 00:02	1
Chromium	**13.9**		0.49	0.20	mg/Kg	☼	08/03/22 13:24	08/05/22 00:02	1
Cobalt	**8.2**		0.49	0.049	mg/Kg	☼	08/03/22 13:24	08/05/22 00:02	1
Copper	**28.3**		0.99	0.21	mg/Kg	☼	08/03/22 13:24	08/05/22 00:02	1
Iron	**25100**		9.9	3.4	mg/Kg	☼	08/03/22 13:24	08/05/22 00:02	1
Lead	**22.8**		0.99	0.24	mg/Kg	☼	08/03/22 13:24	08/05/22 00:02	1
Magnesium	**5390**	**B**	19.7	0.91	mg/Kg	☼	08/03/22 13:24	08/05/22 00:02	1
Manganese	**528**	**B**	0.20	0.032	mg/Kg	☼	08/03/22 13:24	08/05/22 00:02	1
Nickel	**20.6**		4.9	0.23	mg/Kg	☼	08/03/22 13:24	08/05/22 00:02	1
Potassium	**1070**		29.6	19.7	mg/Kg	☼	08/03/22 13:24	08/05/22 00:02	1
Selenium	ND		3.9	0.39	mg/Kg	☼	08/03/22 13:24	08/05/22 00:02	1
Silver	ND		0.59	0.20	mg/Kg	☼	08/03/22 13:24	08/05/22 00:02	1
Sodium	**66.4**	**J**	138	12.8	mg/Kg	☼	08/03/22 13:24	08/05/22 00:02	1
Thallium	ND		5.9	0.30	mg/Kg	☼	08/03/22 13:24	08/05/22 00:02	1
Vanadium	**18.5**		0.49	0.11	mg/Kg	☼	08/03/22 13:24	08/05/22 00:02	1
Zinc	**65.4**		2.0	0.63	mg/Kg	☼	08/03/22 13:24	08/05/22 00:02	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.052**		0.021	0.0048	mg/Kg	☼	08/04/22 10:17	08/04/22 13:07	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Client Sample ID: SS5 (0-2)
Date Collected: 07/29/22 13:25
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-7
Matrix: Solid
Percent Solids: 90.3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		8.5	0.85	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
1,1,1-Trichloroethane	ND		8.5	0.62	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
1,1,2,2-Tetrachloroethane	ND	*3	8.5	1.4	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.5	1.9	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
1,1,2-Trichloroethane	ND		8.5	1.1	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
1,1-Dichloroethane	ND		8.5	1.0	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
1,1-Dichloroethene	ND		8.5	1.0	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
1,2,3-Trimethylbenzene	ND	*3	8.5	1.7	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
1,2,4-Trichlorobenzene	ND	*3	8.5	0.52	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
1,2,4-Trimethylbenzene	ND	*3	8.5	1.6	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
1,2-Dibromo-3-Chloropropane	ND	*3	8.5	4.2	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
1,2-Dibromoethane	ND		8.5	1.1	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
1,2-Dichlorobenzene	ND	*3	8.5	0.66	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
1,2-Dichloroethane	ND		8.5	0.43	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
1,2-Dichloropropane	ND		8.5	4.2	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
1,3,5-Trimethylbenzene	ND	*3	8.5	0.55	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
1,3-Dichlorobenzene	ND	*3	8.5	0.44	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
1,4-Dichlorobenzene	ND	*3	8.5	1.2	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
2-Butanone (MEK)	ND		42	3.1	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
2-Hexanone	ND		42	4.2	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
4-Methyl-2-pentanone (MIBK)	ND		42	2.8	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
Acetone	**16**	**J**	42	7.1	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
Benzene	ND		8.5	0.42	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
Bromodichloromethane	ND		8.5	1.1	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
Bromoform	ND		8.5	4.2	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
Bromomethane	ND		8.5	0.76	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
Carbon disulfide	ND		8.5	4.2	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
Carbon tetrachloride	ND		8.5	0.82	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
Chlorobenzene	ND		8.5	1.1	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
Chloroethane	ND		8.5	1.9	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
Chloroform	ND		8.5	0.52	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
Chloromethane	ND		8.5	0.51	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
cis-1,2-Dichloroethene	ND		8.5	1.1	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
cis-1,3-Dichloropropene	ND		8.5	1.2	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
Cyclohexane	ND		8.5	1.2	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
Dibromochloromethane	ND		8.5	1.1	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
Dichlorodifluoromethane	ND		8.5	0.70	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
Ethylbenzene	ND		8.5	0.59	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
Isopropylbenzene	ND	*3	8.5	1.3	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
m,p-Xylene	ND		17	1.4	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
Methyl acetate	ND		42	5.1	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
Methyl tert-butyl ether	ND		8.5	0.83	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
Methylcyclohexane	ND		8.5	1.3	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
Methylene Chloride	ND		8.5	3.9	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
n-Butylbenzene	ND	*3	8.5	0.74	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
N-Propylbenzene	ND	*3	8.5	0.68	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
o-Xylene	ND		8.5	1.1	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
sec-Butylbenzene	ND	*3	8.5	0.74	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
Styrene	ND		8.5	0.42	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1

Client Sample ID: SS5 (0-2)

Date Collected: 07/29/22 13:25
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-7

Matrix: Solid
Percent Solids: 90.3

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND	*3	8.5	0.88	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
Tetrachloroethene	ND		8.5	1.1	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
Toluene	ND		8.5	0.64	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
trans-1,2-Dichloroethene	ND		8.5	0.88	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
trans-1,3-Dichloropropene	ND		8.5	3.7	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
Trichloroethene	ND		8.5	1.9	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
Trichlorofluoromethane	ND		8.5	0.80	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
Vinyl chloride	ND		8.5	1.0	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1
Xylenes, Total	ND		17	1.4	ug/Kg	☼	07/30/22 12:00	08/11/22 15:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*64 - 126*	*07/30/22 12:00*	*08/11/22 15:59*	*1*
4-Bromofluorobenzene (Surr)	*78*		*72 - 126*	*07/30/22 12:00*	*08/11/22 15:59*	*1*
Dibromofluoromethane (Surr)	*107*		*60 - 140*	*07/30/22 12:00*	*08/11/22 15:59*	*1*
Toluene-d8 (Surr)	*117*		*71 - 125*	*07/30/22 12:00*	*08/11/22 15:59*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		920	250	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
2,4,6-Trichlorophenol	ND		920	180	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
2,4-Dichlorophenol	ND		920	97	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
2,4-Dimethylphenol	ND		920	220	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
2,4-Dinitrophenol	ND		9000	4200	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
2,4-Dinitrotoluene	ND		920	190	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
2,6-Dinitrotoluene	ND		920	110	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
2-Chloronaphthalene	ND		920	150	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
2-Chlorophenol	ND		1800	170	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
2-Methylnaphthalene	ND		920	180	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
2-Methylphenol	ND		920	110	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
2-Nitroaniline	ND		1800	140	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
2-Nitrophenol	ND		920	260	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
3,3'-Dichlorobenzidine	ND		1800	1100	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
3-Nitroaniline	ND		1800	250	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
4,6-Dinitro-2-methylphenol	ND		1800	920	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
4-Bromophenyl phenyl ether	ND		920	130	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
4-Chloro-3-methylphenol	ND		920	230	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
4-Chloroaniline	ND		920	230	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
4-Chlorophenyl phenyl ether	ND		920	110	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
4-Methylphenol	ND		1800	110	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
4-Nitroaniline	ND		1800	480	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
4-Nitrophenol	ND		1800	640	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Acenaphthene	ND		920	140	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Acenaphthylene	**250**	**J**	920	120	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Acetophenone	ND		920	120	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Anthracene	ND		920	230	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Atrazine	ND		920	320	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Benzaldehyde	ND		920	730	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Benzo[a]anthracene	**550**	**J**	920	92	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Benzo[a]pyrene	**390**	**J**	920	140	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Benzo[b]fluoranthene	**890**	**J**	920	150	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5

Client Sample ID: SS5 (0-2)
Date Collected: 07/29/22 13:25
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-7
Matrix: Solid
Percent Solids: 90.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	**480**	**J**	920	97	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Benzo[k]fluoranthene	ND		920	120	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Biphenyl	ND		920	140	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
bis (2-chloroisopropyl) ether	ND		920	180	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Bis(2-chloroethoxy)methane	ND		920	190	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Bis(2-chloroethyl)ether	ND		920	120	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Bis(2-ethylhexyl) phthalate	ND		920	310	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Butyl benzyl phthalate	ND		920	150	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Caprolactam	ND		920	280	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Carbazole	ND		920	110	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Chrysene	**680**	**J**	920	210	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Dibenz(a,h)anthracene	**170**	**J**	920	160	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Dibenzofuran	ND		920	110	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Diethyl phthalate	ND		920	120	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Dimethyl phthalate	ND		920	110	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Di-n-butyl phthalate	ND		920	160	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Di-n-octyl phthalate	ND		920	110	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Fluoranthene	**770**	**J**	920	97	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Fluorene	ND		920	110	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Hexachlorobenzene	ND		920	120	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Hexachlorobutadiene	ND		920	140	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Hexachlorocyclopentadiene	ND		920	120	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Hexachloroethane	ND		920	120	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Indeno[1,2,3-cd]pyrene	**470**	**J**	920	110	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Isophorone	ND		920	190	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Naphthalene	ND		920	120	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Nitrobenzene	ND		920	100	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
N-Nitrosodi-n-propylamine	ND		920	160	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
N-Nitrosodiphenylamine	ND		920	750	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Pentachlorophenol	ND		1800	920	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Phenanthrene	ND		920	140	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Phenol	ND		920	140	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5
Pyrene	**1300**		920	110	ug/Kg	☼	08/03/22 15:56	08/09/22 21:10	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*106*		*54 - 120*	*08/03/22 15:56*	*08/09/22 21:10*	*5*
2-Fluorobiphenyl (Surr)	*86*		*60 - 120*	*08/03/22 15:56*	*08/09/22 21:10*	*5*
2-Fluorophenol (Surr)	*63*		*52 - 120*	*08/03/22 15:56*	*08/09/22 21:10*	*5*
Nitrobenzene-d5 (Surr)	*61*		*53 - 120*	*08/03/22 15:56*	*08/09/22 21:10*	*5*
Phenol-d5 (Surr)	*70*		*54 - 120*	*08/03/22 15:56*	*08/09/22 21:10*	*5*
p-Terphenyl-d14 (Surr)	*91*		*79 - 130*	*08/03/22 15:56*	*08/09/22 21:10*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**9330**		11.7	5.1	mg/Kg	☼	08/03/22 13:24	08/05/22 00:06	1
Antimony	**0.82**	**J**	17.5	0.47	mg/Kg	☼	08/03/22 13:24	08/05/22 00:06	1
Arsenic	**3.3**		2.3	0.47	mg/Kg	☼	08/03/22 13:24	08/05/22 00:06	1
Barium	**102**		0.58	0.13	mg/Kg	☼	08/03/22 13:24	08/05/22 00:06	1
Beryllium	**0.36**		0.23	0.033	mg/Kg	☼	08/03/22 13:24	08/05/22 00:06	1
Cadmium	**0.26**		0.23	0.035	mg/Kg	☼	08/03/22 13:24	08/05/22 00:06	1

Client Sample ID: SS5 (0-2)

Lab Sample ID: 480-200248-7

Date Collected: 07/29/22 13:25
Matrix: Solid
Date Received: 07/30/22 10:30
Percent Solids: 90.3

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	2200	B	58.3	3.8	mg/Kg	☼	08/03/22 13:24	08/05/22 00:06	1
Chromium	10.6		0.58	0.23	mg/Kg	☼	08/03/22 13:24	08/05/22 00:06	1
Cobalt	23.3		0.58	0.058	mg/Kg	☼	08/03/22 13:24	08/05/22 00:06	1
Copper	334		1.2	0.24	mg/Kg	☼	08/03/22 13:24	08/05/22 00:06	1
Iron	11700		11.7	4.1	mg/Kg	☼	08/03/22 13:24	08/05/22 00:06	1
Lead	26.9		1.2	0.28	mg/Kg	☼	08/03/22 13:24	08/05/22 00:06	1
Magnesium	1780	B	23.3	1.1	mg/Kg	☼	08/03/22 13:24	08/05/22 00:06	1
Manganese	314	B	0.23	0.037	mg/Kg	☼	08/03/22 13:24	08/05/22 00:06	1
Nickel	14.0		5.8	0.27	mg/Kg	☼	08/03/22 13:24	08/05/22 00:06	1
Potassium	1070		35.0	23.3	mg/Kg	☼	08/03/22 13:24	08/05/22 00:06	1
Selenium	ND		4.7	0.47	mg/Kg	☼	08/03/22 13:24	08/05/22 00:06	1
Silver	10.2		0.70	0.23	mg/Kg	☼	08/03/22 13:24	08/05/22 00:06	1
Sodium	113	J	163	15.2	mg/Kg	☼	08/03/22 13:24	08/05/22 00:06	1
Thallium	ND		7.0	0.35	mg/Kg	☼	08/03/22 13:24	08/05/22 00:06	1
Vanadium	12.5		0.58	0.13	mg/Kg	☼	08/03/22 13:24	08/05/22 00:06	1
Zinc	69.2		2.3	0.75	mg/Kg	☼	08/03/22 13:24	08/05/22 00:06	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.059		0.021	0.0048	mg/Kg	☼	08/04/22 10:17	08/04/22 13:08	1

Client Sample ID: SS5 (0-6)

Lab Sample ID: 480-200248-8

Date Collected: 07/29/22 13:30
Matrix: Solid
Date Received: 07/30/22 10:30
Percent Solids: 91.5

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		6.4	0.64	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
1,1,1-Trichloroethane	ND		6.4	0.47	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
1,1,2,2-Tetrachloroethane	ND		6.4	1.0	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.4	1.5	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
1,1,2-Trichloroethane	ND		6.4	0.83	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
1,1-Dichloroethane	ND		6.4	0.78	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
1,1-Dichloroethene	ND		6.4	0.78	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
1,2,3-Trimethylbenzene	ND		6.4	1.3	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
1,2,4-Trichlorobenzene	ND		6.4	0.39	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
1,2,4-Trimethylbenzene	ND		6.4	1.2	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
1,2-Dibromo-3-Chloropropane	ND		6.4	3.2	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
1,2-Dibromoethane	ND		6.4	0.82	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
1,2-Dichlorobenzene	ND		6.4	0.50	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
1,2-Dichloroethane	ND		6.4	0.32	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
1,2-Dichloropropane	ND		6.4	3.2	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
1,3,5-Trimethylbenzene	ND		6.4	0.41	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
1,3-Dichlorobenzene	ND		6.4	0.33	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
1,4-Dichlorobenzene	ND		6.4	0.90	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
2-Butanone (MEK)	ND		32	2.3	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
2-Hexanone	ND		32	3.2	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
4-Methyl-2-pentanone (MIBK)	ND		32	2.1	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
Acetone	ND		32	5.4	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
Benzene	ND		6.4	0.31	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1

Client Sample ID: SS5 (0-6)
Date Collected: 07/29/22 13:30
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-8
Matrix: Solid
Percent Solids: 91.5

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		6.4	0.86	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
Bromoform	ND		6.4	3.2	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
Bromomethane	ND		6.4	0.58	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
Carbon disulfide	ND		6.4	3.2	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
Carbon tetrachloride	ND		6.4	0.62	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
Chlorobenzene	ND		6.4	0.85	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
Chloroethane	ND		6.4	1.4	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
Chloroform	ND		6.4	0.40	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
Chloromethane	ND		6.4	0.39	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
cis-1,2-Dichloroethene	ND		6.4	0.82	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
cis-1,3-Dichloropropene	ND		6.4	0.92	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
Cyclohexane	ND		6.4	0.90	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
Dibromochloromethane	ND		6.4	0.82	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
Dichlorodifluoromethane	ND		6.4	0.53	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
Ethylbenzene	ND		6.4	0.44	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
Isopropylbenzene	ND		6.4	0.97	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
m,p-Xylene	ND		13	1.1	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
Methyl acetate	ND		32	3.9	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
Methyl tert-butyl ether	ND		6.4	0.63	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
Methylcyclohexane	ND		6.4	0.97	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
Methylene Chloride	ND		6.4	2.9	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
n-Butylbenzene	ND		6.4	0.56	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
N-Propylbenzene	ND		6.4	0.51	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
o-Xylene	ND		6.4	0.84	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
sec-Butylbenzene	ND		6.4	0.56	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
Styrene	ND		6.4	0.32	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
tert-Butylbenzene	ND		6.4	0.67	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
Tetrachloroethene	ND		6.4	0.86	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
Toluene	ND		6.4	0.48	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
trans-1,2-Dichloroethene	ND		6.4	0.66	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
trans-1,3-Dichloropropene	ND		6.4	2.8	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
Trichloroethene	ND		6.4	1.4	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
Trichlorofluoromethane	ND		6.4	0.61	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
Vinyl chloride	ND		6.4	0.78	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1
Xylenes, Total	ND		13	1.1	ug/Kg	☼	07/30/22 12:00	08/10/22 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*64 - 126*	*07/30/22 12:00*	*08/10/22 17:17*	*1*
4-Bromofluorobenzene (Surr)	*81*		*72 - 126*	*07/30/22 12:00*	*08/10/22 17:17*	*1*
Dibromofluoromethane (Surr)	*105*		*60 - 140*	*07/30/22 12:00*	*08/10/22 17:17*	*1*
Toluene-d8 (Surr)	*115*		*71 - 125*	*07/30/22 12:00*	*08/10/22 17:17*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		180	50	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
2,4,6-Trichlorophenol	ND		180	37	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
2,4-Dichlorophenol	ND		180	19	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
2,4-Dimethylphenol	ND		180	44	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
2,4-Dinitrophenol	ND		1800	850	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
2,4-Dinitrotoluene	ND		180	38	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1

Client Sample ID: SS5 (0-6)
Date Collected: 07/29/22 13:30
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-8
Matrix: Solid
Percent Solids: 91.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		180	22	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
2-Chloronaphthalene	ND		180	30	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
2-Chlorophenol	ND		360	34	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
2-Methylnaphthalene	**56**	**J**	180	37	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
2-Methylphenol	ND		180	22	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
2-Nitroaniline	ND		360	27	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
2-Nitrophenol	ND		180	52	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
3,3'-Dichlorobenzidine	ND		360	220	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
3-Nitroaniline	ND		360	51	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
4,6-Dinitro-2-methylphenol	ND		360	180	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
4-Bromophenyl phenyl ether	ND		180	26	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
4-Chloro-3-methylphenol	ND		180	45	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
4-Chloroaniline	ND		180	45	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
4-Chlorophenyl phenyl ether	ND		180	23	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
4-Methylphenol	ND		360	22	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
4-Nitroaniline	ND		360	96	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
4-Nitrophenol	ND		360	130	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Acenaphthene	ND		180	27	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Acenaphthylene	**450**		180	24	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Acetophenone	ND		180	25	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Anthracene	**180**		180	45	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Atrazine	ND		180	64	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Benzaldehyde	ND		180	150	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Benzo[a]anthracene	**920**		180	18	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Benzo[a]pyrene	**650**		180	27	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Benzo[b]fluoranthene	**1200**		180	29	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Benzo[g,h,i]perylene	**600**		180	19	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Benzo[k]fluoranthene	**520**		180	24	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Biphenyl	ND		180	27	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
bis (2-chloroisopropyl) ether	ND		180	37	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Bis(2-chloroethoxy)methane	ND		180	39	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Bis(2-chloroethyl)ether	ND		180	24	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Bis(2-ethylhexyl) phthalate	ND		180	63	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Butyl benzyl phthalate	**410**		180	30	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Caprolactam	ND		180	55	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Carbazole	ND		180	22	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Chrysene	**1100**		180	41	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Dibenz(a,h)anthracene	**200**		180	32	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Dibenzofuran	ND		180	22	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Diethyl phthalate	ND		180	24	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Dimethyl phthalate	ND		180	22	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Di-n-butyl phthalate	ND		180	31	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Di-n-octyl phthalate	ND		180	22	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Fluoranthene	**1200**		180	19	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Fluorene	**48**	**J**	180	22	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Hexachlorobenzene	ND		180	25	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Hexachlorobutadiene	ND		180	27	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Hexachlorocyclopentadiene	ND		180	25	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Hexachloroethane	ND		180	24	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1

Client Sample ID: SS5 (0-6)
Date Collected: 07/29/22 13:30
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-8
Matrix: Solid
Percent Solids: 91.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	590		180	23	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Isophorone	ND		180	39	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Naphthalene	70	J	180	24	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Nitrobenzene	ND		180	21	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
N-Nitrosodi-n-propylamine	ND		180	31	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
N-Nitrosodiphenylamine	ND		180	150	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Pentachlorophenol	ND		360	180	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Phenanthrene	380		180	27	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Phenol	ND		180	28	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1
Pyrene	1900		180	22	ug/Kg	☼	08/03/22 15:56	08/09/22 21:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*104*		*54 - 120*	*08/03/22 15:56*	*08/09/22 21:34*	*1*
2-Fluorobiphenyl (Surr)	*78*		*60 - 120*	*08/03/22 15:56*	*08/09/22 21:34*	*1*
2-Fluorophenol (Surr)	*54*		*52 - 120*	*08/03/22 15:56*	*08/09/22 21:34*	*1*
Nitrobenzene-d5 (Surr)	*58*		*53 - 120*	*08/03/22 15:56*	*08/09/22 21:34*	*1*
Phenol-d5 (Surr)	*57*		*54 - 120*	*08/03/22 15:56*	*08/09/22 21:34*	*1*
p-Terphenyl-d14 (Surr)	*80*		*79 - 130*	*08/03/22 15:56*	*08/09/22 21:34*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	12100	B	11.5	5.0	mg/Kg	☼	08/04/22 13:08	08/05/22 23:31	1
Antimony	0.66	J	17.2	0.46	mg/Kg	☼	08/04/22 13:08	08/05/22 23:31	1
Arsenic	7.5		2.3	0.46	mg/Kg	☼	08/04/22 13:08	08/05/22 23:31	1
Barium	154	B	0.57	0.13	mg/Kg	☼	08/04/22 13:08	08/05/22 23:31	1
Beryllium	0.48		0.23	0.032	mg/Kg	☼	08/04/22 13:08	08/05/22 23:31	1
Cadmium	0.12	J	0.23	0.034	mg/Kg	☼	08/04/22 13:08	08/05/22 23:31	1
Calcium	1970		57.3	3.8	mg/Kg	☼	08/04/22 13:08	08/05/22 23:31	1
Chromium	14.3		0.57	0.23	mg/Kg	☼	08/04/22 13:08	08/05/22 23:31	1
Cobalt	21.3		0.57	0.057	mg/Kg	☼	08/04/22 13:08	08/05/22 23:31	1
Copper	153		1.1	0.24	mg/Kg	☼	08/04/22 13:08	08/05/22 23:31	1
Iron	17400		11.5	4.0	mg/Kg	☼	08/04/22 13:08	08/05/22 23:31	1
Lead	37.5		1.0	0.25	mg/Kg	☼	08/15/22 12:22	08/16/22 21:32	1
Magnesium	2510	B	22.9	1.1	mg/Kg	☼	08/04/22 13:08	08/05/22 23:31	1
Manganese	437	B	0.23	0.037	mg/Kg	☼	08/04/22 13:08	08/11/22 16:12	1
Nickel	18.9		5.7	0.26	mg/Kg	☼	08/04/22 13:08	08/05/22 23:31	1
Potassium	1490		34.4	22.9	mg/Kg	☼	08/04/22 13:08	08/11/22 16:12	1
Selenium	ND		4.6	0.46	mg/Kg	☼	08/04/22 13:08	08/05/22 23:31	1
Silver	2.7		0.69	0.23	mg/Kg	☼	08/04/22 13:08	08/05/22 23:31	1
Sodium	52.9	J	161	14.9	mg/Kg	☼	08/04/22 13:08	08/05/22 23:31	1
Thallium	ND		6.9	0.34	mg/Kg	☼	08/04/22 13:08	08/05/22 23:31	1
Vanadium	18.8		0.57	0.13	mg/Kg	☼	08/04/22 13:08	08/05/22 23:31	1
Zinc	98.2	B	2.3	0.73	mg/Kg	☼	08/04/22 13:08	08/05/22 23:31	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.090		0.022	0.0051	mg/Kg	☼	08/04/22 10:17	08/04/22 13:10	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Client Sample ID: SS5 (6-12)

Date Collected: 07/29/22 13:35
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-9

Matrix: Solid
Percent Solids: 94.0

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.2	0.52	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
1,1,1-Trichloroethane	ND		5.2	0.38	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
1,1,2,2-Tetrachloroethane	ND		5.2	0.85	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.2	1.2	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
1,1,2-Trichloroethane	ND		5.2	0.68	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
1,1-Dichloroethane	ND		5.2	0.64	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
1,1-Dichloroethene	ND		5.2	0.64	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
1,2,3-Trimethylbenzene	ND		5.2	1.1	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
1,2,4-Trichlorobenzene	ND		5.2	0.32	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
1,2,4-Trimethylbenzene	ND		5.2	1.0	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
1,2-Dibromo-3-Chloropropane	ND		5.2	2.6	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
1,2-Dibromoethane	ND		5.2	0.67	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
1,2-Dichlorobenzene	ND		5.2	0.41	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
1,2-Dichloroethane	ND		5.2	0.26	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
1,2-Dichloropropane	ND		5.2	2.6	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
1,3,5-Trimethylbenzene	ND		5.2	0.34	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
1,3-Dichlorobenzene	ND		5.2	0.27	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
1,4-Dichlorobenzene	ND		5.2	0.73	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
2-Butanone (MEK)	ND		26	1.9	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
2-Hexanone	ND		26	2.6	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
4-Methyl-2-pentanone (MIBK)	ND		26	1.7	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
Acetone	ND		26	4.4	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
Benzene	ND		5.2	0.26	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
Bromodichloromethane	ND		5.2	0.70	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
Bromoform	ND		5.2	2.6	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
Bromomethane	ND		5.2	0.47	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
Carbon disulfide	ND		5.2	2.6	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
Carbon tetrachloride	ND		5.2	0.51	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
Chlorobenzene	ND		5.2	0.69	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
Chloroethane	ND		5.2	1.2	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
Chloroform	ND		5.2	0.32	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
Chloromethane	ND		5.2	0.32	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
cis-1,2-Dichloroethene	ND		5.2	0.67	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
cis-1,3-Dichloropropene	ND		5.2	0.75	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
Cyclohexane	ND		5.2	0.73	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
Dibromochloromethane	ND		5.2	0.67	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
Dichlorodifluoromethane	ND		5.2	0.43	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
Ethylbenzene	ND		5.2	0.36	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
Isopropylbenzene	ND		5.2	0.79	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
m,p-Xylene	ND		10	0.88	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
Methyl acetate	ND		26	3.2	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
Methyl tert-butyl ether	ND		5.2	0.51	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
Methylcyclohexane	ND		5.2	0.79	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
Methylene Chloride	ND		5.2	2.4	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
n-Butylbenzene	ND		5.2	0.45	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
N-Propylbenzene	ND		5.2	0.42	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
o-Xylene	ND		5.2	0.68	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
sec-Butylbenzene	ND		5.2	0.45	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
Styrene	ND		5.2	0.26	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1

Client Sample ID: SS5 (6-12)
Date Collected: 07/29/22 13:35
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-9
Matrix: Solid
Percent Solids: 94.0

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		5.2	0.54	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
Tetrachloroethene	ND		5.2	0.70	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
Toluene	ND		5.2	0.39	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
trans-1,2-Dichloroethene	ND		5.2	0.54	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
trans-1,3-Dichloropropene	ND		5.2	2.3	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
Trichloroethene	ND		5.2	1.1	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
Trichlorofluoromethane	ND		5.2	0.49	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
Vinyl chloride	ND		5.2	0.64	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1
Xylenes, Total	ND		10	0.88	ug/Kg	☼	07/30/22 12:00	08/10/22 17:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*64 - 126*	*07/30/22 12:00*	*08/10/22 17:42*	*1*
4-Bromofluorobenzene (Surr)	*86*		*72 - 126*	*07/30/22 12:00*	*08/10/22 17:42*	*1*
Dibromofluoromethane (Surr)	*104*		*60 - 140*	*07/30/22 12:00*	*08/10/22 17:42*	*1*
Toluene-d8 (Surr)	*113*		*71 - 125*	*07/30/22 12:00*	*08/10/22 17:42*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		890	240	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
2,4,6-Trichlorophenol	ND		890	180	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
2,4-Dichlorophenol	ND		890	94	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
2,4-Dimethylphenol	ND		890	210	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
2,4-Dinitrophenol	ND		8600	4100	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
2,4-Dinitrotoluene	ND		890	180	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
2,6-Dinitrotoluene	ND		890	100	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
2-Chloronaphthalene	ND		890	150	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
2-Chlorophenol	ND		1700	160	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
2-Methylnaphthalene	ND		890	180	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
2-Methylphenol	ND		890	100	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
2-Nitroaniline	ND		1700	130	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
2-Nitrophenol	ND		890	250	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
3,3'-Dichlorobenzidine	ND		1700	1000	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
3-Nitroaniline	ND		1700	240	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
4,6-Dinitro-2-methylphenol	ND		1700	890	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
4-Bromophenyl phenyl ether	ND		890	130	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
4-Chloro-3-methylphenol	ND		890	220	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
4-Chloroaniline	ND		890	220	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
4-Chlorophenyl phenyl ether	ND		890	110	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
4-Methylphenol	ND		1700	100	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
4-Nitroaniline	ND		1700	460	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
4-Nitrophenol	ND		1700	620	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Acenaphthene	ND		890	130	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Acenaphthylene	**340**	**J**	890	110	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Acetophenone	ND		890	120	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Anthracene	ND		890	220	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Atrazine	ND		890	310	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Benzaldehyde	ND		890	700	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Benzo[a]anthracene	**980**		890	89	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Benzo[a]pyrene	**590**	**J**	890	130	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Benzo[b]fluoranthene	**1200**		890	140	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5

Client Sample ID: SS5 (6-12)
Date Collected: 07/29/22 13:35
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-9
Matrix: Solid
Percent Solids: 94.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	**670**	**J**	890	94	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Benzo[k]fluoranthene	**490**	**J**	890	110	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Biphenyl	ND		890	130	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
bis (2-chloroisopropyl) ether	ND		890	180	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Bis(2-chloroethoxy)methane	ND		890	190	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Bis(2-chloroethyl)ether	ND		890	110	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Bis(2-ethylhexyl) phthalate	ND		890	300	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Butyl benzyl phthalate	ND		890	150	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Caprolactam	ND		890	270	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Carbazole	ND		890	100	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Chrysene	**1100**		890	200	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Dibenz(a,h)anthracene	**170**	**J**	890	160	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Dibenzofuran	ND		890	100	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Diethyl phthalate	ND		890	110	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Dimethyl phthalate	ND		890	100	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Di-n-butyl phthalate	ND		890	150	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Di-n-octyl phthalate	ND		890	100	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Fluoranthene	**1300**		890	94	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Fluorene	ND		890	100	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Hexachlorobenzene	ND		890	120	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Hexachlorobutadiene	ND		890	130	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Hexachlorocyclopentadiene	ND		890	120	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Hexachloroethane	ND		890	110	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Indeno[1,2,3-cd]pyrene	**580**	**J**	890	110	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Isophorone	ND		890	190	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Naphthalene	**110**	**J**	890	110	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Nitrobenzene	ND		890	99	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
N-Nitrosodi-n-propylamine	ND		890	150	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
N-Nitrosodiphenylamine	ND		890	720	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Pentachlorophenol	ND		1700	890	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Phenanthrene	**520**	**J**	890	130	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Phenol	ND		890	140	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5
Pyrene	**2200**		890	100	ug/Kg	☼	08/12/22 15:31	08/15/22 11:49	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*69*		*54 - 120*	*08/12/22 15:31*	*08/15/22 11:49*	*5*
2-Fluorobiphenyl (Surr)	*95*		*60 - 120*	*08/12/22 15:31*	*08/15/22 11:49*	*5*
2-Fluorophenol (Surr)	*82*		*52 - 120*	*08/12/22 15:31*	*08/15/22 11:49*	*5*
Nitrobenzene-d5 (Surr)	*80*		*53 - 120*	*08/12/22 15:31*	*08/15/22 11:49*	*5*
Phenol-d5 (Surr)	*88*		*54 - 120*	*08/12/22 15:31*	*08/15/22 11:49*	*5*
p-Terphenyl-d14 (Surr)	*102*		*79 - 130*	*08/12/22 15:31*	*08/15/22 11:49*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**10500**	**B**	10.9	4.8	mg/Kg	☼	08/04/22 13:08	08/05/22 23:47	1
Antimony	**1.2**	**J**	16.3	0.44	mg/Kg	☼	08/04/22 13:08	08/05/22 23:47	1
Arsenic	**7.2**		2.2	0.44	mg/Kg	☼	08/04/22 13:08	08/05/22 23:47	1
Barium	**106**	**B**	0.54	0.12	mg/Kg	☼	08/04/22 13:08	08/05/22 23:47	1
Beryllium	**0.48**		0.22	0.031	mg/Kg	☼	08/04/22 13:08	08/05/22 23:47	1
Cadmium	ND		0.22	0.033	mg/Kg	☼	08/04/22 13:08	08/05/22 23:47	1

Client Sample ID: SS5 (6-12)

Lab Sample ID: 480-200248-9
Date Collected: 07/29/22 13:35
Matrix: Solid
Date Received: 07/30/22 10:30
Percent Solids: 94.0

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	7570		54.5	3.6	mg/Kg	☼	08/04/22 13:08	08/05/22 23:47	1
Chromium	18.0		0.54	0.22	mg/Kg	☼	08/04/22 13:08	08/05/22 23:47	1
Cobalt	9.6		0.54	0.054	mg/Kg	☼	08/04/22 13:08	08/05/22 23:47	1
Copper	62.5		1.1	0.23	mg/Kg	☼	08/04/22 13:08	08/05/22 23:47	1
Iron	28100		10.9	3.8	mg/Kg	☼	08/04/22 13:08	08/05/22 23:47	1
Lead	38.1		1.1	0.27	mg/Kg	☼	08/15/22 12:22	08/16/22 21:36	1
Magnesium	3400	B	21.8	1.0	mg/Kg	☼	08/04/22 13:08	08/05/22 23:47	1
Manganese	805	B	0.22	0.035	mg/Kg	☼	08/04/22 13:08	08/11/22 16:16	1
Nickel	21.1		5.4	0.25	mg/Kg	☼	08/04/22 13:08	08/05/22 23:47	1
Potassium	1310		32.7	21.8	mg/Kg	☼	08/04/22 13:08	08/11/22 16:16	1
Selenium	0.95	J	4.4	0.44	mg/Kg	☼	08/04/22 13:08	08/05/22 23:47	1
Silver	ND		0.65	0.22	mg/Kg	☼	08/04/22 13:08	08/05/22 23:47	1
Sodium	60.2	J	153	14.2	mg/Kg	☼	08/04/22 13:08	08/05/22 23:47	1
Thallium	ND		6.5	0.33	mg/Kg	☼	08/04/22 13:08	08/05/22 23:47	1
Vanadium	25.2		0.54	0.12	mg/Kg	☼	08/04/22 13:08	08/05/22 23:47	1
Zinc	67.8	B	2.2	0.70	mg/Kg	☼	08/04/22 13:08	08/05/22 23:47	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.061		0.021	0.0048	mg/Kg	☼	08/04/22 10:17	08/04/22 13:11	1

Client Sample ID: SS5 (12-24)

Lab Sample ID: 480-200248-10
Date Collected: 07/29/22 13:40
Matrix: Solid
Date Received: 07/30/22 10:30
Percent Solids: 96.0

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.3	0.43	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
1,1,1-Trichloroethane	ND		4.3	0.31	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
1,1,2,2-Tetrachloroethane	ND		4.3	0.69	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.3	0.97	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
1,1,2-Trichloroethane	ND		4.3	0.56	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
1,1-Dichloroethane	ND		4.3	0.52	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
1,1-Dichloroethene	ND		4.3	0.52	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
1,2,3-Trimethylbenzene	ND		4.3	0.87	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
1,2,4-Trichlorobenzene	ND		4.3	0.26	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
1,2,4-Trimethylbenzene	ND		4.3	0.82	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
1,2-Dibromo-3-Chloropropane	ND		4.3	2.1	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
1,2-Dibromoethane	ND		4.3	0.55	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
1,2-Dichlorobenzene	ND		4.3	0.33	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
1,2-Dichloroethane	ND		4.3	0.21	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
1,2-Dichloropropane	ND		4.3	2.1	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
1,3,5-Trimethylbenzene	ND		4.3	0.28	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
1,3-Dichlorobenzene	ND		4.3	0.22	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
1,4-Dichlorobenzene	ND		4.3	0.60	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
2-Butanone (MEK)	ND		21	1.6	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
2-Hexanone	ND		21	2.1	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
4-Methyl-2-pentanone (MIBK)	ND		21	1.4	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
Acetone	20	J	21	3.6	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
Benzene	ND		4.3	0.21	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1

Client Sample ID: SS5 (12-24)
Date Collected: 07/29/22 13:40
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-10
Matrix: Solid
Percent Solids: 96.0

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		4.3	0.57	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
Bromoform	ND		4.3	2.1	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
Bromomethane	ND		4.3	0.38	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
Carbon disulfide	ND		4.3	2.1	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
Carbon tetrachloride	ND		4.3	0.41	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
Chlorobenzene	ND		4.3	0.56	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
Chloroethane	ND		4.3	0.97	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
Chloroform	ND		4.3	0.26	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
Chloromethane	ND		4.3	0.26	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
cis-1,2-Dichloroethene	ND		4.3	0.55	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
cis-1,3-Dichloropropene	ND		4.3	0.62	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
Cyclohexane	ND		4.3	0.60	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
Dibromochloromethane	ND		4.3	0.55	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
Dichlorodifluoromethane	ND		4.3	0.35	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
Ethylbenzene	ND		4.3	0.29	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
Isopropylbenzene	ND		4.3	0.64	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
m,p-Xylene	ND		8.5	0.72	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
Methyl acetate	ND		21	2.6	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
Methyl tert-butyl ether	ND		4.3	0.42	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
Methylcyclohexane	ND		4.3	0.65	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
Methylene Chloride	ND		4.3	2.0	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
n-Butylbenzene	ND		4.3	0.37	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
N-Propylbenzene	ND		4.3	0.34	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
o-Xylene	ND		4.3	0.56	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
sec-Butylbenzene	ND		4.3	0.37	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
Styrene	ND		4.3	0.21	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
tert-Butylbenzene	ND		4.3	0.44	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
Tetrachloroethene	ND		4.3	0.57	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
Toluene	ND		4.3	0.32	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
trans-1,2-Dichloroethene	ND		4.3	0.44	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
trans-1,3-Dichloropropene	ND		4.3	1.9	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
Trichloroethene	ND		4.3	0.94	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
Trichlorofluoromethane	ND		4.3	0.40	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
Vinyl chloride	ND		4.3	0.52	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1
Xylenes, Total	ND		8.5	0.72	ug/Kg	☼	07/30/22 12:00	08/10/22 18:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*64 - 126*	*07/30/22 12:00*	*08/10/22 18:06*	*1*
4-Bromofluorobenzene (Surr)	*85*		*72 - 126*	*07/30/22 12:00*	*08/10/22 18:06*	*1*
Dibromofluoromethane (Surr)	*101*		*60 - 140*	*07/30/22 12:00*	*08/10/22 18:06*	*1*
Toluene-d8 (Surr)	*113*		*71 - 125*	*07/30/22 12:00*	*08/10/22 18:06*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		180	47	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
2,4,6-Trichlorophenol	ND		180	35	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
2,4-Dichlorophenol	ND		180	19	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
2,4-Dimethylphenol	ND		180	42	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
2,4-Dinitrophenol	ND		1700	810	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
2,4-Dinitrotoluene	ND		180	36	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1

Client Sample ID: SS5 (12-24)
Date Collected: 07/29/22 13:40
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-10
Matrix: Solid
Percent Solids: 96.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		180	21	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
2-Chloronaphthalene	ND		180	29	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
2-Chlorophenol	ND		340	32	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
2-Methylnaphthalene	ND		180	35	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
2-Methylphenol	ND		180	21	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
2-Nitroaniline	ND		340	26	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
2-Nitrophenol	ND		180	49	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
3,3'-Dichlorobenzidine	ND		340	210	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
3-Nitroaniline	ND		340	48	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
4,6-Dinitro-2-methylphenol	ND		340	180	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
4-Bromophenyl phenyl ether	ND		180	25	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
4-Chloro-3-methylphenol	ND		180	43	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
4-Chloroaniline	ND		180	43	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
4-Chlorophenyl phenyl ether	ND		180	22	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
4-Methylphenol	ND		340	21	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
4-Nitroaniline	ND		340	92	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
4-Nitrophenol	ND		340	120	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Acenaphthene	ND		180	26	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Acenaphthylene	ND		180	23	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Acetophenone	ND		180	24	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Anthracene	ND		180	43	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Atrazine	ND		180	61	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Benzaldehyde	ND		180	140	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Benzo[a]anthracene	ND		180	18	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Benzo[a]pyrene	ND		180	26	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Benzo[b]fluoranthene	ND		180	28	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Benzo[g,h,i]perylene	ND		180	19	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Benzo[k]fluoranthene	ND		180	23	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Biphenyl	ND		180	26	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
bis (2-chloroisopropyl) ether	ND		180	35	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Bis(2-chloroethoxy)methane	ND		180	37	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Bis(2-chloroethyl)ether	ND		180	23	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Bis(2-ethylhexyl) phthalate	ND		180	60	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Butyl benzyl phthalate	ND		180	29	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Caprolactam	ND		180	53	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Carbazole	ND		180	21	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Chrysene	ND		180	39	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Dibenz(a,h)anthracene	ND		180	31	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Dibenzofuran	ND		180	21	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Diethyl phthalate	ND		180	23	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Dimethyl phthalate	ND		180	21	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Di-n-butyl phthalate	ND		180	30	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Di-n-octyl phthalate	ND		180	21	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Fluoranthene	ND		180	19	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Fluorene	ND		180	21	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Hexachlorobenzene	ND		180	24	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Hexachlorobutadiene	ND		180	26	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Hexachlorocyclopentadiene	ND		180	24	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Hexachloroethane	ND		180	23	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1

Client Sample ID: SS5 (12-24)
Date Collected: 07/29/22 13:40
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-10
Matrix: Solid
Percent Solids: 96.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	ND		180	22	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Isophorone	ND		180	37	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Naphthalene	ND		180	23	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Nitrobenzene	ND		180	20	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
N-Nitrosodi-n-propylamine	ND		180	30	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
N-Nitrosodiphenylamine	ND		180	140	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Pentachlorophenol	ND		340	180	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Phenanthrene	ND		180	26	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Phenol	ND		180	27	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1
Pyrene	ND		180	21	ug/Kg	☼	08/03/22 15:56	08/09/22 22:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*91*		*54 - 120*	*08/03/22 15:56*	*08/09/22 22:23*	*1*
2-Fluorobiphenyl (Surr)	*70*		*60 - 120*	*08/03/22 15:56*	*08/09/22 22:23*	*1*
2-Fluorophenol (Surr)	*56*		*52 - 120*	*08/03/22 15:56*	*08/09/22 22:23*	*1*
Nitrobenzene-d5 (Surr)	*55*		*53 - 120*	*08/03/22 15:56*	*08/09/22 22:23*	*1*
Phenol-d5 (Surr)	*60*		*54 - 120*	*08/03/22 15:56*	*08/09/22 22:23*	*1*
p-Terphenyl-d14 (Surr)	*89*		*79 - 130*	*08/03/22 15:56*	*08/09/22 22:23*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**9840**	**B**	10.4	4.6	mg/Kg	☼	08/04/22 13:08	08/05/22 23:51	1
Antimony	**0.61**	**J**	15.6	0.41	mg/Kg	☼	08/04/22 13:08	08/05/22 23:51	1
Arsenic	**6.2**		2.1	0.41	mg/Kg	☼	08/04/22 13:08	08/05/22 23:51	1
Barium	**56.1**	**B**	0.52	0.11	mg/Kg	☼	08/04/22 13:08	08/05/22 23:51	1
Beryllium	**0.42**		0.21	0.029	mg/Kg	☼	08/04/22 13:08	08/05/22 23:51	1
Cadmium	ND		0.21	0.031	mg/Kg	☼	08/04/22 13:08	08/05/22 23:51	1
Calcium	**19800**		51.9	3.4	mg/Kg	☼	08/04/22 13:08	08/05/22 23:51	1
Chromium	**13.8**		0.52	0.21	mg/Kg	☼	08/04/22 13:08	08/05/22 23:51	1
Cobalt	**9.2**		0.52	0.052	mg/Kg	☼	08/04/22 13:08	08/05/22 23:51	1
Copper	**26.6**		1.0	0.22	mg/Kg	☼	08/04/22 13:08	08/05/22 23:51	1
Iron	**22000**		10.4	3.6	mg/Kg	☼	08/04/22 13:08	08/05/22 23:51	1
Lead	**17.0**		1.1	0.26	mg/Kg	☼	08/15/22 12:22	08/16/22 21:40	1
Magnesium	**5780**	**B**	20.7	0.96	mg/Kg	☼	08/04/22 13:08	08/05/22 23:51	1
Manganese	**490**	**B**	0.21	0.033	mg/Kg	☼	08/04/22 13:08	08/11/22 16:32	1
Nickel	**23.5**		5.2	0.24	mg/Kg	☼	08/04/22 13:08	08/05/22 23:51	1
Potassium	**1280**		31.1	20.7	mg/Kg	☼	08/04/22 13:08	08/11/22 16:32	1
Selenium	ND		4.1	0.41	mg/Kg	☼	08/04/22 13:08	08/05/22 23:51	1
Silver	ND		0.62	0.21	mg/Kg	☼	08/04/22 13:08	08/05/22 23:51	1
Sodium	**48.8**	**J**	145	13.5	mg/Kg	☼	08/04/22 13:08	08/05/22 23:51	1
Thallium	ND		6.2	0.31	mg/Kg	☼	08/04/22 13:08	08/05/22 23:51	1
Vanadium	**16.9**		0.52	0.11	mg/Kg	☼	08/04/22 13:08	08/05/22 23:51	1
Zinc	**67.1**	**B**	2.1	0.66	mg/Kg	☼	08/04/22 13:08	08/05/22 23:51	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.014**	**J**	0.021	0.0048	mg/Kg	☼	08/04/22 10:17	08/04/22 13:15	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Client Sample ID: ERB_072822

Date Collected: 07/28/22 09:00
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-11

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			08/01/22 21:33	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/01/22 21:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/01/22 21:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/01/22 21:33	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/01/22 21:33	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/01/22 21:33	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/01/22 21:33	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			08/01/22 21:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/01/22 21:33	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			08/01/22 21:33	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/01/22 21:33	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/01/22 21:33	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/01/22 21:33	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/01/22 21:33	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/01/22 21:33	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			08/01/22 21:33	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/01/22 21:33	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/01/22 21:33	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/01/22 21:33	1
2-Hexanone	ND		5.0	1.2	ug/L			08/01/22 21:33	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/01/22 21:33	1
Acetone	ND		10	3.0	ug/L			08/01/22 21:33	1
Benzene	ND		1.0	0.41	ug/L			08/01/22 21:33	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/01/22 21:33	1
Bromoform	ND		1.0	0.26	ug/L			08/01/22 21:33	1
Bromomethane	ND		1.0	0.69	ug/L			08/01/22 21:33	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/01/22 21:33	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/01/22 21:33	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/01/22 21:33	1
Chloroethane	ND		1.0	0.32	ug/L			08/01/22 21:33	1
Chloroform	ND		1.0	0.34	ug/L			08/01/22 21:33	1
Chloromethane	ND		1.0	0.35	ug/L			08/01/22 21:33	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			08/01/22 21:33	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/01/22 21:33	1
Cyclohexane	ND		1.0	0.18	ug/L			08/01/22 21:33	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/01/22 21:33	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/01/22 21:33	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/01/22 21:33	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/01/22 21:33	1
m,p-Xylene	ND		2.0	0.66	ug/L			08/01/22 21:33	1
Methyl acetate	ND		2.5	1.3	ug/L			08/01/22 21:33	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/01/22 21:33	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/01/22 21:33	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/01/22 21:33	1
n-Butylbenzene	ND		1.0	0.64	ug/L			08/01/22 21:33	1
N-Propylbenzene	ND		1.0	0.69	ug/L			08/01/22 21:33	1
o-Xylene	ND		1.0	0.76	ug/L			08/01/22 21:33	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			08/01/22 21:33	1
Styrene	ND		1.0	0.73	ug/L			08/01/22 21:33	1

Client Sample ID: ERB_072822
Date Collected: 07/28/22 09:00
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-11
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		1.0	0.81	ug/L			08/01/22 21:33	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/01/22 21:33	1
Toluene	ND		1.0	0.51	ug/L			08/01/22 21:33	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/01/22 21:33	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/01/22 21:33	1
Trichloroethene	ND		1.0	0.46	ug/L			08/01/22 21:33	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/01/22 21:33	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/01/22 21:33	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/01/22 21:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*08/01/22 21:33*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*08/01/22 21:33*	*1*
Dibromofluoromethane (Surr)	*110*		*75 - 123*		*08/01/22 21:33*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*08/01/22 21:33*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		08/02/22 16:05	08/03/22 20:02	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*52*		*15 - 110*	*08/02/22 16:05*	*08/03/22 20:02*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.2	0.50	ug/L		08/02/22 08:24	08/05/22 02:20	1
2,4,6-Trichlorophenol	ND		5.2	0.64	ug/L		08/02/22 08:24	08/05/22 02:20	1
2,4-Dichlorophenol	ND		5.2	0.53	ug/L		08/02/22 08:24	08/05/22 02:20	1
2,4-Dimethylphenol	ND		5.2	0.52	ug/L		08/02/22 08:24	08/05/22 02:20	1
2,4-Dinitrophenol	ND		10	2.3	ug/L		08/02/22 08:24	08/05/22 02:20	1
2,4-Dinitrotoluene	ND		5.2	0.47	ug/L		08/02/22 08:24	08/05/22 02:20	1
2,6-Dinitrotoluene	ND		5.2	0.42	ug/L		08/02/22 08:24	08/05/22 02:20	1
2-Chloronaphthalene	ND		5.2	0.48	ug/L		08/02/22 08:24	08/05/22 02:20	1
2-Chlorophenol	ND		5.2	0.55	ug/L		08/02/22 08:24	08/05/22 02:20	1
2-Methylnaphthalene	ND		5.2	0.63	ug/L		08/02/22 08:24	08/05/22 02:20	1
2-Methylphenol	ND		5.2	0.42	ug/L		08/02/22 08:24	08/05/22 02:20	1
2-Nitroaniline	ND		10	0.44	ug/L		08/02/22 08:24	08/05/22 02:20	1
2-Nitrophenol	ND		5.2	0.50	ug/L		08/02/22 08:24	08/05/22 02:20	1
3,3'-Dichlorobenzidine	ND		5.2	0.42	ug/L		08/02/22 08:24	08/05/22 02:20	1
3-Nitroaniline	ND		10	0.50	ug/L		08/02/22 08:24	08/05/22 02:20	1
4,6-Dinitro-2-methylphenol	ND		10	2.3	ug/L		08/02/22 08:24	08/05/22 02:20	1
4-Bromophenyl phenyl ether	ND		5.2	0.47	ug/L		08/02/22 08:24	08/05/22 02:20	1
4-Chloro-3-methylphenol	ND		5.2	0.47	ug/L		08/02/22 08:24	08/05/22 02:20	1
4-Chloroaniline	ND		5.2	0.61	ug/L		08/02/22 08:24	08/05/22 02:20	1
4-Chlorophenyl phenyl ether	ND		5.2	0.36	ug/L		08/02/22 08:24	08/05/22 02:20	1
4-Methylphenol	ND		10	0.38	ug/L		08/02/22 08:24	08/05/22 02:20	1
4-Nitroaniline	ND		10	0.26	ug/L		08/02/22 08:24	08/05/22 02:20	1
4-Nitrophenol	ND		10	1.6	ug/L		08/02/22 08:24	08/05/22 02:20	1
Acenaphthene	ND		5.2	0.43	ug/L		08/02/22 08:24	08/05/22 02:20	1
Acenaphthylene	ND		5.2	0.40	ug/L		08/02/22 08:24	08/05/22 02:20	1
Acetophenone	ND	*1	5.2	0.56	ug/L		08/02/22 08:24	08/05/22 02:20	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Client Sample ID: ERB_072822
Date Collected: 07/28/22 09:00
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-11
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		5.2	0.29	ug/L		08/02/22 08:24	08/05/22 02:20	1
Atrazine	ND		5.2	0.48	ug/L		08/02/22 08:24	08/05/22 02:20	1
Benzaldehyde	ND		5.2	0.28	ug/L		08/02/22 08:24	08/05/22 02:20	1
Benzo[a]anthracene	ND		5.2	0.38	ug/L		08/02/22 08:24	08/05/22 02:20	1
Benzo[a]pyrene	ND		5.2	0.49	ug/L		08/02/22 08:24	08/05/22 02:20	1
Benzo[b]fluoranthene	ND		5.2	0.35	ug/L		08/02/22 08:24	08/05/22 02:20	1
Benzo[g,h,i]perylene	ND		5.2	0.36	ug/L		08/02/22 08:24	08/05/22 02:20	1
Benzo[k]fluoranthene	ND		5.2	0.76	ug/L		08/02/22 08:24	08/05/22 02:20	1
Biphenyl	ND		5.2	0.68	ug/L		08/02/22 08:24	08/05/22 02:20	1
bis (2-chloroisopropyl) ether	ND		5.2	0.54	ug/L		08/02/22 08:24	08/05/22 02:20	1
Bis(2-chloroethoxy)methane	ND		5.2	0.36	ug/L		08/02/22 08:24	08/05/22 02:20	1
Bis(2-chloroethyl)ether	ND		5.2	0.42	ug/L		08/02/22 08:24	08/05/22 02:20	1
Bis(2-ethylhexyl) phthalate	ND		5.2	2.3	ug/L		08/02/22 08:24	08/05/22 02:20	1
Butyl benzyl phthalate	ND		5.2	1.0	ug/L		08/02/22 08:24	08/05/22 02:20	1
Caprolactam	ND		5.2	2.3	ug/L		08/02/22 08:24	08/05/22 02:20	1
Carbazole	ND	*+	5.2	0.31	ug/L		08/02/22 08:24	08/05/22 02:20	1
Chrysene	ND		5.2	0.34	ug/L		08/02/22 08:24	08/05/22 02:20	1
Dibenz(a,h)anthracene	ND		5.2	0.44	ug/L		08/02/22 08:24	08/05/22 02:20	1
Dibenzofuran	ND		10	0.53	ug/L		08/02/22 08:24	08/05/22 02:20	1
Diethyl phthalate	ND		5.2	0.23	ug/L		08/02/22 08:24	08/05/22 02:20	1
Dimethyl phthalate	ND		5.2	0.38	ug/L		08/02/22 08:24	08/05/22 02:20	1
Di-n-butyl phthalate	ND		5.2	0.32	ug/L		08/02/22 08:24	08/05/22 02:20	1
Di-n-octyl phthalate	ND		5.2	0.49	ug/L		08/02/22 08:24	08/05/22 02:20	1
Fluoranthene	ND		5.2	0.42	ug/L		08/02/22 08:24	08/05/22 02:20	1
Fluorene	ND		5.2	0.38	ug/L		08/02/22 08:24	08/05/22 02:20	1
Hexachlorobenzene	ND		5.2	0.53	ug/L		08/02/22 08:24	08/05/22 02:20	1
Hexachlorobutadiene	ND		5.2	0.71	ug/L		08/02/22 08:24	08/05/22 02:20	1
Hexachlorocyclopentadiene	ND		5.2	0.61	ug/L		08/02/22 08:24	08/05/22 02:20	1
Hexachloroethane	ND		5.2	0.61	ug/L		08/02/22 08:24	08/05/22 02:20	1
Indeno[1,2,3-cd]pyrene	ND		5.2	0.49	ug/L		08/02/22 08:24	08/05/22 02:20	1
Isophorone	ND		5.2	0.45	ug/L		08/02/22 08:24	08/05/22 02:20	1
Naphthalene	**2.5**	**J *+ *1**	5.2	0.79	ug/L		08/02/22 08:24	08/05/22 02:20	1
Nitrobenzene	ND		5.2	0.30	ug/L		08/02/22 08:24	08/05/22 02:20	1
N-Nitrosodi-n-propylamine	ND		5.2	0.56	ug/L		08/02/22 08:24	08/05/22 02:20	1
N-Nitrosodiphenylamine	ND		5.2	0.53	ug/L		08/02/22 08:24	08/05/22 02:20	1
Pentachlorophenol	ND		10	2.3	ug/L		08/02/22 08:24	08/05/22 02:20	1
Phenanthrene	ND		5.2	0.46	ug/L		08/02/22 08:24	08/05/22 02:20	1
Phenol	ND		5.2	0.41	ug/L		08/02/22 08:24	08/05/22 02:20	1
Pyrene	ND		5.2	0.35	ug/L		08/02/22 08:24	08/05/22 02:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*81*		*41 - 120*	*08/02/22 08:24*	*08/05/22 02:20*	*1*
2-Fluorobiphenyl (Surr)	*83*		*48 - 120*	*08/02/22 08:24*	*08/05/22 02:20*	*1*
2-Fluorophenol (Surr)	*61*		*35 - 120*	*08/02/22 08:24*	*08/05/22 02:20*	*1*
Nitrobenzene-d5 (Surr)	*73*		*46 - 120*	*08/02/22 08:24*	*08/05/22 02:20*	*1*
Phenol-d5 (Surr)	*48*		*22 - 120*	*08/02/22 08:24*	*08/05/22 02:20*	*1*
p-Terphenyl-d14 (Surr)	*97*		*60 - 148*	*08/02/22 08:24*	*08/05/22 02:20*	*1*

Client Sample ID: ERB_072822

Date Collected: 07/28/22 09:00
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-11

Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.5	1.1	ng/L		08/04/22 11:45	08/04/22 18:06	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	0.61	ng/L		08/04/22 11:45	08/04/22 18:06	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	0.58	ng/L		08/04/22 11:45	08/04/22 18:06	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.48	ng/L		08/04/22 11:45	08/04/22 18:06	1
Perfluorooctanoic acid (PFOA)	ND		1.8	0.68	ng/L		08/04/22 11:45	08/04/22 18:06	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.44	ng/L		08/04/22 11:45	08/04/22 18:06	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.41	ng/L		08/04/22 11:45	08/04/22 18:06	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.49	ng/L		08/04/22 11:45	08/04/22 18:06	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.44	ng/L		08/04/22 11:45	08/04/22 18:06	1
Perfluorotridecanoic acid (PFTriA)	ND		1.8	0.43	ng/L		08/04/22 11:45	08/04/22 18:06	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.57	ng/L		08/04/22 11:45	08/04/22 18:06	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	0.55	ng/L		08/04/22 11:45	08/04/22 18:06	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.49	ng/L		08/04/22 11:45	08/04/22 18:06	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.8	0.37	ng/L		08/04/22 11:45	08/04/22 18:06	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.76	ng/L		08/04/22 11:45	08/04/22 18:06	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.36	ng/L		08/04/22 11:45	08/04/22 18:06	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.8	0.82	ng/L		08/04/22 11:45	08/04/22 18:06	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.5	1.7	ng/L		08/04/22 11:45	08/04/22 18:06	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.5	1.4	ng/L		08/04/22 11:45	08/04/22 18:06	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		4.5	1.2	ng/L		08/04/22 11:45	08/04/22 18:06	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		1.8	0.69	ng/L		08/04/22 11:45	08/04/22 18:06	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*94*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:06*	*1*
13C4 PFHpA	*101*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:06*	*1*
13C4 PFOA	*100*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:06*	*1*
13C4 PFOS	*89*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:06*	*1*
13C5 PFNA	*96*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:06*	*1*
13C4 PFBA	*100*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:06*	*1*
13C2 PFHxA	*104*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:06*	*1*
13C2 PFDA	*92*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:06*	*1*
13C2 PFUnA	*95*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:06*	*1*
13C2 PFDoA	*90*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:06*	*1*
13C8 FOSA	*81*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:06*	*1*
13C5 PFPeA	*104*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:06*	*1*
13C2 PFTeDA	*92*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:06*	*1*
d3-NMeFOSAA	*80*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:06*	*1*
d5-NEtFOSAA	*76*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:06*	*1*
M2-6:2 FTS	*98*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:06*	*1*
M2-8:2 FTS	*98*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:06*	*1*
13C3 PFBS	*93*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:06*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		08/03/22 09:32	08/04/22 01:05	1
Antimony	ND		0.020	0.0068	mg/L		08/03/22 09:32	08/04/22 01:05	1
Arsenic	ND		0.015	0.0056	mg/L		08/03/22 09:32	08/04/22 01:05	1

Client Sample ID: ERB_072822

Date Collected: 07/28/22 09:00
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-11
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		0.0020	0.00070	mg/L		08/03/22 09:32	08/04/22 01:05	1
Beryllium	ND		0.0020	0.00030	mg/L		08/03/22 09:32	08/04/22 01:05	1
Cadmium	ND		0.0020	0.00050	mg/L		08/03/22 09:32	08/04/22 01:05	1
Calcium	ND		0.50	0.10	mg/L		08/03/22 09:32	08/04/22 01:05	1
Chromium	ND		0.0040	0.0010	mg/L		08/03/22 09:32	08/04/22 01:05	1
Cobalt	ND		0.0040	0.00063	mg/L		08/03/22 09:32	08/04/22 01:05	1
Copper	ND		0.010	0.0016	mg/L		08/03/22 09:32	08/04/22 18:09	1
Iron	ND		0.050	0.019	mg/L		08/03/22 09:32	08/04/22 01:05	1
Lead	ND		0.010	0.0030	mg/L		08/03/22 09:32	08/04/22 01:05	1
Magnesium	ND		0.20	0.043	mg/L		08/03/22 09:32	08/04/22 01:05	1
Manganese	**0.00062**	**J B**	0.0030	0.00040	mg/L		08/03/22 09:32	08/04/22 01:05	1
Nickel	ND		0.010	0.0013	mg/L		08/03/22 09:32	08/04/22 01:05	1
Potassium	ND		0.50	0.10	mg/L		08/03/22 09:32	08/04/22 18:09	1
Selenium	ND		0.025	0.0087	mg/L		08/03/22 09:32	08/04/22 01:05	1
Silver	ND		0.0060	0.0017	mg/L		08/03/22 09:32	08/04/22 01:05	1
Sodium	ND		1.0	0.32	mg/L		08/03/22 09:32	08/04/22 18:09	1
Thallium	ND		0.020	0.010	mg/L		08/03/22 09:32	08/04/22 01:05	1
Vanadium	ND		0.0050	0.0015	mg/L		08/03/22 09:32	08/04/22 01:05	1
Zinc	ND		0.010	0.0015	mg/L		08/03/22 09:32	08/04/22 01:05	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		08/03/22 11:05	08/03/22 15:45	1

Client Sample ID: FB_072922

Date Collected: 07/29/22 09:40
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-12
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			08/02/22 08:24	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/02/22 08:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/02/22 08:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/02/22 08:24	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/02/22 08:24	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/02/22 08:24	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/02/22 08:24	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			08/02/22 08:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/02/22 08:24	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			08/02/22 08:24	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/02/22 08:24	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/02/22 08:24	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/02/22 08:24	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/02/22 08:24	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/02/22 08:24	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			08/02/22 08:24	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/02/22 08:24	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/02/22 08:24	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/02/22 08:24	1
2-Hexanone	ND		5.0	1.2	ug/L			08/02/22 08:24	1

Client Sample ID: FB_072922
Date Collected: 07/29/22 09:40
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-12
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/02/22 08:24	1
Acetone	ND		10	3.0	ug/L			08/02/22 08:24	1
Benzene	ND		1.0	0.41	ug/L			08/02/22 08:24	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/02/22 08:24	1
Bromoform	ND		1.0	0.26	ug/L			08/02/22 08:24	1
Bromomethane	ND		1.0	0.69	ug/L			08/02/22 08:24	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/02/22 08:24	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/02/22 08:24	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/02/22 08:24	1
Chloroethane	ND		1.0	0.32	ug/L			08/02/22 08:24	1
Chloroform	ND		1.0	0.34	ug/L			08/02/22 08:24	1
Chloromethane	ND		1.0	0.35	ug/L			08/02/22 08:24	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			08/02/22 08:24	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/02/22 08:24	1
Cyclohexane	ND		1.0	0.18	ug/L			08/02/22 08:24	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/02/22 08:24	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/02/22 08:24	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/02/22 08:24	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/02/22 08:24	1
m,p-Xylene	ND		2.0	0.66	ug/L			08/02/22 08:24	1
Methyl acetate	ND		2.5	1.3	ug/L			08/02/22 08:24	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/02/22 08:24	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/02/22 08:24	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/02/22 08:24	1
n-Butylbenzene	ND		1.0	0.64	ug/L			08/02/22 08:24	1
N-Propylbenzene	ND		1.0	0.69	ug/L			08/02/22 08:24	1
o-Xylene	ND		1.0	0.76	ug/L			08/02/22 08:24	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			08/02/22 08:24	1
Styrene	ND		1.0	0.73	ug/L			08/02/22 08:24	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			08/02/22 08:24	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/02/22 08:24	1
Toluene	ND		1.0	0.51	ug/L			08/02/22 08:24	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/02/22 08:24	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/02/22 08:24	1
Trichloroethene	ND		1.0	0.46	ug/L			08/02/22 08:24	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/02/22 08:24	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/02/22 08:24	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/02/22 08:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*08/02/22 08:24*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*08/02/22 08:24*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*08/02/22 08:24*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*08/02/22 08:24*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		08/02/22 16:05	08/03/22 20:24	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*46*		*15 - 110*	*08/02/22 16:05*	*08/03/22 20:24*	*1*

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Client Sample ID: FB_072922
Date Collected: 07/29/22 09:40
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-12
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		08/02/22 08:24	08/05/22 02:48	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		08/02/22 08:24	08/05/22 02:48	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		08/02/22 08:24	08/05/22 02:48	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		08/02/22 08:24	08/05/22 02:48	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		08/02/22 08:24	08/05/22 02:48	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		08/02/22 08:24	08/05/22 02:48	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		08/02/22 08:24	08/05/22 02:48	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		08/02/22 08:24	08/05/22 02:48	1
2-Chlorophenol	ND		5.0	0.53	ug/L		08/02/22 08:24	08/05/22 02:48	1
2-Methylnaphthalene	**2.2**	**J**	5.0	0.60	ug/L		08/02/22 08:24	08/05/22 02:48	1
2-Methylphenol	ND		5.0	0.40	ug/L		08/02/22 08:24	08/05/22 02:48	1
2-Nitroaniline	ND		10	0.42	ug/L		08/02/22 08:24	08/05/22 02:48	1
2-Nitrophenol	ND		5.0	0.48	ug/L		08/02/22 08:24	08/05/22 02:48	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		08/02/22 08:24	08/05/22 02:48	1
3-Nitroaniline	ND		10	0.48	ug/L		08/02/22 08:24	08/05/22 02:48	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		08/02/22 08:24	08/05/22 02:48	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		08/02/22 08:24	08/05/22 02:48	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		08/02/22 08:24	08/05/22 02:48	1
4-Chloroaniline	ND		5.0	0.59	ug/L		08/02/22 08:24	08/05/22 02:48	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		08/02/22 08:24	08/05/22 02:48	1
4-Methylphenol	ND		10	0.36	ug/L		08/02/22 08:24	08/05/22 02:48	1
4-Nitroaniline	ND		10	0.25	ug/L		08/02/22 08:24	08/05/22 02:48	1
4-Nitrophenol	ND		10	1.5	ug/L		08/02/22 08:24	08/05/22 02:48	1
Acenaphthene	ND		5.0	0.41	ug/L		08/02/22 08:24	08/05/22 02:48	1
Acenaphthylene	ND		5.0	0.38	ug/L		08/02/22 08:24	08/05/22 02:48	1
Acetophenone	ND	*1	5.0	0.54	ug/L		08/02/22 08:24	08/05/22 02:48	1
Anthracene	ND		5.0	0.28	ug/L		08/02/22 08:24	08/05/22 02:48	1
Atrazine	ND		5.0	0.46	ug/L		08/02/22 08:24	08/05/22 02:48	1
Benzaldehyde	ND		5.0	0.27	ug/L		08/02/22 08:24	08/05/22 02:48	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		08/02/22 08:24	08/05/22 02:48	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		08/02/22 08:24	08/05/22 02:48	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		08/02/22 08:24	08/05/22 02:48	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		08/02/22 08:24	08/05/22 02:48	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		08/02/22 08:24	08/05/22 02:48	1
Biphenyl	ND		5.0	0.65	ug/L		08/02/22 08:24	08/05/22 02:48	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		08/02/22 08:24	08/05/22 02:48	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		08/02/22 08:24	08/05/22 02:48	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		08/02/22 08:24	08/05/22 02:48	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		08/02/22 08:24	08/05/22 02:48	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		08/02/22 08:24	08/05/22 02:48	1
Caprolactam	ND		5.0	2.2	ug/L		08/02/22 08:24	08/05/22 02:48	1
Carbazole	ND	*+	5.0	0.30	ug/L		08/02/22 08:24	08/05/22 02:48	1
Chrysene	ND		5.0	0.33	ug/L		08/02/22 08:24	08/05/22 02:48	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		08/02/22 08:24	08/05/22 02:48	1
Dibenzofuran	ND		10	0.51	ug/L		08/02/22 08:24	08/05/22 02:48	1
Diethyl phthalate	ND		5.0	0.22	ug/L		08/02/22 08:24	08/05/22 02:48	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		08/02/22 08:24	08/05/22 02:48	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		08/02/22 08:24	08/05/22 02:48	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		08/02/22 08:24	08/05/22 02:48	1

Client Sample ID: FB_072922

Date Collected: 07/29/22 09:40
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-12

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		5.0	0.40	ug/L		08/02/22 08:24	08/05/22 02:48	1
Fluorene	ND		5.0	0.36	ug/L		08/02/22 08:24	08/05/22 02:48	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		08/02/22 08:24	08/05/22 02:48	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		08/02/22 08:24	08/05/22 02:48	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		08/02/22 08:24	08/05/22 02:48	1
Hexachloroethane	ND		5.0	0.59	ug/L		08/02/22 08:24	08/05/22 02:48	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		08/02/22 08:24	08/05/22 02:48	1
Isophorone	ND		5.0	0.43	ug/L		08/02/22 08:24	08/05/22 02:48	1
Naphthalene	**16**	***+ *1**	5.0	0.76	ug/L		08/02/22 08:24	08/05/22 02:48	1
Nitrobenzene	ND		5.0	0.29	ug/L		08/02/22 08:24	08/05/22 02:48	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		08/02/22 08:24	08/05/22 02:48	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		08/02/22 08:24	08/05/22 02:48	1
Pentachlorophenol	ND		10	2.2	ug/L		08/02/22 08:24	08/05/22 02:48	1
Phenanthrene	ND		5.0	0.44	ug/L		08/02/22 08:24	08/05/22 02:48	1
Phenol	ND		5.0	0.39	ug/L		08/02/22 08:24	08/05/22 02:48	1
Pyrene	ND		5.0	0.34	ug/L		08/02/22 08:24	08/05/22 02:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*88*		*41 - 120*	*08/02/22 08:24*	*08/05/22 02:48*	*1*
2-Fluorobiphenyl (Surr)	*90*		*48 - 120*	*08/02/22 08:24*	*08/05/22 02:48*	*1*
2-Fluorophenol (Surr)	*66*		*35 - 120*	*08/02/22 08:24*	*08/05/22 02:48*	*1*
Nitrobenzene-d5 (Surr)	*79*		*46 - 120*	*08/02/22 08:24*	*08/05/22 02:48*	*1*
Phenol-d5 (Surr)	*51*		*22 - 120*	*08/02/22 08:24*	*08/05/22 02:48*	*1*
p-Terphenyl-d14 (Surr)	*103*		*60 - 148*	*08/02/22 08:24*	*08/05/22 02:48*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND	H	5.0	0.48	ug/L		08/08/22 22:12	08/09/22 19:19	1
2,4,6-Trichlorophenol	ND	H	5.0	0.61	ug/L		08/08/22 22:12	08/09/22 19:19	1
2,4-Dichlorophenol	ND	H	5.0	0.51	ug/L		08/08/22 22:12	08/09/22 19:19	1
2,4-Dimethylphenol	ND	H	5.0	0.50	ug/L		08/08/22 22:12	08/09/22 19:19	1
2,4-Dinitrophenol	ND	H	10	2.2	ug/L		08/08/22 22:12	08/09/22 19:19	1
2,4-Dinitrotoluene	ND	H	5.0	0.45	ug/L		08/08/22 22:12	08/09/22 19:19	1
2,6-Dinitrotoluene	ND	H	5.0	0.40	ug/L		08/08/22 22:12	08/09/22 19:19	1
2-Chloronaphthalene	ND	H	5.0	0.46	ug/L		08/08/22 22:12	08/09/22 19:19	1
2-Chlorophenol	ND	H	5.0	0.53	ug/L		08/08/22 22:12	08/09/22 19:19	1
2-Methylnaphthalene	ND	H	5.0	0.60	ug/L		08/08/22 22:12	08/09/22 19:19	1
2-Methylphenol	ND	H	5.0	0.40	ug/L		08/08/22 22:12	08/09/22 19:19	1
2-Nitroaniline	ND	H	10	0.42	ug/L		08/08/22 22:12	08/09/22 19:19	1
2-Nitrophenol	ND	H	5.0	0.48	ug/L		08/08/22 22:12	08/09/22 19:19	1
3,3'-Dichlorobenzidine	ND	H	5.0	0.40	ug/L		08/08/22 22:12	08/09/22 19:19	1
3-Nitroaniline	ND	H	10	0.48	ug/L		08/08/22 22:12	08/09/22 19:19	1
4,6-Dinitro-2-methylphenol	ND	H	10	2.2	ug/L		08/08/22 22:12	08/09/22 19:19	1
4-Bromophenyl phenyl ether	ND	H	5.0	0.45	ug/L		08/08/22 22:12	08/09/22 19:19	1
4-Chloro-3-methylphenol	ND	H	5.0	0.45	ug/L		08/08/22 22:12	08/09/22 19:19	1
4-Chloroaniline	ND	H	5.0	0.59	ug/L		08/08/22 22:12	08/09/22 19:19	1
4-Chlorophenyl phenyl ether	ND	H	5.0	0.35	ug/L		08/08/22 22:12	08/09/22 19:19	1
4-Methylphenol	ND	H	10	0.36	ug/L		08/08/22 22:12	08/09/22 19:19	1
4-Nitroaniline	ND	H	10	0.25	ug/L		08/08/22 22:12	08/09/22 19:19	1
4-Nitrophenol	ND	H	10	1.5	ug/L		08/08/22 22:12	08/09/22 19:19	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Client Sample ID: FB_072922
Date Collected: 07/29/22 09:40
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-12
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	5.0	0.41	ug/L		08/08/22 22:12	08/09/22 19:19	1
Acenaphthylene	ND	H	5.0	0.38	ug/L		08/08/22 22:12	08/09/22 19:19	1
Acetophenone	ND	H	5.0	0.54	ug/L		08/08/22 22:12	08/09/22 19:19	1
Anthracene	ND	H	5.0	0.28	ug/L		08/08/22 22:12	08/09/22 19:19	1
Atrazine	ND	H	5.0	0.46	ug/L		08/08/22 22:12	08/09/22 19:19	1
Benzaldehyde	ND	H	5.0	0.27	ug/L		08/08/22 22:12	08/09/22 19:19	1
Benzo[a]anthracene	ND	H	5.0	0.36	ug/L		08/08/22 22:12	08/09/22 19:19	1
Benzo[a]pyrene	ND	H	5.0	0.47	ug/L		08/08/22 22:12	08/09/22 19:19	1
Benzo[b]fluoranthene	ND	H	5.0	0.34	ug/L		08/08/22 22:12	08/09/22 19:19	1
Benzo[g,h,i]perylene	ND	H	5.0	0.35	ug/L		08/08/22 22:12	08/09/22 19:19	1
Benzo[k]fluoranthene	ND	H	5.0	0.73	ug/L		08/08/22 22:12	08/09/22 19:19	1
Biphenyl	ND	H	5.0	0.65	ug/L		08/08/22 22:12	08/09/22 19:19	1
bis (2-chloroisopropyl) ether	ND	H	5.0	0.52	ug/L		08/08/22 22:12	08/09/22 19:19	1
Bis(2-chloroethoxy)methane	ND	H	5.0	0.35	ug/L		08/08/22 22:12	08/09/22 19:19	1
Bis(2-chloroethyl)ether	ND	H	5.0	0.40	ug/L		08/08/22 22:12	08/09/22 19:19	1
Bis(2-ethylhexyl) phthalate	ND	H	5.0	2.2	ug/L		08/08/22 22:12	08/09/22 19:19	1
Butyl benzyl phthalate	ND	H	5.0	1.0	ug/L		08/08/22 22:12	08/09/22 19:19	1
Caprolactam	ND	H	5.0	2.2	ug/L		08/08/22 22:12	08/09/22 19:19	1
Carbazole	ND	H	5.0	0.30	ug/L		08/08/22 22:12	08/09/22 19:19	1
Chrysene	ND	H	5.0	0.33	ug/L		08/08/22 22:12	08/09/22 19:19	1
Dibenz(a,h)anthracene	ND	H	5.0	0.42	ug/L		08/08/22 22:12	08/09/22 19:19	1
Dibenzofuran	ND	H	10	0.51	ug/L		08/08/22 22:12	08/09/22 19:19	1
Diethyl phthalate	ND	H	5.0	0.22	ug/L		08/08/22 22:12	08/09/22 19:19	1
Dimethyl phthalate	ND	H	5.0	0.36	ug/L		08/08/22 22:12	08/09/22 19:19	1
Di-n-butyl phthalate	ND	H	5.0	0.31	ug/L		08/08/22 22:12	08/09/22 19:19	1
Di-n-octyl phthalate	ND	H	5.0	0.47	ug/L		08/08/22 22:12	08/09/22 19:19	1
Fluoranthene	ND	H	5.0	0.40	ug/L		08/08/22 22:12	08/09/22 19:19	1
Fluorene	ND	H	5.0	0.36	ug/L		08/08/22 22:12	08/09/22 19:19	1
Hexachlorobenzene	ND	H	5.0	0.51	ug/L		08/08/22 22:12	08/09/22 19:19	1
Hexachlorobutadiene	ND	H	5.0	0.68	ug/L		08/08/22 22:12	08/09/22 19:19	1
Hexachlorocyclopentadiene	ND	H	5.0	0.59	ug/L		08/08/22 22:12	08/09/22 19:19	1
Hexachloroethane	ND	H	5.0	0.59	ug/L		08/08/22 22:12	08/09/22 19:19	1
Indeno[1,2,3-cd]pyrene	ND	H	5.0	0.47	ug/L		08/08/22 22:12	08/09/22 19:19	1
Isophorone	ND	H	5.0	0.43	ug/L		08/08/22 22:12	08/09/22 19:19	1
Naphthalene	**2.2**	**J H**	5.0	0.76	ug/L		08/08/22 22:12	08/09/22 19:19	1
Nitrobenzene	ND	H	5.0	0.29	ug/L		08/08/22 22:12	08/09/22 19:19	1
N-Nitrosodi-n-propylamine	ND	H	5.0	0.54	ug/L		08/08/22 22:12	08/09/22 19:19	1
N-Nitrosodiphenylamine	ND	H	5.0	0.51	ug/L		08/08/22 22:12	08/09/22 19:19	1
Pentachlorophenol	ND	H	10	2.2	ug/L		08/08/22 22:12	08/09/22 19:19	1
Phenanthrene	ND	H	5.0	0.44	ug/L		08/08/22 22:12	08/09/22 19:19	1
Phenol	ND	H	5.0	0.39	ug/L		08/08/22 22:12	08/09/22 19:19	1
Pyrene	ND	H	5.0	0.34	ug/L		08/08/22 22:12	08/09/22 19:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*86*		*41 - 120*	*08/08/22 22:12*	*08/09/22 19:19*	*1*
2-Fluorobiphenyl (Surr)	*87*		*48 - 120*	*08/08/22 22:12*	*08/09/22 19:19*	*1*
2-Fluorophenol (Surr)	*67*		*35 - 120*	*08/08/22 22:12*	*08/09/22 19:19*	*1*
Nitrobenzene-d5 (Surr)	*79*		*46 - 120*	*08/08/22 22:12*	*08/09/22 19:19*	*1*
Phenol-d5 (Surr)	*49*		*22 - 120*	*08/08/22 22:12*	*08/09/22 19:19*	*1*
p-Terphenyl-d14 (Surr)	*99*		*60 - 148*	*08/08/22 22:12*	*08/09/22 19:19*	*1*

Client Sample ID: FB_072922
Date Collected: 07/29/22 09:40
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-12
Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.4	1.1	ng/L		08/04/22 11:45	08/04/22 18:14	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	0.60	ng/L		08/04/22 11:45	08/04/22 18:14	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	0.57	ng/L		08/04/22 11:45	08/04/22 18:14	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.47	ng/L		08/04/22 11:45	08/04/22 18:14	1
Perfluorooctanoic acid (PFOA)	ND		1.8	0.67	ng/L		08/04/22 11:45	08/04/22 18:14	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.43	ng/L		08/04/22 11:45	08/04/22 18:14	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.40	ng/L		08/04/22 11:45	08/04/22 18:14	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.48	ng/L		08/04/22 11:45	08/04/22 18:14	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.43	ng/L		08/04/22 11:45	08/04/22 18:14	1
Perfluorotridecanoic acid (PFTriA)	ND		1.8	0.42	ng/L		08/04/22 11:45	08/04/22 18:14	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.56	ng/L		08/04/22 11:45	08/04/22 18:14	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	0.54	ng/L		08/04/22 11:45	08/04/22 18:14	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.48	ng/L		08/04/22 11:45	08/04/22 18:14	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.8	0.36	ng/L		08/04/22 11:45	08/04/22 18:14	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.74	ng/L		08/04/22 11:45	08/04/22 18:14	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.35	ng/L		08/04/22 11:45	08/04/22 18:14	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.8	0.81	ng/L		08/04/22 11:45	08/04/22 18:14	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.4	1.7	ng/L		08/04/22 11:45	08/04/22 18:14	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.4	1.4	ng/L		08/04/22 11:45	08/04/22 18:14	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		4.4	1.1	ng/L		08/04/22 11:45	08/04/22 18:14	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		1.8	0.67	ng/L		08/04/22 11:45	08/04/22 18:14	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*99*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:14*	*1*
13C4 PFHpA	*103*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:14*	*1*
13C4 PFOA	*100*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:14*	*1*
13C4 PFOS	*93*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:14*	*1*
13C5 PFNA	*103*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:14*	*1*
13C4 PFBA	*102*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:14*	*1*
13C2 PFHxA	*105*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:14*	*1*
13C2 PFDA	*94*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:14*	*1*
13C2 PFUnA	*96*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:14*	*1*
13C2 PFDoA	*85*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:14*	*1*
13C8 FOSA	*78*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:14*	*1*
13C5 PFPeA	*101*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:14*	*1*
13C2 PFTeDA	*92*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:14*	*1*
d3-NMeFOSAA	*81*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:14*	*1*
d5-NEtFOSAA	*74*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:14*	*1*
M2-6:2 FTS	*95*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:14*	*1*
M2-8:2 FTS	*90*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:14*	*1*
13C3 PFBS	*95*		*50 - 150*	*08/04/22 11:45*	*08/04/22 18:14*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		08/03/22 09:32	08/04/22 01:21	1
Antimony	ND		0.020	0.0068	mg/L		08/03/22 09:32	08/04/22 01:21	1
Arsenic	ND		0.015	0.0056	mg/L		08/03/22 09:32	08/04/22 01:21	1

Client Sample ID: FB_072922

Date Collected: 07/29/22 09:40
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-12
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		0.0020	0.00070	mg/L		08/03/22 09:32	08/04/22 01:21	1
Beryllium	ND		0.0020	0.00030	mg/L		08/03/22 09:32	08/04/22 01:21	1
Cadmium	ND		0.0020	0.00050	mg/L		08/03/22 09:32	08/04/22 01:21	1
Calcium	**0.15**	**J**	0.50	0.10	mg/L		08/03/22 09:32	08/04/22 01:21	1
Chromium	ND		0.0040	0.0010	mg/L		08/03/22 09:32	08/04/22 01:21	1
Cobalt	ND		0.0040	0.00063	mg/L		08/03/22 09:32	08/04/22 01:21	1
Copper	ND		0.010	0.0016	mg/L		08/03/22 09:32	08/04/22 18:13	1
Iron	ND		0.050	0.019	mg/L		08/03/22 09:32	08/04/22 01:21	1
Lead	ND		0.010	0.0030	mg/L		08/03/22 09:32	08/04/22 01:21	1
Magnesium	ND		0.20	0.043	mg/L		08/03/22 09:32	08/04/22 01:21	1
Manganese	**0.0011**	**J B**	0.0030	0.00040	mg/L		08/03/22 09:32	08/04/22 01:21	1
Nickel	ND		0.010	0.0013	mg/L		08/03/22 09:32	08/04/22 01:21	1
Potassium	ND		0.50	0.10	mg/L		08/03/22 09:32	08/04/22 18:13	1
Selenium	ND		0.025	0.0087	mg/L		08/03/22 09:32	08/04/22 01:21	1
Silver	ND		0.0060	0.0017	mg/L		08/03/22 09:32	08/04/22 01:21	1
Sodium	ND		1.0	0.32	mg/L		08/03/22 09:32	08/04/22 18:13	1
Thallium	ND		0.020	0.010	mg/L		08/03/22 09:32	08/04/22 01:21	1
Vanadium	ND		0.0050	0.0015	mg/L		08/03/22 09:32	08/04/22 01:21	1
Zinc	ND		0.010	0.0015	mg/L		08/03/22 09:32	08/04/22 01:21	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		08/03/22 11:05	08/03/22 15:47	1

Client Sample ID: SS6 (0-2)

Date Collected: 07/29/22 14:40
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-13
Matrix: Solid
Percent Solids: 93.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.8	0.58	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
1,1,1-Trichloroethane	ND		5.8	0.42	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
1,1,2,2-Tetrachloroethane	ND	*3	5.8	0.94	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.8	1.3	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
1,1,2-Trichloroethane	ND		5.8	0.76	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
1,1-Dichloroethane	ND		5.8	0.71	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
1,1-Dichloroethene	ND		5.8	0.71	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
1,2,3-Trimethylbenzene	ND	*3	5.8	1.2	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
1,2,4-Trichlorobenzene	ND	*3	5.8	0.35	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
1,2,4-Trimethylbenzene	ND	*3	5.8	1.1	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
1,2-Dibromo-3-Chloropropane	ND	*3	5.8	2.9	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
1,2-Dibromoethane	ND		5.8	0.75	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
1,2-Dichlorobenzene	ND	*3	5.8	0.46	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
1,2-Dichloroethane	ND		5.8	0.29	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
1,2-Dichloropropane	ND		5.8	2.9	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
1,3,5-Trimethylbenzene	ND	*3	5.8	0.38	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
1,3-Dichlorobenzene	ND	*3	5.8	0.30	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
1,4-Dichlorobenzene	ND	*3	5.8	0.82	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
2-Butanone (MEK)	ND		29	2.1	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
2-Hexanone	ND		29	2.9	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1

Client Sample ID: SS6 (0-2)
Date Collected: 07/29/22 14:40
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-13
Matrix: Solid
Percent Solids: 93.2

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		29	1.9	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
Acetone	**6.8**	**J**	29	4.9	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
Benzene	ND		5.8	0.29	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
Bromodichloromethane	ND		5.8	0.78	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
Bromoform	ND		5.8	2.9	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
Bromomethane	ND		5.8	0.52	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
Carbon disulfide	ND		5.8	2.9	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
Carbon tetrachloride	ND		5.8	0.56	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
Chlorobenzene	ND		5.8	0.77	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
Chloroethane	ND		5.8	1.3	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
Chloroform	ND		5.8	0.36	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
Chloromethane	ND		5.8	0.35	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
cis-1,2-Dichloroethene	ND		5.8	0.75	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
cis-1,3-Dichloropropene	ND		5.8	0.84	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
Cyclohexane	ND		5.8	0.82	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
Dibromochloromethane	ND		5.8	0.75	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
Dichlorodifluoromethane	ND		5.8	0.48	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
Ethylbenzene	ND		5.8	0.40	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
Isopropylbenzene	ND	*3	5.8	0.88	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
m,p-Xylene	ND		12	0.98	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
Methyl acetate	ND		29	3.5	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
Methyl tert-butyl ether	ND		5.8	0.57	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
Methylcyclohexane	ND		5.8	0.89	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
Methylene Chloride	ND		5.8	2.7	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
n-Butylbenzene	ND	*3	5.8	0.51	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
N-Propylbenzene	ND	*3	5.8	0.47	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
o-Xylene	ND		5.8	0.76	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
sec-Butylbenzene	ND	*3	5.8	0.51	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
Styrene	ND		5.8	0.29	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
tert-Butylbenzene	ND	*3	5.8	0.61	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
Tetrachloroethene	ND		5.8	0.78	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
Toluene	ND		5.8	0.44	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
trans-1,2-Dichloroethene	ND		5.8	0.60	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
trans-1,3-Dichloropropene	ND		5.8	2.6	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
Trichloroethene	ND		5.8	1.3	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
Trichlorofluoromethane	ND		5.8	0.55	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
Vinyl chloride	ND		5.8	0.71	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1
Xylenes, Total	ND		12	0.98	ug/Kg	☼	07/30/22 12:00	08/11/22 16:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*64 - 126*	*07/30/22 12:00*	*08/11/22 16:23*	*1*
4-Bromofluorobenzene (Surr)	*74*		*72 - 126*	*07/30/22 12:00*	*08/11/22 16:23*	*1*
Dibromofluoromethane (Surr)	*109*		*60 - 140*	*07/30/22 12:00*	*08/11/22 16:23*	*1*
Toluene-d8 (Surr)	*125*		*71 - 125*	*07/30/22 12:00*	*08/11/22 16:23*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		180	48	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
2,4,6-Trichlorophenol	ND		180	36	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
2,4-Dichlorophenol	ND		180	19	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1

Client Sample ID: SS6 (0-2)
Date Collected: 07/29/22 14:40
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-13
Matrix: Solid
Percent Solids: 93.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dimethylphenol	ND		180	43	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
2,4-Dinitrophenol	ND		1700	820	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
2,4-Dinitrotoluene	ND		180	37	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
2,6-Dinitrotoluene	ND		180	21	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
2-Chloronaphthalene	ND		180	29	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
2-Chlorophenol	ND		340	32	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
2-Methylnaphthalene	ND		180	36	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
2-Methylphenol	ND		180	21	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
2-Nitroaniline	ND		340	26	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
2-Nitrophenol	ND		180	50	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
3,3'-Dichlorobenzidine	ND		340	210	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
3-Nitroaniline	ND		340	49	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
4,6-Dinitro-2-methylphenol	ND		340	180	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
4-Bromophenyl phenyl ether	ND		180	25	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
4-Chloro-3-methylphenol	ND		180	44	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
4-Chloroaniline	ND		180	44	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
4-Chlorophenyl phenyl ether	ND		180	22	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
4-Methylphenol	ND		340	21	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
4-Nitroaniline	ND		340	93	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
4-Nitrophenol	ND		340	120	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Acenaphthene	ND		180	26	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Acenaphthylene	**130**	**J**	180	23	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Acetophenone	ND		180	24	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Anthracene	**110**	**J**	180	44	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Atrazine	ND		180	62	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Benzaldehyde	ND		180	140	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Benzo[a]anthracene	**410**		180	18	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Benzo[a]pyrene	**440**		180	26	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Benzo[b]fluoranthene	**710**		180	28	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Benzo[g,h,i]perylene	**380**		180	19	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Benzo[k]fluoranthene	**220**		180	23	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Biphenyl	ND		180	26	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
bis (2-chloroisopropyl) ether	ND		180	36	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Bis(2-chloroethoxy)methane	ND		180	38	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Bis(2-chloroethyl)ether	ND		180	23	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Bis(2-ethylhexyl) phthalate	ND		180	61	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Butyl benzyl phthalate	ND		180	29	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Caprolactam	ND		180	53	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Carbazole	**35**	**J**	180	21	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Chrysene	**570**		180	40	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Dibenz(a,h)anthracene	**96**	**J**	180	31	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Dibenzofuran	**34**	**J**	180	21	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Diethyl phthalate	ND		180	23	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Dimethyl phthalate	ND		180	21	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Di-n-butyl phthalate	ND		180	30	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Di-n-octyl phthalate	ND		180	21	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Fluoranthene	**720**		180	19	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Fluorene	ND		180	21	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Hexachlorobenzene	ND		180	24	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1

Client Sample ID: SS6 (0-2)
Date Collected: 07/29/22 14:40
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-13
Matrix: Solid
Percent Solids: 93.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		180	26	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Hexachlorocyclopentadiene	ND		180	24	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Hexachloroethane	ND		180	23	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Indeno[1,2,3-cd]pyrene	**340**		180	22	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Isophorone	ND		180	38	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Naphthalene	**45**	**J**	180	23	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Nitrobenzene	ND		180	20	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
N-Nitrosodi-n-propylamine	ND		180	30	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
N-Nitrosodiphenylamine	ND		180	140	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Pentachlorophenol	ND		340	180	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Phenanthrene	**320**		180	26	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Phenol	ND		180	27	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1
Pyrene	**780**		180	21	ug/Kg	☼	08/12/22 15:31	08/15/22 12:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*98*		*54 - 120*	*08/12/22 15:31*	*08/15/22 12:13*	*1*
2-Fluorobiphenyl (Surr)	*100*		*60 - 120*	*08/12/22 15:31*	*08/15/22 12:13*	*1*
2-Fluorophenol (Surr)	*83*		*52 - 120*	*08/12/22 15:31*	*08/15/22 12:13*	*1*
Nitrobenzene-d5 (Surr)	*90*		*53 - 120*	*08/12/22 15:31*	*08/15/22 12:13*	*1*
Phenol-d5 (Surr)	*89*		*54 - 120*	*08/12/22 15:31*	*08/15/22 12:13*	*1*
p-Terphenyl-d14 (Surr)	*109*		*79 - 130*	*08/12/22 15:31*	*08/15/22 12:13*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8210**	**B**	10.4	4.6	mg/Kg	☼	08/04/22 13:08	08/05/22 23:55	1
Antimony	**1.3**	**J**	15.6	0.42	mg/Kg	☼	08/04/22 13:08	08/05/22 23:55	1
Arsenic	**24.1**		2.1	0.42	mg/Kg	☼	08/04/22 13:08	08/05/22 23:55	1
Barium	**92.8**	**B**	0.52	0.11	mg/Kg	☼	08/04/22 13:08	08/05/22 23:55	1
Beryllium	**0.49**		0.21	0.029	mg/Kg	☼	08/04/22 13:08	08/05/22 23:55	1
Cadmium	**0.097**	**J**	0.21	0.031	mg/Kg	☼	08/04/22 13:08	08/05/22 23:55	1
Calcium	**1830**		51.9	3.4	mg/Kg	☼	08/04/22 13:08	08/05/22 23:55	1
Chromium	**13.1**		0.52	0.21	mg/Kg	☼	08/04/22 13:08	08/05/22 23:55	1
Cobalt	**8.4**		0.52	0.052	mg/Kg	☼	08/04/22 13:08	08/05/22 23:55	1
Copper	**47.8**		1.0	0.22	mg/Kg	☼	08/04/22 13:08	08/05/22 23:55	1
Iron	**24500**		10.4	3.6	mg/Kg	☼	08/04/22 13:08	08/05/22 23:55	1
Lead	**90.9**		1.1	0.27	mg/Kg	☼	08/15/22 12:22	08/16/22 21:44	1
Magnesium	**2090**	**B**	20.8	0.96	mg/Kg	☼	08/04/22 13:08	08/05/22 23:55	1
Manganese	**478**	**B**	0.21	0.033	mg/Kg	☼	08/04/22 13:08	08/11/22 16:36	1
Nickel	**18.9**		5.2	0.24	mg/Kg	☼	08/04/22 13:08	08/05/22 23:55	1
Potassium	**1420**		31.2	20.8	mg/Kg	☼	08/04/22 13:08	08/11/22 16:36	1
Selenium	**1.2**	**J**	4.2	0.42	mg/Kg	☼	08/04/22 13:08	08/05/22 23:55	1
Silver	ND		0.62	0.21	mg/Kg	☼	08/04/22 13:08	08/05/22 23:55	1
Sodium	**26.2**	**J**	145	13.5	mg/Kg	☼	08/04/22 13:08	08/05/22 23:55	1
Thallium	ND		6.2	0.31	mg/Kg	☼	08/04/22 13:08	08/05/22 23:55	1
Vanadium	**15.4**		0.52	0.11	mg/Kg	☼	08/04/22 13:08	08/05/22 23:55	1
Zinc	**65.6**	**B**	2.1	0.66	mg/Kg	☼	08/04/22 13:08	08/05/22 23:55	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.067**		0.020	0.0047	mg/Kg	☼	08/04/22 10:17	08/04/22 13:16	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Client Sample ID: SS6 (0-6)

Date Collected: 07/29/22 14:25
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-14

Matrix: Solid
Percent Solids: 90.0

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		6.8	0.68	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
1,1,1-Trichloroethane	ND		6.8	0.49	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
1,1,2,2-Tetrachloroethane	ND	*3	6.8	1.1	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.8	1.6	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
1,1,2-Trichloroethane	ND		6.8	0.88	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
1,1-Dichloroethane	ND		6.8	0.83	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
1,1-Dichloroethene	ND		6.8	0.83	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
1,2,3-Trimethylbenzene	ND	*3	6.8	1.4	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
1,2,4-Trichlorobenzene	ND	*3	6.8	0.41	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
1,2,4-Trimethylbenzene	ND	*3	6.8	1.3	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
1,2-Dibromo-3-Chloropropane	ND	*3	6.8	3.4	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
1,2-Dibromoethane	ND		6.8	0.87	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
1,2-Dichlorobenzene	ND	*3	6.8	0.53	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
1,2-Dichloroethane	ND		6.8	0.34	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
1,2-Dichloropropane	ND		6.8	3.4	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
1,3,5-Trimethylbenzene	ND	*3	6.8	0.44	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
1,3-Dichlorobenzene	ND	*3	6.8	0.35	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
1,4-Dichlorobenzene	ND	*3	6.8	0.95	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
2-Butanone (MEK)	ND		34	2.5	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
2-Hexanone	ND		34	3.4	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
4-Methyl-2-pentanone (MIBK)	ND		34	2.2	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
Acetone	ND		34	5.7	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
Benzene	ND		6.8	0.33	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
Bromodichloromethane	ND		6.8	0.91	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
Bromoform	ND		6.8	3.4	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
Bromomethane	ND		6.8	0.61	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
Carbon disulfide	ND		6.8	3.4	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
Carbon tetrachloride	ND		6.8	0.66	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
Chlorobenzene	ND		6.8	0.90	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
Chloroethane	ND		6.8	1.5	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
Chloroform	ND		6.8	0.42	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
Chloromethane	ND		6.8	0.41	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
cis-1,2-Dichloroethene	ND		6.8	0.87	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
cis-1,3-Dichloropropene	ND		6.8	0.98	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
Cyclohexane	ND		6.8	0.95	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
Dibromochloromethane	ND		6.8	0.87	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
Dichlorodifluoromethane	ND		6.8	0.56	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
Ethylbenzene	ND		6.8	0.47	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
Isopropylbenzene	ND	*3	6.8	1.0	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
m,p-Xylene	ND		14	1.1	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
Methyl acetate	ND		34	4.1	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
Methyl tert-butyl ether	ND		6.8	0.67	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
Methylcyclohexane	ND		6.8	1.0	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
Methylene Chloride	ND		6.8	3.1	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
n-Butylbenzene	ND	*3	6.8	0.59	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
N-Propylbenzene	ND	*3	6.8	0.54	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
o-Xylene	ND		6.8	0.89	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
sec-Butylbenzene	ND	*3	6.8	0.59	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
Styrene	ND		6.8	0.34	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1

Client Sample ID: SS6 (0-6)
Date Collected: 07/29/22 14:25
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-14
Matrix: Solid
Percent Solids: 90.0

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND	*3	6.8	0.71	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
Tetrachloroethene	ND		6.8	0.91	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
Toluene	ND		6.8	0.51	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
trans-1,2-Dichloroethene	ND		6.8	0.70	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
trans-1,3-Dichloropropene	ND		6.8	3.0	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
Trichloroethene	ND		6.8	1.5	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
Trichlorofluoromethane	ND		6.8	0.64	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
Vinyl chloride	ND		6.8	0.83	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1
Xylenes, Total	ND		14	1.1	ug/Kg	☼	07/30/22 12:00	08/12/22 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*64 - 126*	*07/30/22 12:00*	*08/12/22 14:48*	*1*
4-Bromofluorobenzene (Surr)	*73*		*72 - 126*	*07/30/22 12:00*	*08/12/22 14:48*	*1*
Dibromofluoromethane (Surr)	*111*		*60 - 140*	*07/30/22 12:00*	*08/12/22 14:48*	*1*
Toluene-d8 (Surr)	*131*	*S1+*	*71 - 125*	*07/30/22 12:00*	*08/12/22 14:48*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		190	50	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
2,4,6-Trichlorophenol	ND		190	37	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
2,4-Dichlorophenol	ND		190	20	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
2,4-Dimethylphenol	ND		190	45	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
2,4-Dinitrophenol	ND		1800	860	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
2,4-Dinitrotoluene	ND		190	38	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
2,6-Dinitrotoluene	ND		190	22	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
2-Chloronaphthalene	ND		190	31	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
2-Chlorophenol	ND		360	34	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
2-Methylnaphthalene	ND		190	37	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
2-Methylphenol	ND		190	22	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
2-Nitroaniline	ND		360	27	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
2-Nitrophenol	ND		190	53	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
3,3'-Dichlorobenzidine	ND		360	220	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
3-Nitroaniline	ND		360	51	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
4,6-Dinitro-2-methylphenol	ND		360	190	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
4-Bromophenyl phenyl ether	ND		190	26	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
4-Chloro-3-methylphenol	ND		190	46	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
4-Chloroaniline	ND		190	46	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
4-Chlorophenyl phenyl ether	ND		190	23	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
4-Methylphenol	ND		360	22	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
4-Nitroaniline	ND		360	97	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
4-Nitrophenol	ND		360	130	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Acenaphthene	ND		190	27	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Acenaphthylene	**69**	**J**	190	24	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Acetophenone	ND		190	25	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Anthracene	**63**	**J**	190	46	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Atrazine	ND		190	65	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Benzaldehyde	ND		190	150	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Benzo[a]anthracene	**220**		190	19	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Benzo[a]pyrene	**230**		190	27	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Benzo[b]fluoranthene	**340**		190	30	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1

Client Sample ID: SS6 (0-6)
Date Collected: 07/29/22 14:25
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-14
Matrix: Solid
Percent Solids: 90.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	**200**		190	20	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Benzo[k]fluoranthene	**120**	**J**	190	24	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Biphenyl	ND		190	27	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
bis (2-chloroisopropyl) ether	ND		190	37	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Bis(2-chloroethoxy)methane	ND		190	39	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Bis(2-chloroethyl)ether	ND		190	24	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Bis(2-ethylhexyl) phthalate	ND		190	64	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Butyl benzyl phthalate	ND		190	31	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Caprolactam	ND		190	56	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Carbazole	ND		190	22	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Chrysene	**330**		190	42	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Dibenz(a,h)anthracene	**54**	**J**	190	33	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Dibenzofuran	ND		190	22	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Diethyl phthalate	ND		190	24	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Dimethyl phthalate	ND		190	22	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Di-n-butyl phthalate	ND		190	32	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Di-n-octyl phthalate	ND		190	22	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Fluoranthene	**360**		190	20	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Fluorene	ND		190	22	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Hexachlorobenzene	ND		190	25	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Hexachlorobutadiene	ND		190	27	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Hexachlorocyclopentadiene	ND		190	25	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Hexachloroethane	ND		190	24	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Indeno[1,2,3-cd]pyrene	**180**	**J**	190	23	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Isophorone	ND		190	39	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Naphthalene	**30**	**J**	190	24	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Nitrobenzene	ND		190	21	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
N-Nitrosodi-n-propylamine	ND		190	32	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
N-Nitrosodiphenylamine	ND		190	150	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Pentachlorophenol	ND		360	190	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Phenanthrene	**210**		190	27	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Phenol	ND		190	28	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1
Pyrene	**410**		190	22	ug/Kg	☼	08/12/22 15:31	08/15/22 12:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*88*		*54 - 120*	*08/12/22 15:31*	*08/15/22 12:38*	*1*
2-Fluorobiphenyl (Surr)	*88*		*60 - 120*	*08/12/22 15:31*	*08/15/22 12:38*	*1*
2-Fluorophenol (Surr)	*74*		*52 - 120*	*08/12/22 15:31*	*08/15/22 12:38*	*1*
Nitrobenzene-d5 (Surr)	*80*		*53 - 120*	*08/12/22 15:31*	*08/15/22 12:38*	*1*
Phenol-d5 (Surr)	*79*		*54 - 120*	*08/12/22 15:31*	*08/15/22 12:38*	*1*
p-Terphenyl-d14 (Surr)	*92*		*79 - 130*	*08/12/22 15:31*	*08/15/22 12:38*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**6930**	**B**	11.4	5.0	mg/Kg	☼	08/04/22 13:08	08/05/22 23:59	1
Antimony	**1.6**	**J**	17.2	0.46	mg/Kg	☼	08/04/22 13:08	08/05/22 23:59	1
Arsenic	**15.7**		2.3	0.46	mg/Kg	☼	08/04/22 13:08	08/05/22 23:59	1
Barium	**70.5**	**B**	0.57	0.13	mg/Kg	☼	08/04/22 13:08	08/05/22 23:59	1
Beryllium	**0.46**		0.23	0.032	mg/Kg	☼	08/04/22 13:08	08/05/22 23:59	1
Cadmium	ND		0.23	0.034	mg/Kg	☼	08/04/22 13:08	08/05/22 23:59	1

Client Sample ID: SS6 (0-6)

Date Collected: 07/29/22 14:25
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-14
Matrix: Solid
Percent Solids: 90.0

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1480		57.2	3.8	mg/Kg	☼	08/04/22 13:08	08/05/22 23:59	1
Chromium	14.2		0.57	0.23	mg/Kg	☼	08/04/22 13:08	08/05/22 23:59	1
Cobalt	7.0		0.57	0.057	mg/Kg	☼	08/04/22 13:08	08/05/22 23:59	1
Copper	83.8		1.1	0.24	mg/Kg	☼	08/04/22 13:08	08/05/22 23:59	1
Iron	44500		11.4	4.0	mg/Kg	☼	08/04/22 13:08	08/05/22 23:59	1
Lead	656		5.5	1.3	mg/Kg	☼	08/15/22 12:22	08/17/22 16:50	5
Magnesium	1250	B	22.9	1.1	mg/Kg	☼	08/04/22 13:08	08/05/22 23:59	1
Manganese	415	B	0.23	0.037	mg/Kg	☼	08/04/22 13:08	08/11/22 16:40	1
Nickel	14.6		5.7	0.26	mg/Kg	☼	08/04/22 13:08	08/05/22 23:59	1
Potassium	1210		34.3	22.9	mg/Kg	☼	08/04/22 13:08	08/11/22 16:40	1
Selenium	2.3	J	4.6	0.46	mg/Kg	☼	08/04/22 13:08	08/05/22 23:59	1
Silver	ND		0.69	0.23	mg/Kg	☼	08/04/22 13:08	08/05/22 23:59	1
Sodium	39.7	J	160	14.9	mg/Kg	☼	08/04/22 13:08	08/05/22 23:59	1
Thallium	ND		6.9	0.34	mg/Kg	☼	08/04/22 13:08	08/05/22 23:59	1
Vanadium	18.8		0.57	0.13	mg/Kg	☼	08/04/22 13:08	08/05/22 23:59	1
Zinc	50.4	B	2.3	0.73	mg/Kg	☼	08/04/22 13:08	08/05/22 23:59	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.073		0.021	0.0049	mg/Kg	☼	08/04/22 10:17	08/04/22 13:20	1

Client Sample ID: SS6 (6-12)

Date Collected: 07/29/22 14:30
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-15
Matrix: Solid
Percent Solids: 95.5

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.1	0.51	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
1,1,1-Trichloroethane	ND		5.1	0.37	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
1,1,2,2-Tetrachloroethane	ND	*3	5.1	0.83	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.1	1.2	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
1,1,2-Trichloroethane	ND		5.1	0.66	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
1,1-Dichloroethane	ND		5.1	0.62	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
1,1-Dichloroethene	ND		5.1	0.62	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
1,2,3-Trimethylbenzene	ND	*3	5.1	1.0	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
1,2,4-Trichlorobenzene	ND	*3	5.1	0.31	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
1,2,4-Trimethylbenzene	ND	*3	5.1	0.98	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
1,2-Dibromo-3-Chloropropane	ND	*3	5.1	2.5	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
1,2-Dibromoethane	ND		5.1	0.65	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
1,2-Dichlorobenzene	ND	*3	5.1	0.40	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
1,2-Dichloroethane	ND		5.1	0.26	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
1,2-Dichloropropane	ND		5.1	2.5	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
1,3,5-Trimethylbenzene	ND	*3	5.1	0.33	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
1,3-Dichlorobenzene	ND	*3	5.1	0.26	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
1,4-Dichlorobenzene	ND	*3	5.1	0.71	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
2-Butanone (MEK)	2.9	J	25	1.9	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
2-Hexanone	ND		25	2.5	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.7	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
Acetone	7.7	J	25	4.3	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
Benzene	ND		5.1	0.25	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1

Client Sample ID: SS6 (6-12)
Date Collected: 07/29/22 14:30
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-15
Matrix: Solid
Percent Solids: 95.5

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		5.1	0.68	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
Bromoform	ND		5.1	2.5	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
Bromomethane	ND		5.1	0.46	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
Carbon disulfide	ND		5.1	2.5	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
Carbon tetrachloride	ND		5.1	0.49	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
Chlorobenzene	ND		5.1	0.67	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
Chloroethane	ND		5.1	1.2	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
Chloroform	ND		5.1	0.31	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
Chloromethane	ND		5.1	0.31	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
cis-1,2-Dichloroethene	ND		5.1	0.65	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
cis-1,3-Dichloropropene	ND		5.1	0.73	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
Cyclohexane	ND		5.1	0.71	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
Dibromochloromethane	ND		5.1	0.65	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
Dichlorodifluoromethane	ND		5.1	0.42	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
Ethylbenzene	ND		5.1	0.35	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
Isopropylbenzene	ND	*3	5.1	0.77	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
m,p-Xylene	ND		10	0.86	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
Methyl acetate	ND		25	3.1	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
Methyl tert-butyl ether	ND		5.1	0.50	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
Methylcyclohexane	ND		5.1	0.77	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
Methylene Chloride	**12**		5.1	2.3	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
n-Butylbenzene	ND	*3	5.1	0.44	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
N-Propylbenzene	ND	*3	5.1	0.41	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
o-Xylene	ND		5.1	0.66	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
sec-Butylbenzene	ND	*3	5.1	0.44	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
Styrene	ND		5.1	0.25	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
tert-Butylbenzene	ND	*3	5.1	0.53	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
Tetrachloroethene	ND		5.1	0.68	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
Toluene	ND		5.1	0.38	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
trans-1,2-Dichloroethene	ND		5.1	0.53	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
trans-1,3-Dichloropropene	ND		5.1	2.2	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
Trichloroethene	ND		5.1	1.1	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
Trichlorofluoromethane	ND		5.1	0.48	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
Vinyl chloride	ND		5.1	0.62	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1
Xylenes, Total	ND		10	0.86	ug/Kg	☼	07/30/22 12:00	08/12/22 15:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*64 - 126*	*07/30/22 12:00*	*08/12/22 15:13*	*1*
4-Bromofluorobenzene (Surr)	*75*		*72 - 126*	*07/30/22 12:00*	*08/12/22 15:13*	*1*
Dibromofluoromethane (Surr)	*109*		*60 - 140*	*07/30/22 12:00*	*08/12/22 15:13*	*1*
Toluene-d8 (Surr)	*122*		*71 - 125*	*07/30/22 12:00*	*08/12/22 15:13*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		180	48	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
2,4,6-Trichlorophenol	ND		180	35	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
2,4-Dichlorophenol	ND		180	19	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
2,4-Dimethylphenol	ND		180	42	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
2,4-Dinitrophenol	ND		1700	810	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
2,4-Dinitrotoluene	ND		180	36	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1

Client Sample ID: SS6 (6-12)
Date Collected: 07/29/22 14:30
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-15
Matrix: Solid
Percent Solids: 95.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		180	21	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
2-Chloronaphthalene	ND		180	29	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
2-Chlorophenol	ND		340	32	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
2-Methylnaphthalene	ND		180	35	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
2-Methylphenol	ND		180	21	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
2-Nitroaniline	ND		340	26	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
2-Nitrophenol	ND		180	50	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
3,3'-Dichlorobenzidine	ND		340	210	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
3-Nitroaniline	ND		340	49	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
4,6-Dinitro-2-methylphenol	ND		340	180	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
4-Bromophenyl phenyl ether	ND		180	25	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
4-Chloro-3-methylphenol	ND		180	44	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
4-Chloroaniline	ND		180	44	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
4-Chlorophenyl phenyl ether	ND		180	22	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
4-Methylphenol	ND		340	21	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
4-Nitroaniline	ND		340	92	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
4-Nitrophenol	ND		340	120	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Acenaphthene	ND		180	26	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Acenaphthylene	ND		180	23	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Acetophenone	ND		180	24	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Anthracene	ND		180	44	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Atrazine	ND		180	61	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Benzaldehyde	ND		180	140	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Benzo[a]anthracene	**56**	**J**	180	18	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Benzo[a]pyrene	**45**	**J**	180	26	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Benzo[b]fluoranthene	**78**	**J**	180	28	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Benzo[g,h,i]perylene	**34**	**J**	180	19	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Benzo[k]fluoranthene	**38**	**J**	180	23	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Biphenyl	ND		180	26	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
bis (2-chloroisopropyl) ether	ND		180	35	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Bis(2-chloroethoxy)methane	ND		180	37	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Bis(2-chloroethyl)ether	ND		180	23	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Bis(2-ethylhexyl) phthalate	ND		180	60	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Butyl benzyl phthalate	ND		180	29	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Caprolactam	ND		180	53	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Carbazole	ND		180	21	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Chrysene	**66**	**J**	180	39	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Dibenz(a,h)anthracene	ND		180	31	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Dibenzofuran	ND		180	21	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Diethyl phthalate	ND		180	23	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Dimethyl phthalate	ND		180	21	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Di-n-butyl phthalate	ND		180	30	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Di-n-octyl phthalate	ND		180	21	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Fluoranthene	**120**	**J**	180	19	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Fluorene	ND		180	21	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Hexachlorobenzene	ND		180	24	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Hexachlorobutadiene	ND		180	26	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Hexachlorocyclopentadiene	ND		180	24	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Hexachloroethane	ND		180	23	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1

Client Sample ID: SS6 (6-12)

Date Collected: 07/29/22 14:30
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-15

Matrix: Solid
Percent Solids: 95.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	**27**	**J**	180	22	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Isophorone	ND		180	37	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Naphthalene	ND		180	23	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Nitrobenzene	ND		180	20	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
N-Nitrosodi-n-propylamine	ND		180	30	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
N-Nitrosodiphenylamine	ND		180	140	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Pentachlorophenol	ND		340	180	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Phenanthrene	**56**	**J**	180	26	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Phenol	ND		180	27	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1
Pyrene	**96**	**J**	180	21	ug/Kg	☼	08/03/22 15:56	08/09/22 23:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*98*		*54 - 120*	*08/03/22 15:56*	*08/09/22 23:36*	*1*
2-Fluorobiphenyl (Surr)	*77*		*60 - 120*	*08/03/22 15:56*	*08/09/22 23:36*	*1*
2-Fluorophenol (Surr)	*61*		*52 - 120*	*08/03/22 15:56*	*08/09/22 23:36*	*1*
Nitrobenzene-d5 (Surr)	*61*		*53 - 120*	*08/03/22 15:56*	*08/09/22 23:36*	*1*
Phenol-d5 (Surr)	*65*		*54 - 120*	*08/03/22 15:56*	*08/09/22 23:36*	*1*
p-Terphenyl-d14 (Surr)	*86*		*79 - 130*	*08/03/22 15:56*	*08/09/22 23:36*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**6350**	**B**	10.6	4.7	mg/Kg	☼	08/04/22 13:08	08/06/22 00:02	1
Antimony	**7.4**	**J**	15.9	0.42	mg/Kg	☼	08/04/22 13:08	08/11/22 16:44	1
Arsenic	**6.6**		2.1	0.42	mg/Kg	☼	08/04/22 13:08	08/06/22 00:02	1
Barium	**38.0**	**B**	0.53	0.12	mg/Kg	☼	08/04/22 13:08	08/06/22 00:02	1
Beryllium	**0.33**		0.21	0.030	mg/Kg	☼	08/04/22 13:08	08/06/22 00:02	1
Cadmium	**0.33**		0.21	0.032	mg/Kg	☼	08/04/22 13:08	08/11/22 16:44	1
Calcium	**833**		52.9	3.5	mg/Kg	☼	08/04/22 13:08	08/06/22 00:02	1
Chromium	**16.3**		0.53	0.21	mg/Kg	☼	08/04/22 13:08	08/06/22 00:02	1
Cobalt	**7.2**		0.53	0.053	mg/Kg	☼	08/04/22 13:08	08/06/22 00:02	1
Copper	**67.9**		1.1	0.22	mg/Kg	☼	08/04/22 13:08	08/06/22 00:02	1
Iron	**95800**		21.2	7.4	mg/Kg	☼	08/04/22 13:08	08/11/22 17:26	2
Lead	**84.0**		5.3	1.3	mg/Kg	☼	08/15/22 12:22	08/17/22 16:54	5
Magnesium	**981**	**B**	21.2	0.98	mg/Kg	☼	08/04/22 13:08	08/06/22 00:02	1
Manganese	**874**	**B**	0.42	0.068	mg/Kg	☼	08/04/22 13:08	08/11/22 17:26	2
Nickel	**12.3**		10.6	0.49	mg/Kg	☼	08/04/22 13:08	08/11/22 17:26	2
Potassium	**847**		31.7	21.2	mg/Kg	☼	08/04/22 13:08	08/11/22 16:44	1
Selenium	**1.1**	**J**	4.2	0.42	mg/Kg	☼	08/04/22 13:08	08/06/22 00:02	1
Silver	ND		0.63	0.21	mg/Kg	☼	08/04/22 13:08	08/06/22 00:02	1
Sodium	**50.9**	**J**	148	13.8	mg/Kg	☼	08/04/22 13:08	08/06/22 00:02	1
Thallium	ND		6.3	0.32	mg/Kg	☼	08/04/22 13:08	08/06/22 00:02	1
Vanadium	**27.7**		1.1	0.23	mg/Kg	☼	08/04/22 13:08	08/11/22 17:26	2
Zinc	**43.3**	**B**	2.1	0.68	mg/Kg	☼	08/04/22 13:08	08/06/22 00:02	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.029**		0.021	0.0048	mg/Kg	☼	08/04/22 10:17	08/04/22 13:21	1

Client Sample ID: SS6 (12-24)
Date Collected: 07/29/22 14:35
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-16
Matrix: Solid
Percent Solids: 94.3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.9	0.49	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
1,1,1-Trichloroethane	ND		4.9	0.35	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
1,1,2,2-Tetrachloroethane	ND	*3	4.9	0.79	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.9	1.1	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
1,1,2-Trichloroethane	ND		4.9	0.63	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
1,1-Dichloroethane	ND		4.9	0.59	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
1,1-Dichloroethene	ND		4.9	0.59	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
1,2,3-Trimethylbenzene	ND	*3	4.9	0.99	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
1,2,4-Trichlorobenzene	ND	*3	4.9	0.30	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
1,2,4-Trimethylbenzene	ND	*3	4.9	0.93	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
1,2-Dibromo-3-Chloropropane	ND	*3	4.9	2.4	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
1,2-Dibromoethane	ND		4.9	0.62	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
1,2-Dichlorobenzene	ND	*3	4.9	0.38	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
1,2-Dichloroethane	ND		4.9	0.24	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
1,2-Dichloropropane	ND		4.9	2.4	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
1,3,5-Trimethylbenzene	ND	*3	4.9	0.31	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
1,3-Dichlorobenzene	ND	*3	4.9	0.25	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
1,4-Dichlorobenzene	ND	*3	4.9	0.68	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
2-Butanone (MEK)	**5.5**	**J**	24	1.8	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
2-Hexanone	ND		24	2.4	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
4-Methyl-2-pentanone (MIBK)	ND		24	1.6	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
Acetone	**23**	**J**	24	4.1	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
Benzene	**0.26**	**J**	4.9	0.24	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
Bromodichloromethane	ND		4.9	0.65	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
Bromoform	ND		4.9	2.4	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
Bromomethane	ND		4.9	0.44	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
Carbon disulfide	ND		4.9	2.4	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
Carbon tetrachloride	ND		4.9	0.47	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
Chlorobenzene	ND		4.9	0.64	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
Chloroethane	ND		4.9	1.1	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
Chloroform	ND		4.9	0.30	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
Chloromethane	ND		4.9	0.29	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
cis-1,2-Dichloroethene	ND		4.9	0.62	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
cis-1,3-Dichloropropene	ND		4.9	0.70	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
Cyclohexane	ND		4.9	0.68	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
Dibromochloromethane	ND		4.9	0.62	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
Dichlorodifluoromethane	ND		4.9	0.40	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
Ethylbenzene	ND		4.9	0.33	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
Isopropylbenzene	ND	*3	4.9	0.73	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
m,p-Xylene	ND		9.7	0.82	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
Methyl acetate	ND		24	2.9	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
Methyl tert-butyl ether	ND		4.9	0.48	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
Methylcyclohexane	ND		4.9	0.74	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
Methylene Chloride	ND		4.9	2.2	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
n-Butylbenzene	ND	*3	4.9	0.42	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
N-Propylbenzene	ND	*3	4.9	0.39	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
o-Xylene	ND		4.9	0.63	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
sec-Butylbenzene	ND	*3	4.9	0.42	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
Styrene	ND		4.9	0.24	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1

Client Sample ID: SS6 (12-24)
Date Collected: 07/29/22 14:35
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-16
Matrix: Solid
Percent Solids: 94.3

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND	*3	4.9	0.50	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
Tetrachloroethene	ND		4.9	0.65	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
Toluene	ND		4.9	0.37	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
trans-1,2-Dichloroethene	ND		4.9	0.50	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
trans-1,3-Dichloropropene	ND		4.9	2.1	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
Trichloroethene	ND		4.9	1.1	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
Trichlorofluoromethane	ND		4.9	0.46	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
Vinyl chloride	ND		4.9	0.59	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1
Xylenes, Total	ND		9.7	0.82	ug/Kg	☼	07/30/22 12:00	08/12/22 15:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*64 - 126*	*07/30/22 12:00*	*08/12/22 15:37*	*1*
4-Bromofluorobenzene (Surr)	*78*		*72 - 126*	*07/30/22 12:00*	*08/12/22 15:37*	*1*
Dibromofluoromethane (Surr)	*108*		*60 - 140*	*07/30/22 12:00*	*08/12/22 15:37*	*1*
Toluene-d8 (Surr)	*122*		*71 - 125*	*07/30/22 12:00*	*08/12/22 15:37*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		180	48	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
2,4,6-Trichlorophenol	ND		180	35	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
2,4-Dichlorophenol	ND		180	19	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
2,4-Dimethylphenol	ND		180	42	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
2,4-Dinitrophenol	ND		1700	810	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
2,4-Dinitrotoluene	ND		180	36	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
2,6-Dinitrotoluene	ND		180	21	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
2-Chloronaphthalene	ND		180	29	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
2-Chlorophenol	ND		340	32	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
2-Methylnaphthalene	ND		180	35	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
2-Methylphenol	ND		180	21	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
2-Nitroaniline	ND		340	26	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
2-Nitrophenol	ND		180	50	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
3,3'-Dichlorobenzidine	ND		340	210	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
3-Nitroaniline	ND		340	49	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
4,6-Dinitro-2-methylphenol	ND		340	180	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
4-Bromophenyl phenyl ether	ND		180	25	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
4-Chloro-3-methylphenol	ND		180	43	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
4-Chloroaniline	ND		180	43	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
4-Chlorophenyl phenyl ether	ND		180	22	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
4-Methylphenol	ND		340	21	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
4-Nitroaniline	ND		340	92	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
4-Nitrophenol	ND		340	120	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Acenaphthene	ND		180	26	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Acenaphthylene	ND		180	23	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Acetophenone	ND		180	24	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Anthracene	ND		180	43	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Atrazine	ND		180	61	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Benzaldehyde	ND		180	140	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Benzo[a]anthracene	ND		180	18	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Benzo[a]pyrene	ND		180	26	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Benzo[b]fluoranthene	**52**	**J**	180	28	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1

Client Sample ID: SS6 (12-24)
Date Collected: 07/29/22 14:35
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-16
Matrix: Solid
Percent Solids: 94.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		180	19	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Benzo[k]fluoranthene	ND		180	23	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Biphenyl	ND		180	26	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
bis (2-chloroisopropyl) ether	ND		180	35	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Bis(2-chloroethoxy)methane	ND		180	37	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Bis(2-chloroethyl)ether	ND		180	23	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Bis(2-ethylhexyl) phthalate	ND		180	60	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Butyl benzyl phthalate	ND		180	29	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Caprolactam	ND		180	53	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Carbazole	ND		180	21	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Chrysene	ND		180	39	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Dibenz(a,h)anthracene	ND		180	31	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Dibenzofuran	ND		180	21	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Diethyl phthalate	ND		180	23	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Dimethyl phthalate	ND		180	21	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Di-n-butyl phthalate	ND		180	30	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Di-n-octyl phthalate	ND		180	21	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Fluoranthene	ND		180	19	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Fluorene	ND		180	21	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Hexachlorobenzene	ND		180	24	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Hexachlorobutadiene	ND		180	26	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Hexachlorocyclopentadiene	ND		180	24	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Hexachloroethane	ND		180	23	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Indeno[1,2,3-cd]pyrene	ND		180	22	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Isophorone	ND		180	37	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Naphthalene	ND		180	23	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Nitrobenzene	ND		180	20	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
N-Nitrosodi-n-propylamine	ND		180	30	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
N-Nitrosodiphenylamine	ND		180	140	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Pentachlorophenol	ND		340	180	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Phenanthrene	ND		180	26	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Phenol	ND		180	27	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1
Pyrene	ND		180	21	ug/Kg	☼	08/12/22 15:31	08/15/22 13:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*99*		*54 - 120*	*08/12/22 15:31*	*08/15/22 13:02*	*1*
2-Fluorobiphenyl (Surr)	*102*		*60 - 120*	*08/12/22 15:31*	*08/15/22 13:02*	*1*
2-Fluorophenol (Surr)	*91*		*52 - 120*	*08/12/22 15:31*	*08/15/22 13:02*	*1*
Nitrobenzene-d5 (Surr)	*94*		*53 - 120*	*08/12/22 15:31*	*08/15/22 13:02*	*1*
Phenol-d5 (Surr)	*93*		*54 - 120*	*08/12/22 15:31*	*08/15/22 13:02*	*1*
p-Terphenyl-d14 (Surr)	*109*		*79 - 130*	*08/12/22 15:31*	*08/15/22 13:02*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5410**	**B**	10.4	4.6	mg/Kg	☼	08/04/22 13:08	08/06/22 00:06	1
Antimony	**10.2**	**J**	15.6	0.41	mg/Kg	☼	08/04/22 13:08	08/11/22 16:48	1
Arsenic	**3.4**		2.1	0.41	mg/Kg	☼	08/04/22 13:08	08/06/22 00:06	1
Barium	**22.6**	**B**	0.52	0.11	mg/Kg	☼	08/04/22 13:08	08/06/22 00:06	1
Beryllium	**0.23**		0.21	0.029	mg/Kg	☼	08/04/22 13:08	08/06/22 00:06	1
Cadmium	**0.38**		0.21	0.031	mg/Kg	☼	08/04/22 13:08	08/11/22 16:48	1

Client Sample ID: SS6 (12-24)

Date Collected: 07/29/22 14:35
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-16

Matrix: Solid
Percent Solids: 94.3

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	572		51.9	3.4	mg/Kg	☼	08/04/22 13:08	08/06/22 00:06	1
Chromium	24.5		0.52	0.21	mg/Kg	☼	08/04/22 13:08	08/06/22 00:06	1
Cobalt	7.3		0.52	0.052	mg/Kg	☼	08/04/22 13:08	08/06/22 00:06	1
Copper	36.8		1.0	0.22	mg/Kg	☼	08/04/22 13:08	08/06/22 00:06	1
Iron	137000		51.9	18.2	mg/Kg	☼	08/04/22 13:08	08/11/22 17:30	5
Lead	74.4		5.2	1.2	mg/Kg	☼	08/15/22 12:22	08/17/22 16:58	5
Magnesium	825	B	20.7	0.96	mg/Kg	☼	08/04/22 13:08	08/06/22 00:06	1
Manganese	1950	B	1.0	0.17	mg/Kg	☼	08/04/22 13:08	08/11/22 17:30	5
Nickel	11.3	J	25.9	1.2	mg/Kg	☼	08/04/22 13:08	08/11/22 17:30	5
Potassium	554		31.1	20.7	mg/Kg	☼	08/04/22 13:08	08/11/22 16:48	1
Selenium	1.1	J	4.1	0.41	mg/Kg	☼	08/04/22 13:08	08/06/22 00:06	1
Silver	ND		0.62	0.21	mg/Kg	☼	08/04/22 13:08	08/06/22 00:06	1
Sodium	56.4	J	145	13.5	mg/Kg	☼	08/04/22 13:08	08/06/22 00:06	1
Thallium	ND		6.2	0.31	mg/Kg	☼	08/04/22 13:08	08/06/22 00:06	1
Vanadium	40.3		2.6	0.57	mg/Kg	☼	08/04/22 13:08	08/11/22 17:30	5
Zinc	41.4	B	2.1	0.66	mg/Kg	☼	08/04/22 13:08	08/06/22 00:06	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.016	J	0.021	0.0048	mg/Kg	☼	08/04/22 10:17	08/04/22 13:23	1

Client Sample ID: FDUP_072922

Date Collected: 07/29/22 09:15
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-17

Matrix: Solid
Percent Solids: 89.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	*3	6.0	0.60	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
1,1,1-Trichloroethane	ND		6.0	0.44	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
1,1,2,2-Tetrachloroethane	ND	*3	6.0	0.97	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.0	1.4	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
1,1,2-Trichloroethane	ND	*3	6.0	0.78	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
1,1-Dichloroethane	ND		6.0	0.73	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
1,1-Dichloroethene	ND		6.0	0.74	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
1,2,3-Trimethylbenzene	ND	*3	6.0	1.2	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
1,2,4-Trichlorobenzene	ND	*3	6.0	0.37	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
1,2,4-Trimethylbenzene	ND	*3	6.0	1.2	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
1,2-Dibromo-3-Chloropropane	ND	*3	6.0	3.0	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
1,2-Dibromoethane	ND	*3	6.0	0.77	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
1,2-Dichlorobenzene	ND	*3	6.0	0.47	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
1,2-Dichloroethane	ND		6.0	0.30	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
1,2-Dichloropropane	ND		6.0	3.0	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
1,3,5-Trimethylbenzene	ND	*3	6.0	0.39	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
1,3-Dichlorobenzene	ND	*3	6.0	0.31	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
1,4-Dichlorobenzene	ND	*3	6.0	0.84	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
2-Butanone (MEK)	ND		30	2.2	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
2-Hexanone	ND	*3	30	3.0	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
4-Methyl-2-pentanone (MIBK)	ND	*3	30	2.0	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
Acetone	ND		30	5.1	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
Benzene	ND		6.0	0.29	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1

Client Sample ID: FDUP_072922
Date Collected: 07/29/22 09:15
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-17
Matrix: Solid
Percent Solids: 89.4

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		6.0	0.80	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
Bromoform	ND	*3	6.0	3.0	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
Bromomethane	ND		6.0	0.54	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
Carbon disulfide	ND		6.0	3.0	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
Carbon tetrachloride	ND		6.0	0.58	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
Chlorobenzene	ND	*3	6.0	0.79	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
Chloroethane	ND		6.0	1.4	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
Chloroform	ND		6.0	0.37	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
Chloromethane	ND		6.0	0.36	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
cis-1,2-Dichloroethene	ND		6.0	0.77	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
cis-1,3-Dichloropropene	ND		6.0	0.87	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
Cyclohexane	ND		6.0	0.84	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
Dibromochloromethane	ND	*3	6.0	0.77	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
Dichlorodifluoromethane	ND		6.0	0.50	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
Ethylbenzene	ND	*3	6.0	0.41	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
Isopropylbenzene	ND	*3	6.0	0.91	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
m,p-Xylene	ND	*3	12	1.0	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
Methyl acetate	ND		30	3.6	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
Methyl tert-butyl ether	ND		6.0	0.59	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
Methylcyclohexane	ND		6.0	0.91	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
Methylene Chloride	ND		6.0	2.8	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
n-Butylbenzene	ND	*3	6.0	0.52	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
N-Propylbenzene	ND	*3	6.0	0.48	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
o-Xylene	ND	*3	6.0	0.78	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
sec-Butylbenzene	ND	*3	6.0	0.52	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
Styrene	ND	*3	6.0	0.30	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
tert-Butylbenzene	ND	*3	6.0	0.62	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
Tetrachloroethene	ND	*3	6.0	0.81	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
Toluene	ND	*3	6.0	0.45	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
trans-1,2-Dichloroethene	ND		6.0	0.62	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
trans-1,3-Dichloropropene	ND	*3	6.0	2.6	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
Trichloroethene	ND		6.0	1.3	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
Trichlorofluoromethane	ND		6.0	0.57	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
Vinyl chloride	ND		6.0	0.73	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1
Xylenes, Total	ND		12	1.0	ug/Kg	☼	07/30/22 12:00	08/12/22 16:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*64 - 126*	*07/30/22 12:00*	*08/12/22 16:01*	*1*
4-Bromofluorobenzene (Surr)	*75*	*3*	*72 - 126*	*07/30/22 12:00*	*08/12/22 16:01*	*1*
Dibromofluoromethane (Surr)	*111*		*60 - 140*	*07/30/22 12:00*	*08/12/22 16:01*	*1*
Toluene-d8 (Surr)	*135*	*3 S1+*	*71 - 125*	*07/30/22 12:00*	*08/12/22 16:01*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		540	300	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
2,4,5-Trichlorophenol	ND		920	250	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
2,4,6-Trichlorophenol	ND		920	180	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
2,4-Dichlorophenol	ND		920	98	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
2,4-Dimethylphenol	ND		920	220	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
2,4-Dinitrophenol	ND		9000	4300	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5

Client Sample ID: FDUP_072922
Date Collected: 07/29/22 09:15
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-17
Matrix: Solid
Percent Solids: 89.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		920	190	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
2,6-Dinitrotoluene	ND		920	110	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
2-Chloronaphthalene	ND		920	150	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
2-Chlorophenol	ND		1800	170	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
2-Methylnaphthalene	ND		920	180	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
2-Methylphenol	ND		920	110	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
2-Nitroaniline	ND		1800	140	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
2-Nitrophenol	ND		920	260	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
3,3'-Dichlorobenzidine	ND		1800	1100	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
3-Nitroaniline	ND		1800	260	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
4,6-Dinitro-2-methylphenol	ND		1800	920	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
4-Bromophenyl phenyl ether	ND		920	130	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
4-Chloro-3-methylphenol	ND		920	230	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
4-Chloroaniline	ND		920	230	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
4-Chlorophenyl phenyl ether	ND		920	110	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
4-Methylphenol	ND		1800	110	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
4-Nitroaniline	ND		1800	480	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
4-Nitrophenol	ND		1800	650	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Acenaphthene	ND		920	140	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Acenaphthylene	**750**	**J**	920	120	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Acetophenone	ND		920	130	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Anthracene	**570**	**J**	920	230	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Atrazine	ND		920	320	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Benzaldehyde	ND		920	730	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Benzo[a]anthracene	**2100**		920	92	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Benzo[a]pyrene	**2200**		920	140	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Benzo[b]fluoranthene	**2400**		920	150	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Benzo[g,h,i]perylene	**1000**		920	98	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Benzo[k]fluoranthene	**1300**		920	120	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Biphenyl	ND		920	140	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
bis (2-chloroisopropyl) ether	ND		920	180	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Bis(2-chloroethoxy)methane	ND		920	200	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Bis(2-chloroethyl)ether	ND		920	120	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Bis(2-ethylhexyl) phthalate	ND		920	320	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Butyl benzyl phthalate	ND		920	150	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Caprolactam	ND		920	280	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Carbazole	ND		920	110	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Chrysene	**2300**		920	210	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Dibenz(a,h)anthracene	**380**	**J**	920	160	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Dibenzofuran	ND		920	110	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Diethyl phthalate	ND		920	120	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Dimethyl phthalate	ND		920	110	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Di-n-butyl phthalate	**170**	**J**	920	160	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Di-n-octyl phthalate	ND		920	110	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Fluoranthene	**4000**		920	98	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Fluorene	**130**	**J**	920	110	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Hexachlorobenzene	ND		920	130	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Hexachlorobutadiene	ND		920	140	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Hexachlorocyclopentadiene	ND		920	130	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5

Client Sample ID: FDUP_072922

Date Collected: 07/29/22 09:15
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-17

Matrix: Solid
Percent Solids: 89.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	ND		920	120	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Indeno[1,2,3-cd]pyrene	**1100**		920	110	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Isophorone	ND		920	200	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Naphthalene	ND		920	120	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Nitrobenzene	ND		920	100	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
N-Nitrosodi-n-propylamine	ND		920	160	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
N-Nitrosodiphenylamine	ND		920	750	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Pentachlorophenol	ND		1800	920	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Phenanthrene	**1300**		920	140	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Phenol	ND		920	140	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5
Pyrene	**3300**		920	110	ug/Kg	☼	08/03/22 15:56	08/10/22 00:24	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*111*		*54 - 120*	*08/03/22 15:56*	*08/10/22 00:24*	*5*
2-Fluorobiphenyl (Surr)	*93*		*60 - 120*	*08/03/22 15:56*	*08/10/22 00:24*	*5*
2-Fluorophenol (Surr)	*69*		*52 - 120*	*08/03/22 15:56*	*08/10/22 00:24*	*5*
Nitrobenzene-d5 (Surr)	*72*		*53 - 120*	*08/03/22 15:56*	*08/10/22 00:24*	*5*
Phenol-d5 (Surr)	*71*		*54 - 120*	*08/03/22 15:56*	*08/10/22 00:24*	*5*
p-Terphenyl-d14 (Surr)	*84*		*79 - 130*	*08/03/22 15:56*	*08/10/22 00:24*	*5*

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.55	0.37	ug/Kg	☼	08/05/22 08:30	08/05/22 20:58	1
Perfluoropentanoic acid (PFPeA)	ND		0.22	0.061	ug/Kg	☼	08/05/22 08:30	08/05/22 20:58	1
Perfluorohexanoic acid (PFHxA)	**0.10**	**J I**	0.22	0.051	ug/Kg	☼	08/05/22 08:30	08/05/22 20:58	1
Perfluoroheptanoic acid (PFHpA)	**0.052**	**J**	0.22	0.043	ug/Kg	☼	08/05/22 08:30	08/05/22 20:58	1
Perfluorooctanoic acid (PFOA)	**0.10**	**J**	0.22	0.064	ug/Kg	☼	08/05/22 08:30	08/05/22 20:58	1
Perfluorononanoic acid (PFNA)	**0.080**	**J**	0.22	0.038	ug/Kg	☼	08/05/22 08:30	08/05/22 20:58	1
Perfluorodecanoic acid (PFDA)	**0.042**	**J**	0.22	0.031	ug/Kg	☼	08/05/22 08:30	08/05/22 20:58	1
Perfluoroundecanoic acid (PFUnA)	**0.045**	**J**	0.22	0.030	ug/Kg	☼	08/05/22 08:30	08/05/22 20:58	1
Perfluorododecanoic acid (PFDoA)	ND		0.22	0.028	ug/Kg	☼	08/05/22 08:30	08/05/22 20:58	1
Perfluorotridecanoic acid (PFTriA)	ND		0.22	0.028	ug/Kg	☼	08/05/22 08:30	08/05/22 20:58	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.22	0.029	ug/Kg	☼	08/05/22 08:30	08/05/22 20:58	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.22	0.037	ug/Kg	☼	08/05/22 08:30	08/05/22 20:58	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.22	0.045	ug/Kg	☼	08/05/22 08:30	08/05/22 20:58	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.22	0.025	ug/Kg	☼	08/05/22 08:30	08/05/22 20:58	1
Perfluorooctanesulfonic acid (PFOS)	**0.25**	**I**	0.22	0.12	ug/Kg	☼	08/05/22 08:30	08/05/22 20:58	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.22	0.021	ug/Kg	☼	08/05/22 08:30	08/05/22 20:58	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.22	0.038	ug/Kg	☼	08/05/22 08:30	08/05/22 20:58	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.2	0.12	ug/Kg	☼	08/05/22 08:30	08/05/22 20:58	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.2	0.092	ug/Kg	☼	08/05/22 08:30	08/05/22 20:58	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.2	0.063	ug/Kg	☼	08/05/22 08:30	08/05/22 20:58	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.2	0.041	ug/Kg	☼	08/05/22 08:30	08/05/22 20:58	1

Client Sample ID: FDUP_072922

Date Collected: 07/29/22 09:15
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-17

Matrix: Solid
Percent Solids: 89.4

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	77		50 - 150	08/05/22 08:30	08/05/22 20:58	1
13C4 PFHpA	88		50 - 150	08/05/22 08:30	08/05/22 20:58	1
13C4 PFOA	89		50 - 150	08/05/22 08:30	08/05/22 20:58	1
13C4 PFOS	74		50 - 150	08/05/22 08:30	08/05/22 20:58	1
13C5 PFNA	87		50 - 150	08/05/22 08:30	08/05/22 20:58	1
13C4 PFBA	84		50 - 150	08/05/22 08:30	08/05/22 20:58	1
13C2 PFHxA	85		50 - 150	08/05/22 08:30	08/05/22 20:58	1
13C2 PFDA	88		50 - 150	08/05/22 08:30	08/05/22 20:58	1
13C2 PFUnA	85		50 - 150	08/05/22 08:30	08/05/22 20:58	1
13C2 PFDoA	93		50 - 150	08/05/22 08:30	08/05/22 20:58	1
13C8 FOSA	70		50 - 150	08/05/22 08:30	08/05/22 20:58	1
13C5 PFPeA	88		50 - 150	08/05/22 08:30	08/05/22 20:58	1
13C2 PFTeDA	102		50 - 150	08/05/22 08:30	08/05/22 20:58	1
d3-NMeFOSAA	78		50 - 150	08/05/22 08:30	08/05/22 20:58	1
d5-NEtFOSAA	86		50 - 150	08/05/22 08:30	08/05/22 20:58	1
M2-6:2 FTS	87		50 - 150	08/05/22 08:30	08/05/22 20:58	1
M2-8:2 FTS	94		50 - 150	08/05/22 08:30	08/05/22 20:58	1
13C3 PFBS	74		50 - 150	08/05/22 08:30	08/05/22 20:58	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8240	B	11.5	5.1	mg/Kg	☼	08/04/22 13:08	08/06/22 00:10	1
Antimony	2.5	J	17.2	0.46	mg/Kg	☼	08/04/22 13:08	08/06/22 00:10	1
Arsenic	10.3		2.3	0.46	mg/Kg	☼	08/04/22 13:08	08/06/22 00:10	1
Barium	198	B	0.57	0.13	mg/Kg	☼	08/04/22 13:08	08/06/22 00:10	1
Beryllium	0.52		0.23	0.032	mg/Kg	☼	08/04/22 13:08	08/06/22 00:10	1
Cadmium	0.25		0.23	0.034	mg/Kg	☼	08/04/22 13:08	08/06/22 00:10	1
Calcium	2470		57.4	3.8	mg/Kg	☼	08/04/22 13:08	08/06/22 00:10	1
Chromium	13.4		0.57	0.23	mg/Kg	☼	08/04/22 13:08	08/06/22 00:10	1
Cobalt	8.5		0.57	0.057	mg/Kg	☼	08/04/22 13:08	08/06/22 00:10	1
Copper	43.0		1.1	0.24	mg/Kg	☼	08/04/22 13:08	08/06/22 00:10	1
Iron	19000		11.5	4.0	mg/Kg	☼	08/04/22 13:08	08/06/22 00:10	1
Lead	100		1.1	0.27	mg/Kg	☼	08/15/22 12:22	08/16/22 22:11	1
Magnesium	2230	B	23.0	1.1	mg/Kg	☼	08/04/22 13:08	08/06/22 00:10	1
Manganese	404	B	0.23	0.037	mg/Kg	☼	08/04/22 13:08	08/11/22 16:51	1
Nickel	18.8		5.7	0.26	mg/Kg	☼	08/04/22 13:08	08/06/22 00:10	1
Potassium	1360		34.4	23.0	mg/Kg	☼	08/04/22 13:08	08/11/22 16:51	1
Selenium	1.6	J	4.6	0.46	mg/Kg	☼	08/04/22 13:08	08/06/22 00:10	1
Silver	ND		0.69	0.23	mg/Kg	☼	08/04/22 13:08	08/06/22 00:10	1
Sodium	30.0	J	161	14.9	mg/Kg	☼	08/04/22 13:08	08/06/22 00:10	1
Thallium	ND		6.9	0.34	mg/Kg	☼	08/04/22 13:08	08/06/22 00:10	1
Vanadium	16.3		0.57	0.13	mg/Kg	☼	08/04/22 13:08	08/06/22 00:10	1
Zinc	134	B	2.3	0.73	mg/Kg	☼	08/04/22 13:08	08/06/22 00:10	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.18		0.022	0.0050	mg/Kg	☼	08/04/22 10:17	08/04/22 13:24	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Client Sample ID: SB6 (1-2)
Date Collected: 07/29/22 09:00
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-18
Matrix: Solid
Percent Solids: 90.0

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	F1 *3	7.8	0.78	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
1,1,1-Trichloroethane	ND		7.8	0.56	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
1,1,2,2-Tetrachloroethane	ND	F1 *3	7.8	1.3	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.8	1.8	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
1,1,2-Trichloroethane	ND	*3	7.8	1.0	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
1,1-Dichloroethane	ND		7.8	0.95	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
1,1-Dichloroethene	ND		7.8	0.95	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
1,2,3-Trimethylbenzene	ND	*3	7.8	1.6	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
1,2,4-Trichlorobenzene	ND	F1 *3	7.8	0.47	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
1,2,4-Trimethylbenzene	ND	F1 *3	7.8	1.5	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
1,2-Dibromo-3-Chloropropane	ND	*3	7.8	3.9	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
1,2-Dibromoethane	ND	F1 *3	7.8	1.0	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
1,2-Dichlorobenzene	ND	F1 *3	7.8	0.61	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
1,2-Dichloroethane	ND	F1	7.8	0.39	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
1,2-Dichloropropane	ND		7.8	3.9	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
1,3,5-Trimethylbenzene	ND	*3	7.8	0.50	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
1,3-Dichlorobenzene	ND	F1 *3	7.8	0.40	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
1,4-Dichlorobenzene	ND	F1 *3	7.8	1.1	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
2-Butanone (MEK)	ND	F1	39	2.8	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
2-Hexanone	ND	*3	39	3.9	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
4-Methyl-2-pentanone (MIBK)	ND	*3	39	2.6	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
Acetone	ND		39	6.5	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
Benzene	ND	F1	7.8	0.38	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
Bromodichloromethane	ND	F1	7.8	1.0	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
Bromoform	ND	F1 *3	7.8	3.9	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
Bromomethane	ND		7.8	0.70	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
Carbon disulfide	ND	F1	7.8	3.9	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
Carbon tetrachloride	ND		7.8	0.75	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
Chlorobenzene	ND	F1 *3	7.8	1.0	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
Chloroethane	ND		7.8	1.8	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
Chloroform	ND	F1	7.8	0.48	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
Chloromethane	ND		7.8	0.47	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
cis-1,2-Dichloroethene	ND	F1	7.8	1.0	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
cis-1,3-Dichloropropene	ND	F1	7.8	1.1	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
Cyclohexane	ND		7.8	1.1	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
Dibromochloromethane	ND	*3	7.8	1.0	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
Dichlorodifluoromethane	ND		7.8	0.64	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
Ethylbenzene	ND	F1 *3	7.8	0.54	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
Isopropylbenzene	ND	F1 *3	7.8	1.2	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
m,p-Xylene	ND	F1 *3	16	1.3	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
Methyl acetate	ND		39	4.7	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
Methyl tert-butyl ether	ND		7.8	0.76	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
Methylcyclohexane	ND	F1	7.8	1.2	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
Methylene Chloride	ND		7.8	3.6	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
n-Butylbenzene	ND	F1 *3	7.8	0.68	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
N-Propylbenzene	ND	F1 *3	7.8	0.62	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
o-Xylene	ND	F1 *3	7.8	1.0	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
sec-Butylbenzene	ND	*3	7.8	0.68	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
Styrene	ND	F1 *3	7.8	0.39	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1

Client Sample ID: SB6 (1-2)
Date Collected: 07/29/22 09:00
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-18
Matrix: Solid
Percent Solids: 90.0

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND	F1 *3	7.8	0.81	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
Tetrachloroethene	ND	F1 *3	7.8	1.0	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
Toluene	ND	*3	7.8	0.59	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
trans-1,2-Dichloroethene	ND	F1	7.8	0.80	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
trans-1,3-Dichloropropene	ND	F1 *3	7.8	3.4	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
Trichloroethene	ND	F1	7.8	1.7	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
Trichlorofluoromethane	ND		7.8	0.74	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
Vinyl chloride	ND		7.8	0.95	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1
Xylenes, Total	ND	F1	16	1.3	ug/Kg	☼	07/30/22 12:00	08/11/22 05:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*64 - 126*	*07/30/22 12:00*	*08/11/22 05:13*	*1*
4-Bromofluorobenzene (Surr)	*65*	*S1- *3*	*72 - 126*	*07/30/22 12:00*	*08/11/22 05:13*	*1*
Dibromofluoromethane (Surr)	*120*		*60 - 140*	*07/30/22 12:00*	*08/11/22 05:13*	*1*
Toluene-d8 (Surr)	*148*	*S1+ *3*	*71 - 125*	*07/30/22 12:00*	*08/11/22 05:13*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND	F1	1100	610	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
2,4,5-Trichlorophenol	ND		1900	510	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
2,4,6-Trichlorophenol	ND	F2	1900	370	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
2,4-Dichlorophenol	ND	F2	1900	200	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
2,4-Dimethylphenol	ND		1900	450	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
2,4-Dinitrophenol	ND		18000	8600	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
2,4-Dinitrotoluene	ND		1900	390	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
2,6-Dinitrotoluene	ND		1900	220	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
2-Chloronaphthalene	ND		1900	310	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
2-Chlorophenol	ND		3600	340	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
2-Methylnaphthalene	ND		1900	370	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
2-Methylphenol	ND		1900	220	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
2-Nitroaniline	ND	F2	3600	280	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
2-Nitrophenol	ND	F2	1900	530	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
3,3'-Dichlorobenzidine	ND		3600	2200	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
3-Nitroaniline	ND	F2	3600	520	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
4,6-Dinitro-2-methylphenol	ND		3600	1900	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
4-Bromophenyl phenyl ether	ND		1900	260	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
4-Chloro-3-methylphenol	ND		1900	460	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
4-Chloroaniline	ND		1900	460	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
4-Chlorophenyl phenyl ether	ND		1900	230	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
4-Methylphenol	ND		3600	220	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
4-Nitroaniline	ND		3600	980	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
4-Nitrophenol	ND	F2	3600	1300	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Acenaphthene	ND		1900	280	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Acenaphthylene	**3000**	**F1**	1900	240	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Acetophenone	ND		1900	250	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Anthracene	**1700**	**J**	1900	460	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Atrazine	ND	F2	1900	650	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Benzaldehyde	ND		1900	1500	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Benzo[a]anthracene	**8200**		1900	190	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Benzo[a]pyrene	**8900**	**F2**	1900	280	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10

Client Sample ID: SB6 (1-2)
Date Collected: 07/29/22 09:00
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-18
Matrix: Solid
Percent Solids: 90.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	**10000**	**F2**	1900	300	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Benzo[g,h,i]perylene	**6300**	**F1**	1900	200	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Benzo[k]fluoranthene	**4100**		1900	240	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Biphenyl	ND		1900	280	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
bis (2-chloroisopropyl) ether	ND		1900	370	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Bis(2-chloroethoxy)methane	ND		1900	400	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Bis(2-chloroethyl)ether	ND		1900	240	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Bis(2-ethylhexyl) phthalate	ND	F2	1900	640	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Butyl benzyl phthalate	ND	F2	1900	310	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Caprolactam	ND		1900	560	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Carbazole	**310**	**J**	1900	220	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Chrysene	**7500**		1900	420	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Dibenz(a,h)anthracene	**2100**	**F2**	1900	330	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Dibenzofuran	**280**	**J F2**	1900	220	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Diethyl phthalate	ND		1900	240	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Dimethyl phthalate	ND		1900	220	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Di-n-butyl phthalate	ND		1900	320	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Di-n-octyl phthalate	ND		1900	220	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Fluoranthene	**13000**		1900	200	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Fluorene	**570**	**J F2**	1900	220	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Hexachlorobenzene	ND	F2	1900	250	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Hexachlorobutadiene	ND		1900	280	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Hexachlorocyclopentadiene	ND	F1	1900	250	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Hexachloroethane	ND		1900	240	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Indeno[1,2,3-cd]pyrene	**5800**	**F1 F2**	1900	230	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Isophorone	ND		1900	400	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Naphthalene	ND		1900	240	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Nitrobenzene	ND		1900	210	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
N-Nitrosodi-n-propylamine	ND		1900	320	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
N-Nitrosodiphenylamine	ND		1900	1500	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Pentachlorophenol	ND		3600	1900	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Phenanthrene	**5000**	**F1 F2**	1900	280	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Phenol	ND		1900	290	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10
Pyrene	**12000**		1900	220	ug/Kg	☼	08/03/22 15:56	08/09/22 19:09	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*106*		*54 - 120*	*08/03/22 15:56*	*08/09/22 19:09*	*10*
2-Fluorobiphenyl (Surr)	*91*		*60 - 120*	*08/03/22 15:56*	*08/09/22 19:09*	*10*
2-Fluorophenol (Surr)	*75*		*52 - 120*	*08/03/22 15:56*	*08/09/22 19:09*	*10*
Nitrobenzene-d5 (Surr)	*67*		*53 - 120*	*08/03/22 15:56*	*08/09/22 19:09*	*10*
Phenol-d5 (Surr)	*62*		*54 - 120*	*08/03/22 15:56*	*08/09/22 19:09*	*10*
p-Terphenyl-d14 (Surr)	*86*		*79 - 130*	*08/03/22 15:56*	*08/09/22 19:09*	*10*

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.55	0.36	ug/Kg	☼	08/05/22 08:30	08/05/22 21:07	1
Perfluoropentanoic acid (PFPeA)	ND		0.22	0.060	ug/Kg	☼	08/05/22 08:30	08/05/22 21:07	1
Perfluorohexanoic acid (PFHxA)	**0.053**	**J**	0.22	0.050	ug/Kg	☼	08/05/22 08:30	08/05/22 21:07	1
Perfluoroheptanoic acid (PFHpA)	ND		0.22	0.043	ug/Kg	☼	08/05/22 08:30	08/05/22 21:07	1
Perfluorooctanoic acid (PFOA)	**0.14**	**J**	0.22	0.063	ug/Kg	☼	08/05/22 08:30	08/05/22 21:07	1

Client Sample ID: SB6 (1-2)
Date Collected: 07/29/22 09:00
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-18
Matrix: Solid
Percent Solids: 90.0

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	ND		0.22	0.037	ug/Kg	☼	08/05/22 08:30	08/05/22 21:07	1
Perfluorodecanoic acid (PFDA)	ND		0.22	0.031	ug/Kg	☼	08/05/22 08:30	08/05/22 21:07	1
Perfluoroundecanoic acid (PFUnA)	ND		0.22	0.029	ug/Kg	☼	08/05/22 08:30	08/05/22 21:07	1
Perfluorododecanoic acid (PFDoA)	ND		0.22	0.027	ug/Kg	☼	08/05/22 08:30	08/05/22 21:07	1
Perfluorotridecanoic acid (PFTriA)	ND		0.22	0.027	ug/Kg	☼	08/05/22 08:30	08/05/22 21:07	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.22	0.028	ug/Kg	☼	08/05/22 08:30	08/05/22 21:07	1
Perfluorobutanesulfonic acid (PFBS)	**0.037**	**J**	0.22	0.036	ug/Kg	☼	08/05/22 08:30	08/05/22 21:07	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.22	0.045	ug/Kg	☼	08/05/22 08:30	08/05/22 21:07	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.22	0.025	ug/Kg	☼	08/05/22 08:30	08/05/22 21:07	1
Perfluorooctanesulfonic acid (PFOS)	**0.50**		0.22	0.12	ug/Kg	☼	08/05/22 08:30	08/05/22 21:07	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.22	0.021	ug/Kg	☼	08/05/22 08:30	08/05/22 21:07	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.22	0.037	ug/Kg	☼	08/05/22 08:30	08/05/22 21:07	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.2	0.12	ug/Kg	☼	08/05/22 08:30	08/05/22 21:07	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.2	0.091	ug/Kg	☼	08/05/22 08:30	08/05/22 21:07	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.2	0.062	ug/Kg	☼	08/05/22 08:30	08/05/22 21:07	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.2	0.040	ug/Kg	☼	08/05/22 08:30	08/05/22 21:07	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*73*		*50 - 150*	*08/05/22 08:30*	*08/05/22 21:07*	*1*
13C4 PFHpA	*76*		*50 - 150*	*08/05/22 08:30*	*08/05/22 21:07*	*1*
13C4 PFOA	*84*		*50 - 150*	*08/05/22 08:30*	*08/05/22 21:07*	*1*
13C4 PFOS	*68*		*50 - 150*	*08/05/22 08:30*	*08/05/22 21:07*	*1*
13C5 PFNA	*85*		*50 - 150*	*08/05/22 08:30*	*08/05/22 21:07*	*1*
13C4 PFBA	*72*		*50 - 150*	*08/05/22 08:30*	*08/05/22 21:07*	*1*
13C2 PFHxA	*73*		*50 - 150*	*08/05/22 08:30*	*08/05/22 21:07*	*1*
13C2 PFDA	*83*		*50 - 150*	*08/05/22 08:30*	*08/05/22 21:07*	*1*
13C2 PFUnA	*87*		*50 - 150*	*08/05/22 08:30*	*08/05/22 21:07*	*1*
13C2 PFDoA	*86*		*50 - 150*	*08/05/22 08:30*	*08/05/22 21:07*	*1*
13C8 FOSA	*66*		*50 - 150*	*08/05/22 08:30*	*08/05/22 21:07*	*1*
13C5 PFPeA	*78*		*50 - 150*	*08/05/22 08:30*	*08/05/22 21:07*	*1*
13C2 PFTeDA	*99*		*50 - 150*	*08/05/22 08:30*	*08/05/22 21:07*	*1*
d3-NMeFOSAA	*75*		*50 - 150*	*08/05/22 08:30*	*08/05/22 21:07*	*1*
d5-NEtFOSAA	*85*		*50 - 150*	*08/05/22 08:30*	*08/05/22 21:07*	*1*
M2-6:2 FTS	*77*		*50 - 150*	*08/05/22 08:30*	*08/05/22 21:07*	*1*
M2-8:2 FTS	*97*		*50 - 150*	*08/05/22 08:30*	*08/05/22 21:07*	*1*
13C3 PFBS	*69*		*50 - 150*	*08/05/22 08:30*	*08/05/22 21:07*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**6570**	**B F1**	10.9	4.8	mg/Kg	☼	08/04/22 13:08	08/06/22 00:14	1
Antimony	**4.9**	**J F1**	16.4	0.44	mg/Kg	☼	08/04/22 13:08	08/06/22 00:14	1
Arsenic	**17.6**		2.2	0.44	mg/Kg	☼	08/04/22 13:08	08/06/22 00:14	1
Barium	**445**	**B**	0.55	0.12	mg/Kg	☼	08/04/22 13:08	08/06/22 00:14	1
Beryllium	**0.70**		0.22	0.031	mg/Kg	☼	08/04/22 13:08	08/06/22 00:14	1
Cadmium	**0.74**		0.22	0.033	mg/Kg	☼	08/04/22 13:08	08/06/22 00:14	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Client Sample ID: SB6 (1-2)

Date Collected: 07/29/22 09:00
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-18

Matrix: Solid
Percent Solids: 90.0

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	4560	F1	54.5	3.6	mg/Kg	☼	08/04/22 13:08	08/06/22 00:14	1
Chromium	13.2		0.55	0.22	mg/Kg	☼	08/04/22 13:08	08/06/22 00:14	1
Cobalt	8.3		0.55	0.055	mg/Kg	☼	08/04/22 13:08	08/06/22 00:14	1
Copper	79.7	F1 F2	1.1	0.23	mg/Kg	☼	08/04/22 13:08	08/06/22 00:14	1
Iron	19400		10.9	3.8	mg/Kg	☼	08/04/22 13:08	08/06/22 00:14	1
Lead	2370		1.1	0.26	mg/Kg	☼	08/15/22 12:22	08/16/22 22:30	1
Magnesium	1910	B	21.8	1.0	mg/Kg	☼	08/04/22 13:08	08/06/22 00:14	1
Manganese	291	B	0.22	0.035	mg/Kg	☼	08/04/22 13:08	08/11/22 16:55	1
Nickel	18.4		5.5	0.25	mg/Kg	☼	08/04/22 13:08	08/06/22 00:14	1
Potassium	1030	F1	32.7	21.8	mg/Kg	☼	08/04/22 13:08	08/11/22 16:55	1
Selenium	2.8	J	4.4	0.44	mg/Kg	☼	08/04/22 13:08	08/06/22 00:14	1
Silver	ND		0.65	0.22	mg/Kg	☼	08/04/22 13:08	08/06/22 00:14	1
Sodium	71.2	J	153	14.2	mg/Kg	☼	08/04/22 13:08	08/06/22 00:14	1
Thallium	ND		6.5	0.33	mg/Kg	☼	08/04/22 13:08	08/06/22 00:14	1
Vanadium	22.6		0.55	0.12	mg/Kg	☼	08/04/22 13:08	08/06/22 00:14	1
Zinc	333	B	2.2	0.70	mg/Kg	☼	08/04/22 13:08	08/06/22 00:14	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.44	F1	0.023	0.0052	mg/Kg	☼	08/04/22 10:17	08/04/22 13:25	1

Surrogate Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(64-126)	(72-126)	(60-140)	(71-125)
480-200248-1	SB6 (0-0.5)	111	71 *3 S1-	114	134 *3 S1+
480-200248-2	SB6 (0.5-1)	115	64 *3 S1-	119	146 *3 S1+
480-200248-3	SB6 (13-15)	105	98	102	100
480-200248-6	FDUP2_072922	107	97	102	101
480-200248-7	SS5 (0-2)	115	78	107	117
480-200248-8	SS5 (0-6)	110	81	105	115
480-200248-9	SS5 (6-12)	104	86	104	113
480-200248-10	SS5 (12-24)	104	85	101	113
480-200248-13	SS6 (0-2)	110	74	109	125
480-200248-14	SS6 (0-6)	112	73	111	131 S1+
480-200248-15	SS6 (6-12)	110	75	109	122
480-200248-16	SS6 (12-24)	115	78	108	122
480-200248-17	FDUP_072922	110	75 *3	111	135 *3 S1+
480-200248-18	SB6 (1-2)	115	65 S1- *3	120	148 S1+ *3
480-200248-18 MS	SB6 (1-2)	100	61 S1- *3	112	156 S1+ *3
480-200248-18 MSD	SB6 (1-2)	97	62 S1- *3	109	161 S1+ *3
LCS 480-636617/1-A	Lab Control Sample	104	98	98	100
LCS 480-636757/1-A	Lab Control Sample	100	98	98	102
LCS 480-636951/1-A	Lab Control Sample	100	99	98	102
LCS 480-637228/1-A	Lab Control Sample	107	97	100	102
LCSD 480-636617/2-A	Lab Control Sample Dup	103	99	98	98
MB 480-636617/3-A	Method Blank	102	104	103	100
MB 480-636757/2-A	Method Blank	101	98	98	99
MB 480-636951/2-A	Method Blank	102	100	103	100
MB 480-637228/3-A	Method Blank	102	100	103	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-200248-11	ERB_072822	106	103	110	99
480-200248-12	FB_072922	102	101	103	97
LCS 480-635636/6	Lab Control Sample	100	108	105	103
LCS 480-635717/6	Lab Control Sample	101	108	104	102
MB 480-635636/8	Method Blank	100	100	106	97
MB 480-635717/8	Method Blank	97	98	100	100

Surrogate Legend

Client: Integral Consulting Inc
Job ID: 480-200248-1
Project/Site: EF1017 - Refractories

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(54-120)	(60-120)	(52-120)	(53-120)	(54-120)	(79-130)
480-200248-1	SB6 (0-0.5)	104	95	80	76	85	97
480-200248-2	SB6 (0.5-1)	85	75	54	57	55	73 S1-
480-200248-3	SB6 (13-15)	103	90	68	69	68	95
480-200248-6	FDUP2_072922	90	79	70	63	71	88
480-200248-7	SS5 (0-2)	106	86	63	61	70	91
480-200248-8	SS5 (0-6)	104	78	54	58	57	80
480-200248-9	SS5 (6-12)	69	95	82	80	88	102
480-200248-10	SS5 (12-24)	91	70	56	55	60	89
480-200248-13	SS6 (0-2)	98	100	83	90	89	109
480-200248-14	SS6 (0-6)	88	88	74	80	79	92
480-200248-15	SS6 (6-12)	98	77	61	61	65	86
480-200248-16	SS6 (12-24)	99	102	91	94	93	109
480-200248-17	FDUP_072922	111	93	69	72	71	84
480-200248-18	SB6 (1-2)	106	91	75	67	62	86
480-200248-18 MS	SB6 (1-2)	99	76	59	62	71	79
480-200248-18 MSD	SB6 (1-2)	100	92	73	72	73	89
LCS 480-636076/2-A	Lab Control Sample	107	89	74	73	75	95
LCS 480-637284/2-A	Lab Control Sample	82	81	67	73	77	101
MB 480-636076/1-A	Method Blank	95	91	77	73	77	95
MB 480-637284/1-A	Method Blank	77	89	80	83	88	100

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(41-120)	(48-120)	(35-120)	(46-120)	(22-120)	(60-148)
480-200248-11	ERB_072822	81	83	61	73	48	97
480-200248-12	FB_072922	88	90	66	79	51	103
480-200248-12 - RE	FB_072922	86	87	67	79	49	99
LCS 480-635797/2-A	Lab Control Sample	101	91	64	87	55	99
LCS 480-636585/2-A	Lab Control Sample	79	98	59	98	57	107
LCSD 480-635797/3-A	Lab Control Sample Dup	104	90	67	86	57	100
MB 480-635797/1-A	Method Blank	78	84	59	76	46	91
MB 480-636585/1-A	Method Blank	91	104	81	97	58	120

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)

Surrogate Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Isotope Dilution Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	DXE (15-110)							
480-200248-11	ERB_072822	52							
480-200248-12	FB_072922	46							
LCS 480-635922/2-A	Lab Control Sample	44							
MB 480-635922/1-A	Method Blank	32							

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 537 IDA - EPA 537 Isotope Dilution

Matrix: Solid **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFHxS (50-150)	C4PFHA (50-150)	PFOA (50-150)	PFOS (50-150)	PFNA (50-150)	PFBA (50-150)	PFHxA (50-150)	PFDA (50-150)
480-200248-1	SB6 (0-0.5)	84	90	87	77	92	88	89	89
480-200248-2	SB6 (0.5-1)	69	81	86	68	85	80	80	86
480-200248-3	SB6 (13-15)	74	78	77	66	72	77	80	72
480-200248-17	FDUP_072922	77	88	89	74	87	84	85	88
480-200248-18	SB6 (1-2)	73	76	84	68	85	72	73	83
480-200248-18 MS	SB6 (1-2)	75	82	88	72	90	79	75	86
480-200248-18 MSD	SB6 (1-2)	72	79	84	73	84	78	74	89
LCS 200-182393/2-A	Lab Control Sample	90	91	92	82	88	94	95	81
MB 200-182393/1-A	Method Blank	92	97	92	82	89	93	95	81

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFUnA (50-150)	PFDoA (50-150)	PFOSA (50-150)	PFPeA (50-150)	PFTDA (50-150)	d3NMFOS (50-150)	d5NEFOS (50-150)	M262FTS (50-150)
480-200248-1	SB6 (0-0.5)	92	94	77	92	106	78	85	87
480-200248-2	SB6 (0.5-1)	90	93	69	81	99	75	84	73
480-200248-3	SB6 (13-15)	78	70	66	79	58	63	62	67
480-200248-17	FDUP_072922	85	93	70	88	102	78	86	87
480-200248-18	SB6 (1-2)	87	86	66	78	99	75	85	77
480-200248-18 MS	SB6 (1-2)	93	95	69	83	100	79	89	84
480-200248-18 MSD	SB6 (1-2)	88	92	72	82	98	77	82	78
LCS 200-182393/2-A	Lab Control Sample	79	71	67	89	92	72	69	89
MB 200-182393/1-A	Method Blank	72	72	64	95	85	68	66	88

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	M282FTS (50-150)	C3PFBS (50-150)						
480-200248-1	SB6 (0-0.5)	91	77						
480-200248-2	SB6 (0.5-1)	83	66						
480-200248-3	SB6 (13-15)	70	75						
480-200248-17	FDUP_072922	94	74						
480-200248-18	SB6 (1-2)	97	69						
480-200248-18 MS	SB6 (1-2)	103	74						
480-200248-18 MSD	SB6 (1-2)	94	73						
LCS 200-182393/2-A	Lab Control Sample	81	86						
MB 200-182393/1-A	Method Blank	83	90						

Surrogate Legend

PFHxS = 18O2 PFHxS

C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFOS = 13C4 PFOS
PFNA = 13C5 PFNA
PFBA = 13C4 PFBA
PFHxA = 13C2 PFHxA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFOSA = 13C8 FOSA
PFPeA = 13C5 PFPeA
PFTDA = 13C2 PFTeDA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
C3PFBS = 13C3 PFBS

Method: 537 IDA - EPA 537 Isotope Dilution

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFHxS (50-150)	C4PFHA (50-150)	PFOA (50-150)	PFOS (50-150)	PFNA (50-150)	PFBA (50-150)	PFHxA (50-150)	PFDA (50-150)
480-200248-11	ERB_072822	94	101	100	89	96	100	104	92
480-200248-12	FB_072922	99	103	100	93	103	102	105	94
LCS 200-182374/2-A	Lab Control Sample	98	99	102	90	93	101	99	91
LCSD 200-182374/3-A	Lab Control Sample Dup	101	106	104	100	107	108	106	101
MB 200-182374/1-A	Method Blank	96	105	101	90	95	99	101	95

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFUnA (50-150)	PFDoA (50-150)	PFOSA (50-150)	PFPeA (50-150)	PFTDA (50-150)	d3NMFOS (50-150)	d5NEFOS (50-150)	M262FTS (50-150)
480-200248-11	ERB_072822	95	90	81	104	92	80	76	98
480-200248-12	FB_072922	96	85	78	101	92	81	74	95
LCS 200-182374/2-A	Lab Control Sample	87	85	76	102	91	82	73	96
LCSD 200-182374/3-A	Lab Control Sample Dup	99	91	81	112	95	92	79	101
MB 200-182374/1-A	Method Blank	91	81	74	103	88	71	72	95

		Percent Isotope Dilution Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	M282FTS (50-150)	C3PFBS (50-150)
480-200248-11	ERB_072822	98	93
480-200248-12	FB_072922	90	95
LCS 200-182374/2-A	Lab Control Sample	93	92
LCSD 200-182374/3-A	Lab Control Sample Dup	102	104
MB 200-182374/1-A	Method Blank	93	96

Surrogate Legend

PFHxS = 18O2 PFHxS
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFOS = 13C4 PFOS
PFNA = 13C5 PFNA
PFBA = 13C4 PFBA
PFHxA = 13C2 PFHxA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA

Isotope Dilution Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

PFDoA = 13C2 PFDoA
PFOSA = 13C8 FOSA
PFPeA = 13C5 PFPeA
PFTDA = 13C2 PFTeDA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
C3PFBS = 13C3 PFBS

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-635636/8
Matrix: Water
Analysis Batch: 635636

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			08/01/22 12:39	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/01/22 12:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/01/22 12:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/01/22 12:39	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/01/22 12:39	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/01/22 12:39	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/01/22 12:39	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			08/01/22 12:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/01/22 12:39	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			08/01/22 12:39	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/01/22 12:39	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/01/22 12:39	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/01/22 12:39	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/01/22 12:39	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/01/22 12:39	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			08/01/22 12:39	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/01/22 12:39	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/01/22 12:39	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/01/22 12:39	1
2-Hexanone	ND		5.0	1.2	ug/L			08/01/22 12:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/01/22 12:39	1
Acetone	ND		10	3.0	ug/L			08/01/22 12:39	1
Benzene	ND		1.0	0.41	ug/L			08/01/22 12:39	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/01/22 12:39	1
Bromoform	ND		1.0	0.26	ug/L			08/01/22 12:39	1
Bromomethane	ND		1.0	0.69	ug/L			08/01/22 12:39	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/01/22 12:39	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/01/22 12:39	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/01/22 12:39	1
Chloroethane	ND		1.0	0.32	ug/L			08/01/22 12:39	1
Chloroform	ND		1.0	0.34	ug/L			08/01/22 12:39	1
Chloromethane	ND		1.0	0.35	ug/L			08/01/22 12:39	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			08/01/22 12:39	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/01/22 12:39	1
Cyclohexane	ND		1.0	0.18	ug/L			08/01/22 12:39	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/01/22 12:39	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/01/22 12:39	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/01/22 12:39	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/01/22 12:39	1
m,p-Xylene	ND		2.0	0.66	ug/L			08/01/22 12:39	1
Methyl acetate	ND		2.5	1.3	ug/L			08/01/22 12:39	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/01/22 12:39	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/01/22 12:39	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/01/22 12:39	1
n-Butylbenzene	ND		1.0	0.64	ug/L			08/01/22 12:39	1
N-Propylbenzene	ND		1.0	0.69	ug/L			08/01/22 12:39	1
o-Xylene	ND		1.0	0.76	ug/L			08/01/22 12:39	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			08/01/22 12:39	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-635636/8
Matrix: Water
Analysis Batch: 635636

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0	0.73	ug/L			08/01/22 12:39	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			08/01/22 12:39	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/01/22 12:39	1
Toluene	ND		1.0	0.51	ug/L			08/01/22 12:39	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/01/22 12:39	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/01/22 12:39	1
Trichloroethene	ND		1.0	0.46	ug/L			08/01/22 12:39	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/01/22 12:39	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/01/22 12:39	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/01/22 12:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*08/01/22 12:39*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*08/01/22 12:39*	*1*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*08/01/22 12:39*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*08/01/22 12:39*	*1*

Lab Sample ID: LCS 480-635636/6
Matrix: Water
Analysis Batch: 635636

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	25.0	25.2		ug/L		101	80 - 120
1,1,1-Trichloroethane	25.0	25.8		ug/L		103	73 - 126
1,1,2,2-Tetrachloroethane	25.0	22.0		ug/L		88	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	25.8		ug/L		103	61 - 148
1,1,2-Trichloroethane	25.0	24.6		ug/L		98	76 - 122
1,1-Dichloroethane	25.0	25.4		ug/L		102	77 - 120
1,1-Dichloroethene	25.0	25.4		ug/L		101	66 - 127
1,2,4-Trichlorobenzene	25.0	24.1		ug/L		96	79 - 122
1,2,4-Trimethylbenzene	25.0	25.2		ug/L		101	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	18.9		ug/L		76	56 - 134
1,2-Dibromoethane	25.0	24.8		ug/L		99	77 - 120
1,2-Dichlorobenzene	25.0	25.4		ug/L		102	80 - 124
1,2-Dichloroethane	25.0	24.3		ug/L		97	75 - 120
1,2-Dichloropropane	25.0	26.0		ug/L		104	76 - 120
1,3,5-Trimethylbenzene	25.0	25.3		ug/L		101	77 - 121
1,3-Dichlorobenzene	25.0	25.8		ug/L		103	77 - 120
1,4-Dichlorobenzene	25.0	25.6		ug/L		103	80 - 120
2-Butanone (MEK)	125	103		ug/L		83	57 - 140
2-Hexanone	125	108		ug/L		87	65 - 127
4-Methyl-2-pentanone (MIBK)	125	104		ug/L		83	71 - 125
Acetone	125	111		ug/L		89	56 - 142
Benzene	25.0	26.4		ug/L		106	71 - 124
Bromodichloromethane	25.0	25.9		ug/L		103	80 - 122
Bromoform	25.0	22.9		ug/L		92	61 - 132
Bromomethane	25.0	24.7		ug/L		99	55 - 144
Carbon disulfide	25.0	21.9		ug/L		87	59 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-635636/6
Matrix: Water
Analysis Batch: 635636

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon tetrachloride	25.0	25.5		ug/L		102	72 - 134
Chlorobenzene	25.0	26.5		ug/L		106	80 - 120
Chloroethane	25.0	24.7		ug/L		99	69 - 136
Chloroform	25.0	25.6		ug/L		103	73 - 127
Chloromethane	25.0	22.0		ug/L		88	68 - 124
cis-1,2-Dichloroethene	25.0	26.1		ug/L		104	74 - 124
cis-1,3-Dichloropropene	25.0	25.7		ug/L		103	74 - 124
Cyclohexane	25.0	26.5		ug/L		106	59 - 135
Dibromochloromethane	25.0	24.0		ug/L		96	75 - 125
Dichlorodifluoromethane	25.0	20.4		ug/L		82	59 - 135
Ethylbenzene	25.0	26.3		ug/L		105	77 - 123
Isopropylbenzene	25.0	24.5		ug/L		98	77 - 122
m,p-Xylene	25.0	26.8		ug/L		107	76 - 122
Methyl acetate	50.0	39.4		ug/L		79	74 - 133
Methyl tert-butyl ether	25.0	23.4		ug/L		94	77 - 120
Methylcyclohexane	25.0	27.2		ug/L		109	68 - 134
Methylene Chloride	25.0	26.5		ug/L		106	75 - 124
n-Butylbenzene	25.0	25.2		ug/L		101	71 - 128
N-Propylbenzene	25.0	25.1		ug/L		100	75 - 127
o-Xylene	25.0	26.8		ug/L		107	76 - 122
sec-Butylbenzene	25.0	25.6		ug/L		102	74 - 127
Styrene	25.0	27.7		ug/L		111	80 - 120
tert-Butylbenzene	25.0	25.3		ug/L		101	75 - 123
Tetrachloroethene	25.0	27.3		ug/L		109	74 - 122
Toluene	25.0	25.7		ug/L		103	80 - 122
trans-1,2-Dichloroethene	25.0	26.3		ug/L		105	73 - 127
trans-1,3-Dichloropropene	25.0	23.5		ug/L		94	80 - 120
Trichloroethene	25.0	26.8		ug/L		107	74 - 123
Trichlorofluoromethane	25.0	27.4		ug/L		110	62 - 150
Vinyl chloride	25.0	23.7		ug/L		95	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*
Dibromofluoromethane (Surr)	*105*		*75 - 123*
Toluene-d8 (Surr)	*103*		*80 - 120*

Lab Sample ID: MB 480-635717/8
Matrix: Water
Analysis Batch: 635717

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			08/02/22 01:26	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/02/22 01:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/02/22 01:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/02/22 01:26	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/02/22 01:26	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/02/22 01:26	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-635717/8
Matrix: Water
Analysis Batch: 635717

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/02/22 01:26	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			08/02/22 01:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/02/22 01:26	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			08/02/22 01:26	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/02/22 01:26	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/02/22 01:26	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/02/22 01:26	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/02/22 01:26	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/02/22 01:26	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			08/02/22 01:26	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/02/22 01:26	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/02/22 01:26	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/02/22 01:26	1
2-Hexanone	ND		5.0	1.2	ug/L			08/02/22 01:26	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/02/22 01:26	1
Acetone	ND		10	3.0	ug/L			08/02/22 01:26	1
Benzene	ND		1.0	0.41	ug/L			08/02/22 01:26	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/02/22 01:26	1
Bromoform	ND		1.0	0.26	ug/L			08/02/22 01:26	1
Bromomethane	ND		1.0	0.69	ug/L			08/02/22 01:26	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/02/22 01:26	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/02/22 01:26	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/02/22 01:26	1
Chloroethane	ND		1.0	0.32	ug/L			08/02/22 01:26	1
Chloroform	ND		1.0	0.34	ug/L			08/02/22 01:26	1
Chloromethane	ND		1.0	0.35	ug/L			08/02/22 01:26	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			08/02/22 01:26	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/02/22 01:26	1
Cyclohexane	ND		1.0	0.18	ug/L			08/02/22 01:26	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/02/22 01:26	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/02/22 01:26	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/02/22 01:26	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/02/22 01:26	1
m,p-Xylene	ND		2.0	0.66	ug/L			08/02/22 01:26	1
Methyl acetate	ND		2.5	1.3	ug/L			08/02/22 01:26	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/02/22 01:26	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/02/22 01:26	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/02/22 01:26	1
n-Butylbenzene	ND		1.0	0.64	ug/L			08/02/22 01:26	1
N-Propylbenzene	ND		1.0	0.69	ug/L			08/02/22 01:26	1
o-Xylene	ND		1.0	0.76	ug/L			08/02/22 01:26	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			08/02/22 01:26	1
Styrene	ND		1.0	0.73	ug/L			08/02/22 01:26	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			08/02/22 01:26	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/02/22 01:26	1
Toluene	ND		1.0	0.51	ug/L			08/02/22 01:26	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/02/22 01:26	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/02/22 01:26	1
Trichloroethene	ND		1.0	0.46	ug/L			08/02/22 01:26	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-635717/8
Matrix: Water
Analysis Batch: 635717

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/02/22 01:26	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/02/22 01:26	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/02/22 01:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*77 - 120*		*08/02/22 01:26*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*08/02/22 01:26*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*08/02/22 01:26*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*08/02/22 01:26*	*1*

Lab Sample ID: LCS 480-635717/6
Matrix: Water
Analysis Batch: 635717

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	25.0	23.8		ug/L		95	80 - 120
1,1,1-Trichloroethane	25.0	24.9		ug/L		100	73 - 126
1,1,2,2-Tetrachloroethane	25.0	22.8		ug/L		91	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.6		ug/L		98	61 - 148
1,1,2-Trichloroethane	25.0	24.3		ug/L		97	76 - 122
1,1-Dichloroethane	25.0	25.2		ug/L		101	77 - 120
1,1-Dichloroethene	25.0	25.4		ug/L		102	66 - 127
1,2,4-Trichlorobenzene	25.0	24.3		ug/L		97	79 - 122
1,2,4-Trimethylbenzene	25.0	25.1		ug/L		101	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	18.2		ug/L		73	56 - 134
1,2-Dibromoethane	25.0	24.6		ug/L		98	77 - 120
1,2-Dichlorobenzene	25.0	25.3		ug/L		101	80 - 124
1,2-Dichloroethane	25.0	24.4		ug/L		98	75 - 120
1,2-Dichloropropane	25.0	24.8		ug/L		99	76 - 120
1,3,5-Trimethylbenzene	25.0	25.0		ug/L		100	77 - 121
1,3-Dichlorobenzene	25.0	25.4		ug/L		102	77 - 120
1,4-Dichlorobenzene	25.0	25.2		ug/L		101	80 - 120
2-Butanone (MEK)	125	112		ug/L		89	57 - 140
2-Hexanone	125	120		ug/L		96	65 - 127
4-Methyl-2-pentanone (MIBK)	125	115		ug/L		92	71 - 125
Acetone	125	115		ug/L		92	56 - 142
Benzene	25.0	25.8		ug/L		103	71 - 124
Bromodichloromethane	25.0	23.5		ug/L		94	80 - 122
Bromoform	25.0	21.2		ug/L		85	61 - 132
Bromomethane	25.0	24.9		ug/L		100	55 - 144
Carbon disulfide	25.0	20.4		ug/L		82	59 - 134
Carbon tetrachloride	25.0	23.9		ug/L		96	72 - 134
Chlorobenzene	25.0	25.9		ug/L		104	80 - 120
Chloroethane	25.0	24.5		ug/L		98	69 - 136
Chloroform	25.0	25.1		ug/L		100	73 - 127
Chloromethane	25.0	21.5		ug/L		86	68 - 124
cis-1,2-Dichloroethene	25.0	26.2		ug/L		105	74 - 124
cis-1,3-Dichloropropene	25.0	23.5		ug/L		94	74 - 124

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-635717/6
Matrix: Water
Analysis Batch: 635717

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyclohexane	25.0	24.0		ug/L		96	59 - 135
Dibromochloromethane	25.0	22.3		ug/L		89	75 - 125
Dichlorodifluoromethane	25.0	20.4		ug/L		81	59 - 135
Ethylbenzene	25.0	25.7		ug/L		103	77 - 123
Isopropylbenzene	25.0	24.5		ug/L		98	77 - 122
m,p-Xylene	25.0	26.2		ug/L		105	76 - 122
Methyl acetate	50.0	41.8		ug/L		84	74 - 133
Methyl tert-butyl ether	25.0	23.2		ug/L		93	77 - 120
Methylcyclohexane	25.0	26.0		ug/L		104	68 - 134
Methylene Chloride	25.0	25.8		ug/L		103	75 - 124
n-Butylbenzene	25.0	25.6		ug/L		103	71 - 128
N-Propylbenzene	25.0	24.6		ug/L		98	75 - 127
o-Xylene	25.0	26.5		ug/L		106	76 - 122
sec-Butylbenzene	25.0	25.9		ug/L		104	74 - 127
Styrene	25.0	26.9		ug/L		107	80 - 120
tert-Butylbenzene	25.0	24.9		ug/L		100	75 - 123
Tetrachloroethene	25.0	27.4		ug/L		110	74 - 122
Toluene	25.0	25.5		ug/L		102	80 - 122
trans-1,2-Dichloroethene	25.0	25.8		ug/L		103	73 - 127
trans-1,3-Dichloropropene	25.0	21.7		ug/L		87	80 - 120
Trichloroethene	25.0	26.1		ug/L		105	74 - 123
Trichlorofluoromethane	25.0	26.7		ug/L		107	62 - 150
Vinyl chloride	25.0	23.7		ug/L		95	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*
Dibromofluoromethane (Surr)	*104*		*75 - 123*
Toluene-d8 (Surr)	*102*		*80 - 120*

Lab Sample ID: MB 480-636617/3-A
Matrix: Solid
Analysis Batch: 636797

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 636617

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.50	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
1,2,3-Trimethylbenzene	ND		5.0	1.0	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		08/08/22 22:58	08/10/22 12:39	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-636617/3-A
Matrix: Solid
Analysis Batch: 636797

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 636617

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
2-Hexanone	ND		25	2.5	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
Acetone	ND		25	4.2	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
Benzene	ND		5.0	0.25	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
Bromoform	ND		5.0	2.5	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
Bromomethane	ND		5.0	0.45	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
Chloroethane	ND		5.0	1.1	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
Chloroform	ND		5.0	0.31	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
Chloromethane	ND		5.0	0.30	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
Cyclohexane	ND		5.0	0.70	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
m,p-Xylene	ND		10	0.84	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
Methyl acetate	ND		25	3.0	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
o-Xylene	ND		5.0	0.65	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
Styrene	ND		5.0	0.25	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
Toluene	ND		5.0	0.38	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
Trichloroethene	ND		5.0	1.1	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		08/08/22 22:58	08/10/22 12:39	1
Xylenes, Total	ND		10	0.84	ug/Kg		08/08/22 22:58	08/10/22 12:39	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*64 - 126*	*08/08/22 22:58*	*08/10/22 12:39*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-636617/3-A
Matrix: Solid
Analysis Batch: 636797

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 636617

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*104*		*72 - 126*	*08/08/22 22:58*	*08/10/22 12:39*	*1*
Dibromofluoromethane (Surr)	*103*		*60 - 140*	*08/08/22 22:58*	*08/10/22 12:39*	*1*
Toluene-d8 (Surr)	*100*		*71 - 125*	*08/08/22 22:58*	*08/10/22 12:39*	*1*

Lab Sample ID: LCS 480-636617/1-A
Matrix: Solid
Analysis Batch: 636797

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 636617

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	54.1		ug/Kg		108	74 - 127
1,1,1-Trichloroethane	50.0	54.7		ug/Kg		109	77 - 121
1,1,2,2-Tetrachloroethane	50.0	51.8		ug/Kg		104	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	46.3		ug/Kg		93	60 - 140
1,1,2-Trichloroethane	50.0	49.7		ug/Kg		99	78 - 122
1,1-Dichloroethane	50.0	54.8		ug/Kg		110	73 - 126
1,1-Dichloroethene	50.0	52.6		ug/Kg		105	59 - 125
1,2,4-Trichlorobenzene	50.0	56.4		ug/Kg		113	64 - 120
1,2,4-Trimethylbenzene	50.0	58.0		ug/Kg		116	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	55.1		ug/Kg		110	63 - 124
1,2-Dibromoethane	50.0	52.1		ug/Kg		104	78 - 120
1,2-Dichlorobenzene	50.0	53.0		ug/Kg		106	75 - 120
1,2-Dichloroethane	50.0	51.4		ug/Kg		103	77 - 122
1,2-Dichloropropane	50.0	54.0		ug/Kg		108	75 - 124
1,3,5-Trimethylbenzene	50.0	58.2		ug/Kg		116	74 - 120
1,3-Dichlorobenzene	50.0	53.9		ug/Kg		108	74 - 120
1,4-Dichlorobenzene	50.0	52.7		ug/Kg		105	73 - 120
2-Butanone (MEK)	250	252		ug/Kg		101	70 - 134
2-Hexanone	250	261		ug/Kg		105	59 - 130
4-Methyl-2-pentanone (MIBK)	250	258		ug/Kg		103	65 - 133
Acetone	250	247		ug/Kg		99	61 - 137
Benzene	50.0	53.4		ug/Kg		107	79 - 127
Bromodichloromethane	50.0	53.3		ug/Kg		107	80 - 122
Bromoform	50.0	51.5		ug/Kg		103	68 - 126
Bromomethane	50.0	51.9		ug/Kg		104	37 - 149
Carbon disulfide	50.0	52.7		ug/Kg		105	64 - 131
Carbon tetrachloride	50.0	54.2		ug/Kg		108	75 - 135
Chlorobenzene	50.0	53.1		ug/Kg		106	76 - 124
Chloroethane	50.0	57.1		ug/Kg		114	69 - 135
Chloroform	50.0	51.5		ug/Kg		103	80 - 120
Chloromethane	50.0	52.3		ug/Kg		105	63 - 127
cis-1,2-Dichloroethene	50.0	53.2		ug/Kg		106	81 - 120
cis-1,3-Dichloropropene	50.0	58.3		ug/Kg		117	80 - 120
Cyclohexane	50.0	50.8		ug/Kg		102	65 - 120
Dibromochloromethane	50.0	53.0		ug/Kg		106	76 - 125
Dichlorodifluoromethane	50.0	47.4		ug/Kg		95	57 - 142
Ethylbenzene	50.0	54.2		ug/Kg		108	80 - 120
Isopropylbenzene	50.0	58.8		ug/Kg		118	72 - 120
m,p-Xylene	50.0	54.8		ug/Kg		110	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-636617/1-A
Matrix: Solid
Analysis Batch: 636797

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 636617

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Methyl acetate			100	99.5		ug/Kg		100	55 - 136		
Methyl tert-butyl ether			50.0	51.8		ug/Kg		104	63 - 125		
Methylcyclohexane			50.0	52.3		ug/Kg		105	60 - 140		
Methylene Chloride			50.0	52.1		ug/Kg		104	61 - 127		
n-Butylbenzene			50.0	58.3		ug/Kg		117	70 - 120		
N-Propylbenzene			50.0	56.6		ug/Kg		113	70 - 130		
o-Xylene			50.0	54.4		ug/Kg		109	70 - 130		
sec-Butylbenzene			50.0	58.7		ug/Kg		117	74 - 120		
Styrene			50.0	53.4		ug/Kg		107	80 - 120		
tert-Butylbenzene			50.0	60.0		ug/Kg		120	73 - 120		
Tetrachloroethene			50.0	57.6		ug/Kg		115	74 - 122		
Toluene			50.0	53.6		ug/Kg		107	74 - 128		
trans-1,2-Dichloroethene			50.0	52.8		ug/Kg		106	78 - 126		
trans-1,3-Dichloropropene			50.0	55.2		ug/Kg		110	73 - 123		
Trichloroethene			50.0	55.0		ug/Kg		110	77 - 129		
Trichlorofluoromethane			50.0	51.4		ug/Kg		103	65 - 146		
Vinyl chloride			50.0	53.1		ug/Kg		106	61 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*64 - 126*
4-Bromofluorobenzene (Surr)	*98*		*72 - 126*
Dibromofluoromethane (Surr)	*98*		*60 - 140*
Toluene-d8 (Surr)	*100*		*71 - 125*

Lab Sample ID: LCSD 480-636617/2-A
Matrix: Solid
Analysis Batch: 636797

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 636617

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane			50.0	53.2		ug/Kg		106	74 - 127	2	20
1,1,1-Trichloroethane			50.0	51.0		ug/Kg		102	77 - 121	7	20
1,1,2,2-Tetrachloroethane			50.0	51.5		ug/Kg		103	80 - 120	1	20
1,1,2-Trichloro-1,2,2-trifluoroethane			50.0	46.2		ug/Kg		92	60 - 140	0	20
1,1,2-Trichloroethane			50.0	51.0		ug/Kg		102	78 - 122	3	20
1,1-Dichloroethane			50.0	52.4		ug/Kg		105	73 - 126	5	20
1,1-Dichloroethene			50.0	48.8		ug/Kg		98	59 - 125	7	20
1,2,4-Trichlorobenzene			50.0	55.1		ug/Kg		110	64 - 120	2	20
1,2,4-Trimethylbenzene			50.0	56.2		ug/Kg		112	74 - 120	3	20
1,2-Dibromo-3-Chloropropane			50.0	54.6		ug/Kg		109	63 - 124	1	20
1,2-Dibromoethane			50.0	50.9		ug/Kg		102	78 - 120	2	20
1,2-Dichlorobenzene			50.0	51.5		ug/Kg		103	75 - 120	3	20
1,2-Dichloroethane			50.0	49.6		ug/Kg		99	77 - 122	4	20
1,2-Dichloropropane			50.0	51.5		ug/Kg		103	75 - 124	5	20
1,3,5-Trimethylbenzene			50.0	56.2		ug/Kg		112	74 - 120	4	20
1,3-Dichlorobenzene			50.0	52.9		ug/Kg		106	74 - 120	2	20
1,4-Dichlorobenzene			50.0	51.6		ug/Kg		103	73 - 120	2	20
2-Butanone (MEK)			250	228		ug/Kg		91	70 - 134	10	20
2-Hexanone			250	258		ug/Kg		103	59 - 130	1	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 480-636617/2-A
Matrix: Solid
Analysis Batch: 636797

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 636617

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4-Methyl-2-pentanone (MIBK)			250	260		ug/Kg		104	65 - 133	1	20
Acetone			250	238		ug/Kg		95	61 - 137	4	20
Benzene			50.0	50.7		ug/Kg		101	79 - 127	5	20
Bromodichloromethane			50.0	52.1		ug/Kg		104	80 - 122	2	20
Bromoform			50.0	50.9		ug/Kg		102	68 - 126	1	20
Bromomethane			50.0	51.9		ug/Kg		104	37 - 149	0	20
Carbon disulfide			50.0	49.1		ug/Kg		98	64 - 131	7	20
Carbon tetrachloride			50.0	50.3		ug/Kg		101	75 - 135	7	20
Chlorobenzene			50.0	51.0		ug/Kg		102	76 - 124	4	20
Chloroethane			50.0	52.1		ug/Kg		104	69 - 135	9	20
Chloroform			50.0	49.6		ug/Kg		99	80 - 120	4	20
Chloromethane			50.0	47.5		ug/Kg		95	63 - 127	10	20
cis-1,2-Dichloroethene			50.0	50.9		ug/Kg		102	81 - 120	5	20
cis-1,3-Dichloropropene			50.0	55.6		ug/Kg		111	80 - 120	5	20
Cyclohexane			50.0	46.2		ug/Kg		92	65 - 120	9	20
Dibromochloromethane			50.0	52.3		ug/Kg		105	76 - 125	1	20
Dichlorodifluoromethane			50.0	41.5		ug/Kg		83	57 - 142	13	20
Ethylbenzene			50.0	51.8		ug/Kg		104	80 - 120	5	20
Isopropylbenzene			50.0	56.6		ug/Kg		113	72 - 120	4	20
m,p-Xylene			50.0	52.3		ug/Kg		105	70 - 130	5	20
Methyl acetate			100	97.8		ug/Kg		98	55 - 136	2	20
Methyl tert-butyl ether			50.0	51.1		ug/Kg		102	63 - 125	1	20
Methylcyclohexane			50.0	48.0		ug/Kg		96	60 - 140	8	20
Methylene Chloride			50.0	50.7		ug/Kg		101	61 - 127	3	20
n-Butylbenzene			50.0	55.1		ug/Kg		110	70 - 120	6	20
N-Propylbenzene			50.0	54.3		ug/Kg		109	70 - 130	4	20
o-Xylene			50.0	52.9		ug/Kg		106	70 - 130	3	20
sec-Butylbenzene			50.0	55.8		ug/Kg		112	74 - 120	5	20
Styrene			50.0	52.1		ug/Kg		104	80 - 120	2	20
tert-Butylbenzene			50.0	56.2		ug/Kg		112	73 - 120	7	20
Tetrachloroethene			50.0	54.1		ug/Kg		108	74 - 122	6	20
Toluene			50.0	51.2		ug/Kg		102	74 - 128	5	20
trans-1,2-Dichloroethene			50.0	50.1		ug/Kg		100	78 - 126	5	20
trans-1,3-Dichloropropene			50.0	54.3		ug/Kg		109	73 - 123	2	20
Trichloroethene			50.0	50.9		ug/Kg		102	77 - 129	8	20
Trichlorofluoromethane			50.0	47.4		ug/Kg		95	65 - 146	8	20
Vinyl chloride			50.0	48.8		ug/Kg		98	61 - 133	8	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*64 - 126*
4-Bromofluorobenzene (Surr)	*99*		*72 - 126*
Dibromofluoromethane (Surr)	*98*		*60 - 140*
Toluene-d8 (Surr)	*98*		*71 - 125*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-636757/2-A
Matrix: Solid
Analysis Batch: 636948

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 636757

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.50	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
1,2,3-Trimethylbenzene	ND		5.0	1.0	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
2-Hexanone	ND		25	2.5	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
Acetone	ND		25	4.2	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
Benzene	ND		5.0	0.25	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
Bromoform	ND		5.0	2.5	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
Bromomethane	ND		5.0	0.45	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
Chloroethane	ND		5.0	1.1	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
Chloroform	ND		5.0	0.31	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
Chloromethane	ND		5.0	0.30	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
Cyclohexane	ND		5.0	0.70	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
m,p-Xylene	ND		10	0.84	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
Methyl acetate	ND		25	3.0	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
o-Xylene	ND		5.0	0.65	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		08/09/22 19:21	08/11/22 00:21	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-636757/2-A
Matrix: Solid
Analysis Batch: 636948

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 636757

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		5.0	0.25	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
Toluene	ND		5.0	0.38	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
Trichloroethene	ND		5.0	1.1	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		08/09/22 19:21	08/11/22 00:21	1
Xylenes, Total	ND		10	0.84	ug/Kg		08/09/22 19:21	08/11/22 00:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*64 - 126*	*08/09/22 19:21*	*08/11/22 00:21*	*1*
4-Bromofluorobenzene (Surr)	*98*		*72 - 126*	*08/09/22 19:21*	*08/11/22 00:21*	*1*
Dibromofluoromethane (Surr)	*98*		*60 - 140*	*08/09/22 19:21*	*08/11/22 00:21*	*1*
Toluene-d8 (Surr)	*99*		*71 - 125*	*08/09/22 19:21*	*08/11/22 00:21*	*1*

Lab Sample ID: LCS 480-636757/1-A
Matrix: Solid
Analysis Batch: 636948

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 636757

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	47.6		ug/Kg		95	74 - 127
1,1,1-Trichloroethane	50.0	49.1		ug/Kg		98	77 - 121
1,1,2,2-Tetrachloroethane	50.0	48.0		ug/Kg		96	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	50.8		ug/Kg		102	60 - 140
1,1,2-Trichloroethane	50.0	46.6		ug/Kg		93	78 - 122
1,1-Dichloroethane	50.0	46.9		ug/Kg		94	73 - 126
1,1-Dichloroethene	50.0	48.6		ug/Kg		97	59 - 125
1,2,4-Trichlorobenzene	50.0	50.2		ug/Kg		100	64 - 120
1,2,4-Trimethylbenzene	50.0	52.7		ug/Kg		105	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	47.4		ug/Kg		95	63 - 124
1,2-Dibromoethane	50.0	47.4		ug/Kg		95	78 - 120
1,2-Dichlorobenzene	50.0	48.7		ug/Kg		97	75 - 120
1,2-Dichloroethane	50.0	45.7		ug/Kg		91	77 - 122
1,2-Dichloropropane	50.0	47.4		ug/Kg		95	75 - 124
1,3,5-Trimethylbenzene	50.0	53.3		ug/Kg		107	74 - 120
1,3-Dichlorobenzene	50.0	49.8		ug/Kg		100	74 - 120
1,4-Dichlorobenzene	50.0	48.3		ug/Kg		97	73 - 120
2-Butanone (MEK)	250	231		ug/Kg		93	70 - 134
2-Hexanone	250	245		ug/Kg		98	59 - 130
4-Methyl-2-pentanone (MIBK)	250	236		ug/Kg		95	65 - 133
Acetone	250	224		ug/Kg		90	61 - 137
Benzene	50.0	47.1		ug/Kg		94	79 - 127
Bromodichloromethane	50.0	46.7		ug/Kg		93	80 - 122
Bromoform	50.0	46.4		ug/Kg		93	68 - 126
Bromomethane	50.0	50.0		ug/Kg		100	37 - 149
Carbon disulfide	50.0	47.9		ug/Kg		96	64 - 131

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-636757/1-A
Matrix: Solid
Analysis Batch: 636948

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 636757

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon tetrachloride	50.0	49.6		ug/Kg		99	75 - 135
Chlorobenzene	50.0	48.3		ug/Kg		97	76 - 124
Chloroethane	50.0	54.0		ug/Kg		108	69 - 135
Chloroform	50.0	46.1		ug/Kg		92	80 - 120
Chloromethane	50.0	45.6		ug/Kg		91	63 - 127
cis-1,2-Dichloroethene	50.0	47.1		ug/Kg		94	81 - 120
cis-1,3-Dichloropropene	50.0	49.4		ug/Kg		99	80 - 120
Cyclohexane	50.0	51.5		ug/Kg		103	65 - 120
Dibromochloromethane	50.0	47.7		ug/Kg		95	76 - 125
Dichlorodifluoromethane	50.0	47.2		ug/Kg		94	57 - 142
Ethylbenzene	50.0	50.4		ug/Kg		101	80 - 120
Isopropylbenzene	50.0	54.0		ug/Kg		108	72 - 120
m,p-Xylene	50.0	50.6		ug/Kg		101	70 - 130
Methyl acetate	100	88.3		ug/Kg		88	55 - 136
Methyl tert-butyl ether	50.0	45.5		ug/Kg		91	63 - 125
Methylcyclohexane	50.0	52.8		ug/Kg		106	60 - 140
Methylene Chloride	50.0	46.9		ug/Kg		94	61 - 127
n-Butylbenzene	50.0	54.7		ug/Kg		109	70 - 120
N-Propylbenzene	50.0	52.9		ug/Kg		106	70 - 130
o-Xylene	50.0	50.4		ug/Kg		101	70 - 130
sec-Butylbenzene	50.0	55.0		ug/Kg		110	74 - 120
Styrene	50.0	49.3		ug/Kg		99	80 - 120
tert-Butylbenzene	50.0	55.0		ug/Kg		110	73 - 120
Tetrachloroethene	50.0	50.3		ug/Kg		101	74 - 122
Toluene	50.0	49.2		ug/Kg		98	74 - 128
trans-1,2-Dichloroethene	50.0	48.0		ug/Kg		96	78 - 126
trans-1,3-Dichloropropene	50.0	49.6		ug/Kg		99	73 - 123
Trichloroethene	50.0	49.1		ug/Kg		98	77 - 129
Trichlorofluoromethane	50.0	54.7		ug/Kg		109	65 - 146
Vinyl chloride	50.0	50.5		ug/Kg		101	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*64 - 126*
4-Bromofluorobenzene (Surr)	*98*		*72 - 126*
Dibromofluoromethane (Surr)	*98*		*60 - 140*
Toluene-d8 (Surr)	*102*		*71 - 125*

Lab Sample ID: 480-200248-18 MS
Matrix: Solid
Analysis Batch: 636948

Client Sample ID: SB6 (1-2)
Prep Type: Total/NA
Prep Batch: 636757

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	ND	F1 *3	81.8	109	F1 *3	ug/Kg	☼	133	74 - 127
1,1,1-Trichloroethane	ND		81.8	87.7		ug/Kg	☼	107	77 - 121
1,1,2,2-Tetrachloroethane	ND	F1 *3	81.8	144	F1 *3	ug/Kg	☼	176	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		81.8	88.4		ug/Kg	☼	108	60 - 140
1,1,2-Trichloroethane	ND	*3	81.8	80.5	*3	ug/Kg	☼	98	78 - 122
1,1-Dichloroethane	ND		81.8	75.9		ug/Kg	☼	93	73 - 126

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-200248-18 MS
Matrix: Solid
Analysis Batch: 636948

Client Sample ID: SB6 (1-2)
Prep Type: Total/NA
Prep Batch: 636757

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	ND		81.8	59.0		ug/Kg	☼	72	59 - 125
1,2,4-Trichlorobenzene	ND	F1 *3	81.8	6.00	J F1 *3	ug/Kg	☼	7	64 - 120
1,2,4-Trimethylbenzene	ND	F1 *3	81.8	52.0	F1 *3	ug/Kg	☼	64	74 - 120
1,2-Dibromo-3-Chloropropane	ND	*3	81.8	73.8	*3	ug/Kg	☼	90	63 - 124
1,2-Dibromoethane	ND	F1 *3	81.8	34.5	F1 *3	ug/Kg	☼	42	78 - 120
1,2-Dichlorobenzene	ND	F1 *3	81.8	26.8	F1 *3	ug/Kg	☼	33	75 - 120
1,2-Dichloroethane	ND	F1	81.8	43.6	F1	ug/Kg	☼	53	77 - 122
1,2-Dichloropropane	ND		81.8	61.6		ug/Kg	☼	75	75 - 124
1,3,5-Trimethylbenzene	ND	*3	81.8	80.4	*3	ug/Kg	☼	98	74 - 120
1,3-Dichlorobenzene	ND	F1 *3	81.8	20.7	F1 *3	ug/Kg	☼	25	74 - 120
1,4-Dichlorobenzene	ND	F1 *3	81.8	15.9	F1 *3	ug/Kg	☼	19	73 - 120
2-Butanone (MEK)	ND	F1	409	286		ug/Kg	☼	70	70 - 134
2-Hexanone	ND	*3	409	293	*3	ug/Kg	☼	72	59 - 130
4-Methyl-2-pentanone (MIBK)	ND	*3	409	512	*3	ug/Kg	☼	125	65 - 133
Acetone	ND		409	321		ug/Kg	☼	78	61 - 137
Benzene	ND	F1	81.8	60.0	F1	ug/Kg	☼	73	79 - 127
Bromodichloromethane	ND	F1	81.8	49.7	F1	ug/Kg	☼	61	80 - 122
Bromoform	ND	F1 *3	81.8	45.5	F1 *3	ug/Kg	☼	56	68 - 126
Bromomethane	ND		81.8	91.0		ug/Kg	☼	111	37 - 149
Carbon disulfide	ND	F1	81.8	38.0	F1	ug/Kg	☼	46	64 - 131
Carbon tetrachloride	ND		81.8	78.8		ug/Kg	☼	96	75 - 135
Chlorobenzene	ND	F1 *3	81.8	28.6	F1 *3	ug/Kg	☼	35	76 - 124
Chloroethane	ND		81.8	87.0		ug/Kg	☼	106	69 - 135
Chloroform	ND	F1	81.8	64.6	F1	ug/Kg	☼	79	80 - 120
Chloromethane	ND		81.8	90.0		ug/Kg	☼	110	63 - 127
cis-1,2-Dichloroethene	ND	F1	81.8	42.5	F1	ug/Kg	☼	52	80 - 120
cis-1,3-Dichloropropene	ND	F1	81.8	20.9	F1	ug/Kg	☼	26	80 - 120
Cyclohexane	ND		81.8	65.1		ug/Kg	☼	80	65 - 120
Dibromochloromethane	ND	*3	81.8	64.8	*3	ug/Kg	☼	79	76 - 125
Dichlorodifluoromethane	ND		81.8	82.2		ug/Kg	☼	100	57 - 142
Ethylbenzene	ND	F1 *3	81.8	35.3	F1 *3	ug/Kg	☼	43	80 - 120
Isopropylbenzene	ND	F1 *3	81.8	98.8	F1 *3	ug/Kg	☼	121	72 - 120
m,p-Xylene	ND	F1 *3	81.8	37.0	F1 *3	ug/Kg	☼	45	70 - 130
Methyl acetate	ND		164	166		ug/Kg	☼	101	55 - 136
Methyl tert-butyl ether	ND		81.8	90.2		ug/Kg	☼	110	63 - 125
Methylcyclohexane	ND	F1	81.8	38.8	F1	ug/Kg	☼	47	60 - 140
Methylene Chloride	ND		81.8	65.2		ug/Kg	☼	80	61 - 127
n-Butylbenzene	ND	F1 *3	81.8	13.0	F1 *3	ug/Kg	☼	16	70 - 120
N-Propylbenzene	ND	F1 *3	81.8	36.5	F1 *3	ug/Kg	☼	45	70 - 130
o-Xylene	ND	F1 *3	81.8	47.6	F1 *3	ug/Kg	☼	58	70 - 130
sec-Butylbenzene	ND	*3	81.8	61.6	*3	ug/Kg	☼	75	74 - 120
Styrene	ND	F1 *3	81.8	17.4	F1 *3	ug/Kg	☼	21	80 - 120
tert-Butylbenzene	ND	F1 *3	81.8	139	F1 *3	ug/Kg	☼	170	73 - 120
Tetrachloroethene	ND	F1 *3	81.8	46.2	F1 *3	ug/Kg	☼	56	74 - 122
Toluene	ND	*3	81.8	79.6	*3	ug/Kg	☼	97	74 - 128
trans-1,2-Dichloroethene	ND	F1	81.8	37.6	F1	ug/Kg	☼	46	78 - 126
trans-1,3-Dichloropropene	ND	F1 *3	81.8	22.6	F1 *3	ug/Kg	☼	28	73 - 123
Trichloroethene	ND	F1	81.8	29.2	F1	ug/Kg	☼	36	77 - 129
Trichlorofluoromethane	ND		81.8	92.5		ug/Kg	☼	113	65 - 146

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-200248-18 MS
Matrix: Solid
Analysis Batch: 636948

Client Sample ID: SB6 (1-2)
Prep Type: Total/NA
Prep Batch: 636757

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Vinyl chloride	ND		81.8	76.5		ug/Kg	☼	94	61 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*64 - 126*
4-Bromofluorobenzene (Surr)	*61*	*S1- *3*	*72 - 126*
Dibromofluoromethane (Surr)	*112*		*60 - 140*
Toluene-d8 (Surr)	*156*	*S1+ *3*	*71 - 125*

Lab Sample ID: 480-200248-18 MSD
Matrix: Solid
Analysis Batch: 636948

Client Sample ID: SB6 (1-2)
Prep Type: Total/NA
Prep Batch: 636757

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND	F1 *3	83.0	112	F1 *3	ug/Kg	☼	135	74 - 127	3	30
1,1,1-Trichloroethane	ND		83.0	84.4		ug/Kg	☼	102	77 - 121	4	30
1,1,2,2-Tetrachloroethane	ND	F1 *3	83.0	161	F1 *3	ug/Kg	☼	193	80 - 120	11	30
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		83.0	81.8		ug/Kg	☼	99	60 - 140	8	30
1,1,2-Trichloroethane	ND	*3	83.0	85.1	*3	ug/Kg	☼	102	78 - 122	5	30
1,1-Dichloroethane	ND		83.0	72.4		ug/Kg	☼	87	73 - 126	5	30
1,1-Dichloroethene	ND		83.0	54.2		ug/Kg	☼	65	59 - 125	9	30
1,2,4-Trichlorobenzene	ND	F1 *3	83.0	6.51	J *3 F1	ug/Kg	☼	8	64 - 120	8	30
1,2,4-Trimethylbenzene	ND	F1 *3	83.0	54.4	*3 F1	ug/Kg	☼	66	74 - 120	5	30
1,2-Dibromo-3-Chloropropane	ND	*3	83.0	73.1	*3	ug/Kg	☼	88	63 - 124	1	30
1,2-Dibromoethane	ND	F1 *3	83.0	36.1	*3 F1	ug/Kg	☼	44	78 - 120	5	30
1,2-Dichlorobenzene	ND	F1 *3	83.0	27.1	*3 F1	ug/Kg	☼	33	75 - 120	1	30
1,2-Dichloroethane	ND	F1	83.0	43.5	F1	ug/Kg	☼	52	77 - 122	0	30
1,2-Dichloropropane	ND		83.0	63.7		ug/Kg	☼	77	75 - 124	3	30
1,3,5-Trimethylbenzene	ND	*3	83.0	85.2	*3	ug/Kg	☼	103	74 - 120	6	30
1,3-Dichlorobenzene	ND	F1 *3	83.0	22.1	*3 F1	ug/Kg	☼	27	74 - 120	7	30
1,4-Dichlorobenzene	ND	F1 *3	83.0	17.3	*3 F1	ug/Kg	☼	21	73 - 120	8	30
2-Butanone (MEK)	ND	F1	415	284	F1	ug/Kg	☼	68	70 - 134	1	30
2-Hexanone	ND	*3	415	304	*3	ug/Kg	☼	73	59 - 130	4	30
4-Methyl-2-pentanone (MIBK)	ND	*3	415	527	*3	ug/Kg	☼	127	65 - 133	3	30
Acetone	ND		415	303		ug/Kg	☼	73	61 - 137	6	30
Benzene	ND	F1	83.0	55.1	F1	ug/Kg	☼	66	79 - 127	9	30
Bromodichloromethane	ND	F1	83.0	50.8	F1	ug/Kg	☼	61	80 - 122	2	30
Bromoform	ND	F1 *3	83.0	47.9	*3 F1	ug/Kg	☼	58	68 - 126	5	30
Bromomethane	ND		83.0	76.9		ug/Kg	☼	93	37 - 149	17	30
Carbon disulfide	ND	F1	83.0	32.7	F1	ug/Kg	☼	39	64 - 131	15	30
Carbon tetrachloride	ND		83.0	76.0		ug/Kg	☼	92	75 - 135	4	30
Chlorobenzene	ND	F1 *3	83.0	29.6	*3 F1	ug/Kg	☼	36	76 - 124	3	30
Chloroethane	ND		83.0	79.5		ug/Kg	☼	96	69 - 135	9	30
Chloroform	ND	F1	83.0	62.0	F1	ug/Kg	☼	75	80 - 120	4	30
Chloromethane	ND		83.0	81.7		ug/Kg	☼	98	63 - 127	10	30
cis-1,2-Dichloroethene	ND	F1	83.0	38.5	F1	ug/Kg	☼	46	80 - 120	10	30
cis-1,3-Dichloropropene	ND	F1	83.0	22.1	F1	ug/Kg	☼	27	80 - 120	6	30
Cyclohexane	ND		83.0	66.1		ug/Kg	☼	80	65 - 120	2	30
Dibromochloromethane	ND	*3	83.0	71.6	*3	ug/Kg	☼	86	76 - 125	10	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-200248-18 MSD
Matrix: Solid
Analysis Batch: 636948

Client Sample ID: SB6 (1-2)
Prep Type: Total/NA
Prep Batch: 636757

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Dichlorodifluoromethane	ND		83.0	74.4		ug/Kg	☼	90	57 - 142	10	30
Ethylbenzene	ND	F1 *3	83.0	37.4	*3 F1	ug/Kg	☼	45	80 - 120	6	30
Isopropylbenzene	ND	F1 *3	83.0	108	F1 *3	ug/Kg	☼	130	72 - 120	9	30
m,p-Xylene	ND	F1 *3	83.0	34.1	*3 F1	ug/Kg	☼	41	70 - 130	8	30
Methyl acetate	ND		166	159		ug/Kg	☼	96	55 - 136	4	30
Methyl tert-butyl ether	ND		83.0	88.1		ug/Kg	☼	106	63 - 125	2	30
Methylcyclohexane	ND	F1	83.0	42.8	F1	ug/Kg	☼	52	60 - 140	10	30
Methylene Chloride	ND		83.0	58.8		ug/Kg	☼	71	61 - 127	10	30
n-Butylbenzene	ND	F1 *3	83.0	15.7	*3 F1	ug/Kg	☼	19	70 - 120	19	30
N-Propylbenzene	ND	F1 *3	83.0	43.5	*3 F1	ug/Kg	☼	52	70 - 130	18	30
o-Xylene	ND	F1 *3	83.0	47.6	*3 F1	ug/Kg	☼	57	70 - 130	0	30
sec-Butylbenzene	ND	*3	83.0	69.0	*3	ug/Kg	☼	83	74 - 120	11	30
Styrene	ND	F1 *3	83.0	17.1	*3 F1	ug/Kg	☼	21	80 - 120	2	30
tert-Butylbenzene	ND	F1 *3	83.0	153	F1 *3	ug/Kg	☼	184	73 - 120	9	30
Tetrachloroethene	ND	F1 *3	83.0	50.1	*3 F1	ug/Kg	☼	60	74 - 122	8	30
Toluene	ND	*3	83.0	63.2	*3	ug/Kg	☼	76	74 - 128	23	30
trans-1,2-Dichloroethene	ND	F1	83.0	34.2	F1	ug/Kg	☼	41	78 - 126	9	30
trans-1,3-Dichloropropene	ND	F1 *3	83.0	23.1	*3 F1	ug/Kg	☼	28	73 - 123	2	30
Trichloroethene	ND	F1	83.0	29.5	F1	ug/Kg	☼	35	77 - 129	1	30
Trichlorofluoromethane	ND		83.0	85.1		ug/Kg	☼	102	65 - 146	8	30
Vinyl chloride	ND		83.0	68.0		ug/Kg	☼	82	61 - 133	12	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*64 - 126*
4-Bromofluorobenzene (Surr)	*62*	*S1- *3*	*72 - 126*
Dibromofluoromethane (Surr)	*109*		*60 - 140*
Toluene-d8 (Surr)	*161*	*S1+ *3*	*71 - 125*

Lab Sample ID: MB 480-636951/2-A
Matrix: Solid
Analysis Batch: 636985

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 636951

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.50	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
1,2,3-Trimethylbenzene	ND		5.0	1.0	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		08/10/22 23:43	08/11/22 13:45	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-636951/2-A
Matrix: Solid
Analysis Batch: 636985

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 636951

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
2-Hexanone	ND		25	2.5	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
Acetone	ND		25	4.2	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
Benzene	ND		5.0	0.25	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
Bromoform	ND		5.0	2.5	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
Bromomethane	ND		5.0	0.45	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
Chloroethane	ND		5.0	1.1	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
Chloroform	ND		5.0	0.31	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
Chloromethane	ND		5.0	0.30	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
Cyclohexane	ND		5.0	0.70	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
m,p-Xylene	ND		10	0.84	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
Methyl acetate	ND		25	3.0	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
o-Xylene	ND		5.0	0.65	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
Styrene	ND		5.0	0.25	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
Toluene	ND		5.0	0.38	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
Trichloroethene	ND		5.0	1.1	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		08/10/22 23:43	08/11/22 13:45	1
Xylenes, Total	ND		10	0.84	ug/Kg		08/10/22 23:43	08/11/22 13:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*64 - 126*	*08/10/22 23:43*	*08/11/22 13:45*	*1*
4-Bromofluorobenzene (Surr)	*100*		*72 - 126*	*08/10/22 23:43*	*08/11/22 13:45*	*1*
Dibromofluoromethane (Surr)	*103*		*60 - 140*	*08/10/22 23:43*	*08/11/22 13:45*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-636951/2-A
Matrix: Solid
Analysis Batch: 636985

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 636951

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	100		71 - 125	08/10/22 23:43	08/11/22 13:45	1

Lab Sample ID: LCS 480-636951/1-A
Matrix: Solid
Analysis Batch: 636985

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 636951

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	53.8		ug/Kg		108	74 - 127
1,1,1-Trichloroethane	50.0	51.8		ug/Kg		104	77 - 121
1,1,2,2-Tetrachloroethane	50.0	51.5		ug/Kg		103	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	51.3		ug/Kg		103	60 - 140
1,1,2-Trichloroethane	50.0	52.5		ug/Kg		105	78 - 122
1,1-Dichloroethane	50.0	52.0		ug/Kg		104	73 - 126
1,1-Dichloroethene	50.0	51.7		ug/Kg		103	59 - 125
1,2,4-Trichlorobenzene	50.0	53.3		ug/Kg		107	64 - 120
1,2,4-Trimethylbenzene	50.0	56.5		ug/Kg		113	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	51.1		ug/Kg		102	63 - 124
1,2-Dibromoethane	50.0	50.9		ug/Kg		102	78 - 120
1,2-Dichlorobenzene	50.0	52.3		ug/Kg		105	75 - 120
1,2-Dichloroethane	50.0	49.9		ug/Kg		100	77 - 122
1,2-Dichloropropane	50.0	51.0		ug/Kg		102	75 - 124
1,3,5-Trimethylbenzene	50.0	56.2		ug/Kg		112	74 - 120
1,3-Dichlorobenzene	50.0	52.8		ug/Kg		106	74 - 120
1,4-Dichlorobenzene	50.0	51.9		ug/Kg		104	73 - 120
2-Butanone (MEK)	250	255		ug/Kg		102	70 - 134
2-Hexanone	250	265		ug/Kg		106	59 - 130
4-Methyl-2-pentanone (MIBK)	250	266		ug/Kg		107	65 - 133
Acetone	250	249		ug/Kg		100	61 - 137
Benzene	50.0	51.2		ug/Kg		102	79 - 127
Bromodichloromethane	50.0	50.4		ug/Kg		101	80 - 122
Bromoform	50.0	51.0		ug/Kg		102	68 - 126
Bromomethane	50.0	54.7		ug/Kg		109	37 - 149
Carbon disulfide	50.0	50.3		ug/Kg		101	64 - 131
Carbon tetrachloride	50.0	52.7		ug/Kg		105	75 - 135
Chlorobenzene	50.0	52.2		ug/Kg		104	76 - 124
Chloroethane	50.0	61.2		ug/Kg		122	69 - 135
Chloroform	50.0	49.9		ug/Kg		100	80 - 120
Chloromethane	50.0	49.9		ug/Kg		100	63 - 127
cis-1,2-Dichloroethene	50.0	51.2		ug/Kg		102	81 - 120
cis-1,3-Dichloropropene	50.0	53.0		ug/Kg		106	80 - 120
Cyclohexane	50.0	53.2		ug/Kg		106	65 - 120
Dibromochloromethane	50.0	52.6		ug/Kg		105	76 - 125
Dichlorodifluoromethane	50.0	48.7		ug/Kg		97	57 - 142
Ethylbenzene	50.0	55.2		ug/Kg		110	80 - 120
Isopropylbenzene	50.0	56.8		ug/Kg		114	72 - 120
m,p-Xylene	50.0	55.1		ug/Kg		110	70 - 130
Methyl acetate	100	97.0		ug/Kg		97	55 - 136
Methyl tert-butyl ether	50.0	49.1		ug/Kg		98	63 - 125

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-636951/1-A
Matrix: Solid
Analysis Batch: 636985

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 636951

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylcyclohexane	50.0	54.4		ug/Kg		109	60 - 140
Methylene Chloride	50.0	51.7		ug/Kg		103	61 - 127
n-Butylbenzene	50.0	58.0		ug/Kg		116	70 - 120
N-Propylbenzene	50.0	56.3		ug/Kg		113	70 - 130
o-Xylene	50.0	54.8		ug/Kg		110	70 - 130
sec-Butylbenzene	50.0	57.9		ug/Kg		116	74 - 120
Styrene	50.0	53.9		ug/Kg		108	80 - 120
tert-Butylbenzene	50.0	58.5		ug/Kg		117	73 - 120
Tetrachloroethene	50.0	54.5		ug/Kg		109	74 - 122
Toluene	50.0	54.3		ug/Kg		109	74 - 128
trans-1,2-Dichloroethene	50.0	51.6		ug/Kg		103	78 - 126
trans-1,3-Dichloropropene	50.0	54.0		ug/Kg		108	73 - 123
Trichloroethene	50.0	51.7		ug/Kg		103	77 - 129
Trichlorofluoromethane	50.0	58.7		ug/Kg		117	65 - 146
Vinyl chloride	50.0	54.4		ug/Kg		109	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*64 - 126*
4-Bromofluorobenzene (Surr)	*99*		*72 - 126*
Dibromofluoromethane (Surr)	*98*		*60 - 140*
Toluene-d8 (Surr)	*102*		*71 - 125*

Lab Sample ID: MB 480-637228/3-A
Matrix: Solid
Analysis Batch: 637219

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 637228

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.50	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
1,2,3-Trimethylbenzene	ND		5.0	1.0	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
2-Hexanone	ND		25	2.5	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		08/12/22 11:16	08/12/22 14:09	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-637228/3-A
Matrix: Solid
Analysis Batch: 637219

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 637228

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		25	4.2	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
Benzene	ND		5.0	0.25	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
Bromoform	ND		5.0	2.5	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
Bromomethane	ND		5.0	0.45	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
Chloroethane	ND		5.0	1.1	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
Chloroform	ND		5.0	0.31	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
Chloromethane	ND		5.0	0.30	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
Cyclohexane	ND		5.0	0.70	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
m,p-Xylene	ND		10	0.84	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
Methyl acetate	ND		25	3.0	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
o-Xylene	ND		5.0	0.65	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
Styrene	ND		5.0	0.25	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
Toluene	ND		5.0	0.38	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
Trichloroethene	ND		5.0	1.1	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		08/12/22 11:16	08/12/22 14:09	1
Xylenes, Total	ND		10	0.84	ug/Kg		08/12/22 11:16	08/12/22 14:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*64 - 126*	*08/12/22 11:16*	*08/12/22 14:09*	*1*
4-Bromofluorobenzene (Surr)	*100*		*72 - 126*	*08/12/22 11:16*	*08/12/22 14:09*	*1*
Dibromofluoromethane (Surr)	*103*		*60 - 140*	*08/12/22 11:16*	*08/12/22 14:09*	*1*
Toluene-d8 (Surr)	*99*		*71 - 125*	*08/12/22 11:16*	*08/12/22 14:09*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-637228/1-A
Matrix: Solid
Analysis Batch: 637219

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 637228

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	54.7		ug/Kg		109	74 - 127
1,1,1-Trichloroethane	50.0	54.4		ug/Kg		109	77 - 121
1,1,2,2-Tetrachloroethane	50.0	51.7		ug/Kg		103	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	55.1		ug/Kg		110	60 - 140
1,1,2-Trichloroethane	50.0	51.0		ug/Kg		102	78 - 122
1,1-Dichloroethane	50.0	53.4		ug/Kg		107	73 - 126
1,1-Dichloroethene	50.0	53.2		ug/Kg		106	59 - 125
1,2,4-Trichlorobenzene	50.0	55.6		ug/Kg		111	64 - 120
1,2,4-Trimethylbenzene	50.0	57.2		ug/Kg		114	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	55.1		ug/Kg		110	63 - 124
1,2-Dibromoethane	50.0	50.1		ug/Kg		100	78 - 120
1,2-Dichlorobenzene	50.0	53.1		ug/Kg		106	75 - 120
1,2-Dichloroethane	50.0	50.2		ug/Kg		100	77 - 122
1,2-Dichloropropane	50.0	51.8		ug/Kg		104	75 - 124
1,3,5-Trimethylbenzene	50.0	58.3		ug/Kg		117	74 - 120
1,3-Dichlorobenzene	50.0	53.1		ug/Kg		106	74 - 120
1,4-Dichlorobenzene	50.0	51.5		ug/Kg		103	73 - 120
2-Butanone (MEK)	250	228		ug/Kg		91	70 - 134
2-Hexanone	250	255		ug/Kg		102	59 - 130
4-Methyl-2-pentanone (MIBK)	250	268		ug/Kg		107	65 - 133
Acetone	250	245		ug/Kg		98	61 - 137
Benzene	50.0	51.7		ug/Kg		103	79 - 127
Bromodichloromethane	50.0	51.3		ug/Kg		103	80 - 122
Bromoform	50.0	50.8		ug/Kg		102	68 - 126
Bromomethane	50.0	54.7		ug/Kg		109	37 - 149
Carbon disulfide	50.0	51.8		ug/Kg		104	64 - 131
Carbon tetrachloride	50.0	54.3		ug/Kg		109	75 - 135
Chlorobenzene	50.0	51.6		ug/Kg		103	76 - 124
Chloroethane	50.0	59.8		ug/Kg		120	69 - 135
Chloroform	50.0	50.8		ug/Kg		102	80 - 120
Chloromethane	50.0	49.8		ug/Kg		100	63 - 127
cis-1,2-Dichloroethene	50.0	52.7		ug/Kg		105	81 - 120
cis-1,3-Dichloropropene	50.0	54.0		ug/Kg		108	80 - 120
Cyclohexane	50.0	56.7		ug/Kg		113	65 - 120
Dibromochloromethane	50.0	52.5		ug/Kg		105	76 - 125
Dichlorodifluoromethane	50.0	49.5		ug/Kg		99	57 - 142
Ethylbenzene	50.0	54.2		ug/Kg		108	80 - 120
Isopropylbenzene	50.0	59.0		ug/Kg		118	72 - 120
m,p-Xylene	50.0	53.8		ug/Kg		108	70 - 130
Methyl acetate	100	101		ug/Kg		101	55 - 136
Methyl tert-butyl ether	50.0	50.3		ug/Kg		101	63 - 125
Methylcyclohexane	50.0	58.0		ug/Kg		116	60 - 140
Methylene Chloride	50.0	51.7		ug/Kg		103	61 - 127
n-Butylbenzene	50.0	59.0		ug/Kg		118	70 - 120
N-Propylbenzene	50.0	56.8		ug/Kg		114	70 - 130
o-Xylene	50.0	54.5		ug/Kg		109	70 - 130
sec-Butylbenzene	50.0	59.1		ug/Kg		118	74 - 120
Styrene	50.0	52.5		ug/Kg		105	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-637228/1-A
Matrix: Solid
Analysis Batch: 637219

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 637228

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
tert-Butylbenzene	50.0	59.9		ug/Kg		120	73 - 120
Tetrachloroethene	50.0	56.9		ug/Kg		114	74 - 122
Toluene	50.0	52.6		ug/Kg		105	74 - 128
trans-1,2-Dichloroethene	50.0	51.8		ug/Kg		104	78 - 126
trans-1,3-Dichloropropene	50.0	53.1		ug/Kg		106	73 - 123
Trichloroethene	50.0	52.8		ug/Kg		106	77 - 129
Trichlorofluoromethane	50.0	59.1		ug/Kg		118	65 - 146
Vinyl chloride	50.0	54.3		ug/Kg		109	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*64 - 126*
4-Bromofluorobenzene (Surr)	*97*		*72 - 126*
Dibromofluoromethane (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*102*		*71 - 125*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-635797/1-A
Matrix: Water
Analysis Batch: 636252

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635797

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		08/02/22 08:24	08/04/22 22:40	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		08/02/22 08:24	08/04/22 22:40	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		08/02/22 08:24	08/04/22 22:40	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		08/02/22 08:24	08/04/22 22:40	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		08/02/22 08:24	08/04/22 22:40	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		08/02/22 08:24	08/04/22 22:40	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		08/02/22 08:24	08/04/22 22:40	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		08/02/22 08:24	08/04/22 22:40	1
2-Chlorophenol	ND		5.0	0.53	ug/L		08/02/22 08:24	08/04/22 22:40	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		08/02/22 08:24	08/04/22 22:40	1
2-Methylphenol	ND		5.0	0.40	ug/L		08/02/22 08:24	08/04/22 22:40	1
2-Nitroaniline	ND		10	0.42	ug/L		08/02/22 08:24	08/04/22 22:40	1
2-Nitrophenol	ND		5.0	0.48	ug/L		08/02/22 08:24	08/04/22 22:40	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		08/02/22 08:24	08/04/22 22:40	1
3-Nitroaniline	ND		10	0.48	ug/L		08/02/22 08:24	08/04/22 22:40	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		08/02/22 08:24	08/04/22 22:40	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		08/02/22 08:24	08/04/22 22:40	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		08/02/22 08:24	08/04/22 22:40	1
4-Chloroaniline	ND		5.0	0.59	ug/L		08/02/22 08:24	08/04/22 22:40	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		08/02/22 08:24	08/04/22 22:40	1
4-Methylphenol	ND		10	0.36	ug/L		08/02/22 08:24	08/04/22 22:40	1
4-Nitroaniline	ND		10	0.25	ug/L		08/02/22 08:24	08/04/22 22:40	1
4-Nitrophenol	ND		10	1.5	ug/L		08/02/22 08:24	08/04/22 22:40	1
Acenaphthene	ND		5.0	0.41	ug/L		08/02/22 08:24	08/04/22 22:40	1
Acenaphthylene	ND		5.0	0.38	ug/L		08/02/22 08:24	08/04/22 22:40	1
Acetophenone	ND		5.0	0.54	ug/L		08/02/22 08:24	08/04/22 22:40	1
Anthracene	ND		5.0	0.28	ug/L		08/02/22 08:24	08/04/22 22:40	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-635797/1-A
Matrix: Water
Analysis Batch: 636252

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635797

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Atrazine	ND		5.0	0.46	ug/L		08/02/22 08:24	08/04/22 22:40	1
Benzaldehyde	ND		5.0	0.27	ug/L		08/02/22 08:24	08/04/22 22:40	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		08/02/22 08:24	08/04/22 22:40	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		08/02/22 08:24	08/04/22 22:40	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		08/02/22 08:24	08/04/22 22:40	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		08/02/22 08:24	08/04/22 22:40	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		08/02/22 08:24	08/04/22 22:40	1
Biphenyl	ND		5.0	0.65	ug/L		08/02/22 08:24	08/04/22 22:40	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		08/02/22 08:24	08/04/22 22:40	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		08/02/22 08:24	08/04/22 22:40	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		08/02/22 08:24	08/04/22 22:40	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		08/02/22 08:24	08/04/22 22:40	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		08/02/22 08:24	08/04/22 22:40	1
Caprolactam	ND		5.0	2.2	ug/L		08/02/22 08:24	08/04/22 22:40	1
Carbazole	ND		5.0	0.30	ug/L		08/02/22 08:24	08/04/22 22:40	1
Chrysene	ND		5.0	0.33	ug/L		08/02/22 08:24	08/04/22 22:40	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		08/02/22 08:24	08/04/22 22:40	1
Dibenzofuran	ND		10	0.51	ug/L		08/02/22 08:24	08/04/22 22:40	1
Diethyl phthalate	ND		5.0	0.22	ug/L		08/02/22 08:24	08/04/22 22:40	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		08/02/22 08:24	08/04/22 22:40	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		08/02/22 08:24	08/04/22 22:40	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		08/02/22 08:24	08/04/22 22:40	1
Fluoranthene	ND		5.0	0.40	ug/L		08/02/22 08:24	08/04/22 22:40	1
Fluorene	ND		5.0	0.36	ug/L		08/02/22 08:24	08/04/22 22:40	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		08/02/22 08:24	08/04/22 22:40	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		08/02/22 08:24	08/04/22 22:40	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		08/02/22 08:24	08/04/22 22:40	1
Hexachloroethane	ND		5.0	0.59	ug/L		08/02/22 08:24	08/04/22 22:40	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		08/02/22 08:24	08/04/22 22:40	1
Isophorone	ND		5.0	0.43	ug/L		08/02/22 08:24	08/04/22 22:40	1
Naphthalene	ND		5.0	0.76	ug/L		08/02/22 08:24	08/04/22 22:40	1
Nitrobenzene	ND		5.0	0.29	ug/L		08/02/22 08:24	08/04/22 22:40	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		08/02/22 08:24	08/04/22 22:40	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		08/02/22 08:24	08/04/22 22:40	1
Pentachlorophenol	ND		10	2.2	ug/L		08/02/22 08:24	08/04/22 22:40	1
Phenanthrene	ND		5.0	0.44	ug/L		08/02/22 08:24	08/04/22 22:40	1
Phenol	ND		5.0	0.39	ug/L		08/02/22 08:24	08/04/22 22:40	1
Pyrene	ND		5.0	0.34	ug/L		08/02/22 08:24	08/04/22 22:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*78*		*41 - 120*	*08/02/22 08:24*	*08/04/22 22:40*	*1*
2-Fluorobiphenyl (Surr)	*84*		*48 - 120*	*08/02/22 08:24*	*08/04/22 22:40*	*1*
2-Fluorophenol (Surr)	*59*		*35 - 120*	*08/02/22 08:24*	*08/04/22 22:40*	*1*
Nitrobenzene-d5 (Surr)	*76*		*46 - 120*	*08/02/22 08:24*	*08/04/22 22:40*	*1*
Phenol-d5 (Surr)	*46*		*22 - 120*	*08/02/22 08:24*	*08/04/22 22:40*	*1*
p-Terphenyl-d14 (Surr)	*91*		*60 - 148*	*08/02/22 08:24*	*08/04/22 22:40*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-635797/2-A
Matrix: Water
Analysis Batch: 636252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635797

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	32.0	30.8		ug/L		96	65 - 126
2,4,6-Trichlorophenol	32.0	31.8		ug/L		99	64 - 120
2,4-Dichlorophenol	32.0	29.6		ug/L		92	63 - 120
2,4-Dimethylphenol	32.0	29.1		ug/L		91	47 - 120
2,4-Dinitrophenol	64.0	62.7		ug/L		98	31 - 137
2,4-Dinitrotoluene	32.0	32.7		ug/L		102	69 - 120
2,6-Dinitrotoluene	32.0	31.1		ug/L		97	68 - 120
2-Chloronaphthalene	32.0	26.6		ug/L		83	58 - 120
2-Chlorophenol	32.0	26.5		ug/L		83	48 - 120
2-Methylnaphthalene	32.0	24.5		ug/L		77	59 - 120
2-Methylphenol	32.0	26.5		ug/L		83	39 - 120
2-Nitroaniline	32.0	31.7		ug/L		99	54 - 127
2-Nitrophenol	32.0	29.1		ug/L		91	52 - 125
3,3'-Dichlorobenzidine	64.0	61.5		ug/L		96	49 - 135
3-Nitroaniline	32.0	29.2		ug/L		91	51 - 120
4,6-Dinitro-2-methylphenol	64.0	63.6		ug/L		99	46 - 136
4-Bromophenyl phenyl ether	32.0	31.4		ug/L		98	65 - 120
4-Chloro-3-methylphenol	32.0	31.1		ug/L		97	61 - 123
4-Chloroaniline	32.0	23.7		ug/L		74	30 - 120
4-Chlorophenyl phenyl ether	32.0	29.1		ug/L		91	62 - 120
4-Methylphenol	32.0	26.5		ug/L		83	29 - 131
4-Nitroaniline	32.0	38.0		ug/L		119	65 - 120
4-Nitrophenol	64.0	54.3		ug/L		85	45 - 120
Acenaphthene	32.0	28.6		ug/L		89	60 - 120
Acenaphthylene	32.0	29.4		ug/L		92	63 - 120
Acetophenone	32.0	30.3		ug/L		95	45 - 120
Anthracene	32.0	32.1		ug/L		100	67 - 120
Atrazine	64.0	66.7		ug/L		104	71 - 130
Benzaldehyde	64.0	54.2		ug/L		85	10 - 140
Benzo[a]anthracene	32.0	31.1		ug/L		97	70 - 121
Benzo[a]pyrene	32.0	31.7		ug/L		99	60 - 123
Benzo[b]fluoranthene	32.0	32.5		ug/L		102	66 - 126
Benzo[g,h,i]perylene	32.0	31.2		ug/L		97	66 - 150
Benzo[k]fluoranthene	32.0	31.3		ug/L		98	65 - 124
Biphenyl	32.0	27.1		ug/L		85	59 - 120
bis (2-chloroisopropyl) ether	32.0	27.4		ug/L		86	21 - 136
Bis(2-chloroethoxy)methane	32.0	28.4		ug/L		89	50 - 128
Bis(2-chloroethyl)ether	32.0	26.7		ug/L		83	44 - 120
Bis(2-ethylhexyl) phthalate	32.0	32.1		ug/L		100	63 - 139
Butyl benzyl phthalate	32.0	32.7		ug/L		102	70 - 129
Caprolactam	64.0	24.6		ug/L		38	22 - 120
Carbazole	32.0	45.0	*+	ug/L		141	66 - 123
Chrysene	32.0	30.4		ug/L		95	69 - 120
Dibenz(a,h)anthracene	32.0	31.4		ug/L		98	65 - 135
Dibenzofuran	32.0	28.8		ug/L		90	66 - 120
Diethyl phthalate	32.0	31.2		ug/L		98	59 - 127
Dimethyl phthalate	32.0	31.0		ug/L		97	68 - 120
Di-n-butyl phthalate	32.0	33.7		ug/L		105	69 - 131

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-635797/2-A
Matrix: Water
Analysis Batch: 636252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635797

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Di-n-octyl phthalate			32.0	31.3		ug/L		98	63 - 140		
Fluoranthene			32.0	33.0		ug/L		103	69 - 126		
Fluorene			32.0	30.3		ug/L		95	66 - 120		
Hexachlorobenzene			32.0	30.4		ug/L		95	61 - 120		
Hexachlorobutadiene			32.0	21.0		ug/L		66	35 - 120		
Hexachlorocyclopentadiene			32.0	17.6		ug/L		55	31 - 120		
Hexachloroethane			32.0	23.0		ug/L		72	43 - 120		
Indeno[1,2,3-cd]pyrene			32.0	31.6		ug/L		99	69 - 146		
Isophorone			32.0	29.9		ug/L		93	55 - 120		
Naphthalene			32.0	30.0		ug/L		94	57 - 120		
Nitrobenzene			32.0	28.6		ug/L		89	53 - 123		
N-Nitrosodi-n-propylamine			32.0	30.4		ug/L		95	32 - 140		
N-Nitrosodiphenylamine			32.0	31.9		ug/L		100	61 - 120		
Pentachlorophenol			64.0	56.4		ug/L		88	29 - 136		
Phenanthrene			32.0	31.3		ug/L		98	68 - 120		
Phenol			32.0	18.7		ug/L		59	17 - 120		
Pyrene			32.0	32.5		ug/L		101	70 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*101*		*41 - 120*
2-Fluorobiphenyl (Surr)	*91*		*48 - 120*
2-Fluorophenol (Surr)	*64*		*35 - 120*
Nitrobenzene-d5 (Surr)	*87*		*46 - 120*
Phenol-d5 (Surr)	*55*		*22 - 120*
p-Terphenyl-d14 (Surr)	*99*		*60 - 148*

Lab Sample ID: LCSD 480-635797/3-A
Matrix: Water
Analysis Batch: 636252

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 635797

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4,5-Trichlorophenol			32.0	32.0		ug/L		100	65 - 126	4	18
2,4,6-Trichlorophenol			32.0	32.3		ug/L		101	64 - 120	2	19
2,4-Dichlorophenol			32.0	29.7		ug/L		93	63 - 120	0	19
2,4-Dimethylphenol			32.0	29.3		ug/L		92	47 - 120	1	42
2,4-Dinitrophenol			64.0	61.4		ug/L		96	31 - 137	2	22
2,4-Dinitrotoluene			32.0	34.2		ug/L		107	69 - 120	4	20
2,6-Dinitrotoluene			32.0	32.4		ug/L		101	68 - 120	4	15
2-Chloronaphthalene			32.0	26.1		ug/L		81	58 - 120	2	21
2-Chlorophenol			32.0	27.3		ug/L		85	48 - 120	3	25
2-Methylnaphthalene			32.0	26.4		ug/L		82	59 - 120	7	21
2-Methylphenol			32.0	27.5		ug/L		86	39 - 120	4	27
2-Nitroaniline			32.0	33.7		ug/L		105	54 - 127	6	15
2-Nitrophenol			32.0	29.1		ug/L		91	52 - 125	0	18
3,3'-Dichlorobenzidine			64.0	66.0		ug/L		103	49 - 135	7	25
3-Nitroaniline			32.0	31.9		ug/L		100	51 - 120	9	19
4,6-Dinitro-2-methylphenol			64.0	60.7		ug/L		95	46 - 136	5	15
4-Bromophenyl phenyl ether			32.0	30.6		ug/L		96	65 - 120	3	15

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-635797/3-A
Matrix: Water
Analysis Batch: 636252

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 635797

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4-Chloro-3-methylphenol	32.0	31.3		ug/L		98	61 - 123	1	27
4-Chloroaniline	32.0	23.0		ug/L		72	30 - 120	3	22
4-Chlorophenyl phenyl ether	32.0	29.6		ug/L		93	62 - 120	2	16
4-Methylphenol	32.0	27.2		ug/L		85	29 - 131	2	24
4-Nitroaniline	32.0	36.9		ug/L		115	65 - 120	3	24
4-Nitrophenol	64.0	58.5		ug/L		91	45 - 120	7	48
Acenaphthene	32.0	28.4		ug/L		89	60 - 120	1	24
Acenaphthylene	32.0	29.4		ug/L		92	63 - 120	0	18
Acetophenone	32.0	38.4	*1	ug/L		120	45 - 120	24	20
Anthracene	32.0	32.7		ug/L		102	67 - 120	2	15
Atrazine	64.0	66.8		ug/L		104	71 - 130	0	20
Benzaldehyde	64.0	53.4		ug/L		83	10 - 140	2	20
Benzo[a]anthracene	32.0	31.7		ug/L		99	70 - 121	2	15
Benzo[a]pyrene	32.0	32.2		ug/L		101	60 - 123	2	15
Benzo[b]fluoranthene	32.0	33.3		ug/L		104	66 - 126	2	15
Benzo[g,h,i]perylene	32.0	31.6		ug/L		99	66 - 150	1	15
Benzo[k]fluoranthene	32.0	31.6		ug/L		99	65 - 124	1	22
Biphenyl	32.0	26.7		ug/L		83	59 - 120	2	20
bis (2-chloroisopropyl) ether	32.0	27.1		ug/L		85	21 - 136	1	24
Bis(2-chloroethoxy)methane	32.0	28.5		ug/L		89	50 - 128	0	17
Bis(2-chloroethyl)ether	32.0	27.8		ug/L		87	44 - 120	4	21
Bis(2-ethylhexyl) phthalate	32.0	32.1		ug/L		100	63 - 139	0	15
Butyl benzyl phthalate	32.0	34.0		ug/L		106	70 - 129	4	16
Caprolactam	64.0	24.1		ug/L		38	22 - 120	2	20
Carbazole	32.0	43.2	*+	ug/L		135	66 - 123	4	20
Chrysene	32.0	31.0		ug/L		97	69 - 120	2	15
Dibenz(a,h)anthracene	32.0	31.5		ug/L		98	65 - 135	0	15
Dibenzofuran	32.0	29.4		ug/L		92	66 - 120	2	15
Diethyl phthalate	32.0	32.2		ug/L		101	59 - 127	3	15
Dimethyl phthalate	32.0	32.1		ug/L		100	68 - 120	4	15
Di-n-butyl phthalate	32.0	34.6		ug/L		108	69 - 131	3	15
Di-n-octyl phthalate	32.0	31.8		ug/L		99	63 - 140	2	16
Fluoranthene	32.0	33.6		ug/L		105	69 - 126	2	15
Fluorene	32.0	30.6		ug/L		96	66 - 120	1	15
Hexachlorobenzene	32.0	31.1		ug/L		97	61 - 120	2	15
Hexachlorobutadiene	32.0	19.9		ug/L		62	35 - 120	5	44
Hexachlorocyclopentadiene	32.0	17.1		ug/L		53	31 - 120	3	49
Hexachloroethane	32.0	30.4		ug/L		95	43 - 120	28	46
Indeno[1,2,3-cd]pyrene	32.0	31.7		ug/L		99	69 - 146	0	15
Isophorone	32.0	29.4		ug/L		92	55 - 120	2	17
Naphthalene	32.0	45.5	*+ *1	ug/L		142	57 - 120	41	29
Nitrobenzene	32.0	27.9		ug/L		87	53 - 123	2	24
N-Nitrosodi-n-propylamine	32.0	31.2		ug/L		97	32 - 140	3	31
N-Nitrosodiphenylamine	32.0	32.4		ug/L		101	61 - 120	2	15
Pentachlorophenol	64.0	61.7		ug/L		96	29 - 136	9	37
Phenanthrene	32.0	32.0		ug/L		100	68 - 120	2	15
Phenol	32.0	19.5		ug/L		61	17 - 120	4	34
Pyrene	32.0	32.8		ug/L		102	70 - 125	1	19

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-635797/3-A
Matrix: Water
Analysis Batch: 636252

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 635797

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*104*		*41 - 120*
2-Fluorobiphenyl (Surr)	*90*		*48 - 120*
2-Fluorophenol (Surr)	*67*		*35 - 120*
Nitrobenzene-d5 (Surr)	*86*		*46 - 120*
Phenol-d5 (Surr)	*57*		*22 - 120*
p-Terphenyl-d14 (Surr)	*100*		*60 - 148*

Lab Sample ID: MB 480-636076/1-A
Matrix: Solid
Analysis Batch: 636722

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 636076

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		98	54	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
2,4,5-Trichlorophenol	ND		170	45	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
2,4,6-Trichlorophenol	ND		170	33	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
2,4-Dimethylphenol	ND		170	40	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
2,4-Dinitrophenol	ND		1600	770	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
2,4-Dinitrotoluene	ND		170	34	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
2-Chloronaphthalene	ND		170	27	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
2-Chlorophenol	ND		320	30	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
2-Methylnaphthalene	ND		170	33	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
2-Methylphenol	ND		170	20	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
2-Nitroaniline	ND		320	25	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
2-Nitrophenol	ND		170	47	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
3,3'-Dichlorobenzidine	ND		320	200	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
3-Nitroaniline	ND		320	46	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
4,6-Dinitro-2-methylphenol	ND		320	170	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
4-Bromophenyl phenyl ether	ND		170	24	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
4-Chloro-3-methylphenol	ND		170	41	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
4-Chloroaniline	ND		170	41	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
4-Chlorophenyl phenyl ether	ND		170	21	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
4-Methylphenol	ND		320	20	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
4-Nitroaniline	ND		320	87	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
4-Nitrophenol	ND		320	120	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Acenaphthene	ND		170	25	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Acenaphthylene	ND		170	22	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Acetophenone	ND		170	23	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Anthracene	ND		170	41	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Atrazine	ND		170	58	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Benzaldehyde	ND		170	130	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Benzo[a]anthracene	ND		170	17	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Benzo[a]pyrene	ND		170	25	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Benzo[b]fluoranthene	ND		170	26	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Biphenyl	ND		170	25	ug/Kg		08/03/22 15:56	08/09/22 17:32	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-636076/1-A
Matrix: Solid
Analysis Batch: 636722

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 636076

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
bis (2-chloroisopropyl) ether	ND		170	33	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Bis(2-chloroethoxy)methane	ND		170	35	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Bis(2-chloroethyl)ether	ND		170	22	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Bis(2-ethylhexyl) phthalate	ND		170	57	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Butyl benzyl phthalate	ND		170	27	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Caprolactam	ND		170	50	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Carbazole	ND		170	20	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Chrysene	ND		170	37	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Dibenz(a,h)anthracene	ND		170	29	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Dibenzofuran	ND		170	20	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Diethyl phthalate	ND		170	22	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Dimethyl phthalate	ND		170	20	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Di-n-butyl phthalate	ND		170	28	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Di-n-octyl phthalate	ND		170	20	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Fluoranthene	ND		170	18	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Fluorene	ND		170	20	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Hexachlorobenzene	ND		170	23	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Hexachlorobutadiene	ND		170	25	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Hexachlorocyclopentadiene	ND		170	23	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Hexachloroethane	ND		170	22	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Isophorone	ND		170	35	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Naphthalene	ND		170	22	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Nitrobenzene	ND		170	19	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
N-Nitrosodi-n-propylamine	ND		170	28	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
N-Nitrosodiphenylamine	ND		170	140	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Pentachlorophenol	ND		320	170	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Phenanthrene	ND		170	25	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Phenol	ND		170	26	ug/Kg		08/03/22 15:56	08/09/22 17:32	1
Pyrene	ND		170	20	ug/Kg		08/03/22 15:56	08/09/22 17:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*95*		*54 - 120*	*08/03/22 15:56*	*08/09/22 17:32*	*1*
2-Fluorobiphenyl (Surr)	*91*		*60 - 120*	*08/03/22 15:56*	*08/09/22 17:32*	*1*
2-Fluorophenol (Surr)	*77*		*52 - 120*	*08/03/22 15:56*	*08/09/22 17:32*	*1*
Nitrobenzene-d5 (Surr)	*73*		*53 - 120*	*08/03/22 15:56*	*08/09/22 17:32*	*1*
Phenol-d5 (Surr)	*77*		*54 - 120*	*08/03/22 15:56*	*08/09/22 17:32*	*1*
p-Terphenyl-d14 (Surr)	*95*		*79 - 130*	*08/03/22 15:56*	*08/09/22 17:32*	*1*

Lab Sample ID: LCS 480-636076/2-A
Matrix: Solid
Analysis Batch: 636722

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 636076

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	1630	732		ug/Kg		45	23 - 120
2,4,5-Trichlorophenol	1630	1550		ug/Kg		95	59 - 126
2,4,6-Trichlorophenol	1630	1560		ug/Kg		96	59 - 123
2,4-Dichlorophenol	1630	1490		ug/Kg		91	61 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-636076/2-A
Matrix: Solid
Analysis Batch: 636722

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 636076

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-Dimethylphenol	1630	1360		ug/Kg		83	59 - 120
2,4-Dinitrophenol	3260	3070		ug/Kg		94	41 - 146
2,4-Dinitrotoluene	1630	1520		ug/Kg		93	63 - 120
2,6-Dinitrotoluene	1630	1460		ug/Kg		90	66 - 120
2-Chloronaphthalene	1630	1410		ug/Kg		87	57 - 120
2-Chlorophenol	1630	1310		ug/Kg		80	53 - 120
2-Methylnaphthalene	1630	1270		ug/Kg		78	59 - 120
2-Methylphenol	1630	1350		ug/Kg		83	54 - 120
2-Nitroaniline	1630	1350		ug/Kg		83	61 - 120
2-Nitrophenol	1630	1290		ug/Kg		79	56 - 120
3,3'-Dichlorobenzidine	3260	3020		ug/Kg		93	54 - 120
3-Nitroaniline	1630	1470		ug/Kg		90	48 - 120
4,6-Dinitro-2-methylphenol	3260	3310		ug/Kg		101	49 - 122
4-Bromophenyl phenyl ether	1630	1720		ug/Kg		105	58 - 120
4-Chloro-3-methylphenol	1630	1410		ug/Kg		87	61 - 120
4-Chloroaniline	1630	1370		ug/Kg		84	38 - 120
4-Chlorophenyl phenyl ether	1630	1490		ug/Kg		91	63 - 124
4-Methylphenol	1630	1330		ug/Kg		82	55 - 120
4-Nitroaniline	1630	1410		ug/Kg		87	56 - 120
4-Nitrophenol	3260	2920		ug/Kg		90	43 - 147
Acenaphthene	1630	1410		ug/Kg		86	62 - 120
Acenaphthylene	1630	1440		ug/Kg		88	58 - 121
Acetophenone	1630	1230		ug/Kg		76	54 - 120
Anthracene	1630	1570		ug/Kg		96	62 - 120
Atrazine	3260	3180		ug/Kg		98	60 - 127
Benzaldehyde	3260	2670		ug/Kg		82	10 - 150
Benzo[a]anthracene	1630	1550		ug/Kg		95	65 - 120
Benzo[a]pyrene	1630	1590		ug/Kg		97	64 - 120
Benzo[b]fluoranthene	1630	1540		ug/Kg		95	64 - 120
Benzo[g,h,i]perylene	1630	1650		ug/Kg		101	45 - 145
Benzo[k]fluoranthene	1630	1720		ug/Kg		106	65 - 120
Biphenyl	1630	1420		ug/Kg		87	59 - 120
bis (2-chloroisopropyl) ether	1630	1170		ug/Kg		72	44 - 120
Bis(2-chloroethoxy)methane	1630	1260		ug/Kg		77	55 - 120
Bis(2-chloroethyl)ether	1630	1230		ug/Kg		75	45 - 120
Bis(2-ethylhexyl) phthalate	1630	1560		ug/Kg		96	61 - 133
Butyl benzyl phthalate	1630	1530		ug/Kg		94	61 - 129
Caprolactam	3260	3010		ug/Kg		92	47 - 120
Carbazole	1630	1640		ug/Kg		100	65 - 120
Chrysene	1630	1610		ug/Kg		99	64 - 120
Dibenz(a,h)anthracene	1630	1700		ug/Kg		104	54 - 132
Dibenzofuran	1630	1450		ug/Kg		89	63 - 120
Diethyl phthalate	1630	1560		ug/Kg		96	66 - 120
Dimethyl phthalate	1630	1490		ug/Kg		91	65 - 124
Di-n-butyl phthalate	1630	1610		ug/Kg		99	58 - 130
Di-n-octyl phthalate	1630	1490		ug/Kg		91	57 - 133
Fluoranthene	1630	1640		ug/Kg		101	62 - 120
Fluorene	1630	1520		ug/Kg		93	63 - 120
Hexachlorobenzene	1630	1620		ug/Kg		99	60 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-636076/2-A
Matrix: Solid
Analysis Batch: 636722

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 636076

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexachlorobutadiene	1630	1390		ug/Kg		85	45 - 120
Hexachlorocyclopentadiene	1630	1130		ug/Kg		69	47 - 120
Hexachloroethane	1630	1110		ug/Kg		68	41 - 120
Indeno[1,2,3-cd]pyrene	1630	1690		ug/Kg		103	56 - 134
Isophorone	1630	1330		ug/Kg		81	56 - 120
Naphthalene	1630	1300		ug/Kg		80	55 - 120
Nitrobenzene	1630	1210		ug/Kg		74	54 - 120
N-Nitrosodi-n-propylamine	1630	1210		ug/Kg		74	52 - 120
N-Nitrosodiphenylamine	1630	1630		ug/Kg		100	51 - 128
Pentachlorophenol	3260	3470		ug/Kg		106	51 - 120
Phenanthrene	1630	1530		ug/Kg		94	60 - 120
Phenol	1630	1180		ug/Kg		72	53 - 120
Pyrene	1630	1570		ug/Kg		96	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*107*		*54 - 120*
2-Fluorobiphenyl (Surr)	*89*		*60 - 120*
2-Fluorophenol (Surr)	*74*		*52 - 120*
Nitrobenzene-d5 (Surr)	*73*		*53 - 120*
Phenol-d5 (Surr)	*75*		*54 - 120*
p-Terphenyl-d14 (Surr)	*95*		*79 - 130*

Lab Sample ID: 480-200248-18 MS
Matrix: Solid
Analysis Batch: 636722

Client Sample ID: SB6 (1-2)
Prep Type: Total/NA
Prep Batch: 636076

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	ND	F1	1830	ND	F1	ug/Kg	☼	0	13 - 120
2,4,5-Trichlorophenol	ND		1830	1590	J	ug/Kg	☼	87	46 - 120
2,4,6-Trichlorophenol	ND	F2	1830	1470	J	ug/Kg	☼	80	41 - 123
2,4-Dichlorophenol	ND	F2	1830	1500	J	ug/Kg	☼	82	45 - 120
2,4-Dimethylphenol	ND		1830	1150	J	ug/Kg	☼	63	52 - 120
2,4-Dinitrophenol	ND		3650	ND		ug/Kg	☼	NC	41 - 146
2,4-Dinitrotoluene	ND		1830	1280	J	ug/Kg	☼	70	63 - 125
2,6-Dinitrotoluene	ND		1830	1450	J	ug/Kg	☼	79	66 - 120
2-Chloronaphthalene	ND		1830	1360	J	ug/Kg	☼	75	57 - 120
2-Chlorophenol	ND		1830	1380	J	ug/Kg	☼	75	43 - 120
2-Methylnaphthalene	ND		1830	1530	J	ug/Kg	☼	84	55 - 120
2-Methylphenol	ND		1830	1200	J	ug/Kg	☼	66	48 - 120
2-Nitroaniline	ND	F2	1830	1230	J	ug/Kg	☼	67	61 - 120
2-Nitrophenol	ND	F2	1830	1370	J	ug/Kg	☼	75	37 - 120
3,3'-Dichlorobenzidine	ND		3650	2350	J	ug/Kg	☼	64	37 - 126
3-Nitroaniline	ND	F2	1830	1230	J	ug/Kg	☼	67	48 - 120
4,6-Dinitro-2-methylphenol	ND		3650	3270	J	ug/Kg	☼	90	23 - 149
4-Bromophenyl phenyl ether	ND		1830	1790	J	ug/Kg	☼	98	58 - 120
4-Chloro-3-methylphenol	ND		1830	1320	J	ug/Kg	☼	72	49 - 125
4-Chloroaniline	ND		1830	1030	J	ug/Kg	☼	56	38 - 120
4-Chlorophenyl phenyl ether	ND		1830	1480	J	ug/Kg	☼	81	63 - 124

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-200248-18 MS
Matrix: Solid
Analysis Batch: 636722

Client Sample ID: SB6 (1-2)
Prep Type: Total/NA
Prep Batch: 636076

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
4-Methylphenol	ND		1830	1460	J	ug/Kg	☼	80	50 - 120
4-Nitroaniline	ND		1830	1170	J	ug/Kg	☼	64	47 - 120
4-Nitrophenol	ND	F2	3650	2870	J	ug/Kg	☼	79	31 - 147
Acenaphthene	ND		1830	1540	J	ug/Kg	☼	85	60 - 120
Acenaphthylene	3000	F1	1830	3900	F1	ug/Kg	☼	52	58 - 121
Acetophenone	ND		1830	1410	J	ug/Kg	☼	77	47 - 120
Anthracene	1700	J	1830	3320		ug/Kg	☼	87	62 - 120
Atrazine	ND	F2	3650	2650		ug/Kg	☼	73	60 - 150
Benzaldehyde	ND		3650	2650		ug/Kg	☼	73	10 - 150
Benzo[a]anthracene	8200		1830	9220	4	ug/Kg	☼	59	65 - 120
Benzo[a]pyrene	8900	F2	1830	5510	4	ug/Kg	☼	-187	64 - 120
Benzo[b]fluoranthene	10000	F2	1830	11700	4	ug/Kg	☼	74	10 - 150
Benzo[g,h,i]perylene	6300	F1	1830	7360		ug/Kg	☼	56	45 - 145
Benzo[k]fluoranthene	4100		1830	5260		ug/Kg	☼	64	23 - 150
Biphenyl	ND		1830	1490	J	ug/Kg	☼	82	58 - 120
bis (2-chloroisopropyl) ether	ND		1830	1230	J	ug/Kg	☼	67	31 - 120
Bis(2-chloroethoxy)methane	ND		1830	1290	J	ug/Kg	☼	71	52 - 120
Bis(2-chloroethyl)ether	ND		1830	1270	J	ug/Kg	☼	70	45 - 120
Bis(2-ethylhexyl) phthalate	ND	F2	1830	1440	J	ug/Kg	☼	79	61 - 133
Butyl benzyl phthalate	ND	F2	1830	1360	J	ug/Kg	☼	74	61 - 120
Caprolactam	ND		3650	3170		ug/Kg	☼	87	37 - 133
Carbazole	310	J	1830	1790	J	ug/Kg	☼	81	59 - 120
Chrysene	7500		1830	8380	4	ug/Kg	☼	46	64 - 120
Dibenz(a,h)anthracene	2100	F2	1830	3920		ug/Kg	☼	97	54 - 132
Dibenzofuran	280	J F2	1830	1570	J	ug/Kg	☼	70	62 - 120
Diethyl phthalate	ND		1830	1360	J	ug/Kg	☼	74	66 - 120
Dimethyl phthalate	ND		1830	1440	J	ug/Kg	☼	79	65 - 124
Di-n-butyl phthalate	ND		1830	1680	J	ug/Kg	☼	92	58 - 130
Di-n-octyl phthalate	ND		1830	1470	J	ug/Kg	☼	80	57 - 133
Fluoranthene	13000		1830	14400	4	ug/Kg	☼	56	62 - 120
Fluorene	570	J F2	1830	1900		ug/Kg	☼	73	63 - 120
Hexachlorobenzene	ND	F2	1830	1520	J	ug/Kg	☼	83	60 - 120
Hexachlorobutadiene	ND		1830	1510	J	ug/Kg	☼	82	45 - 120
Hexachlorocyclopentadiene	ND	F1	1830	ND	F1	ug/Kg	☼	0	31 - 120
Hexachloroethane	ND		1830	1220	J	ug/Kg	☼	67	21 - 120
Indeno[1,2,3-cd]pyrene	5800	F1 F2	1830	7150		ug/Kg	☼	75	56 - 134
Isophorone	ND		1830	1230	J	ug/Kg	☼	67	56 - 120
Naphthalene	ND		1830	1660	J	ug/Kg	☼	91	46 - 120
Nitrobenzene	ND		1830	1310	J	ug/Kg	☼	72	49 - 120
N-Nitrosodi-n-propylamine	ND		1830	1360	J	ug/Kg	☼	75	46 - 120
Pentachlorophenol	ND		3650	2990	J	ug/Kg	☼	82	25 - 136
Phenanthrene	5000	F1 F2	1830	5840	F1	ug/Kg	☼	44	60 - 122
Phenol	ND		1830	1350	J	ug/Kg	☼	74	50 - 120
Pyrene	12000		1830	13000	4	ug/Kg	☼	37	61 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*99*		*54 - 120*
2-Fluorobiphenyl (Surr)	*76*		*60 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-200248-18 MS
Matrix: Solid
Analysis Batch: 636722

Client Sample ID: SB6 (1-2)
Prep Type: Total/NA
Prep Batch: 636076

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorophenol (Surr)	*59*		*52 - 120*
Nitrobenzene-d5 (Surr)	*62*		*53 - 120*
Phenol-d5 (Surr)	*71*		*54 - 120*
p-Terphenyl-d14 (Surr)	*79*		*79 - 130*

Lab Sample ID: 480-200248-18 MSD
Matrix: Solid
Analysis Batch: 636722

Client Sample ID: SB6 (1-2)
Prep Type: Total/NA
Prep Batch: 636076

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	ND	F1	1840	ND	F1	ug/Kg	☼	0	13 - 120	NC	50
2,4,5-Trichlorophenol	ND		1840	1790	J	ug/Kg	☼	97	46 - 120	11	18
2,4,6-Trichlorophenol	ND	F2	1840	1810	J F2	ug/Kg	☼	98	41 - 123	21	19
2,4-Dichlorophenol	ND	F2	1840	2000	F2	ug/Kg	☼	109	45 - 120	29	19
2,4-Dimethylphenol	ND		1840	1480	J	ug/Kg	☼	80	52 - 120	25	42
2,4-Dinitrophenol	ND		3690	ND		ug/Kg	☼	NC	41 - 146	NC	22
2,4-Dinitrotoluene	ND		1840	1530	J	ug/Kg	☼	83	63 - 125	18	20
2,6-Dinitrotoluene	ND		1840	1530	J	ug/Kg	☼	83	66 - 120	5	15
2-Chloronaphthalene	ND		1840	1560	J	ug/Kg	☼	84	57 - 120	13	21
2-Chlorophenol	ND		1840	1350	J	ug/Kg	☼	73	43 - 120	2	25
2-Methylnaphthalene	ND		1840	1650	J	ug/Kg	☼	89	55 - 120	7	21
2-Methylphenol	ND		1840	1350	J	ug/Kg	☼	73	48 - 120	11	27
2-Nitroaniline	ND	F2	1840	1710	J F2	ug/Kg	☼	93	61 - 120	33	15
2-Nitrophenol	ND	F2	1840	1680	J F2	ug/Kg	☼	91	37 - 120	20	18
3,3'-Dichlorobenzidine	ND		3690	2580	J	ug/Kg	☼	70	37 - 126	9	25
3-Nitroaniline	ND	F2	1840	1560	J F2	ug/Kg	☼	85	48 - 120	24	19
4,6-Dinitro-2-methylphenol	ND		3690	3310	J	ug/Kg	☼	90	23 - 149	1	15
4-Bromophenyl phenyl ether	ND		1840	1590	J	ug/Kg	☼	87	58 - 120	11	15
4-Chloro-3-methylphenol	ND		1840	1570	J	ug/Kg	☼	85	49 - 125	17	27
4-Chloroaniline	ND		1840	1260	J	ug/Kg	☼	68	38 - 120	20	22
4-Chlorophenyl phenyl ether	ND		1840	1630	J	ug/Kg	☼	88	63 - 124	9	16
4-Methylphenol	ND		1840	1470	J	ug/Kg	☼	80	50 - 120	1	24
4-Nitroaniline	ND		1840	1410	J	ug/Kg	☼	77	47 - 120	18	24
4-Nitrophenol	ND	F2	3690	3720	F2	ug/Kg	☼	101	31 - 147	26	25
Acenaphthene	ND		1840	1760	J	ug/Kg	☼	96	60 - 120	13	35
Acenaphthylene	3000	F1	1840	3900	F1	ug/Kg	☼	51	58 - 121	0	18
Acetophenone	ND		1840	1540	J	ug/Kg	☼	83	47 - 120	9	20
Anthracene	1700	J	1840	3670		ug/Kg	☼	105	62 - 120	10	15
Atrazine	ND	F2	3690	3350	F2	ug/Kg	☼	91	60 - 150	23	20
Benzaldehyde	ND		3690	3110		ug/Kg	☼	84	10 - 150	16	20
Benzo[a]anthracene	8200		1840	8290	4	ug/Kg	☼	8	65 - 120	11	15
Benzo[a]pyrene	8900	F2	1840	1800	J 4 F2	ug/Kg	☼	-387	64 - 120	101	15
Benzo[b]fluoranthene	10000	F2	1840	9800	4 F2	ug/Kg	☼	-28	10 - 150	17	15
Benzo[g,h,i]perylene	6300	F1	1840	6340	F1	ug/Kg	☼	0.4	45 - 145	15	15
Benzo[k]fluoranthene	4100		1840	4660		ug/Kg	☼	31	23 - 150	12	22
Biphenyl	ND		1840	1650	J	ug/Kg	☼	90	58 - 120	10	20
bis (2-chloroisopropyl) ether	ND		1840	1430	J	ug/Kg	☼	78	31 - 120	15	24
Bis(2-chloroethoxy)methane	ND		1840	1420	J	ug/Kg	☼	77	52 - 120	9	17

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-200248-18 MSD
Matrix: Solid
Analysis Batch: 636722

Client Sample ID: SB6 (1-2)
Prep Type: Total/NA
Prep Batch: 636076

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bis(2-chloroethyl)ether	ND		1840	1390	J	ug/Kg	☼	76	45 - 120	9	21
Bis(2-ethylhexyl) phthalate	ND	F2	1840	1700	J F2	ug/Kg	☼	92	61 - 133	16	15
Butyl benzyl phthalate	ND	F2	1840	1740	J F2	ug/Kg	☼	94	61 - 120	24	16
Caprolactam	ND		3690	3330		ug/Kg	☼	90	37 - 133	5	20
Carbazole	310	J	1840	1990		ug/Kg	☼	91	59 - 120	11	20
Chrysene	7500		1840	7780	4	ug/Kg	☼	13	64 - 120	7	15
Dibenz(a,h)anthracene	2100	F2	1840	3250	F2	ug/Kg	☼	60	54 - 132	19	15
Dibenzofuran	280	J F2	1840	1960	F2	ug/Kg	☼	91	62 - 120	23	15
Diethyl phthalate	ND		1840	1490	J	ug/Kg	☼	81	66 - 120	9	15
Dimethyl phthalate	ND		1840	1650	J	ug/Kg	☼	89	65 - 124	13	15
Di-n-butyl phthalate	ND		1840	1720	J	ug/Kg	☼	93	58 - 130	2	15
Di-n-octyl phthalate	ND		1840	1580	J	ug/Kg	☼	86	57 - 133	7	16
Fluoranthene	13000		1840	14700	4	ug/Kg	☼	70	62 - 120	2	15
Fluorene	570	J F2	1840	2560	F2	ug/Kg	☼	108	63 - 120	30	15
Hexachlorobenzene	ND	F2	1840	1930	F2	ug/Kg	☼	105	60 - 120	24	15
Hexachlorobutadiene	ND		1840	1510	J	ug/Kg	☼	82	45 - 120	0	44
Hexachlorocyclopentadiene	ND	F1	1840	1780	J	ug/Kg	☼	97	31 - 120	NC	49
Hexachloroethane	ND		1840	1180	J	ug/Kg	☼	64	21 - 120	3	46
Indeno[1,2,3-cd]pyrene	5800	F1 F2	1840	6120	F1 F2	ug/Kg	☼	18	56 - 134	16	15
Isophorone	ND		1840	1380	J	ug/Kg	☼	75	56 - 120	12	17
Naphthalene	ND		1840	2090		ug/Kg	☼	113	46 - 120	23	29
Nitrobenzene	ND		1840	1170	J	ug/Kg	☼	63	49 - 120	12	24
N-Nitrosodi-n-propylamine	ND		1840	1320	J	ug/Kg	☼	72	46 - 120	3	31
Pentachlorophenol	ND		3690	3180	J	ug/Kg	☼	86	25 - 136	6	35
Phenanthrene	5000	F1 F2	1840	8640	F1 F2	ug/Kg	☼	195	60 - 122	39	15
Phenol	ND		1840	1390	J	ug/Kg	☼	75	50 - 120	3	35
Pyrene	12000		1840	13000	4	ug/Kg	☼	38	61 - 133	0	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*100*		*54 - 120*
2-Fluorobiphenyl (Surr)	*92*		*60 - 120*
2-Fluorophenol (Surr)	*73*		*52 - 120*
Nitrobenzene-d5 (Surr)	*72*		*53 - 120*
Phenol-d5 (Surr)	*73*		*54 - 120*
p-Terphenyl-d14 (Surr)	*89*		*79 - 130*

Lab Sample ID: MB 480-636585/1-A
Matrix: Water
Analysis Batch: 636678

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 636585

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		08/08/22 15:30	08/09/22 14:19	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		08/08/22 15:30	08/09/22 14:19	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		08/08/22 15:30	08/09/22 14:19	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		08/08/22 15:30	08/09/22 14:19	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		08/08/22 15:30	08/09/22 14:19	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		08/08/22 15:30	08/09/22 14:19	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		08/08/22 15:30	08/09/22 14:19	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-636585/1-A
Matrix: Water
Analysis Batch: 636678

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 636585

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND		5.0	0.46	ug/L		08/08/22 15:30	08/09/22 14:19	1
2-Chlorophenol	ND		5.0	0.53	ug/L		08/08/22 15:30	08/09/22 14:19	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		08/08/22 15:30	08/09/22 14:19	1
2-Methylphenol	ND		5.0	0.40	ug/L		08/08/22 15:30	08/09/22 14:19	1
2-Nitroaniline	ND		10	0.42	ug/L		08/08/22 15:30	08/09/22 14:19	1
2-Nitrophenol	ND		5.0	0.48	ug/L		08/08/22 15:30	08/09/22 14:19	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		08/08/22 15:30	08/09/22 14:19	1
3-Nitroaniline	ND		10	0.48	ug/L		08/08/22 15:30	08/09/22 14:19	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		08/08/22 15:30	08/09/22 14:19	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		08/08/22 15:30	08/09/22 14:19	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		08/08/22 15:30	08/09/22 14:19	1
4-Chloroaniline	ND		5.0	0.59	ug/L		08/08/22 15:30	08/09/22 14:19	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		08/08/22 15:30	08/09/22 14:19	1
4-Methylphenol	ND		10	0.36	ug/L		08/08/22 15:30	08/09/22 14:19	1
4-Nitroaniline	ND		10	0.25	ug/L		08/08/22 15:30	08/09/22 14:19	1
4-Nitrophenol	ND		10	1.5	ug/L		08/08/22 15:30	08/09/22 14:19	1
Acenaphthene	ND		5.0	0.41	ug/L		08/08/22 15:30	08/09/22 14:19	1
Acenaphthylene	ND		5.0	0.38	ug/L		08/08/22 15:30	08/09/22 14:19	1
Acetophenone	ND		5.0	0.54	ug/L		08/08/22 15:30	08/09/22 14:19	1
Anthracene	ND		5.0	0.28	ug/L		08/08/22 15:30	08/09/22 14:19	1
Atrazine	ND		5.0	0.46	ug/L		08/08/22 15:30	08/09/22 14:19	1
Benzaldehyde	ND		5.0	0.27	ug/L		08/08/22 15:30	08/09/22 14:19	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		08/08/22 15:30	08/09/22 14:19	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		08/08/22 15:30	08/09/22 14:19	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		08/08/22 15:30	08/09/22 14:19	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		08/08/22 15:30	08/09/22 14:19	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		08/08/22 15:30	08/09/22 14:19	1
Biphenyl	ND		5.0	0.65	ug/L		08/08/22 15:30	08/09/22 14:19	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		08/08/22 15:30	08/09/22 14:19	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		08/08/22 15:30	08/09/22 14:19	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		08/08/22 15:30	08/09/22 14:19	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		08/08/22 15:30	08/09/22 14:19	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		08/08/22 15:30	08/09/22 14:19	1
Caprolactam	ND		5.0	2.2	ug/L		08/08/22 15:30	08/09/22 14:19	1
Carbazole	ND		5.0	0.30	ug/L		08/08/22 15:30	08/09/22 14:19	1
Chrysene	ND		5.0	0.33	ug/L		08/08/22 15:30	08/09/22 14:19	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		08/08/22 15:30	08/09/22 14:19	1
Dibenzofuran	ND		10	0.51	ug/L		08/08/22 15:30	08/09/22 14:19	1
Diethyl phthalate	ND		5.0	0.22	ug/L		08/08/22 15:30	08/09/22 14:19	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		08/08/22 15:30	08/09/22 14:19	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		08/08/22 15:30	08/09/22 14:19	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		08/08/22 15:30	08/09/22 14:19	1
Fluoranthene	ND		5.0	0.40	ug/L		08/08/22 15:30	08/09/22 14:19	1
Fluorene	ND		5.0	0.36	ug/L		08/08/22 15:30	08/09/22 14:19	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		08/08/22 15:30	08/09/22 14:19	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		08/08/22 15:30	08/09/22 14:19	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		08/08/22 15:30	08/09/22 14:19	1
Hexachloroethane	ND		5.0	0.59	ug/L		08/08/22 15:30	08/09/22 14:19	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		08/08/22 15:30	08/09/22 14:19	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-636585/1-A
Matrix: Water
Analysis Batch: 636678

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 636585

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	ND		5.0	0.43	ug/L		08/08/22 15:30	08/09/22 14:19	1
Naphthalene	ND		5.0	0.76	ug/L		08/08/22 15:30	08/09/22 14:19	1
Nitrobenzene	ND		5.0	0.29	ug/L		08/08/22 15:30	08/09/22 14:19	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		08/08/22 15:30	08/09/22 14:19	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		08/08/22 15:30	08/09/22 14:19	1
Pentachlorophenol	ND		10	2.2	ug/L		08/08/22 15:30	08/09/22 14:19	1
Phenanthrene	ND		5.0	0.44	ug/L		08/08/22 15:30	08/09/22 14:19	1
Phenol	ND		5.0	0.39	ug/L		08/08/22 15:30	08/09/22 14:19	1
Pyrene	ND		5.0	0.34	ug/L		08/08/22 15:30	08/09/22 14:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*91*		*41 - 120*	*08/08/22 15:30*	*08/09/22 14:19*	*1*
2-Fluorobiphenyl (Surr)	*104*		*48 - 120*	*08/08/22 15:30*	*08/09/22 14:19*	*1*
2-Fluorophenol (Surr)	*81*		*35 - 120*	*08/08/22 15:30*	*08/09/22 14:19*	*1*
Nitrobenzene-d5 (Surr)	*97*		*46 - 120*	*08/08/22 15:30*	*08/09/22 14:19*	*1*
Phenol-d5 (Surr)	*58*		*22 - 120*	*08/08/22 15:30*	*08/09/22 14:19*	*1*
p-Terphenyl-d14 (Surr)	*120*		*60 - 148*	*08/08/22 15:30*	*08/09/22 14:19*	*1*

Lab Sample ID: LCS 480-636585/2-A
Matrix: Water
Analysis Batch: 636678

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 636585

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	32.0	26.3		ug/L		82	65 - 126
2,4,6-Trichlorophenol	32.0	21.3		ug/L		67	64 - 120
2,4-Dichlorophenol	32.0	26.6		ug/L		83	63 - 120
2,4-Dimethylphenol	32.0	32.5		ug/L		102	47 - 120
2,4-Dinitrophenol	64.0	39.6		ug/L		62	31 - 137
2,4-Dinitrotoluene	32.0	33.1		ug/L		103	69 - 120
2,6-Dinitrotoluene	32.0	33.0		ug/L		103	68 - 120
2-Chloronaphthalene	32.0	29.8		ug/L		93	58 - 120
2-Chlorophenol	32.0	25.3		ug/L		79	48 - 120
2-Methylnaphthalene	32.0	27.6		ug/L		86	59 - 120
2-Methylphenol	32.0	30.0		ug/L		94	39 - 120
2-Nitroaniline	32.0	34.3		ug/L		107	54 - 127
2-Nitrophenol	32.0	24.0		ug/L		75	52 - 125
3,3'-Dichlorobenzidine	64.0	52.3		ug/L		82	49 - 135
3-Nitroaniline	32.0	29.2		ug/L		91	51 - 120
4,6-Dinitro-2-methylphenol	64.0	45.0		ug/L		70	46 - 136
4-Bromophenyl phenyl ether	32.0	33.4		ug/L		104	65 - 120
4-Chloro-3-methylphenol	32.0	32.4		ug/L		101	61 - 123
4-Chloroaniline	32.0	28.0		ug/L		88	30 - 120
4-Chlorophenyl phenyl ether	32.0	31.4		ug/L		98	62 - 120
4-Methylphenol	32.0	29.8		ug/L		93	29 - 131
4-Nitroaniline	32.0	34.5		ug/L		108	65 - 120
4-Nitrophenol	64.0	34.1		ug/L		53	45 - 120
Acenaphthene	32.0	31.2		ug/L		98	60 - 120
Acenaphthylene	32.0	32.1		ug/L		100	63 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-636585/2-A
Matrix: Water
Analysis Batch: 636678

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 636585

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acetophenone	32.0	31.7		ug/L		99	45 - 120
Anthracene	32.0	33.8		ug/L		106	67 - 120
Atrazine	64.0	82.9		ug/L		129	71 - 130
Benzaldehyde	64.0	64.8		ug/L		101	10 - 140
Benzo[a]anthracene	32.0	33.1		ug/L		103	70 - 121
Benzo[a]pyrene	32.0	34.2		ug/L		107	60 - 123
Benzo[b]fluoranthene	32.0	33.0		ug/L		103	66 - 126
Benzo[g,h,i]perylene	32.0	34.3		ug/L		107	66 - 150
Benzo[k]fluoranthene	32.0	33.7		ug/L		105	65 - 124
Biphenyl	32.0	30.1		ug/L		94	59 - 120
bis (2-chloroisopropyl) ether	32.0	32.6		ug/L		102	21 - 136
Bis(2-chloroethoxy)methane	32.0	31.6		ug/L		99	50 - 128
Bis(2-chloroethyl)ether	32.0	31.1		ug/L		97	44 - 120
Bis(2-ethylhexyl) phthalate	32.0	34.1		ug/L		107	63 - 139
Butyl benzyl phthalate	32.0	34.5		ug/L		108	70 - 129
Caprolactam	64.0	26.1		ug/L		41	22 - 120
Carbazole	32.0	37.2		ug/L		116	66 - 123
Chrysene	32.0	32.3		ug/L		101	69 - 120
Dibenz(a,h)anthracene	32.0	34.2		ug/L		107	65 - 135
Dibenzofuran	32.0	32.5		ug/L		101	66 - 120
Diethyl phthalate	32.0	34.1		ug/L		107	59 - 127
Dimethyl phthalate	32.0	33.9		ug/L		106	68 - 120
Di-n-butyl phthalate	32.0	37.4		ug/L		117	69 - 131
Di-n-octyl phthalate	32.0	34.2		ug/L		107	63 - 140
Fluoranthene	32.0	35.6		ug/L		111	69 - 126
Fluorene	32.0	33.1		ug/L		103	66 - 120
Hexachlorobenzene	32.0	33.8		ug/L		106	61 - 120
Hexachlorobutadiene	32.0	22.7		ug/L		71	35 - 120
Hexachlorocyclopentadiene	32.0	15.4		ug/L		48	31 - 120
Hexachloroethane	32.0	22.9		ug/L		71	43 - 120
Indeno[1,2,3-cd]pyrene	32.0	35.0		ug/L		109	69 - 146
Isophorone	32.0	33.2		ug/L		104	55 - 120
Naphthalene	32.0	28.7		ug/L		90	57 - 120
Nitrobenzene	32.0	31.9		ug/L		100	53 - 123
N-Nitrosodi-n-propylamine	32.0	33.2		ug/L		104	32 - 140
N-Nitrosodiphenylamine	32.0	33.5		ug/L		105	61 - 120
Pentachlorophenol	64.0	33.4		ug/L		52	29 - 136
Phenanthrene	32.0	33.5		ug/L		105	68 - 120
Phenol	32.0	19.5		ug/L		61	17 - 120
Pyrene	32.0	33.2		ug/L		104	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*79*		*41 - 120*
2-Fluorobiphenyl (Surr)	*98*		*48 - 120*
2-Fluorophenol (Surr)	*59*		*35 - 120*
Nitrobenzene-d5 (Surr)	*98*		*46 - 120*
Phenol-d5 (Surr)	*57*		*22 - 120*
p-Terphenyl-d14 (Surr)	*107*		*60 - 148*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-637284/1-A
Matrix: Solid
Analysis Batch: 637369

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 637284

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		170	45	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
2,4,6-Trichlorophenol	ND		170	33	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
2,4-Dimethylphenol	ND		170	40	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
2,4-Dinitrophenol	ND		1600	770	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
2,4-Dinitrotoluene	ND		170	34	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
2-Chloronaphthalene	ND		170	28	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
2-Chlorophenol	ND		330	31	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
2-Methylnaphthalene	ND		170	33	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
2-Methylphenol	ND		170	20	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
2-Nitroaniline	ND		330	25	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
2-Nitrophenol	ND		170	47	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
3,3'-Dichlorobenzidine	ND		330	200	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
3-Nitroaniline	ND		330	46	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
4,6-Dinitro-2-methylphenol	ND		330	170	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
4-Bromophenyl phenyl ether	ND		170	24	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
4-Chloro-3-methylphenol	ND		170	41	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
4-Chloroaniline	ND		170	41	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
4-Chlorophenyl phenyl ether	ND		170	21	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
4-Methylphenol	ND		330	20	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
4-Nitroaniline	ND		330	88	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
4-Nitrophenol	ND		330	120	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Acenaphthene	ND		170	25	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Acenaphthylene	ND		170	22	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Acetophenone	ND		170	23	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Anthracene	ND		170	41	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Atrazine	ND		170	58	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Benzaldehyde	ND		170	130	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Benzo[a]anthracene	ND		170	17	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Benzo[a]pyrene	ND		170	25	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Biphenyl	ND		170	25	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
bis (2-chloroisopropyl) ether	ND		170	33	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Bis(2-chloroethoxy)methane	ND		170	35	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Bis(2-chloroethyl)ether	ND		170	22	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Bis(2-ethylhexyl) phthalate	ND		170	57	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Butyl benzyl phthalate	ND		170	28	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Caprolactam	ND		170	50	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Carbazole	ND		170	20	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Chrysene	ND		170	37	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Dibenz(a,h)anthracene	ND		170	30	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Dibenzofuran	ND		170	20	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Diethyl phthalate	ND		170	22	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Dimethyl phthalate	ND		170	20	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Di-n-butyl phthalate	ND		170	29	ug/Kg		08/12/22 15:31	08/15/22 11:01	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-637284/1-A
Matrix: Solid
Analysis Batch: 637369

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 637284

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	ND		170	20	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Fluoranthene	ND		170	18	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Fluorene	ND		170	20	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Hexachlorobenzene	ND		170	23	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Hexachlorobutadiene	ND		170	25	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Hexachlorocyclopentadiene	ND		170	23	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Hexachloroethane	ND		170	22	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Isophorone	ND		170	35	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Naphthalene	ND		170	22	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Nitrobenzene	ND		170	19	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
N-Nitrosodi-n-propylamine	ND		170	29	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
N-Nitrosodiphenylamine	ND		170	140	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Pentachlorophenol	ND		330	170	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Phenanthrene	ND		170	25	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Phenol	ND		170	26	ug/Kg		08/12/22 15:31	08/15/22 11:01	1
Pyrene	ND		170	20	ug/Kg		08/12/22 15:31	08/15/22 11:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*77*		*54 - 120*	*08/12/22 15:31*	*08/15/22 11:01*	*1*
2-Fluorobiphenyl (Surr)	*89*		*60 - 120*	*08/12/22 15:31*	*08/15/22 11:01*	*1*
2-Fluorophenol (Surr)	*80*		*52 - 120*	*08/12/22 15:31*	*08/15/22 11:01*	*1*
Nitrobenzene-d5 (Surr)	*83*		*53 - 120*	*08/12/22 15:31*	*08/15/22 11:01*	*1*
Phenol-d5 (Surr)	*88*		*54 - 120*	*08/12/22 15:31*	*08/15/22 11:01*	*1*
p-Terphenyl-d14 (Surr)	*100*		*79 - 130*	*08/12/22 15:31*	*08/15/22 11:01*	*1*

Lab Sample ID: LCS 480-637284/2-A
Matrix: Solid
Analysis Batch: 637369

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 637284

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	1640	1370		ug/Kg		83	59 - 126
2,4,6-Trichlorophenol	1640	1380		ug/Kg		84	59 - 123
2,4-Dichlorophenol	1640	1320		ug/Kg		80	61 - 120
2,4-Dimethylphenol	1640	1330		ug/Kg		81	59 - 120
2,4-Dinitrophenol	3280	2870		ug/Kg		88	41 - 146
2,4-Dinitrotoluene	1640	1400		ug/Kg		85	63 - 120
2,6-Dinitrotoluene	1640	1360		ug/Kg		83	66 - 120
2-Chloronaphthalene	1640	1370		ug/Kg		84	57 - 120
2-Chlorophenol	1640	1220		ug/Kg		74	53 - 120
2-Methylnaphthalene	1640	1250		ug/Kg		76	59 - 120
2-Methylphenol	1640	1330		ug/Kg		81	54 - 120
2-Nitroaniline	1640	1380		ug/Kg		84	61 - 120
2-Nitrophenol	1640	1240		ug/Kg		75	56 - 120
3,3'-Dichlorobenzidine	3280	2230		ug/Kg		68	54 - 120
3-Nitroaniline	1640	954		ug/Kg		58	48 - 120
4,6-Dinitro-2-methylphenol	3280	3120		ug/Kg		95	49 - 122
4-Bromophenyl phenyl ether	1640	1510		ug/Kg		92	58 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-637284/2-A
Matrix: Solid
Analysis Batch: 637369

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 637284

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4-Chloro-3-methylphenol	1640	1380		ug/Kg		84	61 - 120
4-Chloroaniline	1640	952		ug/Kg		58	38 - 120
4-Chlorophenyl phenyl ether	1640	1480		ug/Kg		91	63 - 124
4-Methylphenol	1640	1420		ug/Kg		86	55 - 120
4-Nitroaniline	1640	1340		ug/Kg		82	56 - 120
4-Nitrophenol	3280	2430		ug/Kg		74	43 - 147
Acenaphthene	1640	1400		ug/Kg		86	62 - 120
Acenaphthylene	1640	1380		ug/Kg		84	58 - 121
Acetophenone	1640	1280		ug/Kg		78	54 - 120
Anthracene	1640	1500		ug/Kg		91	62 - 120
Atrazine	3280	2570		ug/Kg		78	60 - 127
Benzaldehyde	3280	2130		ug/Kg		65	10 - 150
Benzo[a]anthracene	1640	1470		ug/Kg		90	65 - 120
Benzo[a]pyrene	1640	1550		ug/Kg		95	64 - 120
Benzo[b]fluoranthene	1640	1600		ug/Kg		97	64 - 120
Benzo[g,h,i]perylene	1640	1470		ug/Kg		89	45 - 145
Benzo[k]fluoranthene	1640	1580		ug/Kg		96	65 - 120
Biphenyl	1640	1390		ug/Kg		85	59 - 120
bis (2-chloroisopropyl) ether	1640	1250		ug/Kg		76	44 - 120
Bis(2-chloroethoxy)methane	1640	1300		ug/Kg		79	55 - 120
Bis(2-chloroethyl)ether	1640	1240		ug/Kg		76	45 - 120
Bis(2-ethylhexyl) phthalate	1640	1540		ug/Kg		94	61 - 133
Butyl benzyl phthalate	1640	1540		ug/Kg		94	61 - 129
Caprolactam	3280	2720		ug/Kg		83	47 - 120
Carbazole	1640	1470		ug/Kg		90	65 - 120
Chrysene	1640	1510		ug/Kg		92	64 - 120
Dibenz(a,h)anthracene	1640	1490		ug/Kg		91	54 - 132
Dibenzofuran	1640	1420		ug/Kg		86	63 - 120
Diethyl phthalate	1640	1360		ug/Kg		83	66 - 120
Dimethyl phthalate	1640	1400		ug/Kg		85	65 - 124
Di-n-butyl phthalate	1640	1460		ug/Kg		89	58 - 130
Di-n-octyl phthalate	1640	1390		ug/Kg		85	57 - 133
Fluoranthene	1640	1380		ug/Kg		84	62 - 120
Fluorene	1640	1440		ug/Kg		88	63 - 120
Hexachlorobenzene	1640	1460		ug/Kg		89	60 - 120
Hexachlorobutadiene	1640	1090		ug/Kg		67	45 - 120
Hexachlorocyclopentadiene	1640	1080		ug/Kg		66	47 - 120
Hexachloroethane	1640	1100		ug/Kg		67	41 - 120
Indeno[1,2,3-cd]pyrene	1640	1460		ug/Kg		89	56 - 134
Isophorone	1640	1350		ug/Kg		82	56 - 120
Naphthalene	1640	1260		ug/Kg		77	55 - 120
Nitrobenzene	1640	1260		ug/Kg		77	54 - 120
N-Nitrosodi-n-propylamine	1640	1320		ug/Kg		81	52 - 120
N-Nitrosodiphenylamine	1640	1530		ug/Kg		93	51 - 128
Pentachlorophenol	3280	2490		ug/Kg		76	51 - 120
Phenanthrene	1640	1490		ug/Kg		91	60 - 120
Phenol	1640	1190		ug/Kg		73	53 - 120
Pyrene	1640	1680		ug/Kg		102	61 - 133

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-637284/2-A
Matrix: Solid
Analysis Batch: 637369

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 637284

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*82*		*54 - 120*
2-Fluorobiphenyl (Surr)	*81*		*60 - 120*
2-Fluorophenol (Surr)	*67*		*52 - 120*
Nitrobenzene-d5 (Surr)	*73*		*53 - 120*
Phenol-d5 (Surr)	*77*		*54 - 120*
p-Terphenyl-d14 (Surr)	*101*		*79 - 130*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-635922/1-A
Matrix: Water
Analysis Batch: 636027

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635922

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		08/02/22 16:05	08/03/22 16:22	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*32*		*15 - 110*	*08/02/22 16:05*	*08/03/22 16:22*	*1*

Lab Sample ID: LCS 480-635922/2-A
Matrix: Water
Analysis Batch: 636027

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635922

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			2.00	2.27		ug/L		113	40 - 140		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*44*		*15 - 110*

Method: 537 IDA - EPA 537 Isotope Dilution

Lab Sample ID: MB 200-182374/1-A
Matrix: Water
Analysis Batch: 182386

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 182374

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		5.0	1.2	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.68	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.65	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.54	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.76	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.49	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.46	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.55	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.49	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.48	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.64	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.62	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.55	ng/L		08/04/22 11:45	08/04/22 17:09	1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: MB 200-182374/1-A
Matrix: Water
Analysis Batch: 182386

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 182374

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoroheptanesulfonic acid (PFHpS)	ND		2.0	0.41	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.85	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.40	ng/L		08/04/22 11:45	08/04/22 17:09	1
Perfluorooctanesulfonamide (PFOSA)	ND		2.0	0.92	ng/L		08/04/22 11:45	08/04/22 17:09	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		5.0	1.9	ng/L		08/04/22 11:45	08/04/22 17:09	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		5.0	1.6	ng/L		08/04/22 11:45	08/04/22 17:09	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		5.0	1.3	ng/L		08/04/22 11:45	08/04/22 17:09	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.0	0.77	ng/L		08/04/22 11:45	08/04/22 17:09	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*96*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:09*	*1*
13C4 PFHpA	*105*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:09*	*1*
13C4 PFOA	*101*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:09*	*1*
13C4 PFOS	*90*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:09*	*1*
13C5 PFNA	*95*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:09*	*1*
13C4 PFBA	*99*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:09*	*1*
13C2 PFHxA	*101*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:09*	*1*
13C2 PFDA	*95*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:09*	*1*
13C2 PFUnA	*91*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:09*	*1*
13C2 PFDoA	*81*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:09*	*1*
13C8 FOSA	*74*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:09*	*1*
13C5 PFPeA	*103*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:09*	*1*
13C2 PFTeDA	*88*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:09*	*1*
d3-NMeFOSAA	*71*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:09*	*1*
d5-NEtFOSAA	*72*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:09*	*1*
M2-6:2 FTS	*95*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:09*	*1*
M2-8:2 FTS	*93*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:09*	*1*
13C3 PFBS	*96*		*50 - 150*	*08/04/22 11:45*	*08/04/22 17:09*	*1*

Lab Sample ID: LCS 200-182374/2-A
Matrix: Water
Analysis Batch: 182386

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 182374

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	80.0	80.4		ng/L		100	70 - 130
Perfluoropentanoic acid (PFPeA)	80.0	79.5		ng/L		99	70 - 130
Perfluorohexanoic acid (PFHxA)	80.0	82.0		ng/L		102	70 - 130
Perfluoroheptanoic acid (PFHpA)	80.0	83.1		ng/L		104	70 - 130
Perfluorooctanoic acid (PFOA)	80.0	82.3		ng/L		103	70 - 130
Perfluorononanoic acid (PFNA)	80.0	82.8		ng/L		104	70 - 130
Perfluorodecanoic acid (PFDA)	80.0	84.4		ng/L		105	70 - 130
Perfluoroundecanoic acid (PFUnA)	80.0	84.7		ng/L		106	70 - 130
Perfluorododecanoic acid (PFDoA)	80.0	84.9		ng/L		106	70 - 130

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 200-182374/2-A
Matrix: Water
Analysis Batch: 182386

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 182374

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Perfluorotridecanoic acid (PFTriA)			80.0	83.2		ng/L		104	70 - 130		
Perfluorotetradecanoic acid (PFTeA)			80.0	86.8		ng/L		108	70 - 130		
Perfluorobutanesulfonic acid (PFBS)			70.7	72.7		ng/L		103	70 - 130		
Perfluorohexanesulfonic acid (PFHxS)			72.8	72.9		ng/L		100	70 - 130		
Perfluoroheptanesulfonic acid (PFHpS)			76.2	82.5		ng/L		108	70 - 130		
Perfluorooctanesulfonic acid (PFOS)			74.2	81.2		ng/L		109	70 - 130		
Perfluorodecanesulfonic acid (PFDS)			77.1	72.0		ng/L		93	70 - 130		
Perfluorooctanesulfonamide (PFOSA)			80.0	81.8		ng/L		102	70 - 130		
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)			80.0	83.9		ng/L		105	70 - 130		
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			80.0	79.8		ng/L		100	70 - 130		
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)			75.8	81.5		ng/L		108	60 - 140		
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)			76.6	83.5		ng/L		109	70 - 130		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
18O2 PFHxS	*98*		*50 - 150*
13C4 PFHpA	*99*		*50 - 150*
13C4 PFOA	*102*		*50 - 150*
13C4 PFOS	*90*		*50 - 150*
13C5 PFNA	*93*		*50 - 150*
13C4 PFBA	*101*		*50 - 150*
13C2 PFHxA	*99*		*50 - 150*
13C2 PFDA	*91*		*50 - 150*
13C2 PFUnA	*87*		*50 - 150*
13C2 PFDoA	*85*		*50 - 150*
13C8 FOSA	*76*		*50 - 150*
13C5 PFPeA	*102*		*50 - 150*
13C2 PFTeDA	*91*		*50 - 150*
d3-NMeFOSAA	*82*		*50 - 150*
d5-NEtFOSAA	*73*		*50 - 150*
M2-6:2 FTS	*96*		*50 - 150*
M2-8:2 FTS	*93*		*50 - 150*
13C3 PFBS	*92*		*50 - 150*

Lab Sample ID: LCSD 200-182374/3-A
Matrix: Water
Analysis Batch: 182386

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 182374

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)			80.0	80.0		ng/L		100	70 - 130	0	30
Perfluoropentanoic acid (PFPeA)			80.0	83.3		ng/L		104	70 - 130	5	30

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCSD 200-182374/3-A
Matrix: Water
Analysis Batch: 182386

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 182374

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorohexanoic acid (PFHxA)			80.0	86.2		ng/L		108	70 - 130	5	30
Perfluoroheptanoic acid (PFHpA)			80.0	83.5		ng/L		104	70 - 130	0	30
Perfluorooctanoic acid (PFOA)			80.0	83.2		ng/L		104	70 - 130	1	30
Perfluorononanoic acid (PFNA)			80.0	83.6		ng/L		105	70 - 130	1	30
Perfluorodecanoic acid (PFDA)			80.0	83.6		ng/L		104	70 - 130	1	30
Perfluoroundecanoic acid (PFUnA)			80.0	84.5		ng/L		106	70 - 130	0	30
Perfluorododecanoic acid (PFDoA)			80.0	83.6		ng/L		104	70 - 130	2	30
Perfluorotridecanoic acid (PFTriA)			80.0	81.8		ng/L		102	70 - 130	2	30
Perfluorotetradecanoic acid (PFTeA)			80.0	83.5		ng/L		104	70 - 130	4	30
Perfluorobutanesulfonic acid (PFBS)			70.7	73.4		ng/L		104	70 - 130	1	30
Perfluorohexanesulfonic acid (PFHxS)			72.8	76.0		ng/L		104	70 - 130	4	30
Perfluoroheptanesulfonic acid (PFHpS)			76.2	80.3		ng/L		105	70 - 130	3	30
Perfluorooctanesulfonic acid (PFOS)			74.2	80.7		ng/L		109	70 - 130	1	30
Perfluorodecanesulfonic acid (PFDS)			77.1	70.6		ng/L		92	70 - 130	2	30
Perfluorooctanesulfonamide (PFOSA)			80.0	82.7		ng/L		103	70 - 130	1	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)			80.0	81.7		ng/L		102	70 - 130	3	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			80.0	83.4		ng/L		104	70 - 130	4	30
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)			75.8	85.2		ng/L		112	60 - 140	4	30
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)			76.6	77.6		ng/L		101	70 - 130	7	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
18O2 PFHxS	*101*		*50 - 150*
13C4 PFHpA	*106*		*50 - 150*
13C4 PFOA	*104*		*50 - 150*
13C4 PFOS	*100*		*50 - 150*
13C5 PFNA	*107*		*50 - 150*
13C4 PFBA	*108*		*50 - 150*
13C2 PFHxA	*106*		*50 - 150*
13C2 PFDA	*101*		*50 - 150*
13C2 PFUnA	*99*		*50 - 150*
13C2 PFDoA	*91*		*50 - 150*
13C8 FOSA	*81*		*50 - 150*
13C5 PFPeA	*112*		*50 - 150*
13C2 PFTeDA	*95*		*50 - 150*
d3-NMeFOSAA	*92*		*50 - 150*
d5-NEtFOSAA	*79*		*50 - 150*
M2-6:2 FTS	*101*		*50 - 150*
M2-8:2 FTS	*102*		*50 - 150*

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCSD 200-182374/3-A
Matrix: Water
Analysis Batch: 182386

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 182374

Isotope Dilution	LCSD %Recovery	LCSD Qualifier	Limits
13C3 PFBS	104		50 - 150

Lab Sample ID: MB 200-182393/1-A
Matrix: Solid
Analysis Batch: 182423

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 182393

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.50	0.33	ug/Kg		08/05/22 08:30	08/05/22 18:06	1
Perfluoropentanoic acid (PFPeA)	ND		0.20	0.055	ug/Kg		08/05/22 08:30	08/05/22 18:06	1
Perfluorohexanoic acid (PFHxA)	ND		0.20	0.046	ug/Kg		08/05/22 08:30	08/05/22 18:06	1
Perfluoroheptanoic acid (PFHpA)	ND		0.20	0.039	ug/Kg		08/05/22 08:30	08/05/22 18:06	1
Perfluorooctanoic acid (PFOA)	ND		0.20	0.058	ug/Kg		08/05/22 08:30	08/05/22 18:06	1
Perfluorononanoic acid (PFNA)	ND		0.20	0.034	ug/Kg		08/05/22 08:30	08/05/22 18:06	1
Perfluorodecanoic acid (PFDA)	ND		0.20	0.028	ug/Kg		08/05/22 08:30	08/05/22 18:06	1
Perfluoroundecanoic acid (PFUnA)	ND		0.20	0.027	ug/Kg		08/05/22 08:30	08/05/22 18:06	1
Perfluorododecanoic acid (PFDoA)	ND		0.20	0.025	ug/Kg		08/05/22 08:30	08/05/22 18:06	1
Perfluorotridecanoic acid (PFTriA)	ND		0.20	0.025	ug/Kg		08/05/22 08:30	08/05/22 18:06	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.20	0.026	ug/Kg		08/05/22 08:30	08/05/22 18:06	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.20	0.033	ug/Kg		08/05/22 08:30	08/05/22 18:06	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.20	0.041	ug/Kg		08/05/22 08:30	08/05/22 18:06	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.20	0.023	ug/Kg		08/05/22 08:30	08/05/22 18:06	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.20	0.11	ug/Kg		08/05/22 08:30	08/05/22 18:06	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.20	0.019	ug/Kg		08/05/22 08:30	08/05/22 18:06	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.20	0.034	ug/Kg		08/05/22 08:30	08/05/22 18:06	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.0	0.11	ug/Kg		08/05/22 08:30	08/05/22 18:06	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.0	0.083	ug/Kg		08/05/22 08:30	08/05/22 18:06	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.0	0.057	ug/Kg		08/05/22 08:30	08/05/22 18:06	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.0	0.037	ug/Kg		08/05/22 08:30	08/05/22 18:06	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	92		50 - 150	08/05/22 08:30	08/05/22 18:06	1
13C4 PFHpA	97		50 - 150	08/05/22 08:30	08/05/22 18:06	1
13C4 PFOA	92		50 - 150	08/05/22 08:30	08/05/22 18:06	1
13C4 PFOS	82		50 - 150	08/05/22 08:30	08/05/22 18:06	1
13C5 PFNA	89		50 - 150	08/05/22 08:30	08/05/22 18:06	1
13C4 PFBA	93		50 - 150	08/05/22 08:30	08/05/22 18:06	1
13C2 PFHxA	95		50 - 150	08/05/22 08:30	08/05/22 18:06	1
13C2 PFDA	81		50 - 150	08/05/22 08:30	08/05/22 18:06	1
13C2 PFUnA	72		50 - 150	08/05/22 08:30	08/05/22 18:06	1
13C2 PFDoA	72		50 - 150	08/05/22 08:30	08/05/22 18:06	1
13C8 FOSA	64		50 - 150	08/05/22 08:30	08/05/22 18:06	1
13C5 PFPeA	95		50 - 150	08/05/22 08:30	08/05/22 18:06	1
13C2 PFTeDA	85		50 - 150	08/05/22 08:30	08/05/22 18:06	1
d3-NMeFOSAA	68		50 - 150	08/05/22 08:30	08/05/22 18:06	1
d5-NEtFOSAA	66		50 - 150	08/05/22 08:30	08/05/22 18:06	1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: MB 200-182393/1-A
Matrix: Solid
Analysis Batch: 182423

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 182393

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
M2-6:2 FTS	88		50 - 150	08/05/22 08:30	08/05/22 18:06	1
M2-8:2 FTS	83		50 - 150	08/05/22 08:30	08/05/22 18:06	1
13C3 PFBS	90		50 - 150	08/05/22 08:30	08/05/22 18:06	1

Lab Sample ID: LCS 200-182393/2-A
Matrix: Solid
Analysis Batch: 182423

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 182393

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	2.00	1.81		ug/Kg		90	60 - 140
Perfluoropentanoic acid (PFPeA)	2.00	1.90		ug/Kg		95	60 - 140
Perfluorohexanoic acid (PFHxA)	2.00	1.84		ug/Kg		92	60 - 140
Perfluoroheptanoic acid (PFHpA)	2.00	1.95		ug/Kg		97	60 - 140
Perfluorooctanoic acid (PFOA)	2.00	1.91		ug/Kg		96	60 - 140
Perfluorononanoic acid (PFNA)	2.00	1.85		ug/Kg		93	60 - 140
Perfluorodecanoic acid (PFDA)	2.00	1.93		ug/Kg		97	60 - 140
Perfluoroundecanoic acid (PFUnA)	2.00	1.81		ug/Kg		90	60 - 140
Perfluorododecanoic acid (PFDoA)	2.00	1.97		ug/Kg		99	60 - 140
Perfluorotridecanoic acid (PFTriA)	2.00	2.15		ug/Kg		107	60 - 140
Perfluorotetradecanoic acid (PFTeA)	2.00	1.90		ug/Kg		95	60 - 140
Perfluorobutanesulfonic acid (PFBS)	1.77	1.66		ug/Kg		94	60 - 140
Perfluorohexanesulfonic acid (PFHxS)	1.82	1.67		ug/Kg		92	60 - 140
Perfluoroheptanesulfonic acid (PFHpS)	1.90	1.88		ug/Kg		99	60 - 140
Perfluorooctanesulfonic acid (PFOS)	1.86	1.82		ug/Kg		98	60 - 140
Perfluorodecanesulfonic acid (PFDS)	1.93	1.59		ug/Kg		82	60 - 140
Perfluorooctanesulfonamide (PFOSA)	2.00	1.91		ug/Kg		96	60 - 140
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.00	1.78	J	ug/Kg		89	60 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.00	1.76	J	ug/Kg		88	60 - 140
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	1.90	1.81	J	ug/Kg		96	50 - 150
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	1.92	1.78	J	ug/Kg		93	60 - 140

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
18O2 PFHxS	90		50 - 150
13C4 PFHpA	91		50 - 150
13C4 PFOA	92		50 - 150
13C4 PFOS	82		50 - 150
13C5 PFNA	88		50 - 150
13C4 PFBA	94		50 - 150

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 200-182393/2-A
Matrix: Solid
Analysis Batch: 182423

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 182393

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
13C2 PFHxA	95		50 - 150
13C2 PFDA	81		50 - 150
13C2 PFUnA	79		50 - 150
13C2 PFDoA	71		50 - 150
13C8 FOSA	67		50 - 150
13C5 PFPeA	89		50 - 150
13C2 PFTeDA	92		50 - 150
d3-NMeFOSAA	72		50 - 150
d5-NEtFOSAA	69		50 - 150
M2-6:2 FTS	89		50 - 150
M2-8:2 FTS	81		50 - 150
13C3 PFBS	86		50 - 150

Lab Sample ID: 480-200248-18 MS
Matrix: Solid
Analysis Batch: 182423

Client Sample ID: SB6 (1-2)
Prep Type: Total/NA
Prep Batch: 182393

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	ND		2.21	2.61		ug/Kg	☼	118	60 - 140
Perfluoropentanoic acid (PFPeA)	ND		2.21	2.23		ug/Kg	☼	101	60 - 140
Perfluorohexanoic acid (PFHxA)	0.053	J	2.21	2.21		ug/Kg	☼	97	60 - 140
Perfluoroheptanoic acid (PFHpA)	ND		2.21	2.09		ug/Kg	☼	94	60 - 140
Perfluorooctanoic acid (PFOA)	0.14	J	2.21	2.22		ug/Kg	☼	94	60 - 140
Perfluorononanoic acid (PFNA)	ND		2.21	2.10		ug/Kg	☼	95	60 - 140
Perfluorodecanoic acid (PFDA)	ND		2.21	2.15		ug/Kg	☼	97	60 - 140
Perfluoroundecanoic acid (PFUnA)	ND		2.21	2.11		ug/Kg	☼	95	60 - 140
Perfluorododecanoic acid (PFDoA)	ND		2.21	2.17		ug/Kg	☼	98	60 - 140
Perfluorotridecanoic acid (PFTriA)	ND		2.21	2.18		ug/Kg	☼	98	60 - 140
Perfluorotetradecanoic acid (PFTeA)	ND		2.21	2.25		ug/Kg	☼	102	60 - 140
Perfluorobutanesulfonic acid (PFBS)	0.037	J	1.96	1.82		ug/Kg	☼	91	60 - 140
Perfluorohexanesulfonic acid (PFHxS)	ND		2.01	2.10		ug/Kg	☼	104	60 - 140
Perfluoroheptanesulfonic acid (PFHpS)	ND		2.11	2.14		ug/Kg	☼	102	60 - 140
Perfluorooctanesulfonic acid (PFOS)	0.50		2.05	2.55		ug/Kg	☼	100	60 - 140
Perfluorodecanesulfonic acid (PFDS)	ND		2.13	2.03		ug/Kg	☼	95	60 - 140
Perfluorooctanesulfonamide (PFOSA)	ND		2.21	2.10		ug/Kg	☼	95	60 - 140
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.21	2.12	J	ug/Kg	☼	96	60 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.21	2.16	J	ug/Kg	☼	97	60 - 140
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.10	2.02	J	ug/Kg	☼	96	50 - 150

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: 480-200248-18 MS
Matrix: Solid
Analysis Batch: 182423

Client Sample ID: SB6 (1-2)
Prep Type: Total/NA
Prep Batch: 182393

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.12	2.05	J	ug/Kg	☼	97	60 - 140

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
18O2 PFHxS	*75*		*50 - 150*
13C4 PFHpA	*82*		*50 - 150*
13C4 PFOA	*88*		*50 - 150*
13C4 PFOS	*72*		*50 - 150*
13C5 PFNA	*90*		*50 - 150*
13C4 PFBA	*79*		*50 - 150*
13C2 PFHxA	*75*		*50 - 150*
13C2 PFDA	*86*		*50 - 150*
13C2 PFUnA	*93*		*50 - 150*
13C2 PFDoA	*95*		*50 - 150*
13C8 FOSA	*69*		*50 - 150*
13C5 PFPeA	*83*		*50 - 150*
13C2 PFTeDA	*100*		*50 - 150*
d3-NMeFOSAA	*79*		*50 - 150*
d5-NEtFOSAA	*89*		*50 - 150*
M2-6:2 FTS	*84*		*50 - 150*
M2-8:2 FTS	*103*		*50 - 150*
13C3 PFBS	*74*		*50 - 150*

Lab Sample ID: 480-200248-18 MSD
Matrix: Solid
Analysis Batch: 182423

Client Sample ID: SB6 (1-2)
Prep Type: Total/NA
Prep Batch: 182393

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	ND		2.20	2.56		ug/Kg	☼	117	60 - 140	2	30
Perfluoropentanoic acid (PFPeA)	ND		2.20	2.29		ug/Kg	☼	104	60 - 140	3	30
Perfluorohexanoic acid (PFHxA)	0.053	J	2.20	2.29		ug/Kg	☼	102	60 - 140	3	30
Perfluoroheptanoic acid (PFHpA)	ND		2.20	2.16		ug/Kg	☼	98	60 - 140	3	30
Perfluorooctanoic acid (PFOA)	0.14	J	2.20	2.22		ug/Kg	☼	95	60 - 140	0	30
Perfluorononanoic acid (PFNA)	ND		2.20	2.08		ug/Kg	☼	95	60 - 140	1	30
Perfluorodecanoic acid (PFDA)	ND		2.20	2.02		ug/Kg	☼	92	60 - 140	6	30
Perfluoroundecanoic acid (PFUnA)	ND		2.20	2.21		ug/Kg	☼	101	60 - 140	5	30
Perfluorododecanoic acid (PFDoA)	ND		2.20	2.08		ug/Kg	☼	95	60 - 140	5	30
Perfluorotridecanoic acid (PFTriA)	ND		2.20	2.18		ug/Kg	☼	99	60 - 140	0	30
Perfluorotetradecanoic acid (PFTeA)	ND		2.20	2.21		ug/Kg	☼	101	60 - 140	2	30
Perfluorobutanesulfonic acid (PFBS)	0.037	J	1.94	1.90		ug/Kg	☼	96	60 - 140	5	30
Perfluorohexanesulfonic acid (PFHxS)	ND		2.00	2.15		ug/Kg	☼	108	60 - 140	2	30
Perfluoroheptanesulfonic acid (PFHpS)	ND		2.09	1.96		ug/Kg	☼	94	60 - 140	9	30
Perfluorooctanesulfonic acid (PFOS)	0.50		2.04	2.56		ug/Kg	☼	101	60 - 140	0	30

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: 480-200248-18 MSD
Matrix: Solid
Analysis Batch: 182423

Client Sample ID: SB6 (1-2)
Prep Type: Total/NA
Prep Batch: 182393

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorodecanesulfonic acid (PFDS)	ND		2.12	2.03		ug/Kg	☼	96	60 - 140	0	30
Perfluorooctanesulfonamide (PFOSA)	ND		2.20	2.01		ug/Kg	☼	91	60 - 140	4	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.20	2.08	J	ug/Kg	☼	95	60 - 140	2	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.20	2.16	J	ug/Kg	☼	99	60 - 140	0	30
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.08	2.09	J	ug/Kg	☼	100	50 - 150	3	30
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.10	2.08	J	ug/Kg	☼	99	60 - 140	2	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
18O2 PFHxS	*72*		*50 - 150*
13C4 PFHpA	*79*		*50 - 150*
13C4 PFOA	*84*		*50 - 150*
13C4 PFOS	*73*		*50 - 150*
13C5 PFNA	*84*		*50 - 150*
13C4 PFBA	*78*		*50 - 150*
13C2 PFHxA	*74*		*50 - 150*
13C2 PFDA	*89*		*50 - 150*
13C2 PFUnA	*88*		*50 - 150*
13C2 PFDoA	*92*		*50 - 150*
13C8 FOSA	*72*		*50 - 150*
13C5 PFPeA	*82*		*50 - 150*
13C2 PFTeDA	*98*		*50 - 150*
d3-NMeFOSAA	*77*		*50 - 150*
d5-NEtFOSAA	*82*		*50 - 150*
M2-6:2 FTS	*78*		*50 - 150*
M2-8:2 FTS	*94*		*50 - 150*
13C3 PFBS	*73*		*50 - 150*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-635895/1-A
Matrix: Water
Analysis Batch: 636171

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635895

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		08/03/22 09:32	08/03/22 23:29	1
Antimony	ND		0.020	0.0068	mg/L		08/03/22 09:32	08/03/22 23:29	1
Arsenic	ND		0.015	0.0056	mg/L		08/03/22 09:32	08/03/22 23:29	1
Barium	ND		0.0020	0.00070	mg/L		08/03/22 09:32	08/03/22 23:29	1
Beryllium	ND		0.0020	0.00030	mg/L		08/03/22 09:32	08/03/22 23:29	1
Cadmium	ND		0.0020	0.00050	mg/L		08/03/22 09:32	08/03/22 23:29	1
Calcium	ND		0.50	0.10	mg/L		08/03/22 09:32	08/03/22 23:29	1
Chromium	ND		0.0040	0.0010	mg/L		08/03/22 09:32	08/03/22 23:29	1
Cobalt	ND		0.0040	0.00063	mg/L		08/03/22 09:32	08/03/22 23:29	1
Iron	ND		0.050	0.019	mg/L		08/03/22 09:32	08/03/22 23:29	1
Lead	ND		0.010	0.0030	mg/L		08/03/22 09:32	08/03/22 23:29	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 480-635895/1-A
Matrix: Water
Analysis Batch: 636171

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635895

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Magnesium	ND		0.20	0.043	mg/L		08/03/22 09:32	08/03/22 23:29	1
Manganese	0.000510	J	0.0030	0.00040	mg/L		08/03/22 09:32	08/03/22 23:29	1
Nickel	ND		0.010	0.0013	mg/L		08/03/22 09:32	08/03/22 23:29	1
Selenium	ND		0.025	0.0087	mg/L		08/03/22 09:32	08/03/22 23:29	1
Silver	ND		0.0060	0.0017	mg/L		08/03/22 09:32	08/03/22 23:29	1
Thallium	ND		0.020	0.010	mg/L		08/03/22 09:32	08/03/22 23:29	1
Vanadium	ND		0.0050	0.0015	mg/L		08/03/22 09:32	08/03/22 23:29	1
Zinc	ND		0.010	0.0015	mg/L		08/03/22 09:32	08/03/22 23:29	1

Lab Sample ID: MB 480-635895/1-A
Matrix: Water
Analysis Batch: 636347

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635895

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Copper	ND		0.010	0.0016	mg/L		08/03/22 09:32	08/04/22 17:23	1
Potassium	ND		0.50	0.10	mg/L		08/03/22 09:32	08/04/22 17:23	1
Sodium	ND		1.0	0.32	mg/L		08/03/22 09:32	08/04/22 17:23	1

Lab Sample ID: LCS 480-635895/2-A
Matrix: Water
Analysis Batch: 636171

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635895

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	10.0	9.21		mg/L		92	80 - 120
Antimony	0.200	0.194		mg/L		97	80 - 120
Arsenic	0.200	0.190		mg/L		95	80 - 120
Barium	0.200	0.205		mg/L		103	80 - 120
Beryllium	0.200	0.187		mg/L		94	80 - 120
Cadmium	0.200	0.187		mg/L		93	80 - 120
Calcium	10.0	9.10		mg/L		91	80 - 120
Chromium	0.200	0.189		mg/L		94	80 - 120
Cobalt	0.200	0.184		mg/L		92	80 - 120
Iron	10.0	9.27		mg/L		93	80 - 120
Lead	0.200	0.183		mg/L		92	80 - 120
Magnesium	10.0	9.90		mg/L		99	80 - 120
Manganese	0.200	0.195		mg/L		98	80 - 120
Nickel	0.200	0.180		mg/L		90	80 - 120
Selenium	0.200	0.187		mg/L		94	80 - 120
Silver	0.0500	0.0465		mg/L		93	80 - 120
Thallium	0.200	0.189		mg/L		95	80 - 120
Vanadium	0.200	0.188		mg/L		94	80 - 120
Zinc	0.200	0.191		mg/L		95	80 - 120

Lab Sample ID: LCS 480-635895/2-A
Matrix: Water
Analysis Batch: 636347

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635895

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Copper	0.200	0.197		mg/L		99	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-635895/2-A
Matrix: Water
Analysis Batch: 636347

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635895

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Potassium	10.0	10.05		mg/L		100	80 - 120
Sodium	10.0	9.76		mg/L		97	80 - 120

Lab Sample ID: MB 480-636004/1-A
Matrix: Solid
Analysis Batch: 636339

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 636004

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		10.4	4.6	mg/Kg		08/03/22 13:24	08/04/22 21:59	1
Antimony	ND		15.6	0.42	mg/Kg		08/03/22 13:24	08/04/22 21:59	1
Arsenic	ND		2.1	0.42	mg/Kg		08/03/22 13:24	08/04/22 21:59	1
Barium	ND		0.52	0.11	mg/Kg		08/03/22 13:24	08/04/22 21:59	1
Beryllium	ND		0.21	0.029	mg/Kg		08/03/22 13:24	08/04/22 21:59	1
Cadmium	ND		0.21	0.031	mg/Kg		08/03/22 13:24	08/04/22 21:59	1
Calcium	4.53	J	51.9	3.4	mg/Kg		08/03/22 13:24	08/04/22 21:59	1
Chromium	ND		0.52	0.21	mg/Kg		08/03/22 13:24	08/04/22 21:59	1
Cobalt	ND		0.52	0.052	mg/Kg		08/03/22 13:24	08/04/22 21:59	1
Copper	ND		1.0	0.22	mg/Kg		08/03/22 13:24	08/04/22 21:59	1
Iron	ND		10.4	3.6	mg/Kg		08/03/22 13:24	08/04/22 21:59	1
Lead	ND		1.0	0.25	mg/Kg		08/03/22 13:24	08/04/22 21:59	1
Magnesium	2.42	J	20.8	0.96	mg/Kg		08/03/22 13:24	08/04/22 21:59	1
Manganese	0.132	J	0.21	0.033	mg/Kg		08/03/22 13:24	08/04/22 21:59	1
Nickel	ND		5.2	0.24	mg/Kg		08/03/22 13:24	08/04/22 21:59	1
Potassium	ND		31.2	20.8	mg/Kg		08/03/22 13:24	08/04/22 21:59	1
Selenium	ND		4.2	0.42	mg/Kg		08/03/22 13:24	08/04/22 21:59	1
Silver	ND		0.62	0.21	mg/Kg		08/03/22 13:24	08/04/22 21:59	1
Sodium	ND		145	13.5	mg/Kg		08/03/22 13:24	08/04/22 21:59	1
Thallium	ND		6.2	0.31	mg/Kg		08/03/22 13:24	08/04/22 21:59	1
Vanadium	ND		0.52	0.11	mg/Kg		08/03/22 13:24	08/04/22 21:59	1
Zinc	ND		2.1	0.66	mg/Kg		08/03/22 13:24	08/04/22 21:59	1

Lab Sample ID: LCDSRM 480-636004/3-A
Matrix: Solid
Analysis Batch: 636339

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 636004

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	8630	9830		mg/Kg		113.9	50.6 - 149.5	2	20
Antimony	129	84.02		mg/Kg		65.1	19.8 - 250.4	2	20
Arsenic	84.5	75.18		mg/Kg		89.0	70.1 - 130.2	1	20
Barium	249	221.2		mg/Kg		88.8	75.1 - 124.9	3	20
Beryllium	163	133.4		mg/Kg		81.8	74.8 - 125.2	10	20
Cadmium	99.0	85.73		mg/Kg		86.6	74.9 - 125.3	4	20
Calcium	4760	4208		mg/Kg		88.4	72.7 - 127.5	1	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCDSRM 480-636004/3-A
Matrix: Solid
Analysis Batch: 636339

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 636004

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium	122	109.3		mg/Kg		89.6	70.2 - 130.3	2	20
Cobalt	61.7	62.83		mg/Kg		101.8	75.0 - 125.1	2	20
Copper	61.5	53.77		mg/Kg		87.4	75.0 - 124.9	1	20
Iron	14500	14730		mg/Kg		101.6	35.8 - 164.1	4	20
Lead	123	125.7		mg/Kg		102.2	71.8 - 128.5	2	20
Magnesium	2360	2281		mg/Kg		96.7	62.7 - 137.7	1	20
Manganese	456	407.1		mg/Kg		89.3	76.8 - 123.5	4	20
Nickel	135	135.4		mg/Kg		100.3	70.1 - 130.4	3	20
Potassium	2090	2462		mg/Kg		117.8	59.3 - 140.7	3	20
Selenium	121	104.2		mg/Kg		86.1	66.4 - 133.9	2	20
Silver	33.6	36.66		mg/Kg		109.1	68.5 - 131.3	1	20
Sodium	136	167.7		mg/Kg		123.3	35.4 - 164.0	4	20
Thallium	144	145.9		mg/Kg		101.3	70.1 - 129.9	3	20
Vanadium	186	172.3		mg/Kg		92.6	74.2 - 126.3	0	20
Zinc	295	249.0		mg/Kg		84.4	70.2 - 130.2	0	20

Lab Sample ID: LCSSRM 480-636004/2-A
Matrix: Solid
Analysis Batch: 636339

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 636004

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	8630	9617		mg/Kg		111.4	50.6 - 149.5
Antimony	129	85.56		mg/Kg		66.3	19.8 - 250.4
Arsenic	84.5	75.82		mg/Kg		89.7	70.1 - 130.2
Barium	249	229.0		mg/Kg		92.0	75.1 - 124.9
Beryllium	163	147.5		mg/Kg		90.5	74.8 - 125.2
Cadmium	99.0	88.91		mg/Kg		89.8	74.9 - 125.3
Calcium	4760	4232		mg/Kg		88.9	72.7 - 127.5
Chromium	122	111.7		mg/Kg		91.5	70.2 - 130.3
Cobalt	61.7	64.13		mg/Kg		103.9	75.0 - 125.1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-636004/2-A
Matrix: Solid
Analysis Batch: 636339

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 636004

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Copper	61.5	54.17		mg/Kg		88.1	75.0 - 124.9
Iron	14500	14180		mg/Kg		97.8	35.8 - 164.1
Lead	123	128.6		mg/Kg		104.5	71.8 - 128.5
Magnesium	2360	2264		mg/Kg		95.9	62.7 - 137.7
Manganese	456	422.5		mg/Kg		92.6	76.8 - 123.5
Nickel	135	139.6		mg/Kg		103.4	70.1 - 130.4
Potassium	2090	2383		mg/Kg		114.0	59.3 - 140.7
Selenium	121	101.7		mg/Kg		84.0	66.4 - 133.9
Silver	33.6	36.92		mg/Kg		109.9	68.5 - 131.3
Sodium	136	160.5		mg/Kg		118.0	35.4 - 164.0
Thallium	144	151.0		mg/Kg		104.9	70.1 - 129.9
Vanadium	186	172.7		mg/Kg		92.8	74.2 - 126.3
Zinc	295	250.2		mg/Kg		84.8	70.2 - 130.2

Lab Sample ID: MB 480-636010/1-A
Matrix: Solid
Analysis Batch: 636536

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 636010

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8.75	J	10.0	4.4	mg/Kg		08/04/22 13:08	08/05/22 23:24	1
Antimony	ND		15.0	0.40	mg/Kg		08/04/22 13:08	08/05/22 23:24	1
Arsenic	ND		2.0	0.40	mg/Kg		08/04/22 13:08	08/05/22 23:24	1
Barium	0.116	J	0.50	0.11	mg/Kg		08/04/22 13:08	08/05/22 23:24	1
Beryllium	ND		0.20	0.028	mg/Kg		08/04/22 13:08	08/05/22 23:24	1
Cadmium	ND		0.20	0.030	mg/Kg		08/04/22 13:08	08/05/22 23:24	1
Calcium	ND		50.0	3.3	mg/Kg		08/04/22 13:08	08/05/22 23:24	1
Chromium	ND		0.50	0.20	mg/Kg		08/04/22 13:08	08/05/22 23:24	1
Cobalt	ND		0.50	0.050	mg/Kg		08/04/22 13:08	08/05/22 23:24	1
Copper	ND		1.0	0.21	mg/Kg		08/04/22 13:08	08/05/22 23:24	1
Iron	ND		10.0	3.5	mg/Kg		08/04/22 13:08	08/05/22 23:24	1
Magnesium	2.51	J	20.0	0.93	mg/Kg		08/04/22 13:08	08/05/22 23:24	1
Nickel	ND		5.0	0.23	mg/Kg		08/04/22 13:08	08/05/22 23:24	1
Selenium	ND		4.0	0.40	mg/Kg		08/04/22 13:08	08/05/22 23:24	1
Silver	ND		0.60	0.20	mg/Kg		08/04/22 13:08	08/05/22 23:24	1
Sodium	ND		140	13.0	mg/Kg		08/04/22 13:08	08/05/22 23:24	1
Thallium	ND		6.0	0.30	mg/Kg		08/04/22 13:08	08/05/22 23:24	1
Vanadium	ND		0.50	0.11	mg/Kg		08/04/22 13:08	08/05/22 23:24	1
Zinc	1.46	J	2.0	0.64	mg/Kg		08/04/22 13:08	08/05/22 23:24	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 480-636010/1-A
Matrix: Solid
Analysis Batch: 637198

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 636010

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		1.0	0.24	mg/Kg		08/04/22 13:08	08/11/22 16:05	1
Manganese	ND		0.20	0.032	mg/Kg		08/04/22 13:08	08/11/22 16:05	1
Potassium	ND		30.0	20.0	mg/Kg		08/04/22 13:08	08/11/22 16:05	1

Lab Sample ID: LCSSRM 480-636010/2-A
Matrix: Solid
Analysis Batch: 636536

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 636010

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	8630	9159		mg/Kg		106.1	50.6 - 149.5
Antimony	129	72.67		mg/Kg		56.3	19.8 - 250.4
Arsenic	84.5	76.87		mg/Kg		91.0	70.1 - 130.2
Barium	249	224.0		mg/Kg		90.0	75.1 - 124.9
Beryllium	163	124.8		mg/Kg		76.6	74.8 - 125.2
Cadmium	99.0	84.82		mg/Kg		85.7	74.9 - 125.3
Calcium	4760	4127		mg/Kg		86.7	72.7 - 127.5
Chromium	122	108.7		mg/Kg		89.1	70.2 - 130.3
Cobalt	61.7	64.80		mg/Kg		105.0	75.0 - 125.1
Copper	61.5	53.72		mg/Kg		87.3	75.0 - 124.9
Iron	14500	14990		mg/Kg		103.4	35.8 - 164.1
Magnesium	2360	2303		mg/Kg		97.6	62.7 - 137.7
Nickel	135	141.1		mg/Kg		104.5	70.1 - 130.4
Selenium	121	101.8		mg/Kg		84.1	66.4 - 133.9
Silver	33.6	37.11		mg/Kg		110.4	68.5 - 131.3
Sodium	136	137.5	J	mg/Kg		101.1	35.4 - 164.0
Thallium	144	146.6		mg/Kg		101.8	70.1 - 129.9
Vanadium	186	169.6		mg/Kg		91.2	74.2 - 126.3
Zinc	295	253.1		mg/Kg		85.8	70.2 - 130.2

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-636010/2-A
Matrix: Solid
Analysis Batch: 637198

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 636010

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Manganese	456	432.9		mg/Kg		94.9	76.8 - 123.5
Potassium	2090	2374		mg/Kg		113.6	59.3 - 140.7

Lab Sample ID: 480-200248-18 MS
Matrix: Solid
Analysis Batch: 636536

Client Sample ID: SB6 (1-2)
Prep Type: Total/NA
Prep Batch: 636010

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	6570	B F1	2250	16520	F1	mg/Kg	☼	442	75 - 125
Antimony	4.9	J F1	45.0	33.42	F1	mg/Kg	☼	63	75 - 125
Arsenic	17.6		45.0	59.26		mg/Kg	☼	92	75 - 125
Barium	445	B	45.0	591.7	4	mg/Kg	☼	326	75 - 125
Beryllium	0.70		45.0	38.66		mg/Kg	☼	84	75 - 125
Cadmium	0.74		45.0	40.61		mg/Kg	☼	89	75 - 125
Calcium	4560	F1	2250	7031		mg/Kg	☼	110	75 - 125
Chromium	13.2		45.0	58.24		mg/Kg	☼	100	75 - 125
Cobalt	8.3		45.0	54.63		mg/Kg	☼	103	75 - 125
Copper	79.7	F1 F2	45.0	125.3		mg/Kg	☼	101	75 - 125
Iron	19400		2250	21750	4	mg/Kg	☼	104	75 - 125
Magnesium	1910	B	2250	4604		mg/Kg	☼	120	75 - 125
Nickel	18.4		45.0	65.68		mg/Kg	☼	105	75 - 125
Selenium	2.8	J	45.0	39.02		mg/Kg	☼	81	75 - 125
Silver	ND		11.3	9.63		mg/Kg	☼	86	75 - 125
Sodium	71.2	J	2250	2188		mg/Kg	☼	94	75 - 125
Thallium	ND		45.0	33.88		mg/Kg	☼	75	75 - 125
Vanadium	22.6		45.0	71.35		mg/Kg	☼	108	75 - 125
Zinc	333	B	45.0	373.3	4	mg/Kg	☼	90	75 - 125

Lab Sample ID: 480-200248-18 MS
Matrix: Solid
Analysis Batch: 637198

Client Sample ID: SB6 (1-2)
Prep Type: Total/NA
Prep Batch: 636010

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Manganese	291	B	45.0	373.4	4	mg/Kg	☼	182	75 - 125
Potassium	1030	F1	2250	5126	F1	mg/Kg	☼	182	75 - 125

Lab Sample ID: 480-200248-18 MSD
Matrix: Solid
Analysis Batch: 636536

Client Sample ID: SB6 (1-2)
Prep Type: Total/NA
Prep Batch: 636010

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	6570	B F1	2370	15960	F1	mg/Kg	☼	397	75 - 125	3	20
Antimony	4.9	J F1	47.3	36.42	F1	mg/Kg	☼	67	75 - 125	9	20
Arsenic	17.6		47.3	61.15		mg/Kg	☼	92	75 - 125	3	20
Barium	445	B	47.3	543.8	4	mg/Kg	☼	209	75 - 125	8	20
Beryllium	0.70		47.3	41.86		mg/Kg	☼	87	75 - 125	8	20
Cadmium	0.74		47.3	43.77		mg/Kg	☼	91	75 - 125	7	20
Calcium	4560	F1	2360	6022	F1	mg/Kg	☼	62	75 - 125	15	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-200248-18 MSD — **Client Sample ID: SB6 (1-2)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 636536 — **Prep Batch: 636010**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chromium	13.2		47.3	61.56		mg/Kg	☼	102	75 - 125	6	20
Cobalt	8.3		47.3	58.01		mg/Kg	☼	105	75 - 125	6	20
Copper	79.7	F1 F2	47.3	184.0	F1 F2	mg/Kg	☼	221	75 - 125	38	20
Iron	19400		2360	22800	4	mg/Kg	☼	143	75 - 125	5	20
Magnesium	1910	B	2360	4575		mg/Kg	☼	113	75 - 125	1	20
Nickel	18.4		47.3	68.68		mg/Kg	☼	106	75 - 125	4	20
Selenium	2.8	J	47.3	42.08		mg/Kg	☼	83	75 - 125	8	20
Silver	ND		11.8	10.57		mg/Kg	☼	89	75 - 125	9	20
Sodium	71.2	J	2370	2328		mg/Kg	☼	95	75 - 125	6	20
Thallium	ND		47.3	38.32		mg/Kg	☼	81	75 - 125	12	20
Vanadium	22.6		47.3	75.23		mg/Kg	☼	111	75 - 125	5	20
Zinc	333	B	47.3	353.9	4	mg/Kg	☼	44	75 - 125	5	20

Lab Sample ID: 480-200248-18 MSD — **Client Sample ID: SB6 (1-2)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 637198 — **Prep Batch: 636010**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Manganese	291	B	47.3	372.1	4	mg/Kg	☼	171	75 - 125	0	20
Potassium	1030	F1	2370	5063	F1	mg/Kg	☼	171	75 - 125	1	20

Lab Sample ID: MB 480-637262/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 637788 — **Prep Batch: 637262**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lead	ND		0.96	0.23	mg/Kg		08/15/22 12:22	08/16/22 21:24	1

Lab Sample ID: LCSSRM 480-637262/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 637788 — **Prep Batch: 637262**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Lead	123	131.7		mg/Kg		107.0	71.8 - 128.5

Lab Sample ID: 480-200248-17 MS — **Client Sample ID: FDUP_072922**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 637788 — **Prep Batch: 637262**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	100		43.8	135.2		mg/Kg	☼	79	75 - 125

Lab Sample ID: 480-200248-17 MSD — **Client Sample ID: FDUP_072922**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 637788 — **Prep Batch: 637262**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	100		46.2	148.5		mg/Kg	☼	104	75 - 125	9	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-635992/1-A
Matrix: Water
Analysis Batch: 636085

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 635992

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		08/03/22 11:05	08/03/22 15:11	1

Lab Sample ID: LCS 480-635992/2-A
Matrix: Water
Analysis Batch: 636085

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 635992

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00667	0.00643		mg/L		96	80 - 120

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-636060/1-A
Matrix: Solid
Analysis Batch: 636266

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 636060

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0046	mg/Kg		08/04/22 10:17	08/04/22 12:33	1

Lab Sample ID: LCSSRM 480-636060/2-A ^10
Matrix: Solid
Analysis Batch: 636266

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 636060

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	18.9	20.57		mg/Kg		108.8	59.8 - 139.7

Lab Sample ID: MB 480-636061/1-A
Matrix: Solid
Analysis Batch: 636266

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 636061

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0046	mg/Kg		08/04/22 10:17	08/04/22 13:12	1

Lab Sample ID: LCSSRM 480-636061/2-A ^10
Matrix: Solid
Analysis Batch: 636266

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 636061

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	18.9	16.16		mg/Kg		85.5	59.8 - 139.7

Lab Sample ID: 480-200248-18 MS
Matrix: Solid
Analysis Batch: 636266

Client Sample ID: SB6 (1-2)
Prep Type: Total/NA
Prep Batch: 636061

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.44	F1	0.358	0.626	F1	mg/Kg	☼	52	80 - 120

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: 480-200248-18 MSD
Matrix: Solid
Analysis Batch: 636266

Client Sample ID: SB6 (1-2)
Prep Type: Total/NA
Prep Batch: 636061

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.44	F1	0.367	0.681	F1	mg/Kg	☼	66	80 - 120	8	20

GC/MS VOA

Analysis Batch: 635636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-11	ERB_072822	Total/NA	Water	8260C	
MB 480-635636/8	Method Blank	Total/NA	Water	8260C	
LCS 480-635636/6	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 635717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-12	FB_072922	Total/NA	Water	8260C	
MB 480-635717/8	Method Blank	Total/NA	Water	8260C	
LCS 480-635717/6	Lab Control Sample	Total/NA	Water	8260C	

Prep Batch: 636617

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-3	SB6 (13-15)	Total/NA	Solid	5035A_L	
480-200248-8	SS5 (0-6)	Total/NA	Solid	5035A_L	
480-200248-9	SS5 (6-12)	Total/NA	Solid	5035A_L	
480-200248-10	SS5 (12-24)	Total/NA	Solid	5035A_L	
MB 480-636617/3-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-636617/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	
LCSD 480-636617/2-A	Lab Control Sample Dup	Total/NA	Solid	5035A_L	

Prep Batch: 636757

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-6	FDUP2_072922	Total/NA	Solid	5035A_L	
480-200248-18	SB6 (1-2)	Total/NA	Solid	5035A_L	
MB 480-636757/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-636757/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	
480-200248-18 MS	SB6 (1-2)	Total/NA	Solid	5035A_L	
480-200248-18 MSD	SB6 (1-2)	Total/NA	Solid	5035A_L	

Analysis Batch: 636797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-3	SB6 (13-15)	Total/NA	Solid	8260C	636617
480-200248-8	SS5 (0-6)	Total/NA	Solid	8260C	636617
480-200248-9	SS5 (6-12)	Total/NA	Solid	8260C	636617
480-200248-10	SS5 (12-24)	Total/NA	Solid	8260C	636617
MB 480-636617/3-A	Method Blank	Total/NA	Solid	8260C	636617
LCS 480-636617/1-A	Lab Control Sample	Total/NA	Solid	8260C	636617
LCSD 480-636617/2-A	Lab Control Sample Dup	Total/NA	Solid	8260C	636617

Analysis Batch: 636948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-6	FDUP2_072922	Total/NA	Solid	8260C	636757
480-200248-18	SB6 (1-2)	Total/NA	Solid	8260C	636757
MB 480-636757/2-A	Method Blank	Total/NA	Solid	8260C	636757
LCS 480-636757/1-A	Lab Control Sample	Total/NA	Solid	8260C	636757
480-200248-18 MS	SB6 (1-2)	Total/NA	Solid	8260C	636757
480-200248-18 MSD	SB6 (1-2)	Total/NA	Solid	8260C	636757

Prep Batch: 636951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-1	SB6 (0-0.5)	Total/NA	Solid	5035A_L	

GC/MS VOA (Continued)

Prep Batch: 636951 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-2	SB6 (0.5-1)	Total/NA	Solid	5035A_L	
480-200248-7	SS5 (0-2)	Total/NA	Solid	5035A_L	
480-200248-13	SS6 (0-2)	Total/NA	Solid	5035A_L	
MB 480-636951/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-636951/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

Analysis Batch: 636985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-1	SB6 (0-0.5)	Total/NA	Solid	8260C	636951
480-200248-2	SB6 (0.5-1)	Total/NA	Solid	8260C	636951
480-200248-7	SS5 (0-2)	Total/NA	Solid	8260C	636951
480-200248-13	SS6 (0-2)	Total/NA	Solid	8260C	636951
MB 480-636951/2-A	Method Blank	Total/NA	Solid	8260C	636951
LCS 480-636951/1-A	Lab Control Sample	Total/NA	Solid	8260C	636951

Analysis Batch: 637219

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-14	SS6 (0-6)	Total/NA	Solid	8260C	637228
480-200248-15	SS6 (6-12)	Total/NA	Solid	8260C	637228
480-200248-16	SS6 (12-24)	Total/NA	Solid	8260C	637228
480-200248-17	FDUP_072922	Total/NA	Solid	8260C	637228
MB 480-637228/3-A	Method Blank	Total/NA	Solid	8260C	637228
LCS 480-637228/1-A	Lab Control Sample	Total/NA	Solid	8260C	637228

Prep Batch: 637228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-14	SS6 (0-6)	Total/NA	Solid	5035A_L	
480-200248-15	SS6 (6-12)	Total/NA	Solid	5035A_L	
480-200248-16	SS6 (12-24)	Total/NA	Solid	5035A_L	
480-200248-17	FDUP_072922	Total/NA	Solid	5035A_L	
MB 480-637228/3-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-637228/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

GC/MS Semi VOA

Prep Batch: 635797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-11	ERB_072822	Total/NA	Water	3510C	
480-200248-12	FB_072922	Total/NA	Water	3510C	
MB 480-635797/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-635797/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-635797/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 635922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-11	ERB_072822	Total/NA	Water	3510C	
480-200248-12	FB_072922	Total/NA	Water	3510C	
MB 480-635922/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-635922/2-A	Lab Control Sample	Total/NA	Water	3510C	

GC/MS Semi VOA

Analysis Batch: 636027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-11	ERB_072822	Total/NA	Water	8270D SIM ID	635922
480-200248-12	FB_072922	Total/NA	Water	8270D SIM ID	635922
MB 480-635922/1-A	Method Blank	Total/NA	Water	8270D SIM ID	635922
LCS 480-635922/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	635922

Prep Batch: 636076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-1	SB6 (0-0.5)	Total/NA	Solid	3550C	
480-200248-2	SB6 (0.5-1)	Total/NA	Solid	3550C	
480-200248-3	SB6 (13-15)	Total/NA	Solid	3550C	
480-200248-6	FDUP2_072922	Total/NA	Solid	3550C	
480-200248-7	SS5 (0-2)	Total/NA	Solid	3550C	
480-200248-8	SS5 (0-6)	Total/NA	Solid	3550C	
480-200248-10	SS5 (12-24)	Total/NA	Solid	3550C	
480-200248-15	SS6 (6-12)	Total/NA	Solid	3550C	
480-200248-17	FDUP_072922	Total/NA	Solid	3550C	
480-200248-18	SB6 (1-2)	Total/NA	Solid	3550C	
MB 480-636076/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-636076/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-200248-18 MS	SB6 (1-2)	Total/NA	Solid	3550C	
480-200248-18 MSD	SB6 (1-2)	Total/NA	Solid	3550C	

Analysis Batch: 636252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-11	ERB_072822	Total/NA	Water	8270D	635797
480-200248-12	FB_072922	Total/NA	Water	8270D	635797
MB 480-635797/1-A	Method Blank	Total/NA	Water	8270D	635797
LCS 480-635797/2-A	Lab Control Sample	Total/NA	Water	8270D	635797
LCSD 480-635797/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	635797

Prep Batch: 636585

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-12 - RE	FB_072922	Total/NA	Water	3510C	
MB 480-636585/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-636585/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 636678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-12 - RE	FB_072922	Total/NA	Water	8270D	636585
MB 480-636585/1-A	Method Blank	Total/NA	Water	8270D	636585
LCS 480-636585/2-A	Lab Control Sample	Total/NA	Water	8270D	636585

Analysis Batch: 636722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-1	SB6 (0-0.5)	Total/NA	Solid	8270D	636076
480-200248-2	SB6 (0.5-1)	Total/NA	Solid	8270D	636076
480-200248-3	SB6 (13-15)	Total/NA	Solid	8270D	636076
480-200248-6	FDUP2_072922	Total/NA	Solid	8270D	636076
480-200248-7	SS5 (0-2)	Total/NA	Solid	8270D	636076
480-200248-8	SS5 (0-6)	Total/NA	Solid	8270D	636076
480-200248-10	SS5 (12-24)	Total/NA	Solid	8270D	636076

GC/MS Semi VOA (Continued)

Analysis Batch: 636722 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-15	SS6 (6-12)	Total/NA	Solid	8270D	636076
480-200248-17	FDUP_072922	Total/NA	Solid	8270D	636076
480-200248-18	SB6 (1-2)	Total/NA	Solid	8270D	636076
MB 480-636076/1-A	Method Blank	Total/NA	Solid	8270D	636076
LCS 480-636076/2-A	Lab Control Sample	Total/NA	Solid	8270D	636076
480-200248-18 MS	SB6 (1-2)	Total/NA	Solid	8270D	636076
480-200248-18 MSD	SB6 (1-2)	Total/NA	Solid	8270D	636076

Prep Batch: 637284

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-9	SS5 (6-12)	Total/NA	Solid	3550C	
480-200248-13	SS6 (0-2)	Total/NA	Solid	3550C	
480-200248-14	SS6 (0-6)	Total/NA	Solid	3550C	
480-200248-16	SS6 (12-24)	Total/NA	Solid	3550C	
MB 480-637284/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-637284/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 637369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-9	SS5 (6-12)	Total/NA	Solid	8270D	637284
480-200248-13	SS6 (0-2)	Total/NA	Solid	8270D	637284
480-200248-14	SS6 (0-6)	Total/NA	Solid	8270D	637284
480-200248-16	SS6 (12-24)	Total/NA	Solid	8270D	637284
MB 480-637284/1-A	Method Blank	Total/NA	Solid	8270D	637284
LCS 480-637284/2-A	Lab Control Sample	Total/NA	Solid	8270D	637284

LCMS

Prep Batch: 182374

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-11	ERB_072822	Total/NA	Water	3535	
480-200248-12	FB_072922	Total/NA	Water	3535	
MB 200-182374/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-182374/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 200-182374/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 182386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-11	ERB_072822	Total/NA	Water	537 IDA	182374
480-200248-12	FB_072922	Total/NA	Water	537 IDA	182374
MB 200-182374/1-A	Method Blank	Total/NA	Water	537 IDA	182374
LCS 200-182374/2-A	Lab Control Sample	Total/NA	Water	537 IDA	182374
LCSD 200-182374/3-A	Lab Control Sample Dup	Total/NA	Water	537 IDA	182374

Prep Batch: 182393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-1	SB6 (0-0.5)	Total/NA	Solid	SHAKE	
480-200248-2	SB6 (0.5-1)	Total/NA	Solid	SHAKE	
480-200248-3	SB6 (13-15)	Total/NA	Solid	SHAKE	
480-200248-17	FDUP_072922	Total/NA	Solid	SHAKE	
480-200248-18	SB6 (1-2)	Total/NA	Solid	SHAKE	

LCMS (Continued)

Prep Batch: 182393 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 200-182393/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 200-182393/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
480-200248-18 MS	SB6 (1-2)	Total/NA	Solid	SHAKE	
480-200248-18 MSD	SB6 (1-2)	Total/NA	Solid	SHAKE	

Analysis Batch: 182423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-1	SB6 (0-0.5)	Total/NA	Solid	537 IDA	182393
480-200248-2	SB6 (0.5-1)	Total/NA	Solid	537 IDA	182393
480-200248-3	SB6 (13-15)	Total/NA	Solid	537 IDA	182393
480-200248-17	FDUP_072922	Total/NA	Solid	537 IDA	182393
480-200248-18	SB6 (1-2)	Total/NA	Solid	537 IDA	182393
MB 200-182393/1-A	Method Blank	Total/NA	Solid	537 IDA	182393
LCS 200-182393/2-A	Lab Control Sample	Total/NA	Solid	537 IDA	182393
480-200248-18 MS	SB6 (1-2)	Total/NA	Solid	537 IDA	182393
480-200248-18 MSD	SB6 (1-2)	Total/NA	Solid	537 IDA	182393

Metals

Prep Batch: 635895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-11	ERB_072822	Total/NA	Water	3005A	
480-200248-12	FB_072922	Total/NA	Water	3005A	
MB 480-635895/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-635895/2-A	Lab Control Sample	Total/NA	Water	3005A	

Prep Batch: 635992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-11	ERB_072822	Total/NA	Water	7470A	
480-200248-12	FB_072922	Total/NA	Water	7470A	
MB 480-635992/1-A	Method Blank	Total/NA	Water	7470A	
LCS 480-635992/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 636004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-1	SB6 (0-0.5)	Total/NA	Solid	3050B	
480-200248-2	SB6 (0.5-1)	Total/NA	Solid	3050B	
480-200248-3	SB6 (13-15)	Total/NA	Solid	3050B	
480-200248-6	FDUP2_072922	Total/NA	Solid	3050B	
480-200248-7	SS5 (0-2)	Total/NA	Solid	3050B	
MB 480-636004/1-A	Method Blank	Total/NA	Solid	3050B	
LCDSRM 480-636004/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 480-636004/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 636010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-8	SS5 (0-6)	Total/NA	Solid	3050B	
480-200248-9	SS5 (6-12)	Total/NA	Solid	3050B	
480-200248-10	SS5 (12-24)	Total/NA	Solid	3050B	
480-200248-13	SS6 (0-2)	Total/NA	Solid	3050B	
480-200248-14	SS6 (0-6)	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 636010 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-15	SS6 (6-12)	Total/NA	Solid	3050B	
480-200248-16	SS6 (12-24)	Total/NA	Solid	3050B	
480-200248-17	FDUP_072922	Total/NA	Solid	3050B	
480-200248-18	SB6 (1-2)	Total/NA	Solid	3050B	
MB 480-636010/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-636010/2-A	Lab Control Sample	Total/NA	Solid	3050B	
480-200248-18 MS	SB6 (1-2)	Total/NA	Solid	3050B	
480-200248-18 MSD	SB6 (1-2)	Total/NA	Solid	3050B	

Prep Batch: 636060

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-1	SB6 (0-0.5)	Total/NA	Solid	7471B	
480-200248-2	SB6 (0.5-1)	Total/NA	Solid	7471B	
480-200248-3	SB6 (13-15)	Total/NA	Solid	7471B	
480-200248-6	FDUP2_072922	Total/NA	Solid	7471B	
480-200248-7	SS5 (0-2)	Total/NA	Solid	7471B	
480-200248-8	SS5 (0-6)	Total/NA	Solid	7471B	
480-200248-9	SS5 (6-12)	Total/NA	Solid	7471B	
MB 480-636060/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-636060/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	

Prep Batch: 636061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-10	SS5 (12-24)	Total/NA	Solid	7471B	
480-200248-13	SS6 (0-2)	Total/NA	Solid	7471B	
480-200248-14	SS6 (0-6)	Total/NA	Solid	7471B	
480-200248-15	SS6 (6-12)	Total/NA	Solid	7471B	
480-200248-16	SS6 (12-24)	Total/NA	Solid	7471B	
480-200248-17	FDUP_072922	Total/NA	Solid	7471B	
480-200248-18	SB6 (1-2)	Total/NA	Solid	7471B	
MB 480-636061/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-636061/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	
480-200248-18 MS	SB6 (1-2)	Total/NA	Solid	7471B	
480-200248-18 MSD	SB6 (1-2)	Total/NA	Solid	7471B	

Analysis Batch: 636085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-11	ERB_072822	Total/NA	Water	7470A	635992
480-200248-12	FB_072922	Total/NA	Water	7470A	635992
MB 480-635992/1-A	Method Blank	Total/NA	Water	7470A	635992
LCS 480-635992/2-A	Lab Control Sample	Total/NA	Water	7470A	635992

Analysis Batch: 636171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-11	ERB_072822	Total/NA	Water	6010C	635895
480-200248-12	FB_072922	Total/NA	Water	6010C	635895
MB 480-635895/1-A	Method Blank	Total/NA	Water	6010C	635895
LCS 480-635895/2-A	Lab Control Sample	Total/NA	Water	6010C	635895

Metals

Analysis Batch: 636266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-1	SB6 (0-0.5)	Total/NA	Solid	7471B	636060
480-200248-2	SB6 (0.5-1)	Total/NA	Solid	7471B	636060
480-200248-3	SB6 (13-15)	Total/NA	Solid	7471B	636060
480-200248-6	FDUP2_072922	Total/NA	Solid	7471B	636060
480-200248-7	SS5 (0-2)	Total/NA	Solid	7471B	636060
480-200248-8	SS5 (0-6)	Total/NA	Solid	7471B	636060
480-200248-9	SS5 (6-12)	Total/NA	Solid	7471B	636060
480-200248-10	SS5 (12-24)	Total/NA	Solid	7471B	636061
480-200248-13	SS6 (0-2)	Total/NA	Solid	7471B	636061
480-200248-14	SS6 (0-6)	Total/NA	Solid	7471B	636061
480-200248-15	SS6 (6-12)	Total/NA	Solid	7471B	636061
480-200248-16	SS6 (12-24)	Total/NA	Solid	7471B	636061
480-200248-17	FDUP_072922	Total/NA	Solid	7471B	636061
480-200248-18	SB6 (1-2)	Total/NA	Solid	7471B	636061
MB 480-636060/1-A	Method Blank	Total/NA	Solid	7471B	636060
MB 480-636061/1-A	Method Blank	Total/NA	Solid	7471B	636061
LCSSRM 480-636060/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	636060
LCSSRM 480-636061/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	636061
480-200248-18 MS	SB6 (1-2)	Total/NA	Solid	7471B	636061
480-200248-18 MSD	SB6 (1-2)	Total/NA	Solid	7471B	636061

Analysis Batch: 636339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-1	SB6 (0-0.5)	Total/NA	Solid	6010C	636004
480-200248-2	SB6 (0.5-1)	Total/NA	Solid	6010C	636004
480-200248-3	SB6 (13-15)	Total/NA	Solid	6010C	636004
480-200248-6	FDUP2_072922	Total/NA	Solid	6010C	636004
480-200248-7	SS5 (0-2)	Total/NA	Solid	6010C	636004
MB 480-636004/1-A	Method Blank	Total/NA	Solid	6010C	636004
LCDSRM 480-636004/3-A	Lab Control Sample Dup	Total/NA	Solid	6010C	636004
LCSSRM 480-636004/2-A	Lab Control Sample	Total/NA	Solid	6010C	636004

Analysis Batch: 636347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-11	ERB_072822	Total/NA	Water	6010C	635895
480-200248-12	FB_072922	Total/NA	Water	6010C	635895
MB 480-635895/1-A	Method Blank	Total/NA	Water	6010C	635895
LCS 480-635895/2-A	Lab Control Sample	Total/NA	Water	6010C	635895

Analysis Batch: 636536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-8	SS5 (0-6)	Total/NA	Solid	6010C	636010
480-200248-9	SS5 (6-12)	Total/NA	Solid	6010C	636010
480-200248-10	SS5 (12-24)	Total/NA	Solid	6010C	636010
480-200248-13	SS6 (0-2)	Total/NA	Solid	6010C	636010
480-200248-14	SS6 (0-6)	Total/NA	Solid	6010C	636010
480-200248-15	SS6 (6-12)	Total/NA	Solid	6010C	636010
480-200248-16	SS6 (12-24)	Total/NA	Solid	6010C	636010
480-200248-17	FDUP_072922	Total/NA	Solid	6010C	636010
480-200248-18	SB6 (1-2)	Total/NA	Solid	6010C	636010
MB 480-636010/1-A	Method Blank	Total/NA	Solid	6010C	636010

Metals (Continued)

Analysis Batch: 636536 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSSRM 480-636010/2-A	Lab Control Sample	Total/NA	Solid	6010C	636010
480-200248-18 MS	SB6 (1-2)	Total/NA	Solid	6010C	636010
480-200248-18 MSD	SB6 (1-2)	Total/NA	Solid	6010C	636010

Analysis Batch: 637198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-8	SS5 (0-6)	Total/NA	Solid	6010C	636010
480-200248-9	SS5 (6-12)	Total/NA	Solid	6010C	636010
480-200248-10	SS5 (12-24)	Total/NA	Solid	6010C	636010
480-200248-13	SS6 (0-2)	Total/NA	Solid	6010C	636010
480-200248-14	SS6 (0-6)	Total/NA	Solid	6010C	636010
480-200248-15	SS6 (6-12)	Total/NA	Solid	6010C	636010
480-200248-15	SS6 (6-12)	Total/NA	Solid	6010C	636010
480-200248-16	SS6 (12-24)	Total/NA	Solid	6010C	636010
480-200248-16	SS6 (12-24)	Total/NA	Solid	6010C	636010
480-200248-17	FDUP_072922	Total/NA	Solid	6010C	636010
480-200248-18	SB6 (1-2)	Total/NA	Solid	6010C	636010
MB 480-636010/1-A	Method Blank	Total/NA	Solid	6010C	636010
LCSSRM 480-636010/2-A	Lab Control Sample	Total/NA	Solid	6010C	636010
480-200248-18 MS	SB6 (1-2)	Total/NA	Solid	6010C	636010
480-200248-18 MSD	SB6 (1-2)	Total/NA	Solid	6010C	636010

Prep Batch: 637262

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-8	SS5 (0-6)	Total/NA	Solid	3050B	
480-200248-9	SS5 (6-12)	Total/NA	Solid	3050B	
480-200248-10	SS5 (12-24)	Total/NA	Solid	3050B	
480-200248-13	SS6 (0-2)	Total/NA	Solid	3050B	
480-200248-14	SS6 (0-6)	Total/NA	Solid	3050B	
480-200248-15	SS6 (6-12)	Total/NA	Solid	3050B	
480-200248-16	SS6 (12-24)	Total/NA	Solid	3050B	
480-200248-17	FDUP_072922	Total/NA	Solid	3050B	
480-200248-18	SB6 (1-2)	Total/NA	Solid	3050B	
MB 480-637262/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-637262/2-A	Lab Control Sample	Total/NA	Solid	3050B	
480-200248-17 MS	FDUP_072922	Total/NA	Solid	3050B	
480-200248-17 MSD	FDUP_072922	Total/NA	Solid	3050B	

Analysis Batch: 637788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-8	SS5 (0-6)	Total/NA	Solid	6010C	637262
480-200248-9	SS5 (6-12)	Total/NA	Solid	6010C	637262
480-200248-10	SS5 (12-24)	Total/NA	Solid	6010C	637262
480-200248-13	SS6 (0-2)	Total/NA	Solid	6010C	637262
480-200248-17	FDUP_072922	Total/NA	Solid	6010C	637262
480-200248-18	SB6 (1-2)	Total/NA	Solid	6010C	637262
MB 480-637262/1-A	Method Blank	Total/NA	Solid	6010C	637262
LCSSRM 480-637262/2-A	Lab Control Sample	Total/NA	Solid	6010C	637262
480-200248-17 MS	FDUP_072922	Total/NA	Solid	6010C	637262
480-200248-17 MSD	FDUP_072922	Total/NA	Solid	6010C	637262

QC Association Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Metals

Analysis Batch: 637983

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-14	SS6 (0-6)	Total/NA	Solid	6010C	637262
480-200248-15	SS6 (6-12)	Total/NA	Solid	6010C	637262
480-200248-16	SS6 (12-24)	Total/NA	Solid	6010C	637262

General Chemistry

Analysis Batch: 635764

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-200248-1	SB6 (0-0.5)	Total/NA	Solid	Moisture	
480-200248-2	SB6 (0.5-1)	Total/NA	Solid	Moisture	
480-200248-3	SB6 (13-15)	Total/NA	Solid	Moisture	
480-200248-6	FDUP2_072922	Total/NA	Solid	Moisture	
480-200248-7	SS5 (0-2)	Total/NA	Solid	Moisture	
480-200248-8	SS5 (0-6)	Total/NA	Solid	Moisture	
480-200248-9	SS5 (6-12)	Total/NA	Solid	Moisture	
480-200248-10	SS5 (12-24)	Total/NA	Solid	Moisture	
480-200248-13	SS6 (0-2)	Total/NA	Solid	Moisture	
480-200248-14	SS6 (0-6)	Total/NA	Solid	Moisture	
480-200248-15	SS6 (6-12)	Total/NA	Solid	Moisture	
480-200248-16	SS6 (12-24)	Total/NA	Solid	Moisture	
480-200248-17	FDUP_072922	Total/NA	Solid	Moisture	
480-200248-18	SB6 (1-2)	Total/NA	Solid	Moisture	
480-200248-18 MS	SB6 (1-2)	Total/NA	Solid	Moisture	
480-200248-18 MSD	SB6 (1-2)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Client Sample ID: SB6 (0-0.5)
Date Collected: 07/29/22 08:50
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	635764	DSC	EET BUF	08/01/22 16:50

Client Sample ID: SB6 (0-0.5)
Date Collected: 07/29/22 08:50
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-1
Matrix: Solid
Percent Solids: 88.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			636951	CDC	EET BUF	07/30/22 12:00
Total/NA	Analysis	8260C		1	636985	CDC	EET BUF	08/11/22 15:10
Total/NA	Prep	3550C			636076	SJM	EET BUF	08/03/22 15:56
Total/NA	Analysis	8270D		5	636722	PJQ	EET BUF	08/09/22 19:33
Total/NA	Prep	SHAKE			182393	EK	EET BUR	08/05/22 08:30
Total/NA	Analysis	537 IDA		1	182423	ND	EET BUR	08/05/22 20:34
Total/NA	Prep	3050B			636004	NZG	EET BUF	08/03/22 13:24
Total/NA	Analysis	6010C		1	636339	BMB	EET BUF	08/04/22 23:39
Total/NA	Prep	7471B			636060	NVK	EET BUF	08/04/22 10:17
Total/NA	Analysis	7471B		1	636266	NVK	EET BUF	08/04/22 13:00

Client Sample ID: SB6 (0.5-1)
Date Collected: 07/29/22 09:05
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	635764	DSC	EET BUF	08/01/22 16:50

Client Sample ID: SB6 (0.5-1)
Date Collected: 07/29/22 09:05
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-2
Matrix: Solid
Percent Solids: 91.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			636951	CDC	EET BUF	07/30/22 12:00
Total/NA	Analysis	8260C		1	636985	CDC	EET BUF	08/11/22 15:34
Total/NA	Prep	3550C			636076	SJM	EET BUF	08/03/22 15:56
Total/NA	Analysis	8270D		10	636722	PJQ	EET BUF	08/09/22 19:58
Total/NA	Prep	SHAKE			182393	EK	EET BUR	08/05/22 08:30
Total/NA	Analysis	537 IDA		1	182423	ND	EET BUR	08/05/22 20:42
Total/NA	Prep	3050B			636004	NZG	EET BUF	08/03/22 13:24
Total/NA	Analysis	6010C		1	636339	BMB	EET BUF	08/04/22 23:43
Total/NA	Prep	7471B			636060	NVK	EET BUF	08/04/22 10:17
Total/NA	Analysis	7471B		1	636266	NVK	EET BUF	08/04/22 13:04

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Client Sample ID: SB6 (13-15)
Date Collected: 07/29/22 09:30
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	635764	DSC	EET BUF	08/01/22 16:50

Client Sample ID: SB6 (13-15)
Date Collected: 07/29/22 09:30
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-3
Matrix: Solid
Percent Solids: 74.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			636617	CDC	EET BUF	07/30/22 12:00
Total/NA	Analysis	8260C		1	636797	CDC	EET BUF	08/10/22 16:29
Total/NA	Prep	3550C			636076	SJM	EET BUF	08/03/22 15:56
Total/NA	Analysis	8270D		1	636722	PJQ	EET BUF	08/09/22 20:22
Total/NA	Prep	SHAKE			182393	EK	EET BUR	08/05/22 08:30
Total/NA	Analysis	537 IDA		1	182423	ND	EET BUR	08/05/22 20:50
Total/NA	Prep	3050B			636004	NZG	EET BUF	08/03/22 13:24
Total/NA	Analysis	6010C		1	636339	BMB	EET BUF	08/04/22 23:47
Total/NA	Prep	7471B			636060	NVK	EET BUF	08/04/22 10:17
Total/NA	Analysis	7471B		1	636266	NVK	EET BUF	08/04/22 13:06

Client Sample ID: FDUP2_072922
Date Collected: 07/29/22 13:50
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	635764	DSC	EET BUF	08/01/22 16:50

Client Sample ID: FDUP2_072922
Date Collected: 07/29/22 13:50
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-6
Matrix: Solid
Percent Solids: 96.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			636757	CDC	EET BUF	07/30/22 12:00
Total/NA	Analysis	8260C		1	636948	LCH	EET BUF	08/11/22 03:11
Total/NA	Prep	3550C			636076	SJM	EET BUF	08/03/22 15:56
Total/NA	Analysis	8270D		1	636722	PJQ	EET BUF	08/09/22 20:46
Total/NA	Prep	3050B			636004	NZG	EET BUF	08/03/22 13:24
Total/NA	Analysis	6010C		1	636339	BMB	EET BUF	08/05/22 00:02
Total/NA	Prep	7471B			636060	NVK	EET BUF	08/04/22 10:17
Total/NA	Analysis	7471B		1	636266	NVK	EET BUF	08/04/22 13:07

Client Sample ID: SS5 (0-2)
Date Collected: 07/29/22 13:25
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	635764	DSC	EET BUF	08/01/22 16:50

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Client Sample ID: SS5 (0-2)
Date Collected: 07/29/22 13:25
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-7
Matrix: Solid
Percent Solids: 90.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			636951	CDC	EET BUF	07/30/22 12:00
Total/NA	Analysis	8260C		1	636985	CDC	EET BUF	08/11/22 15:59
Total/NA	Prep	3550C			636076	SJM	EET BUF	08/03/22 15:56
Total/NA	Analysis	8270D		5	636722	PJQ	EET BUF	08/09/22 21:10
Total/NA	Prep	3050B			636004	NZG	EET BUF	08/03/22 13:24
Total/NA	Analysis	6010C		1	636339	BMB	EET BUF	08/05/22 00:06
Total/NA	Prep	7471B			636060	NVK	EET BUF	08/04/22 10:17
Total/NA	Analysis	7471B		1	636266	NVK	EET BUF	08/04/22 13:08

Client Sample ID: SS5 (0-6)
Date Collected: 07/29/22 13:30
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	635764	DSC	EET BUF	08/01/22 16:50

Client Sample ID: SS5 (0-6)
Date Collected: 07/29/22 13:30
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-8
Matrix: Solid
Percent Solids: 91.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			636617	CDC	EET BUF	07/30/22 12:00
Total/NA	Analysis	8260C		1	636797	CDC	EET BUF	08/10/22 17:17
Total/NA	Prep	3550C			636076	SJM	EET BUF	08/03/22 15:56
Total/NA	Analysis	8270D		1	636722	PJQ	EET BUF	08/09/22 21:34
Total/NA	Prep	3050B			636010	NZG	EET BUF	08/04/22 13:08
Total/NA	Analysis	6010C		1	637198	LMH	EET BUF	08/11/22 16:12
Total/NA	Prep	3050B			637262	VAK	EET BUF	08/15/22 12:22
Total/NA	Analysis	6010C		1	637788	BMB	EET BUF	08/16/22 21:32
Total/NA	Prep	3050B			636010	NZG	EET BUF	08/04/22 13:08
Total/NA	Analysis	6010C		1	636536	LMH	EET BUF	08/05/22 23:31
Total/NA	Prep	7471B			636060	NVK	EET BUF	08/04/22 10:17
Total/NA	Analysis	7471B		1	636266	NVK	EET BUF	08/04/22 13:10

Client Sample ID: SS5 (6-12)
Date Collected: 07/29/22 13:35
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	635764	DSC	EET BUF	08/01/22 16:50

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Client Sample ID: SS5 (6-12)

Lab Sample ID: 480-200248-9
Date Collected: 07/29/22 13:35
Matrix: Solid
Date Received: 07/30/22 10:30
Percent Solids: 94.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			636617	CDC	EET BUF	07/30/22 12:00
Total/NA	Analysis	8260C		1	636797	CDC	EET BUF	08/10/22 17:42
Total/NA	Prep	3550C			637284	SJM	EET BUF	08/12/22 15:31
Total/NA	Analysis	8270D		5	637369	JMM	EET BUF	08/15/22 11:49
Total/NA	Prep	3050B			636010	NZG	EET BUF	08/04/22 13:08
Total/NA	Analysis	6010C		1	637198	LMH	EET BUF	08/11/22 16:16
Total/NA	Prep	3050B			637262	VAK	EET BUF	08/15/22 12:22
Total/NA	Analysis	6010C		1	637788	BMB	EET BUF	08/16/22 21:36
Total/NA	Prep	3050B			636010	NZG	EET BUF	08/04/22 13:08
Total/NA	Analysis	6010C		1	636536	LMH	EET BUF	08/05/22 23:47
Total/NA	Prep	7471B			636060	NVK	EET BUF	08/04/22 10:17
Total/NA	Analysis	7471B		1	636266	NVK	EET BUF	08/04/22 13:11

Client Sample ID: SS5 (12-24)

Lab Sample ID: 480-200248-10
Date Collected: 07/29/22 13:40
Matrix: Solid
Date Received: 07/30/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	635764	DSC	EET BUF	08/01/22 16:50

Client Sample ID: SS5 (12-24)

Lab Sample ID: 480-200248-10
Date Collected: 07/29/22 13:40
Matrix: Solid
Date Received: 07/30/22 10:30
Percent Solids: 96.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			636617	CDC	EET BUF	07/30/22 12:00
Total/NA	Analysis	8260C		1	636797	CDC	EET BUF	08/10/22 18:06
Total/NA	Prep	3550C			636076	SJM	EET BUF	08/03/22 15:56
Total/NA	Analysis	8270D		1	636722	PJQ	EET BUF	08/09/22 22:23
Total/NA	Prep	3050B			636010	NZG	EET BUF	08/04/22 13:08
Total/NA	Analysis	6010C		1	637198	LMH	EET BUF	08/11/22 16:32
Total/NA	Prep	3050B			637262	VAK	EET BUF	08/15/22 12:22
Total/NA	Analysis	6010C		1	637788	BMB	EET BUF	08/16/22 21:40
Total/NA	Prep	3050B			636010	NZG	EET BUF	08/04/22 13:08
Total/NA	Analysis	6010C		1	636536	LMH	EET BUF	08/05/22 23:51
Total/NA	Prep	7471B			636061	NVK	EET BUF	08/04/22 10:17
Total/NA	Analysis	7471B		1	636266	NVK	EET BUF	08/04/22 13:15

Client Sample ID: ERB_072822

Lab Sample ID: 480-200248-11
Date Collected: 07/28/22 09:00
Matrix: Water
Date Received: 07/30/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	635636	ATG	EET BUF	08/01/22 21:33

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Client Sample ID: ERB_072822

Lab Sample ID: 480-200248-11

Date Collected: 07/28/22 09:00

Matrix: Water

Date Received: 07/30/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			635797	MS	EET BUF	08/02/22 08:24
Total/NA	Analysis	8270D		1	636252	PJQ	EET BUF	08/05/22 02:20
Total/NA	Prep	3510C			635922	CMC	EET BUF	08/02/22 16:05
Total/NA	Analysis	8270D SIM ID		1	636027	PJQ	EET BUF	08/03/22 20:02
Total/NA	Prep	3535			182374	CM	EET BUR	08/04/22 11:45
Total/NA	Analysis	537 IDA		1	182386	ND	EET BUR	08/04/22 18:06
Total/NA	Prep	3005A			635895	NVK	EET BUF	08/03/22 09:32
Total/NA	Analysis	6010C		1	636347	BMB	EET BUF	08/04/22 18:09
Total/NA	Prep	3005A			635895	NVK	EET BUF	08/03/22 09:32
Total/NA	Analysis	6010C		1	636171	BMB	EET BUF	08/04/22 01:05
Total/NA	Prep	7470A			635992	NVK	EET BUF	08/03/22 11:05
Total/NA	Analysis	7470A		1	636085	NVK	EET BUF	08/03/22 15:45

Client Sample ID: FB_072922

Lab Sample ID: 480-200248-12

Date Collected: 07/29/22 09:40

Matrix: Water

Date Received: 07/30/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	635717	ATG	EET BUF	08/02/22 08:24
Total/NA	Prep	3510C			635797	MS	EET BUF	08/02/22 08:24
Total/NA	Analysis	8270D		1	636252	PJQ	EET BUF	08/05/22 02:48
Total/NA	Prep	3510C	RE		636585	CMC	EET BUF	08/08/22 22:12
Total/NA	Analysis	8270D	RE	1	636678	JMM	EET BUF	08/09/22 19:19
Total/NA	Prep	3510C			635922	CMC	EET BUF	08/02/22 16:05
Total/NA	Analysis	8270D SIM ID		1	636027	PJQ	EET BUF	08/03/22 20:24
Total/NA	Prep	3535			182374	CM	EET BUR	08/04/22 11:45
Total/NA	Analysis	537 IDA		1	182386	ND	EET BUR	08/04/22 18:14
Total/NA	Prep	3005A			635895	NVK	EET BUF	08/03/22 09:32
Total/NA	Analysis	6010C		1	636347	BMB	EET BUF	08/04/22 18:13
Total/NA	Prep	3005A			635895	NVK	EET BUF	08/03/22 09:32
Total/NA	Analysis	6010C		1	636171	BMB	EET BUF	08/04/22 01:21
Total/NA	Prep	7470A			635992	NVK	EET BUF	08/03/22 11:05
Total/NA	Analysis	7470A		1	636085	NVK	EET BUF	08/03/22 15:47

Client Sample ID: SS6 (0-2)

Lab Sample ID: 480-200248-13

Date Collected: 07/29/22 14:40

Matrix: Solid

Date Received: 07/30/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	635764	DSC	EET BUF	08/01/22 16:50

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Client Sample ID: SS6 (0-2)

Lab Sample ID: 480-200248-13
Date Collected: 07/29/22 14:40
Matrix: Solid
Date Received: 07/30/22 10:30
Percent Solids: 93.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			636951	CDC	EET BUF	07/30/22 12:00
Total/NA	Analysis	8260C		1	636985	CDC	EET BUF	08/11/22 16:23
Total/NA	Prep	3550C			637284	SJM	EET BUF	08/12/22 15:31
Total/NA	Analysis	8270D		1	637369	JMM	EET BUF	08/15/22 12:13
Total/NA	Prep	3050B			636010	NZG	EET BUF	08/04/22 13:08
Total/NA	Analysis	6010C		1	637198	LMH	EET BUF	08/11/22 16:36
Total/NA	Prep	3050B			637262	VAK	EET BUF	08/15/22 12:22
Total/NA	Analysis	6010C		1	637788	BMB	EET BUF	08/16/22 21:44
Total/NA	Prep	3050B			636010	NZG	EET BUF	08/04/22 13:08
Total/NA	Analysis	6010C		1	636536	LMH	EET BUF	08/05/22 23:55
Total/NA	Prep	7471B			636061	NVK	EET BUF	08/04/22 10:17
Total/NA	Analysis	7471B		1	636266	NVK	EET BUF	08/04/22 13:16

Client Sample ID: SS6 (0-6)

Lab Sample ID: 480-200248-14
Date Collected: 07/29/22 14:25
Matrix: Solid
Date Received: 07/30/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	635764	DSC	EET BUF	08/01/22 16:50

Client Sample ID: SS6 (0-6)

Lab Sample ID: 480-200248-14
Date Collected: 07/29/22 14:25
Matrix: Solid
Date Received: 07/30/22 10:30
Percent Solids: 90.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			637228	LCH	EET BUF	07/30/22 12:00
Total/NA	Analysis	8260C		1	637219	CDC	EET BUF	08/12/22 14:48
Total/NA	Prep	3550C			637284	SJM	EET BUF	08/12/22 15:31
Total/NA	Analysis	8270D		1	637369	JMM	EET BUF	08/15/22 12:38
Total/NA	Prep	3050B			636010	NZG	EET BUF	08/04/22 13:08
Total/NA	Analysis	6010C		1	637198	LMH	EET BUF	08/11/22 16:40
Total/NA	Prep	3050B			637262	VAK	EET BUF	08/15/22 12:22
Total/NA	Analysis	6010C		5	637983	BMB	EET BUF	08/17/22 16:50
Total/NA	Prep	3050B			636010	NZG	EET BUF	08/04/22 13:08
Total/NA	Analysis	6010C		1	636536	LMH	EET BUF	08/05/22 23:59
Total/NA	Prep	7471B			636061	NVK	EET BUF	08/04/22 10:17
Total/NA	Analysis	7471B		1	636266	NVK	EET BUF	08/04/22 13:20

Client Sample ID: SS6 (6-12)

Lab Sample ID: 480-200248-15
Date Collected: 07/29/22 14:30
Matrix: Solid
Date Received: 07/30/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	635764	DSC	EET BUF	08/01/22 16:50

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Client Sample ID: SS6 (6-12)

Date Collected: 07/29/22 14:30
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-15

Matrix: Solid
Percent Solids: 95.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			637228	LCH	EET BUF	07/30/22 12:00
Total/NA	Analysis	8260C		1	637219	CDC	EET BUF	08/12/22 15:13
Total/NA	Prep	3550C			636076	SJM	EET BUF	08/03/22 15:56
Total/NA	Analysis	8270D		1	636722	PJQ	EET BUF	08/09/22 23:36
Total/NA	Prep	3050B			636010	NZG	EET BUF	08/04/22 13:08
Total/NA	Analysis	6010C		1	637198	LMH	EET BUF	08/11/22 16:44
Total/NA	Prep	3050B			636010	NZG	EET BUF	08/04/22 13:08
Total/NA	Analysis	6010C		2	637198	LMH	EET BUF	08/11/22 17:26
Total/NA	Prep	3050B			637262	VAK	EET BUF	08/15/22 12:22
Total/NA	Analysis	6010C		5	637983	BMB	EET BUF	08/17/22 16:54
Total/NA	Prep	3050B			636010	NZG	EET BUF	08/04/22 13:08
Total/NA	Analysis	6010C		1	636536	LMH	EET BUF	08/06/22 00:02
Total/NA	Prep	7471B			636061	NVK	EET BUF	08/04/22 10:17
Total/NA	Analysis	7471B		1	636266	NVK	EET BUF	08/04/22 13:21

Client Sample ID: SS6 (12-24)

Date Collected: 07/29/22 14:35
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-16

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	635764	DSC	EET BUF	08/01/22 16:50

Client Sample ID: SS6 (12-24)

Date Collected: 07/29/22 14:35
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-16

Matrix: Solid
Percent Solids: 94.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			637228	LCH	EET BUF	07/30/22 12:00
Total/NA	Analysis	8260C		1	637219	CDC	EET BUF	08/12/22 15:37
Total/NA	Prep	3550C			637284	SJM	EET BUF	08/12/22 15:31
Total/NA	Analysis	8270D		1	637369	JMM	EET BUF	08/15/22 13:02
Total/NA	Prep	3050B			636010	NZG	EET BUF	08/04/22 13:08
Total/NA	Analysis	6010C		1	637198	LMH	EET BUF	08/11/22 16:48
Total/NA	Prep	3050B			636010	NZG	EET BUF	08/04/22 13:08
Total/NA	Analysis	6010C		5	637198	LMH	EET BUF	08/11/22 17:30
Total/NA	Prep	3050B			637262	VAK	EET BUF	08/15/22 12:22
Total/NA	Analysis	6010C		5	637983	BMB	EET BUF	08/17/22 16:58
Total/NA	Prep	3050B			636010	NZG	EET BUF	08/04/22 13:08
Total/NA	Analysis	6010C		1	636536	LMH	EET BUF	08/06/22 00:06
Total/NA	Prep	7471B			636061	NVK	EET BUF	08/04/22 10:17
Total/NA	Analysis	7471B		1	636266	NVK	EET BUF	08/04/22 13:23

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Client Sample ID: FDUP_072922
Date Collected: 07/29/22 09:15
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-17
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	635764	DSC	EET BUF	08/01/22 16:50

Client Sample ID: FDUP_072922
Date Collected: 07/29/22 09:15
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-17
Matrix: Solid
Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			637228	LCH	EET BUF	07/30/22 12:00
Total/NA	Analysis	8260C		1	637219	CDC	EET BUF	08/12/22 16:01
Total/NA	Prep	3550C			636076	SJM	EET BUF	08/03/22 15:56
Total/NA	Analysis	8270D		5	636722	PJQ	EET BUF	08/10/22 00:24
Total/NA	Prep	SHAKE			182393	EK	EET BUR	08/05/22 08:30
Total/NA	Analysis	537 IDA		1	182423	ND	EET BUR	08/05/22 20:58
Total/NA	Prep	3050B			636010	NZG	EET BUF	08/04/22 13:08
Total/NA	Analysis	6010C		1	637198	LMH	EET BUF	08/11/22 16:51
Total/NA	Prep	3050B			637262	VAK	EET BUF	08/15/22 12:22
Total/NA	Analysis	6010C		1	637788	BMB	EET BUF	08/16/22 22:11
Total/NA	Prep	3050B			636010	NZG	EET BUF	08/04/22 13:08
Total/NA	Analysis	6010C		1	636536	LMH	EET BUF	08/06/22 00:10
Total/NA	Prep	7471B			636061	NVK	EET BUF	08/04/22 10:17
Total/NA	Analysis	7471B		1	636266	NVK	EET BUF	08/04/22 13:24

Client Sample ID: SB6 (1-2)
Date Collected: 07/29/22 09:00
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-18
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	635764	DSC	EET BUF	08/01/22 16:50

Client Sample ID: SB6 (1-2)
Date Collected: 07/29/22 09:00
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-18
Matrix: Solid
Percent Solids: 90.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			636757	CDC	EET BUF	07/30/22 12:00
Total/NA	Analysis	8260C		1	636948	LCH	EET BUF	08/11/22 05:13
Total/NA	Prep	3550C			636076	SJM	EET BUF	08/03/22 15:56
Total/NA	Analysis	8270D		10	636722	PJQ	EET BUF	08/09/22 19:09
Total/NA	Prep	SHAKE			182393	EK	EET BUR	08/05/22 08:30
Total/NA	Analysis	537 IDA		1	182423	ND	EET BUR	08/05/22 21:07
Total/NA	Prep	3050B			636010	NZG	EET BUF	08/04/22 13:08
Total/NA	Analysis	6010C		1	637198	LMH	EET BUF	08/11/22 16:55
Total/NA	Prep	3050B			637262	VAK	EET BUF	08/15/22 12:22
Total/NA	Analysis	6010C		1	637788	BMB	EET BUF	08/16/22 22:30

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Client Sample ID: SB6 (1-2)

Date Collected: 07/29/22 09:00
Date Received: 07/30/22 10:30

Lab Sample ID: 480-200248-18

Matrix: Solid
Percent Solids: 90.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			636010	NZG	EET BUF	08/04/22 13:08
Total/NA	Analysis	6010C		1	636536	LMH	EET BUF	08/06/22 00:14
Total/NA	Prep	7471B			636061	NVK	EET BUF	08/04/22 10:17
Total/NA	Analysis	7471B		1	636266	NVK	EET BUF	08/04/22 13:25

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	1,2,3-Trimethylbenzene
8260C	5035A_L	Solid	1,2,3-Trimethylbenzene
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Laboratory: Eurofins Burlington

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2336	02-25-23
Connecticut	State	PH-0751	09-30-23
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	05-17-23
Florida	NELAP	E87467	06-30-23
Minnesota	NELAP	050-999-436	12-31-22
New Hampshire	NELAP	2006	12-18-22
New Jersey	NELAP	VT972	06-30-23
New York	NELAP	10391	04-01-23
Pennsylvania	NELAP	68-00489	04-30-23
Rhode Island	State	LAO00298	12-30-22
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00272	10-30-23
Vermont	State	VT4000	02-10-23
Virginia	NELAP	460209	12-14-22
Wisconsin	State	399133350	08-07-22

Method Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	EET BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	EET BUF
537 IDA	EPA 537 Isotope Dilution	EPA	EET BUR
6010C	Metals (ICP)	SW846	EET BUF
7470A	Mercury (CVAA)	SW846	EET BUF
7471B	Mercury (CVAA)	SW846	EET BUF
Moisture	Percent Moisture	EPA	EET BUF
3005A	Preparation, Total Metals	SW846	EET BUF
3050B	Preparation, Metals	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
3535	Solid-Phase Extraction (SPE)	SW846	EET BUR
3550C	Ultrasonic Extraction	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF
5035A_L	Closed System Purge and Trap	SW846	EET BUF
7470A	Preparation, Mercury	SW846	EET BUF
7471B	Preparation, Mercury	SW846	EET BUF
SHAKE	Shake Extraction with Ultrasonic Bath Extraction	SW846	EET BUR

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Sample Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-200248-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-200248-1	SB6 (0-0.5)	Solid	07/29/22 08:50	07/30/22 10:30
480-200248-2	SB6 (0.5-1)	Solid	07/29/22 09:05	07/30/22 10:30
480-200248-3	SB6 (13-15)	Solid	07/29/22 09:30	07/30/22 10:30
480-200248-6	FDUP2_072922	Solid	07/29/22 13:50	07/30/22 10:30
480-200248-7	SS5 (0-2)	Solid	07/29/22 13:25	07/30/22 10:30
480-200248-8	SS5 (0-6)	Solid	07/29/22 13:30	07/30/22 10:30
480-200248-9	SS5 (6-12)	Solid	07/29/22 13:35	07/30/22 10:30
480-200248-10	SS5 (12-24)	Solid	07/29/22 13:40	07/30/22 10:30
480-200248-11	ERB_072822	Water	07/28/22 09:00	07/30/22 10:30
480-200248-12	FB_072922	Water	07/29/22 09:40	07/30/22 10:30
480-200248-13	SS6 (0-2)	Solid	07/29/22 14:40	07/30/22 10:30
480-200248-14	SS6 (0-6)	Solid	07/29/22 14:25	07/30/22 10:30
480-200248-15	SS6 (6-12)	Solid	07/29/22 14:30	07/30/22 10:30
480-200248-16	SS6 (12-24)	Solid	07/29/22 14:35	07/30/22 10:30
480-200248-17	FDUP_072922	Solid	07/29/22 09:15	07/30/22 10:30
480-200248-18	SB6 (1-2)	Solid	07/29/22 09:00	07/30/22 10:30

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: K. Zatwarnicki	Lab PM: Beninati, John	Carrier Tracking No(s):	COC No: 480-175097-37694.2
Client Contact: Mr. Glenn Esler	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Integral Consulting Inc	PWSID:			Job #:
Address: 319 SW Washington Ave Suite 1150	Due Date Requested:			
City: Portland	TAT Requested (days): Per Quote			
State, Zip: OR, 97204	Compliance Project: Δ Yes Δ No			
Phone: 503-943-3617(Tel)	PO #: Purchase Order not required			
Email: gesler@integral-corp.com	WO #:			
Project Name: EF1017 - Refractories - Surface Soil	Project #: 48025298			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs (LL)	6010C, 7471B	8270D - TCL SVOCs - to include 1,4 Dioxane	PFC_IDA - PFAS - NY 21 Analytes	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N		
SB6 (0-0.5)	7/29/22	0850	G	Solid	N	N	1	1	1	1	4	
SB6 (0.5-1)	7/29/22	0905	G	Solid								
SB6 (13-15)	7/29/22	0930	G	Solid								

480-200248 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) NYSDEC Cat B / Integral Specific EDD

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Katelyn Zatwarnicki	7/29/22 1400			7/30/22 0830	FD
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 3.0, 4.6, 4.2, 3.7, 4.1, 3.1 # ICE

Ver: 06/08/2021

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: Integral Cooler 3	Lab PM: Beninati, John	Carrier Tracking No(s):	COC No: 480-175097-37694.2
Client Contact: Mr. Glenn Esler	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Integral Consulting Inc	PWSID:	Analysis Requested		Job #:
Address: 319 SW Washington Ave Suite 1150	Due Date Requested:			Preservation Codes: A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Y - Trizma; Z - other (specify); Other:
City: Portland	TAT Requested (days): per Quote			
State, Zip: OR, 97204	Compliance Project: Δ Yes Δ No			
Phone: 503-943-3617(Tel)	PO #: Purchase Order not required			
Email: gesler@integral-corp.com	WO #:			
Project Name: EF1017 - Refractories - Surface Soil	Project #: 48025298			
Site: Refractories	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs (LL)	8010C, 7471B	8270D - TCL SVOCs - to include 1,4 Dioxane	PFC_IDA - PFAS - NY 21 Analytes	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N		
SB6 (1-2) MSD	7/29/22	1005	G	Solid	N	Y	1	1	1	1	4	MS in cooler 2
SB6 (15+20) Archive	7/29/22	0950	G	Solid	N	N	+	+	+		2	Hold until notified Freeze one
SB6 (13-15) Archive	7/29/22	0945	G	Solid	N	N	+	+	+		4	Hold until notified. Freeze 2
FDUP2-072922	7/29/22	1350	G	Solid	N	N	1	1	1			

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☒ Archive For until instructed Months

Deliverable Requested: I, II, III, IV, Other (specify) NYSDEC Cat B / Integral Specific EDD

Special Instructions/QC Requirements:

Empty Kit Relinquished by: Date: Time: Method of Shipment: fedex

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Kalelyn Zatowarnicki	7/29/22 1500	Integral	See PS1		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

8/22/2022

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Integral Cooler 5	Lab PM: Beninati, John	Carrier Tracking No(s):	COC No: 480-175097-37694.2
Client Contact: Mr. Glenn Esler	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Integral Consulting Inc	PWSID:	Analysis Requested		Job #:
Address: 319 SW Washington Ave Suite 1150	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify), Other:
City: Portland	TAT Requested (days): Per Quote			
State, Zip: OR, 97204	Compliance Project: Δ Yes Δ No			
Phone: 503-943-3617(Tel)	PO #: Purchase Order not required			
Email: gesler@integral-corp.com	WO #:			
Project Name: EF1017 - Refractories - Surface Soil	Project #: 48025298			
Site: Refractories	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs (LL)	6010C, 7471B	8270D - TCL SVOCs - [illegible]	PFC_IDA - PFAS - NY 21 Analytes	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N		
SS5 (0-2)	7/29/22	1325	G	Solid	N	N	1	1	1		3	
SS5 (0-4)		1330									3	
SS5 (4-12)		1335									3	
SS5 (12-24)		1340									3	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) NYSDEC Cat B / Integral Specific EDS

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Katelyn Zettwartuki	7/29/22 1630	Integral	see pg 1		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

8/22/2022

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Integral	Lab PM: Beninati, John	Carrier Tracking No(s):	COC No: 480-175097-37694.2
Client Contact: Mr. Glenn Esler	Phone: Cooler 6	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Integral Consulting Inc	PWSID:	Analysis Requested		Job #:
Address: 319 SW Washington Ave Suite 1150	Due Date Requested:			Preservation Codes: A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Y - Trizma; Z - other (specify); Other:
City: Portland	TAT Requested (days): per Quote			
State, Zip: OR, 97204	Compliance Project: Δ Yes Δ No			
Phone: 503-943-3617(Tel)	PO #: Purchase Order not required			
Email: gesler@integral-corp.com	WO #:			
Project Name: EF1017 - Refractories - Surface Soil	Project #: 48025298			
Site:	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs (LL)	6010C, 7471B	8270D - TCL SVOCs - target list + 1,4 Dioxane	PFC_IDA - PFAS - NY 21 Analytes	1,4 Dioxane	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N			
ERB_072822	7/28/22	0900	-	BLANK			3	1	2	2	2		
FB_072922	7/29/22	0940	-	BLANK			3	1	2	2	2		

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) NYSDEC CatB / Integral Special EDD

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Kathelyn Zawramicki	7/29/22 1640	Integral	see psl		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

8/22/2022

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Integral	Lab PM: Beninati, John	Carrier Tracking No(s):	COC No: 480-175097-37694.2
Client Contact: Mr. Glenn Esler	Phone: Cooler 4	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Integral Consulting Inc	PWSID:	Analysis Requested		Job #:
Address: 319 SW Washington Ave Suite 1150	Due Date Requested:			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
City: Portland	TAT Requested (days): per Quote			
State, Zip: OR, 97204	Compliance Project: Δ Yes Δ No			
Phone: 503-943-3617(Tel)	PO #: Purchase Order not required			
Email: gesler@integral-corp.com	WO #:			Other:
Project Name: EF1017 - Refractories - Surface Soil	Project #: 48025298			
Site: Refractories	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs (LL)	6010C, 7471B	8270D - TCL SVOCs - [illegible] Dioxane	PFC_IDA - PFAS - NY 21 Analytes	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N		
SS6 (0-2)	7/29/22	1440	G	Solid	N	N	1	1	1		3	
SS6 (0-6)	↓	1425	↓	↓	↓	↓	↓	↓	↓		3	
SS6 (6-12)		1430									3	
SS6 (12-24)		1435									3	
											3	XZ

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) NYSDEC Cat B / Integral Specific EDD

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Katilyn Zatwarnicki	7/29/22 1430	Integral	See PSL		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

8/22/2022

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Integral	Lab PM: Beninati, John	Carrier Tracking No(s):	COC No: 480-175097-37694.2
Client Contact: Mr. Glenn Esler	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Integral Consulting Inc	PWSID:			Job #:

Address: 319 SW Washington Ave Suite 1150	Due Date Requested:	Analysis Requested	Preservation Codes:
City: Portland	TAT Requested (days): per Quote		A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Y - Trizma; Z - other (specify)
State, Zip: OR, 97204	Compliance Project: Δ Yes Δ No		
Phone: 503-943-3617(Tel)	PO #: Purchase Order not required		
Email: gesler@integral-corp.com	WO #:		Other:
Project Name: EF1017 - Refractories - Surface Soil	Project #: 48025298		
Site: Refractories	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs (LL)	6010C, 7471B	8270D - TCL SVOCs - to include 1,4 Dioxane	PFC_IDA - PFAS - NY 21 Analytes	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N		
FDUP_072922	7/29/22	0915	G	Solid	N	N	1	1	1	1	4	
SB6 (1-2)	7/29/22	0900	G	Solid	N	N	1	1	1	1	4	
SB6 (1-2) MS	7/29/22	1000	G	Solid	N	Y	1	1	1	1	4	MSD in cooler 3

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) NYSDEC Cat B / Integral Specific EDD

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

	Date/Time	Company	Received by	Date/Time	Company
Relinquished by: Katelyn Zatwarnicki	7/29/22 1430	Integral	See PS1		
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

8/22/2022

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

480-200248 Chain of Custody

fins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Beninati, John		3.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New York		Job #: 480-200248-1
Address: 530 Community Drive, Suite 11,	Due Date Requested: 8/15/2022			
City: South Burlington	TAT Requested (days):			
State, Zip: VT, 05403				
Phone: 802-660-1990(Tel) 802-660-1919(Fax)	PO #:			
Email:	WO #:			
Project Name: Refractories	Project #: 48025298			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA/Shake_Bath_14D PFAS - NY 21 Analytes	PFC_IDA/3535_IVWT PFAS - NY 21 Analytes	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
SB6 (0-0.5) (480-200248-1)	7/29/22	08:50 Eastern		Solid			X		1	
SB6 (0.5-1) (480-200248-2)	7/29/22	09.05 Eastern		Solid			X		1	
SB6 (13-15) (480-200248-3)	7/29/22	09:30 Eastern		Solid			X		1	
ERB_072822 (480-200248-11)	7/28/22	09:00 Eastern		Water				X	2	
FB_072922 (480-200248-12)	7/29/22	09:40 Eastern		Water				X	2	
FDUP_072922 (480-200248-17)	7/29/22	09 15 Eastern		Solid			X		1	
SB6 (1-2) (480-200248-18)	7/29/22	09.00 Eastern		Solid			X		1	
SB6 (1-2) (480-200248-18MS)	7/29/22	10:00 Eastern	MS	Solid			X		1	
SB6 (1-2) (480-200248-18MSD)	7/29/22	10:05 Eastern	MSD	Solid			X		1	

Note Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing Northeast, LLC

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*
Deliverable Requested. I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 8-2-22 1800	Company: TAL	Received by:	Date/Time: 8/3/22 1030	Company: TA-Buf
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

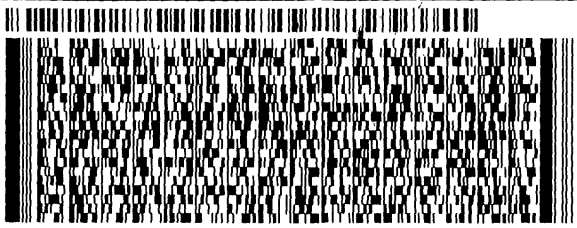
ORIGIN ID:DKKA (716) 691-2600
SAMPLE RECEIPT
EUROFINS BUFFALO
10 HAZELWOOD DR

AMHERST, NY 14228
UNITED STATES US

SHIP DATE: 02AUG22
ACTWGT: 54.60 LB
CAD: 846654/CAFE3614
DIMS: 26x15x14 IN

BILL SENDER

TO SAMPLE MGT.
EUROFINS BURLINGTON
530 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 923-1026
REF: TA BURLINGTON



FedEx Express



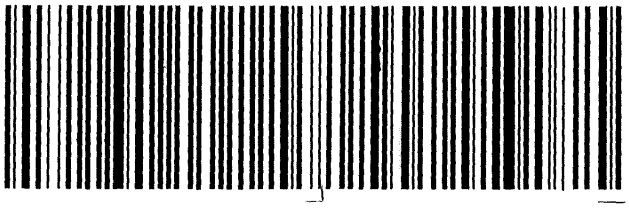
J22202203280 1uv

WED - 03 AUG 10:30A
PRIORITY OVERNIGHT

TRK# 0201 5754 0124 6018

NL BTVA

05403
VT-US BTV



577C2/F39D/4328

Login Sample Receipt Checklist

Client: Integral Consulting Inc

Job Number: 480-200248-1

Login Number: 200248
List Number: 1
Creator: Sabuda, Brendan D

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.0 4.6 4.2 3.7 4.1 3.1 #1 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	FREEZE TIME: 7/30 1200
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: Integral Consulting Inc

Job Number: 480-200248-1

Login Number: 200248
List Number: 2
Creator: Cunningham, Caroline R

List Source: Eurofins Burlington
List Creation: 08/03/22 11:59 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	1979809
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.5ºC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-201563-1
Client Project/Site: EF1017 - Refractories
Revision: 1

For:
Integral Consulting Inc
319 SW Washington Ave
Suite 1150
Portland, Oregon 97204

Attn: Mr. Glenn Esler

Authorized for release by:
10/5/2022 10:11:10 AM

John Beninati, Project Manager
(716)504-9874
John.Beninati@et.eurofinsus.com

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 5
Detection Summary 7
Client Sample Results 12
Surrogate Summary 40
Isotope Dilution Summary 42
QC Sample Results 44
QC Association Summary 72
Lab Chronicle 77
Certification Summary 81
Method Summary 83
Sample Summary 84
Chain of Custody 85
Receipt Checklists 90

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1+	Surrogate recovery exceeds control limits, high biased.

GC/MS Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

LCMS

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-201563-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-201563-1

Comments
No additional comments.

Revision 1
The report being provided is a revision of the original report sent on 9/27/2022. The report (revision 1) is being revised due to: Client requested a character change in sample IDs for samples FB_091222 and TB_091222.

Receipt
The samples were received on 9/13/2022 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 3.4º C.

Receipt Exceptions
Method 537 (modified): The following sample was received at the laboratory outside the required temperature criteria: FB_091222 (480-201563-6). This does not meet regulatory requirements. The cooler was receievd with a corrected temperature of 10.9C. There was water in the cooler to indicate melted ice.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-641153 recovered outside acceptance criteria, low biased, for 2-Butanone (MEK), 2-Hexanone, Vinyl chloride, Chloromethane, and 4-Methyl-2-pentanone (MIBK) . A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported. The associated samples are impacted: FB_091222 (480-201563-6) and TB_091222 (480-201563-7).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-641153 recovered above the upper control limit for Chlorodibromomethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: FB_091222 (480-201563-6) and TB_091222 (480-201563-7).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-641452 recovered above the upper control limit for Isopropylbenzene, n-Butylbenzene, N-Propylbenzene, tert-Butylbenzene and Vinyl chloride. The sample(s) associated with this CCV were non-detects above the reporting limits for the affected analytes; therefore, the data have been reported. The associated sample is impacted: SS1 (12-24) (480-201563-4).

Method 8260C: Internal standard and surrogate response for the following samples were outside control limits: SS1 (0-2) (480-201563-1), SS1 (0-6) (480-201563-2), SS1 (6-12) (480-201563-3) and FDUP_091222 (480-201563-5). The samples were re-analyzed and responses were outside control limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270D: The following samples were diluted due to color , appearance, and viscosity: SS1 (0-2) (480-201563-1), SS1 (0-6) (480-201563-2) and SS1 (6-12) (480-201563-3). Elevated reporting limits (RL) are provided.

Method 8270D: The following compound has been spiked at a level above the upper range of the initial calibration: Benzaldehyde. The laboratory control sample (LCS) associated with preparation batch 480-641440 and analytical batch 480-641495 recovered within acceptable limits for this analyte and has been qualified with an "E" flag.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method 6010C: The following samples were diluted due to the presence of Total Iron which interferes with Chromium, Nickel, Lead, Manganese, and Vanadium: SS1 (12-24) (480-201563-4) and FDUP_091222 (480-201563-5). Elevated reporting limits (RLs) are provided.

Job ID: 480-201563-1 (Continued)

Laboratory: Eurofins Buffalo (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

LCMS

Method 537 (modified): The method blank for preparation batch 200-183583 and analytical batch 200-183606 contained Perfluorododecanoic acid (PFDoA), Perfluorotridecanoic acid (PFTriA), Perfluoroheptanesulfonic acid (PFHpS) and Perfluorodecanesulfonic acid (PFDS) above the method detection limit. This target analyte concentration was less than half the reporting limit (1/2RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 537 (modified): Method 537 (modified): The “I” qualifier associated with sample SS1 (0-2) (480-201563-1) is applied because the transition mass ratio for the indicated analyte(s) was outside of the established ratio limits. The qualitative identification has some degree of uncertainty, however analyst judgment was used to positively identify the analyte(s).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Client Sample ID: SS1 (0-2) — Lab Sample ID: 480-201563-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.28	J B	4.5	0.28	ug/Kg	1	☼	8260C	Total/NA
Benzo[a]anthracene	340	J	1000	100	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	540	J	1000	150	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	870	J	1000	160	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	380	J	1000	110	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	350	J	1000	130	ug/Kg	5	☼	8270D	Total/NA
Chrysene	730	J	1000	230	ug/Kg	5	☼	8270D	Total/NA
Diethyl phthalate	180	J B	1000	130	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	1500		1000	110	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	470	J	1000	120	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	960	J	1000	150	ug/Kg	5	☼	8270D	Total/NA
Pyrene	1100		1000	120	ug/Kg	5	☼	8270D	Total/NA
Perfluoropentanoic acid (PFPeA)	0.068	J	0.24	0.065	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorohexanoic acid (PFHxA)	0.14	J I	0.24	0.055	ug/Kg	1	☼	537 IDA	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.074	J	0.24	0.046	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorooctanoic acid (PFOA)	0.28		0.24	0.069	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorononanoic acid (PFNA)	0.15	J	0.24	0.040	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorodecanoic acid (PFDA)	0.12	J	0.24	0.033	ug/Kg	1	☼	537 IDA	Total/NA
Perfluoroundecanoic acid (PFUnA)	0.079	J	0.24	0.032	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorododecanoic acid (PFDoA)	0.052	J B	0.24	0.030	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorotridecanoic acid (PFTriA)	0.031	J B	0.24	0.030	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorooctanesulfonic acid (PFOS)	1.0		0.24	0.13	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorodecanesulfonic acid (PFDS)	0.048	J B	0.24	0.023	ug/Kg	1	☼	537 IDA	Total/NA
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.11	J	2.4	0.099	ug/Kg	1	☼	537 IDA	Total/NA
Aluminum	9000	F1	12.4	5.5	mg/Kg	1	☼	6010C	Total/NA
Antimony	2.3	J F1	18.6	0.50	mg/Kg	1	☼	6010C	Total/NA
Arsenic	9.9		2.5	0.50	mg/Kg	1	☼	6010C	Total/NA
Barium	86.9	F1	0.62	0.14	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.46		0.25	0.035	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.75		0.25	0.037	mg/Kg	1	☼	6010C	Total/NA
Calcium	2810	B	62.1	4.1	mg/Kg	1	☼	6010C	Total/NA
Chromium	14.2		0.62	0.25	mg/Kg	1	☼	6010C	Total/NA
Cobalt	7.0		0.62	0.062	mg/Kg	1	☼	6010C	Total/NA
Copper	20.5		1.2	0.26	mg/Kg	1	☼	6010C	Total/NA
Iron	23100		12.4	4.3	mg/Kg	1	☼	6010C	Total/NA
Lead	88.4		1.2	0.30	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2220	B	24.8	1.2	mg/Kg	1	☼	6010C	Total/NA
Manganese	427	B	0.25	0.040	mg/Kg	1	☼	6010C	Total/NA
Nickel	16.2		6.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Potassium	1740	F1	37.2	24.8	mg/Kg	1	☼	6010C	Total/NA
Selenium	1.0	J	5.0	0.50	mg/Kg	1	☼	6010C	Total/NA
Sodium	58.6	J	174	16.1	mg/Kg	1	☼	6010C	Total/NA
Vanadium	15.8		0.62	0.14	mg/Kg	1	☼	6010C	Total/NA
Zinc	119		2.5	0.79	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.085		0.025	0.0058	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS1 (0-6) — Lab Sample ID: 480-201563-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	260	J	2100	210	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]pyrene	440	J	2100	310	ug/Kg	10	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS1 (0-6) (Continued)

Lab Sample ID: 480-201563-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	710	J	2100	330	ug/Kg	10	☼	8270D	Total/NA
Benzo[g,h,i]perylene	320	J	2100	220	ug/Kg	10	☼	8270D	Total/NA
Benzo[k]fluoranthene	280	J	2100	270	ug/Kg	10	☼	8270D	Total/NA
Chrysene	590	J	2100	460	ug/Kg	10	☼	8270D	Total/NA
Fluoranthene	1200	J	2100	220	ug/Kg	10	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	320	J	2100	260	ug/Kg	10	☼	8270D	Total/NA
Phenanthrene	700	J	2100	310	ug/Kg	10	☼	8270D	Total/NA
Pyrene	860	J	2100	240	ug/Kg	10	☼	8270D	Total/NA
Aluminum	9160		12.7	5.6	mg/Kg	1	☼	6010C	Total/NA
Antimony	2.2	J	19.0	0.51	mg/Kg	1	☼	6010C	Total/NA
Arsenic	12.5		2.5	0.51	mg/Kg	1	☼	6010C	Total/NA
Barium	91.7		0.63	0.14	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.48		0.25	0.035	mg/Kg	1	☼	6010C	Total/NA
Cadmium	1.0		0.25	0.038	mg/Kg	1	☼	6010C	Total/NA
Calcium	3380	B	63.3	4.2	mg/Kg	1	☼	6010C	Total/NA
Chromium	15.6		0.63	0.25	mg/Kg	1	☼	6010C	Total/NA
Cobalt	7.8		0.63	0.063	mg/Kg	1	☼	6010C	Total/NA
Copper	27.2		1.3	0.27	mg/Kg	1	☼	6010C	Total/NA
Iron	30000		12.7	4.4	mg/Kg	1	☼	6010C	Total/NA
Lead	118		1.3	0.30	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2470	B	25.3	1.2	mg/Kg	1	☼	6010C	Total/NA
Manganese	553	B	0.25	0.041	mg/Kg	1	☼	6010C	Total/NA
Nickel	26.9		6.3	0.29	mg/Kg	1	☼	6010C	Total/NA
Potassium	1640		38.0	25.3	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.92	J	5.1	0.51	mg/Kg	1	☼	6010C	Total/NA
Sodium	67.2	J	177	16.5	mg/Kg	1	☼	6010C	Total/NA
Vanadium	19.3		0.63	0.14	mg/Kg	1	☼	6010C	Total/NA
Zinc	135		2.5	0.81	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.099		0.025	0.0059	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS1 (6-12)

Lab Sample ID: 480-201563-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.30	J B	4.7	0.29	ug/Kg	1	☼	8260C	Total/NA
Benzo[a]anthracene	220	J	930	93	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	340	J	930	140	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	540	J	930	150	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	240	J	930	99	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	210	J	930	120	ug/Kg	5	☼	8270D	Total/NA
Chrysene	440	J	930	210	ug/Kg	5	☼	8270D	Total/NA
Diethyl phthalate	130	J B	930	120	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	890	J	930	99	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	290	J	930	120	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	670	J	930	140	ug/Kg	5	☼	8270D	Total/NA
Pyrene	680	J	930	110	ug/Kg	5	☼	8270D	Total/NA
Perfluoropentanoic acid (PFPeA)	0.085	J	0.22	0.060	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorohexanoic acid (PFHxA)	0.077	J	0.22	0.051	ug/Kg	1	☼	537 IDA	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.066	J	0.22	0.043	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorooctanoic acid (PFOA)	0.26		0.22	0.064	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorononanoic acid (PFNA)	0.11	J	0.22	0.037	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorodecanoic acid (PFDA)	0.080	J	0.22	0.031	ug/Kg	1	☼	537 IDA	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS1 (6-12) (Continued)

Lab Sample ID: 480-201563-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluoroundecanoic acid (PFUnA)	0.052	J	0.22	0.030	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorododecanoic acid (PFDoA)	0.039	J B	0.22	0.027	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.82		0.22	0.12	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorodecanesulfonic acid (PFDS)	0.037	J B	0.22	0.021	ug/Kg	1	☼	537 IDA	Total/NA
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.11	J	2.2	0.091	ug/Kg	1	☼	537 IDA	Total/NA
Aluminum	9580		11.5	5.0	mg/Kg	1	☼	6010C	Total/NA
Antimony	2.2	J	17.2	0.46	mg/Kg	1	☼	6010C	Total/NA
Arsenic	18.5		2.3	0.46	mg/Kg	1	☼	6010C	Total/NA
Barium	149		0.57	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.57		0.23	0.032	mg/Kg	1	☼	6010C	Total/NA
Cadmium	1.2		0.23	0.034	mg/Kg	1	☼	6010C	Total/NA
Calcium	13200	B	57.3	3.8	mg/Kg	1	☼	6010C	Total/NA
Chromium	15.3		0.57	0.23	mg/Kg	1	☼	6010C	Total/NA
Cobalt	7.4		0.57	0.057	mg/Kg	1	☼	6010C	Total/NA
Copper	26.8		1.1	0.24	mg/Kg	1	☼	6010C	Total/NA
Iron	27900		11.5	4.0	mg/Kg	1	☼	6010C	Total/NA
Lead	134		1.1	0.27	mg/Kg	1	☼	6010C	Total/NA
Magnesium	6650	B	22.9	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	536	B	0.23	0.037	mg/Kg	1	☼	6010C	Total/NA
Nickel	16.9		5.7	0.26	mg/Kg	1	☼	6010C	Total/NA
Potassium	1440		34.4	22.9	mg/Kg	1	☼	6010C	Total/NA
Selenium	1.1	J	4.6	0.46	mg/Kg	1	☼	6010C	Total/NA
Sodium	81.8	J	160	14.9	mg/Kg	1	☼	6010C	Total/NA
Vanadium	18.7		0.57	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	103		2.3	0.73	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.14		0.022	0.0051	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS1 (12-24)

Lab Sample ID: 480-201563-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.33	J B	5.2	0.32	ug/Kg	1	☼	8260C	Total/NA
Benzo[a]anthracene	62	J	180	18	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	72	J	180	27	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	130	J	180	29	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	51	J	180	20	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	43	J	180	24	ug/Kg	1	☼	8270D	Total/NA
Butyl benzyl phthalate	32	J	180	30	ug/Kg	1	☼	8270D	Total/NA
Chrysene	96	J	180	41	ug/Kg	1	☼	8270D	Total/NA
Diethyl phthalate	110	J B	180	24	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	180		180	20	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	60	J	180	23	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	130	J	180	27	ug/Kg	1	☼	8270D	Total/NA
Pyrene	140	J	180	22	ug/Kg	1	☼	8270D	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.042	J	0.22	0.042	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorooctanoic acid (PFOA)	0.18	J	0.22	0.063	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.28		0.22	0.12	ug/Kg	1	☼	537 IDA	Total/NA
Aluminum	4890		11.3	5.0	mg/Kg	1	☼	6010C	Total/NA
Antimony	7.3	J	16.9	0.45	mg/Kg	1	☼	6010C	Total/NA
Arsenic	12.2		2.3	0.45	mg/Kg	1	☼	6010C	Total/NA
Barium	50.8		0.56	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.36		0.23	0.032	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS1 (12-24) (Continued)

Lab Sample ID: 480-201563-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.66		0.23	0.034	mg/Kg	1	☼	6010C	Total/NA
Calcium	2160	B	56.4	3.7	mg/Kg	1	☼	6010C	Total/NA
Chromium	19.0		5.6	2.3	mg/Kg	10	☼	6010C	Total/NA
Cobalt	12.0		0.56	0.056	mg/Kg	1	☼	6010C	Total/NA
Copper	59.3		1.1	0.24	mg/Kg	1	☼	6010C	Total/NA
Iron	113000		113	39.5	mg/Kg	10	☼	6010C	Total/NA
Lead	77.4		11.3	2.7	mg/Kg	10	☼	6010C	Total/NA
Magnesium	851	B	22.6	1.0	mg/Kg	1	☼	6010C	Total/NA
Manganese	790	B	2.3	0.36	mg/Kg	10	☼	6010C	Total/NA
Nickel	20.7	J	56.4	2.6	mg/Kg	10	☼	6010C	Total/NA
Potassium	797		33.8	22.6	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.68	J	4.5	0.45	mg/Kg	1	☼	6010C	Total/NA
Sodium	101	J	158	14.7	mg/Kg	1	☼	6010C	Total/NA
Vanadium	33.4		5.6	1.2	mg/Kg	10	☼	6010C	Total/NA
Zinc	45.9		2.3	0.72	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.057		0.021	0.0049	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: FDUP_091222

Lab Sample ID: 480-201563-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.33	J B	5.1	0.31	ug/Kg	1	☼	8260C	Total/NA
Benzo[a]anthracene	73	J	190	19	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	91	J	190	28	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	150	J	190	30	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	59	J	190	20	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	57	J	190	24	ug/Kg	1	☼	8270D	Total/NA
Butyl benzyl phthalate	32	J	190	31	ug/Kg	1	☼	8270D	Total/NA
Chrysene	130	J	190	42	ug/Kg	1	☼	8270D	Total/NA
Diethyl phthalate	89	J B	190	24	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	220		190	20	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	72	J	190	23	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	170	J	190	28	ug/Kg	1	☼	8270D	Total/NA
Pyrene	180	J	190	22	ug/Kg	1	☼	8270D	Total/NA
Perfluorohexanoic acid (PFHxA)	0.050	J	0.22	0.049	ug/Kg	1	☼	537 IDA	Total/NA
Perfluoroheptanoic acid (PFHpA)	0.071	J	0.22	0.042	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorooctanoic acid (PFOA)	0.33		0.22	0.062	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorohexanesulfonic acid (PFHxS)	0.055	J	0.22	0.044	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.49		0.22	0.12	ug/Kg	1	☼	537 IDA	Total/NA
Aluminum	6850		11.0	4.9	mg/Kg	1	☼	6010C	Total/NA
Antimony	10.0	J	16.6	0.44	mg/Kg	1	☼	6010C	Total/NA
Arsenic	12.9		2.2	0.44	mg/Kg	1	☼	6010C	Total/NA
Barium	70.3		0.55	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.44		0.22	0.031	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.72		0.22	0.033	mg/Kg	1	☼	6010C	Total/NA
Calcium	2130	B	55.2	3.6	mg/Kg	1	☼	6010C	Total/NA
Chromium	20.2		0.55	0.22	mg/Kg	1	☼	6010C	Total/NA
Cobalt	14.1		0.55	0.055	mg/Kg	1	☼	6010C	Total/NA
Copper	70.5		1.1	0.23	mg/Kg	1	☼	6010C	Total/NA
Iron	145000		110	38.6	mg/Kg	10	☼	6010C	Total/NA
Lead	82.2		11.0	2.6	mg/Kg	10	☼	6010C	Total/NA
Magnesium	1050	B	22.1	1.0	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FDUP_091222 (Continued)

Lab Sample ID: 480-201563-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	885	B	2.2	0.35	mg/Kg	10	☼	6010C	Total/NA
Nickel	29.5	J	55.2	2.5	mg/Kg	10	☼	6010C	Total/NA
Potassium	1230		33.1	22.1	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.99	J	4.4	0.44	mg/Kg	1	☼	6010C	Total/NA
Sodium	93.2	J	155	14.4	mg/Kg	1	☼	6010C	Total/NA
Vanadium	41.4		5.5	1.2	mg/Kg	10	☼	6010C	Total/NA
Zinc	49.6		2.2	0.71	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.049		0.020	0.0047	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: FB_091222

Lab Sample ID: 480-201563-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	0.25	J B	0.50	0.10	mg/L	1		6010C	Total/NA

Client Sample ID: TB_091222

Lab Sample ID: 480-201563-7

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS1 (0-2)
Date Collected: 09/12/22 16:35
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-1
Matrix: Solid
Percent Solids: 82.2

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.5	0.45	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
1,1,1-Trichloroethane	ND		4.5	0.33	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
1,1,2,2-Tetrachloroethane	ND	*3	4.5	0.73	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.5	1.0	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
1,1,2-Trichloroethane	ND		4.5	0.58	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
1,1-Dichloroethane	ND		4.5	0.55	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
1,1-Dichloroethene	ND		4.5	0.55	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
1,2,3-Trimethylbenzene	ND	*3	4.5	0.91	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
1,2,4-Trichlorobenzene	ND	*3	4.5	0.27	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
1,2,4-Trimethylbenzene	ND	*3	4.5	0.86	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
1,2-Dibromo-3-Chloropropane	ND	*3	4.5	2.2	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
1,2-Dibromoethane	ND		4.5	0.57	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
1,2-Dichlorobenzene	ND	*3	4.5	0.35	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
1,2-Dichloroethane	ND		4.5	0.22	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
1,2-Dichloropropane	ND		4.5	2.2	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
1,3,5-Trimethylbenzene	ND	*3	4.5	0.29	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
1,3-Dichlorobenzene	ND	*3	4.5	0.23	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
1,4-Dichlorobenzene	ND	*3	4.5	0.63	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
2-Butanone (MEK)	ND		22	1.6	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
2-Hexanone	ND		22	2.2	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
4-Methyl-2-pentanone (MIBK)	ND		22	1.5	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
Acetone	ND		22	3.8	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
Benzene	ND		4.5	0.22	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
Bromodichloromethane	ND		4.5	0.60	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
Bromoform	ND		4.5	2.2	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
Bromomethane	ND		4.5	0.40	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
Carbon disulfide	ND		4.5	2.2	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
Carbon tetrachloride	ND		4.5	0.43	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
Chlorobenzene	ND		4.5	0.59	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
Chloroethane	ND		4.5	1.0	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
Chloroform	0.28	J B	4.5	0.28	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
Chloromethane	ND		4.5	0.27	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
cis-1,2-Dichloroethene	ND		4.5	0.57	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
cis-1,3-Dichloropropene	ND		4.5	0.64	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
Cyclohexane	ND		4.5	0.63	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
Dibromochloromethane	ND		4.5	0.57	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
Dichlorodifluoromethane	ND		4.5	0.37	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
Ethylbenzene	ND		4.5	0.31	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
Isopropylbenzene	ND	*3	4.5	0.68	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
m,p-Xylene	ND		9.0	0.75	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
Methyl acetate	ND		22	2.7	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
Methyl tert-butyl ether	ND		4.5	0.44	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
Methylcyclohexane	ND		4.5	0.68	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
Methylene Chloride	ND		4.5	2.1	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
n-Butylbenzene	ND	*3	4.5	0.39	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
N-Propylbenzene	ND	*3	4.5	0.36	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
o-Xylene	ND		4.5	0.58	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
sec-Butylbenzene	ND	*3	4.5	0.39	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
Styrene	ND		4.5	0.22	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1

Client Sample ID: SS1 (0-2)
Date Collected: 09/12/22 16:35
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-1
Matrix: Solid
Percent Solids: 82.2

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND	*3	4.5	0.47	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
Tetrachloroethene	ND		4.5	0.60	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
Toluene	ND		4.5	0.34	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
trans-1,2-Dichloroethene	ND		4.5	0.46	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
trans-1,3-Dichloropropene	ND		4.5	2.0	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
Trichloroethene	ND		4.5	0.99	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
Trichlorofluoromethane	ND		4.5	0.42	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
Vinyl chloride	ND		4.5	0.55	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1
Xylenes, Total	ND		9.0	0.75	ug/Kg	☼	09/13/22 13:00	09/15/22 21:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*64 - 126*	*09/13/22 13:00*	*09/15/22 21:38*	*1*
4-Bromofluorobenzene (Surr)	*78*		*72 - 126*	*09/13/22 13:00*	*09/15/22 21:38*	*1*
Dibromofluoromethane (Surr)	*104*		*60 - 140*	*09/13/22 13:00*	*09/15/22 21:38*	*1*
Toluene-d8 (Surr)	*129*	*S1+*	*71 - 125*	*09/13/22 13:00*	*09/15/22 21:38*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		590	330	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
2,4,5-Trichlorophenol	ND		1000	270	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
2,4,6-Trichlorophenol	ND		1000	200	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
2,4-Dichlorophenol	ND		1000	110	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
2,4-Dimethylphenol	ND		1000	240	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
2,4-Dinitrophenol	ND		9800	4700	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
2,4-Dinitrotoluene	ND		1000	210	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
2,6-Dinitrotoluene	ND		1000	120	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
2-Chloronaphthalene	ND		1000	170	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
2-Chlorophenol	ND		2000	180	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
2-Methylnaphthalene	ND		1000	200	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
2-Methylphenol	ND		1000	120	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
2-Nitroaniline	ND		2000	150	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
2-Nitrophenol	ND		1000	280	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
3,3'-Dichlorobenzidine	ND		2000	1200	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
3-Nitroaniline	ND		2000	280	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
4,6-Dinitro-2-methylphenol	ND		2000	1000	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
4-Bromophenyl phenyl ether	ND		1000	140	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
4-Chloro-3-methylphenol	ND		1000	250	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
4-Chloroaniline	ND		1000	250	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
4-Chlorophenyl phenyl ether	ND		1000	120	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
4-Methylphenol	ND		2000	120	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
4-Nitroaniline	ND		2000	530	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
4-Nitrophenol	ND		2000	710	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Acenaphthene	ND		1000	150	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Acenaphthylene	ND		1000	130	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Acetophenone	ND		1000	140	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Anthracene	ND		1000	250	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Atrazine	ND		1000	350	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Benzaldehyde	ND		1000	800	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Benzo[a]anthracene	**340**	**J**	1000	100	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Benzo[a]pyrene	**540**	**J**	1000	150	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5

Client Sample ID: SS1 (0-2)
Date Collected: 09/12/22 16:35
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-1
Matrix: Solid
Percent Solids: 82.2

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	870	J	1000	160	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Benzo[g,h,i]perylene	380	J	1000	110	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Benzo[k]fluoranthene	350	J	1000	130	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Biphenyl	ND		1000	150	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
bis (2-chloroisopropyl) ether	ND		1000	200	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Bis(2-chloroethoxy)methane	ND		1000	210	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Bis(2-chloroethyl)ether	ND		1000	130	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Bis(2-ethylhexyl) phthalate	ND		1000	340	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Butyl benzyl phthalate	ND		1000	170	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Caprolactam	ND		1000	300	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Carbazole	ND		1000	120	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Chrysene	730	J	1000	230	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Dibenz(a,h)anthracene	ND		1000	180	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Dibenzofuran	ND		1000	120	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Diethyl phthalate	180	J B	1000	130	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Dimethyl phthalate	ND		1000	120	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Di-n-butyl phthalate	ND		1000	170	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Di-n-octyl phthalate	ND		1000	120	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Fluoranthene	1500		1000	110	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Fluorene	ND		1000	120	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Hexachlorobenzene	ND		1000	140	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Hexachlorobutadiene	ND		1000	150	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Hexachlorocyclopentadiene	ND		1000	140	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Hexachloroethane	ND		1000	130	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Indeno[1,2,3-cd]pyrene	470	J	1000	120	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Isophorone	ND		1000	210	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Naphthalene	ND		1000	130	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Nitrobenzene	ND		1000	110	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
N-Nitrosodi-n-propylamine	ND		1000	170	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
N-Nitrosodiphenylamine	ND		1000	820	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Pentachlorophenol	ND		2000	1000	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Phenanthrene	960	J	1000	150	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Phenol	ND		1000	150	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5
Pyrene	1100		1000	120	ug/Kg	☼	09/14/22 15:47	09/15/22 16:56	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*103*		*54 - 120*	*09/14/22 15:47*	*09/15/22 16:56*	*5*
2-Fluorobiphenyl (Surr)	*86*		*60 - 120*	*09/14/22 15:47*	*09/15/22 16:56*	*5*
2-Fluorophenol (Surr)	*75*		*52 - 120*	*09/14/22 15:47*	*09/15/22 16:56*	*5*
Nitrobenzene-d5 (Surr)	*71*		*53 - 120*	*09/14/22 15:47*	*09/15/22 16:56*	*5*
Phenol-d5 (Surr)	*79*		*54 - 120*	*09/14/22 15:47*	*09/15/22 16:56*	*5*
p-Terphenyl-d14 (Surr)	*102*		*79 - 130*	*09/14/22 15:47*	*09/15/22 16:56*	*5*

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.59	0.39	ug/Kg	☼	09/15/22 08:50	09/15/22 19:23	1
Perfluoropentanoic acid (PFPeA)	0.068	J	0.24	0.065	ug/Kg	☼	09/15/22 08:50	09/15/22 19:23	1
Perfluorohexanoic acid (PFHxA)	0.14	J I	0.24	0.055	ug/Kg	☼	09/15/22 08:50	09/15/22 19:23	1
Perfluoroheptanoic acid (PFHpA)	0.074	J	0.24	0.046	ug/Kg	☼	09/15/22 08:50	09/15/22 19:23	1
Perfluorooctanoic acid (PFOA)	0.28		0.24	0.069	ug/Kg	☼	09/15/22 08:50	09/15/22 19:23	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201563-1

Client Sample ID: SS1 (0-2)
Date Collected: 09/12/22 16:35
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-1
Matrix: Solid
Percent Solids: 82.2

Method: EPA 537 IDA - EPA 537 Isotope Dilution (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	0.15	J	0.24	0.040	ug/Kg	☼	09/15/22 08:50	09/15/22 19:23	1
Perfluorodecanoic acid (PFDA)	0.12	J	0.24	0.033	ug/Kg	☼	09/15/22 08:50	09/15/22 19:23	1
Perfluoroundecanoic acid (PFUnA)	0.079	J	0.24	0.032	ug/Kg	☼	09/15/22 08:50	09/15/22 19:23	1
Perfluorododecanoic acid (PFDoA)	0.052	J B	0.24	0.030	ug/Kg	☼	09/15/22 08:50	09/15/22 19:23	1
Perfluorotridecanoic acid (PFTriA)	0.031	J B	0.24	0.030	ug/Kg	☼	09/15/22 08:50	09/15/22 19:23	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.24	0.031	ug/Kg	☼	09/15/22 08:50	09/15/22 19:23	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.24	0.039	ug/Kg	☼	09/15/22 08:50	09/15/22 19:23	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.24	0.049	ug/Kg	☼	09/15/22 08:50	09/15/22 19:23	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.24	0.027	ug/Kg	☼	09/15/22 08:50	09/15/22 19:23	1
Perfluorooctanesulfonic acid (PFOS)	1.0		0.24	0.13	ug/Kg	☼	09/15/22 08:50	09/15/22 19:23	1
Perfluorodecanesulfonic acid (PFDS)	0.048	J B	0.24	0.023	ug/Kg	☼	09/15/22 08:50	09/15/22 19:23	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.24	0.040	ug/Kg	☼	09/15/22 08:50	09/15/22 19:23	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.4	0.13	ug/Kg	☼	09/15/22 08:50	09/15/22 19:23	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.11	J	2.4	0.099	ug/Kg	☼	09/15/22 08:50	09/15/22 19:23	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.4	0.068	ug/Kg	☼	09/15/22 08:50	09/15/22 19:23	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.4	0.044	ug/Kg	☼	09/15/22 08:50	09/15/22 19:23	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*81*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:23*	*1*
13C4 PFHpA	*92*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:23*	*1*
13C4 PFOA	*91*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:23*	*1*
13C4 PFOS	*76*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:23*	*1*
13C5 PFNA	*84*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:23*	*1*
13C4 PFBA	*90*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:23*	*1*
13C2 PFHxA	*90*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:23*	*1*
13C2 PFDA	*91*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:23*	*1*
13C2 PFUnA	*85*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:23*	*1*
13C2 PFDoA	*89*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:23*	*1*
13C8 FOSA	*74*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:23*	*1*
13C5 PFPeA	*91*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:23*	*1*
13C2 PFTeDA	*84*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:23*	*1*
d3-NMeFOSAA	*85*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:23*	*1*
d5-NEtFOSAA	*97*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:23*	*1*
M2-6:2 FTS	*103*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:23*	*1*
M2-8:2 FTS	*113*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:23*	*1*
13C3 PFBS	*83*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:23*	*1*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9000	F1	12.4	5.5	mg/Kg	☼	09/14/22 11:33	09/15/22 14:07	1
Antimony	2.3	J F1	18.6	0.50	mg/Kg	☼	09/14/22 11:33	09/15/22 14:07	1
Arsenic	9.9		2.5	0.50	mg/Kg	☼	09/14/22 11:33	09/15/22 14:07	1
Barium	86.9	F1	0.62	0.14	mg/Kg	☼	09/14/22 11:33	09/15/22 14:07	1
Beryllium	0.46		0.25	0.035	mg/Kg	☼	09/14/22 11:33	09/15/22 14:07	1
Cadmium	0.75		0.25	0.037	mg/Kg	☼	09/14/22 11:33	09/15/22 14:07	1
Calcium	2810	B	62.1	4.1	mg/Kg	☼	09/14/22 11:33	09/15/22 14:07	1
Chromium	14.2		0.62	0.25	mg/Kg	☼	09/14/22 11:33	09/15/22 14:07	1

Client Sample ID: SS1 (0-2)

Date Collected: 09/12/22 16:35
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-1

Matrix: Solid
Percent Solids: 82.2

Method: SW846 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	7.0		0.62	0.062	mg/Kg	☼	09/14/22 11:33	09/15/22 14:07	1
Copper	20.5		1.2	0.26	mg/Kg	☼	09/14/22 11:33	09/15/22 14:07	1
Iron	23100		12.4	4.3	mg/Kg	☼	09/14/22 11:33	09/15/22 14:07	1
Lead	88.4		1.2	0.30	mg/Kg	☼	09/14/22 11:33	09/15/22 14:07	1
Magnesium	2220	B	24.8	1.2	mg/Kg	☼	09/14/22 11:33	09/15/22 14:07	1
Manganese	427	B	0.25	0.040	mg/Kg	☼	09/14/22 11:33	09/15/22 14:07	1
Nickel	16.2		6.2	0.29	mg/Kg	☼	09/14/22 11:33	09/15/22 14:07	1
Potassium	1740	F1	37.2	24.8	mg/Kg	☼	09/14/22 11:33	09/15/22 14:07	1
Selenium	1.0	J	5.0	0.50	mg/Kg	☼	09/14/22 11:33	09/16/22 15:23	1
Silver	ND		0.74	0.25	mg/Kg	☼	09/14/22 11:33	09/15/22 14:07	1
Sodium	58.6	J	174	16.1	mg/Kg	☼	09/14/22 11:33	09/15/22 14:07	1
Thallium	ND		7.4	0.37	mg/Kg	☼	09/14/22 11:33	09/15/22 14:07	1
Vanadium	15.8		0.62	0.14	mg/Kg	☼	09/14/22 11:33	09/15/22 14:07	1
Zinc	119		2.5	0.79	mg/Kg	☼	09/14/22 11:33	09/15/22 14:07	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.085		0.025	0.0058	mg/Kg	☼	09/15/22 10:09	09/15/22 13:51	1

Client Sample ID: SS1 (0-6)

Date Collected: 09/12/22 16:00
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-2

Matrix: Solid
Percent Solids: 80.9

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.5	0.55	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
1,1,1-Trichloroethane	ND		5.5	0.40	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
1,1,2,2-Tetrachloroethane	ND	*3	5.5	0.89	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.5	1.2	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
1,1,2-Trichloroethane	ND		5.5	0.71	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
1,1-Dichloroethane	ND		5.5	0.67	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
1,1-Dichloroethene	ND		5.5	0.67	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
1,2,3-Trimethylbenzene	ND	*3	5.5	1.1	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
1,2,4-Trichlorobenzene	ND	*3	5.5	0.33	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
1,2,4-Trimethylbenzene	ND	*3	5.5	1.1	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
1,2-Dibromo-3-Chloropropane	ND	*3	5.5	2.7	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
1,2-Dibromoethane	ND		5.5	0.70	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
1,2-Dichlorobenzene	ND	*3	5.5	0.43	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
1,2-Dichloroethane	ND		5.5	0.27	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
1,2-Dichloropropane	ND		5.5	2.7	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
1,3,5-Trimethylbenzene	ND	*3	5.5	0.35	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
1,3-Dichlorobenzene	ND	*3	5.5	0.28	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
1,4-Dichlorobenzene	ND	*3	5.5	0.77	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
2-Butanone (MEK)	ND		27	2.0	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
2-Hexanone	ND		27	2.7	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
4-Methyl-2-pentanone (MIBK)	ND		27	1.8	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
Acetone	ND		27	4.6	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
Benzene	ND		5.5	0.27	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
Bromodichloromethane	ND		5.5	0.73	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
Bromoform	ND		5.5	2.7	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1

Client Sample ID: SS1 (0-6)
Date Collected: 09/12/22 16:00
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-2
Matrix: Solid
Percent Solids: 80.9

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		5.5	0.49	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
Carbon disulfide	ND		5.5	2.7	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
Carbon tetrachloride	ND		5.5	0.53	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
Chlorobenzene	ND		5.5	0.72	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
Chloroethane	ND		5.5	1.2	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
Chloroform	ND		5.5	0.34	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
Chloromethane	ND		5.5	0.33	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
cis-1,2-Dichloroethene	ND		5.5	0.70	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
cis-1,3-Dichloropropene	ND		5.5	0.79	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
Cyclohexane	ND		5.5	0.77	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
Dibromochloromethane	ND		5.5	0.70	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
Dichlorodifluoromethane	ND		5.5	0.45	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
Ethylbenzene	ND		5.5	0.38	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
Isopropylbenzene	ND	*3	5.5	0.83	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
m,p-Xylene	ND		11	0.92	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
Methyl acetate	ND		27	3.3	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
Methyl tert-butyl ether	ND		5.5	0.54	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
Methylcyclohexane	ND		5.5	0.83	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
Methylene Chloride	ND		5.5	2.5	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
n-Butylbenzene	ND	*3	5.5	0.48	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
N-Propylbenzene	ND	*3	5.5	0.44	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
o-Xylene	ND		5.5	0.72	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
sec-Butylbenzene	ND	*3	5.5	0.48	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
Styrene	ND		5.5	0.27	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
tert-Butylbenzene	ND	*3	5.5	0.57	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
Tetrachloroethene	ND		5.5	0.74	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
Toluene	ND		5.5	0.41	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
trans-1,2-Dichloroethene	ND		5.5	0.57	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
trans-1,3-Dichloropropene	ND		5.5	2.4	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
Trichloroethene	ND		5.5	1.2	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
Trichlorofluoromethane	ND		5.5	0.52	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
Vinyl chloride	ND		5.5	0.67	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1
Xylenes, Total	ND		11	0.92	ug/Kg	☼	09/13/22 13:00	09/15/22 22:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*64 - 126*	*09/13/22 13:00*	*09/15/22 22:02*	*1*
4-Bromofluorobenzene (Surr)	*78*		*72 - 126*	*09/13/22 13:00*	*09/15/22 22:02*	*1*
Dibromofluoromethane (Surr)	*105*		*60 - 140*	*09/13/22 13:00*	*09/15/22 22:02*	*1*
Toluene-d8 (Surr)	*136*	*S1+*	*71 - 125*	*09/13/22 13:00*	*09/15/22 22:02*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		2100	560	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
2,4,6-Trichlorophenol	ND		2100	410	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
2,4-Dichlorophenol	ND		2100	220	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
2,4-Dimethylphenol	ND		2100	500	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
2,4-Dinitrophenol	ND		20000	9600	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
2,4-Dinitrotoluene	ND		2100	430	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
2,6-Dinitrotoluene	ND		2100	240	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
2-Chloronaphthalene	ND		2100	340	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201563-1

Client Sample ID: SS1 (0-6)
Date Collected: 09/12/22 16:00
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-2
Matrix: Solid
Percent Solids: 80.9

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chlorophenol	ND		4000	380	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
2-Methylnaphthalene	ND		2100	410	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
2-Methylphenol	ND		2100	240	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
2-Nitroaniline	ND		4000	310	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
2-Nitrophenol	ND		2100	590	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
3,3'-Dichlorobenzidine	ND		4000	2400	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
3-Nitroaniline	ND		4000	570	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
4,6-Dinitro-2-methylphenol	ND		4000	2100	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
4-Bromophenyl phenyl ether	ND		2100	290	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
4-Chloro-3-methylphenol	ND		2100	510	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
4-Chloroaniline	ND		2100	510	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
4-Chlorophenyl phenyl ether	ND		2100	260	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
4-Methylphenol	ND		4000	240	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
4-Nitroaniline	ND		4000	1100	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
4-Nitrophenol	ND		4000	1500	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Acenaphthene	ND		2100	310	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Acenaphthylene	ND		2100	270	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Acetophenone	ND		2100	280	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Anthracene	ND		2100	510	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Atrazine	ND		2100	720	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Benzaldehyde	ND		2100	1600	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Benzo[a]anthracene	260	J	2100	210	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Benzo[a]pyrene	440	J	2100	310	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Benzo[b]fluoranthene	710	J	2100	330	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Benzo[g,h,i]perylene	320	J	2100	220	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Benzo[k]fluoranthene	280	J	2100	270	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Biphenyl	ND		2100	310	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
bis (2-chloroisopropyl) ether	ND		2100	410	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Bis(2-chloroethoxy)methane	ND		2100	440	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Bis(2-chloroethyl)ether	ND		2100	270	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Bis(2-ethylhexyl) phthalate	ND		2100	710	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Butyl benzyl phthalate	ND		2100	340	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Caprolactam	ND		2100	620	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Carbazole	ND		2100	240	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Chrysene	590	J	2100	460	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Dibenz(a,h)anthracene	ND		2100	370	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Dibenzofuran	ND		2100	240	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Diethyl phthalate	ND		2100	270	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Dimethyl phthalate	ND		2100	240	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Di-n-butyl phthalate	ND		2100	350	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Di-n-octyl phthalate	ND		2100	240	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Fluoranthene	1200	J	2100	220	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Fluorene	ND		2100	240	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Hexachlorobenzene	ND		2100	280	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Hexachlorobutadiene	ND		2100	310	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Hexachlorocyclopentadiene	ND		2100	280	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Hexachloroethane	ND		2100	270	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Indeno[1,2,3-cd]pyrene	320	J	2100	260	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Isophorone	ND		2100	440	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10

Client Sample ID: SS1 (0-6)
Date Collected: 09/12/22 16:00
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-2
Matrix: Solid
Percent Solids: 80.9

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	ND		2100	270	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Nitrobenzene	ND		2100	230	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
N-Nitrosodi-n-propylamine	ND		2100	350	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
N-Nitrosodiphenylamine	ND		2100	1700	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Pentachlorophenol	ND		4000	2100	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Phenanthrene	700	J	2100	310	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Phenol	ND		2100	320	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10
Pyrene	860	J	2100	240	ug/Kg	☼	09/14/22 15:47	09/15/22 17:13	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*104*		*54 - 120*	*09/14/22 15:47*	*09/15/22 17:13*	*10*
2-Fluorobiphenyl (Surr)	*82*		*60 - 120*	*09/14/22 15:47*	*09/15/22 17:13*	*10*
2-Fluorophenol (Surr)	*71*		*52 - 120*	*09/14/22 15:47*	*09/15/22 17:13*	*10*
Nitrobenzene-d5 (Surr)	*65*		*53 - 120*	*09/14/22 15:47*	*09/15/22 17:13*	*10*
Phenol-d5 (Surr)	*73*		*54 - 120*	*09/14/22 15:47*	*09/15/22 17:13*	*10*
p-Terphenyl-d14 (Surr)	*100*		*79 - 130*	*09/14/22 15:47*	*09/15/22 17:13*	*10*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9160		12.7	5.6	mg/Kg	☼	09/14/22 11:33	09/15/22 14:37	1
Antimony	2.2	J	19.0	0.51	mg/Kg	☼	09/14/22 11:33	09/15/22 14:37	1
Arsenic	12.5		2.5	0.51	mg/Kg	☼	09/14/22 11:33	09/15/22 14:37	1
Barium	91.7		0.63	0.14	mg/Kg	☼	09/14/22 11:33	09/15/22 14:37	1
Beryllium	0.48		0.25	0.035	mg/Kg	☼	09/14/22 11:33	09/15/22 14:37	1
Cadmium	1.0		0.25	0.038	mg/Kg	☼	09/14/22 11:33	09/15/22 14:37	1
Calcium	3380	B	63.3	4.2	mg/Kg	☼	09/14/22 11:33	09/15/22 14:37	1
Chromium	15.6		0.63	0.25	mg/Kg	☼	09/14/22 11:33	09/15/22 14:37	1
Cobalt	7.8		0.63	0.063	mg/Kg	☼	09/14/22 11:33	09/15/22 14:37	1
Copper	27.2		1.3	0.27	mg/Kg	☼	09/14/22 11:33	09/15/22 14:37	1
Iron	30000		12.7	4.4	mg/Kg	☼	09/14/22 11:33	09/15/22 14:37	1
Lead	118		1.3	0.30	mg/Kg	☼	09/14/22 11:33	09/15/22 14:37	1
Magnesium	2470	B	25.3	1.2	mg/Kg	☼	09/14/22 11:33	09/15/22 14:37	1
Manganese	553	B	0.25	0.041	mg/Kg	☼	09/14/22 11:33	09/15/22 14:37	1
Nickel	26.9		6.3	0.29	mg/Kg	☼	09/14/22 11:33	09/15/22 14:37	1
Potassium	1640		38.0	25.3	mg/Kg	☼	09/14/22 11:33	09/15/22 14:37	1
Selenium	0.92	J	5.1	0.51	mg/Kg	☼	09/14/22 11:33	09/16/22 15:54	1
Silver	ND		0.76	0.25	mg/Kg	☼	09/14/22 11:33	09/15/22 14:37	1
Sodium	67.2	J	177	16.5	mg/Kg	☼	09/14/22 11:33	09/15/22 14:37	1
Thallium	ND		7.6	0.38	mg/Kg	☼	09/14/22 11:33	09/15/22 14:37	1
Vanadium	19.3		0.63	0.14	mg/Kg	☼	09/14/22 11:33	09/15/22 14:37	1
Zinc	135		2.5	0.81	mg/Kg	☼	09/14/22 11:33	09/15/22 14:37	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.099		0.025	0.0059	mg/Kg	☼	09/15/22 10:09	09/15/22 13:53	1

Client Sample ID: SS1 (6-12)
Date Collected: 09/12/22 16:05
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-3
Matrix: Solid
Percent Solids: 89.4

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.7	0.47	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
1,1,1-Trichloroethane	ND		4.7	0.34	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
1,1,2,2-Tetrachloroethane	ND	*3	4.7	0.77	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.7	1.1	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
1,1,2-Trichloroethane	ND		4.7	0.62	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
1,1-Dichloroethane	ND		4.7	0.58	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
1,1-Dichloroethene	ND		4.7	0.58	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
1,2,3-Trimethylbenzene	ND	*3	4.7	0.97	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
1,2,4-Trichlorobenzene	ND	*3	4.7	0.29	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
1,2,4-Trimethylbenzene	ND	*3	4.7	0.91	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
1,2-Dibromo-3-Chloropropane	ND	*3	4.7	2.4	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
1,2-Dibromoethane	ND		4.7	0.61	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
1,2-Dichlorobenzene	ND	*3	4.7	0.37	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
1,2-Dichloroethane	ND		4.7	0.24	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
1,2-Dichloropropane	ND		4.7	2.4	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
1,3,5-Trimethylbenzene	ND	*3	4.7	0.31	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
1,3-Dichlorobenzene	ND	*3	4.7	0.24	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
1,4-Dichlorobenzene	ND	*3	4.7	0.66	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
2-Butanone (MEK)	ND		24	1.7	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
2-Hexanone	ND		24	2.4	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
4-Methyl-2-pentanone (MIBK)	ND		24	1.6	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
Acetone	ND		24	4.0	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
Benzene	ND		4.7	0.23	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
Bromodichloromethane	ND		4.7	0.64	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
Bromoform	ND		4.7	2.4	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
Bromomethane	ND		4.7	0.43	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
Carbon disulfide	ND		4.7	2.4	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
Carbon tetrachloride	ND		4.7	0.46	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
Chlorobenzene	ND		4.7	0.63	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
Chloroethane	ND		4.7	1.1	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
Chloroform	0.30	J B	4.7	0.29	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
Chloromethane	ND		4.7	0.29	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
cis-1,2-Dichloroethene	ND		4.7	0.61	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
cis-1,3-Dichloropropene	ND		4.7	0.68	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
Cyclohexane	ND		4.7	0.66	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
Dibromochloromethane	ND		4.7	0.61	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
Dichlorodifluoromethane	ND		4.7	0.39	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
Ethylbenzene	ND		4.7	0.33	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
Isopropylbenzene	ND	*3	4.7	0.71	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
m,p-Xylene	ND		9.5	0.80	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
Methyl acetate	ND		24	2.9	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
Methyl tert-butyl ether	ND		4.7	0.47	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
Methylcyclohexane	ND		4.7	0.72	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
Methylene Chloride	ND		4.7	2.2	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
n-Butylbenzene	ND	*3	4.7	0.41	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
N-Propylbenzene	ND	*3	4.7	0.38	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
o-Xylene	ND		4.7	0.62	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
sec-Butylbenzene	ND	*3	4.7	0.41	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
Styrene	ND		4.7	0.24	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201563-1

Client Sample ID: SS1 (6-12)
Date Collected: 09/12/22 16:05
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-3
Matrix: Solid
Percent Solids: 89.4

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND	*3	4.7	0.49	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
Tetrachloroethene	ND		4.7	0.64	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
Toluene	ND		4.7	0.36	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
trans-1,2-Dichloroethene	ND		4.7	0.49	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
trans-1,3-Dichloropropene	ND		4.7	2.1	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
Trichloroethene	ND		4.7	1.0	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
Trichlorofluoromethane	ND		4.7	0.45	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
Vinyl chloride	ND		4.7	0.58	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1
Xylenes, Total	ND		9.5	0.80	ug/Kg	☼	09/13/22 13:00	09/15/22 22:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*64 - 126*	*09/13/22 13:00*	*09/15/22 22:27*	*1*
4-Bromofluorobenzene (Surr)	*72*		*72 - 126*	*09/13/22 13:00*	*09/15/22 22:27*	*1*
Dibromofluoromethane (Surr)	*102*		*60 - 140*	*09/13/22 13:00*	*09/15/22 22:27*	*1*
Toluene-d8 (Surr)	*132*	*S1+*	*71 - 125*	*09/13/22 13:00*	*09/15/22 22:27*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		550	300	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
2,4,5-Trichlorophenol	ND		930	250	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
2,4,6-Trichlorophenol	ND		930	190	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
2,4-Dichlorophenol	ND		930	99	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
2,4-Dimethylphenol	ND		930	230	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
2,4-Dinitrophenol	ND		9100	4300	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
2,4-Dinitrotoluene	ND		930	190	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
2,6-Dinitrotoluene	ND		930	110	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
2-Chloronaphthalene	ND		930	150	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
2-Chlorophenol	ND		1800	170	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
2-Methylnaphthalene	ND		930	190	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
2-Methylphenol	ND		930	110	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
2-Nitroaniline	ND		1800	140	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
2-Nitrophenol	ND		930	260	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
3,3'-Dichlorobenzidine	ND		1800	1100	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
3-Nitroaniline	ND		1800	260	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
4,6-Dinitro-2-methylphenol	ND		1800	930	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
4-Bromophenyl phenyl ether	ND		930	130	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
4-Chloro-3-methylphenol	ND		930	230	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
4-Chloroaniline	ND		930	230	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
4-Chlorophenyl phenyl ether	ND		930	120	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
4-Methylphenol	ND		1800	110	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
4-Nitroaniline	ND		1800	490	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
4-Nitrophenol	ND		1800	650	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Acenaphthene	ND		930	140	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Acenaphthylene	ND		930	120	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Acetophenone	ND		930	130	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Anthracene	ND		930	230	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Atrazine	ND		930	320	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Benzaldehyde	ND		930	740	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Benzo[a]anthracene	**220**	**J**	930	93	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Benzo[a]pyrene	**340**	**J**	930	140	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201563-1

Client Sample ID: SS1 (6-12)
Date Collected: 09/12/22 16:05
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-3
Matrix: Solid
Percent Solids: 89.4

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	540	J	930	150	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Benzo[g,h,i]perylene	240	J	930	99	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Benzo[k]fluoranthene	210	J	930	120	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Biphenyl	ND		930	140	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
bis (2-chloroisopropyl) ether	ND		930	190	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Bis(2-chloroethoxy)methane	ND		930	200	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Bis(2-chloroethyl)ether	ND		930	120	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Bis(2-ethylhexyl) phthalate	ND		930	320	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Butyl benzyl phthalate	ND		930	150	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Caprolactam	ND		930	280	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Carbazole	ND		930	110	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Chrysene	440	J	930	210	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Dibenz(a,h)anthracene	ND		930	160	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Dibenzofuran	ND		930	110	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Diethyl phthalate	130	J B	930	120	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Dimethyl phthalate	ND		930	110	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Di-n-butyl phthalate	ND		930	160	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Di-n-octyl phthalate	ND		930	110	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Fluoranthene	890	J	930	99	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Fluorene	ND		930	110	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Hexachlorobenzene	ND		930	130	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Hexachlorobutadiene	ND		930	140	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Hexachlorocyclopentadiene	ND		930	130	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Hexachloroethane	ND		930	120	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Indeno[1,2,3-cd]pyrene	290	J	930	120	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Isophorone	ND		930	200	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Naphthalene	ND		930	120	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Nitrobenzene	ND		930	100	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
N-Nitrosodi-n-propylamine	ND		930	160	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
N-Nitrosodiphenylamine	ND		930	760	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Pentachlorophenol	ND		1800	930	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Phenanthrene	670	J	930	140	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Phenol	ND		930	140	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5
Pyrene	680	J	930	110	ug/Kg	☼	09/14/22 15:47	09/15/22 17:30	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*86*		*54 - 120*	*09/14/22 15:47*	*09/15/22 17:30*	*5*
2-Fluorobiphenyl (Surr)	*75*		*60 - 120*	*09/14/22 15:47*	*09/15/22 17:30*	*5*
2-Fluorophenol (Surr)	*68*		*52 - 120*	*09/14/22 15:47*	*09/15/22 17:30*	*5*
Nitrobenzene-d5 (Surr)	*66*		*53 - 120*	*09/14/22 15:47*	*09/15/22 17:30*	*5*
Phenol-d5 (Surr)	*66*		*54 - 120*	*09/14/22 15:47*	*09/15/22 17:30*	*5*
p-Terphenyl-d14 (Surr)	*89*		*79 - 130*	*09/14/22 15:47*	*09/15/22 17:30*	*5*

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.55	0.36	ug/Kg	☼	09/15/22 08:50	09/15/22 19:32	1
Perfluoropentanoic acid (PFPeA)	0.085	J	0.22	0.060	ug/Kg	☼	09/15/22 08:50	09/15/22 19:32	1
Perfluorohexanoic acid (PFHxA)	0.077	J	0.22	0.051	ug/Kg	☼	09/15/22 08:50	09/15/22 19:32	1
Perfluoroheptanoic acid (PFHpA)	0.066	J	0.22	0.043	ug/Kg	☼	09/15/22 08:50	09/15/22 19:32	1
Perfluorooctanoic acid (PFOA)	0.26		0.22	0.064	ug/Kg	☼	09/15/22 08:50	09/15/22 19:32	1

Client Sample ID: SS1 (6-12)
Date Collected: 09/12/22 16:05
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-3
Matrix: Solid
Percent Solids: 89.4

Method: EPA 537 IDA - EPA 537 Isotope Dilution (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	0.11	J	0.22	0.037	ug/Kg	☼	09/15/22 08:50	09/15/22 19:32	1
Perfluorodecanoic acid (PFDA)	0.080	J	0.22	0.031	ug/Kg	☼	09/15/22 08:50	09/15/22 19:32	1
Perfluoroundecanoic acid (PFUnA)	0.052	J	0.22	0.030	ug/Kg	☼	09/15/22 08:50	09/15/22 19:32	1
Perfluorododecanoic acid (PFDoA)	0.039	J B	0.22	0.027	ug/Kg	☼	09/15/22 08:50	09/15/22 19:32	1
Perfluorotridecanoic acid (PFTriA)	ND		0.22	0.027	ug/Kg	☼	09/15/22 08:50	09/15/22 19:32	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.22	0.029	ug/Kg	☼	09/15/22 08:50	09/15/22 19:32	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.22	0.036	ug/Kg	☼	09/15/22 08:50	09/15/22 19:32	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.22	0.045	ug/Kg	☼	09/15/22 08:50	09/15/22 19:32	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.22	0.025	ug/Kg	☼	09/15/22 08:50	09/15/22 19:32	1
Perfluorooctanesulfonic acid (PFOS)	0.82		0.22	0.12	ug/Kg	☼	09/15/22 08:50	09/15/22 19:32	1
Perfluorodecanesulfonic acid (PFDS)	0.037	J B	0.22	0.021	ug/Kg	☼	09/15/22 08:50	09/15/22 19:32	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.22	0.037	ug/Kg	☼	09/15/22 08:50	09/15/22 19:32	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.2	0.12	ug/Kg	☼	09/15/22 08:50	09/15/22 19:32	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	0.11	J	2.2	0.091	ug/Kg	☼	09/15/22 08:50	09/15/22 19:32	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.2	0.063	ug/Kg	☼	09/15/22 08:50	09/15/22 19:32	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.2	0.041	ug/Kg	☼	09/15/22 08:50	09/15/22 19:32	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*86*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:32*	*1*
13C4 PFHpA	*93*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:32*	*1*
13C4 PFOA	*98*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:32*	*1*
13C4 PFOS	*84*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:32*	*1*
13C5 PFNA	*87*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:32*	*1*
13C4 PFBA	*91*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:32*	*1*
13C2 PFHxA	*91*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:32*	*1*
13C2 PFDA	*89*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:32*	*1*
13C2 PFUnA	*88*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:32*	*1*
13C2 PFDoA	*95*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:32*	*1*
13C8 FOSA	*80*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:32*	*1*
13C5 PFPeA	*91*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:32*	*1*
13C2 PFTeDA	*87*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:32*	*1*
d3-NMeFOSAA	*92*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:32*	*1*
d5-NEtFOSAA	*98*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:32*	*1*
M2-6:2 FTS	*97*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:32*	*1*
M2-8:2 FTS	*105*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:32*	*1*
13C3 PFBS	*88*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:32*	*1*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9580		11.5	5.0	mg/Kg	☼	09/14/22 11:33	09/15/22 14:41	1
Antimony	2.2	J	17.2	0.46	mg/Kg	☼	09/14/22 11:33	09/15/22 14:41	1
Arsenic	18.5		2.3	0.46	mg/Kg	☼	09/14/22 11:33	09/15/22 14:41	1
Barium	149		0.57	0.13	mg/Kg	☼	09/14/22 11:33	09/15/22 14:41	1
Beryllium	0.57		0.23	0.032	mg/Kg	☼	09/14/22 11:33	09/15/22 14:41	1
Cadmium	1.2		0.23	0.034	mg/Kg	☼	09/14/22 11:33	09/15/22 14:41	1
Calcium	13200	B	57.3	3.8	mg/Kg	☼	09/14/22 11:33	09/15/22 14:41	1
Chromium	15.3		0.57	0.23	mg/Kg	☼	09/14/22 11:33	09/15/22 14:41	1

Client Sample ID: SS1 (6-12)

Lab Sample ID: 480-201563-3

Date Collected: 09/12/22 16:05
Matrix: Solid
Date Received: 09/13/22 10:00
Percent Solids: 89.4

Method: SW846 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	7.4		0.57	0.057	mg/Kg	☼	09/14/22 11:33	09/15/22 14:41	1
Copper	26.8		1.1	0.24	mg/Kg	☼	09/14/22 11:33	09/15/22 14:41	1
Iron	27900		11.5	4.0	mg/Kg	☼	09/14/22 11:33	09/15/22 14:41	1
Lead	134		1.1	0.27	mg/Kg	☼	09/14/22 11:33	09/15/22 14:41	1
Magnesium	6650	B	22.9	1.1	mg/Kg	☼	09/14/22 11:33	09/15/22 14:41	1
Manganese	536	B	0.23	0.037	mg/Kg	☼	09/14/22 11:33	09/15/22 14:41	1
Nickel	16.9		5.7	0.26	mg/Kg	☼	09/14/22 11:33	09/15/22 14:41	1
Potassium	1440		34.4	22.9	mg/Kg	☼	09/14/22 11:33	09/15/22 14:41	1
Selenium	1.1	J	4.6	0.46	mg/Kg	☼	09/14/22 11:33	09/16/22 15:58	1
Silver	ND		0.69	0.23	mg/Kg	☼	09/14/22 11:33	09/15/22 14:41	1
Sodium	81.8	J	160	14.9	mg/Kg	☼	09/14/22 11:33	09/15/22 14:41	1
Thallium	ND		6.9	0.34	mg/Kg	☼	09/14/22 11:33	09/15/22 14:41	1
Vanadium	18.7		0.57	0.13	mg/Kg	☼	09/14/22 11:33	09/15/22 14:41	1
Zinc	103		2.3	0.73	mg/Kg	☼	09/14/22 11:33	09/15/22 14:41	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.14		0.022	0.0051	mg/Kg	☼	09/15/22 10:09	09/15/22 13:54	1

Client Sample ID: SS1 (12-24)

Lab Sample ID: 480-201563-4

Date Collected: 09/12/22 16:10
Matrix: Solid
Date Received: 09/13/22 10:00
Percent Solids: 91.4

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.2	0.52	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
1,1,1-Trichloroethane	ND		5.2	0.38	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
1,1,2,2-Tetrachloroethane	ND		5.2	0.85	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.2	1.2	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
1,1,2-Trichloroethane	ND		5.2	0.68	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
1,1-Dichloroethane	ND		5.2	0.64	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
1,1-Dichloroethene	ND		5.2	0.64	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
1,2,3-Trimethylbenzene	ND		5.2	1.1	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
1,2,4-Trichlorobenzene	ND		5.2	0.32	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
1,2,4-Trimethylbenzene	ND		5.2	1.0	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
1,2-Dibromo-3-Chloropropane	ND		5.2	2.6	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
1,2-Dibromoethane	ND		5.2	0.67	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
1,2-Dichlorobenzene	ND		5.2	0.41	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
1,2-Dichloroethane	ND		5.2	0.26	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
1,2-Dichloropropane	ND		5.2	2.6	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
1,3,5-Trimethylbenzene	ND		5.2	0.34	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
1,3-Dichlorobenzene	ND		5.2	0.27	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
1,4-Dichlorobenzene	ND		5.2	0.73	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
2-Butanone (MEK)	ND		26	1.9	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
2-Hexanone	ND		26	2.6	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
4-Methyl-2-pentanone (MIBK)	ND		26	1.7	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
Acetone	ND		26	4.4	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
Benzene	ND		5.2	0.26	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
Bromodichloromethane	ND		5.2	0.70	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
Bromoform	ND		5.2	2.6	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1

Client Sample ID: SS1 (12-24)
Date Collected: 09/12/22 16:10
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-4
Matrix: Solid
Percent Solids: 91.4

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		5.2	0.47	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
Carbon disulfide	ND		5.2	2.6	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
Carbon tetrachloride	ND		5.2	0.51	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
Chlorobenzene	ND		5.2	0.69	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
Chloroethane	ND		5.2	1.2	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
Chloroform	0.33	J B	5.2	0.32	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
Chloromethane	ND		5.2	0.32	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
cis-1,2-Dichloroethene	ND		5.2	0.67	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
cis-1,3-Dichloropropene	ND		5.2	0.76	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
Cyclohexane	ND		5.2	0.73	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
Dibromochloromethane	ND		5.2	0.67	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
Dichlorodifluoromethane	ND		5.2	0.43	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
Ethylbenzene	ND		5.2	0.36	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
Isopropylbenzene	ND		5.2	0.79	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
m,p-Xylene	ND		10	0.88	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
Methyl acetate	ND		26	3.2	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
Methyl tert-butyl ether	ND		5.2	0.51	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
Methylcyclohexane	ND		5.2	0.80	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
Methylene Chloride	ND		5.2	2.4	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
n-Butylbenzene	ND		5.2	0.46	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
N-Propylbenzene	ND		5.2	0.42	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
o-Xylene	ND		5.2	0.68	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
sec-Butylbenzene	ND		5.2	0.46	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
Styrene	ND		5.2	0.26	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
tert-Butylbenzene	ND		5.2	0.55	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
Tetrachloroethene	ND		5.2	0.70	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
Toluene	ND		5.2	0.40	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
trans-1,2-Dichloroethene	ND		5.2	0.54	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
trans-1,3-Dichloropropene	ND		5.2	2.3	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
Trichloroethene	ND		5.2	1.2	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
Trichlorofluoromethane	ND		5.2	0.50	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
Vinyl chloride	ND		5.2	0.64	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1
Xylenes, Total	ND		10	0.88	ug/Kg	☼	09/13/22 13:00	09/15/22 01:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*64 - 126*	*09/13/22 13:00*	*09/15/22 01:45*	*1*
4-Bromofluorobenzene (Surr)	*84*		*72 - 126*	*09/13/22 13:00*	*09/15/22 01:45*	*1*
Dibromofluoromethane (Surr)	*102*		*60 - 140*	*09/13/22 13:00*	*09/15/22 01:45*	*1*
Toluene-d8 (Surr)	*120*		*71 - 125*	*09/13/22 13:00*	*09/15/22 01:45*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		110	60	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
2,4,5-Trichlorophenol	ND		180	50	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
2,4,6-Trichlorophenol	ND		180	37	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
2,4-Dichlorophenol	ND		180	20	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
2,4-Dimethylphenol	ND		180	44	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
2,4-Dinitrophenol	ND		1800	850	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
2,4-Dinitrotoluene	ND		180	38	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
2,6-Dinitrotoluene	ND		180	22	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1

Client Sample ID: SS1 (12-24)

Date Collected: 09/12/22 16:10
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-4

Matrix: Solid
Percent Solids: 91.4

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND		180	30	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
2-Chlorophenol	ND		360	34	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
2-Methylnaphthalene	ND		180	37	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
2-Methylphenol	ND		180	22	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
2-Nitroaniline	ND		360	27	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
2-Nitrophenol	ND		180	52	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
3,3'-Dichlorobenzidine	ND		360	220	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
3-Nitroaniline	ND		360	51	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
4,6-Dinitro-2-methylphenol	ND		360	180	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
4-Bromophenyl phenyl ether	ND		180	26	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
4-Chloro-3-methylphenol	ND		180	46	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
4-Chloroaniline	ND		180	46	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
4-Chlorophenyl phenyl ether	ND		180	23	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
4-Methylphenol	ND		360	22	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
4-Nitroaniline	ND		360	96	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
4-Nitrophenol	ND		360	130	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Acenaphthene	ND		180	27	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Acenaphthylene	ND		180	24	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Acetophenone	ND		180	25	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Anthracene	ND		180	46	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Atrazine	ND		180	64	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Benzaldehyde	ND		180	150	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Benzo[a]anthracene	62	J	180	18	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Benzo[a]pyrene	72	J	180	27	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Benzo[b]fluoranthene	130	J	180	29	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Benzo[g,h,i]perylene	51	J	180	20	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Benzo[k]fluoranthene	43	J	180	24	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Biphenyl	ND		180	27	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
bis (2-chloroisopropyl) ether	ND		180	37	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Bis(2-chloroethoxy)methane	ND		180	39	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Bis(2-chloroethyl)ether	ND		180	24	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Bis(2-ethylhexyl) phthalate	ND		180	63	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Butyl benzyl phthalate	32	J	180	30	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Caprolactam	ND		180	55	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Carbazole	ND		180	22	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Chrysene	96	J	180	41	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Dibenz(a,h)anthracene	ND		180	33	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Dibenzofuran	ND		180	22	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Diethyl phthalate	110	J B	180	24	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Dimethyl phthalate	ND		180	22	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Di-n-butyl phthalate	ND		180	31	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Di-n-octyl phthalate	ND		180	22	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Fluoranthene	180		180	20	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Fluorene	ND		180	22	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Hexachlorobenzene	ND		180	25	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Hexachlorobutadiene	ND		180	27	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Hexachlorocyclopentadiene	ND		180	25	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Hexachloroethane	ND		180	24	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Indeno[1,2,3-cd]pyrene	60	J	180	23	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201563-1

Client Sample ID: SS1 (12-24)
Date Collected: 09/12/22 16:10
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-4
Matrix: Solid
Percent Solids: 91.4

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	ND		180	39	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Naphthalene	ND		180	24	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Nitrobenzene	ND		180	21	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
N-Nitrosodi-n-propylamine	ND		180	31	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
N-Nitrosodiphenylamine	ND		180	150	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Pentachlorophenol	ND		360	180	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Phenanthrene	130	J	180	27	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Phenol	ND		180	28	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1
Pyrene	140	J	180	22	ug/Kg	☼	09/14/22 15:47	09/15/22 17:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*88*		*54 - 120*	*09/14/22 15:47*	*09/15/22 17:47*	*1*
2-Fluorobiphenyl (Surr)	*80*		*60 - 120*	*09/14/22 15:47*	*09/15/22 17:47*	*1*
2-Fluorophenol (Surr)	*70*		*52 - 120*	*09/14/22 15:47*	*09/15/22 17:47*	*1*
Nitrobenzene-d5 (Surr)	*71*		*53 - 120*	*09/14/22 15:47*	*09/15/22 17:47*	*1*
Phenol-d5 (Surr)	*71*		*54 - 120*	*09/14/22 15:47*	*09/15/22 17:47*	*1*
p-Terphenyl-d14 (Surr)	*93*		*79 - 130*	*09/14/22 15:47*	*09/15/22 17:47*	*1*

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.54	0.36	ug/Kg	☼	09/15/22 08:50	09/15/22 19:40	1
Perfluoropentanoic acid (PFPeA)	ND		0.22	0.059	ug/Kg	☼	09/15/22 08:50	09/15/22 19:40	1
Perfluorohexanoic acid (PFHxA)	ND		0.22	0.050	ug/Kg	☼	09/15/22 08:50	09/15/22 19:40	1
Perfluoroheptanoic acid (PFHpA)	0.042	J	0.22	0.042	ug/Kg	☼	09/15/22 08:50	09/15/22 19:40	1
Perfluorooctanoic acid (PFOA)	0.18	J	0.22	0.063	ug/Kg	☼	09/15/22 08:50	09/15/22 19:40	1
Perfluorononanoic acid (PFNA)	ND		0.22	0.037	ug/Kg	☼	09/15/22 08:50	09/15/22 19:40	1
Perfluorodecanoic acid (PFDA)	ND		0.22	0.030	ug/Kg	☼	09/15/22 08:50	09/15/22 19:40	1
Perfluoroundecanoic acid (PFUnA)	ND		0.22	0.029	ug/Kg	☼	09/15/22 08:50	09/15/22 19:40	1
Perfluorododecanoic acid (PFDoA)	ND		0.22	0.027	ug/Kg	☼	09/15/22 08:50	09/15/22 19:40	1
Perfluorotridecanoic acid (PFTriA)	ND		0.22	0.027	ug/Kg	☼	09/15/22 08:50	09/15/22 19:40	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.22	0.028	ug/Kg	☼	09/15/22 08:50	09/15/22 19:40	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.22	0.036	ug/Kg	☼	09/15/22 08:50	09/15/22 19:40	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.22	0.044	ug/Kg	☼	09/15/22 08:50	09/15/22 19:40	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.22	0.025	ug/Kg	☼	09/15/22 08:50	09/15/22 19:40	1
Perfluorooctanesulfonic acid (PFOS)	0.28		0.22	0.12	ug/Kg	☼	09/15/22 08:50	09/15/22 19:40	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.22	0.021	ug/Kg	☼	09/15/22 08:50	09/15/22 19:40	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.22	0.037	ug/Kg	☼	09/15/22 08:50	09/15/22 19:40	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.2	0.12	ug/Kg	☼	09/15/22 08:50	09/15/22 19:40	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.2	0.090	ug/Kg	☼	09/15/22 08:50	09/15/22 19:40	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.2	0.062	ug/Kg	☼	09/15/22 08:50	09/15/22 19:40	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.2	0.040	ug/Kg	☼	09/15/22 08:50	09/15/22 19:40	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*85*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:40*	*1*
13C4 PFHpA	*95*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:40*	*1*
13C4 PFOA	*91*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:40*	*1*
13C4 PFOS	*82*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:40*	*1*

Client Sample ID: SS1 (12-24)

Date Collected: 09/12/22 16:10
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-4

Matrix: Solid
Percent Solids: 91.4

Method: EPA 537 IDA - EPA 537 Isotope Dilution (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFNA	92		50 - 150	09/15/22 08:50	09/15/22 19:40	1
13C4 PFBA	93		50 - 150	09/15/22 08:50	09/15/22 19:40	1
13C2 PFHxA	92		50 - 150	09/15/22 08:50	09/15/22 19:40	1
13C2 PFDA	87		50 - 150	09/15/22 08:50	09/15/22 19:40	1
13C2 PFUnA	91		50 - 150	09/15/22 08:50	09/15/22 19:40	1
13C2 PFDoA	93		50 - 150	09/15/22 08:50	09/15/22 19:40	1
13C8 FOSA	83		50 - 150	09/15/22 08:50	09/15/22 19:40	1
13C5 PFPeA	94		50 - 150	09/15/22 08:50	09/15/22 19:40	1
13C2 PFTeDA	96		50 - 150	09/15/22 08:50	09/15/22 19:40	1
d3-NMeFOSAA	90		50 - 150	09/15/22 08:50	09/15/22 19:40	1
d5-NEtFOSAA	91		50 - 150	09/15/22 08:50	09/15/22 19:40	1
M2-6:2 FTS	101		50 - 150	09/15/22 08:50	09/15/22 19:40	1
M2-8:2 FTS	112		50 - 150	09/15/22 08:50	09/15/22 19:40	1
13C3 PFBS	91		50 - 150	09/15/22 08:50	09/15/22 19:40	1

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	4890		11.3	5.0	mg/Kg	☼	09/14/22 11:33	09/15/22 14:45	1
Antimony	7.3	J	16.9	0.45	mg/Kg	☼	09/14/22 11:33	09/15/22 14:45	1
Arsenic	12.2		2.3	0.45	mg/Kg	☼	09/14/22 11:33	09/15/22 14:45	1
Barium	50.8		0.56	0.12	mg/Kg	☼	09/14/22 11:33	09/15/22 14:45	1
Beryllium	0.36		0.23	0.032	mg/Kg	☼	09/14/22 11:33	09/15/22 14:45	1
Cadmium	0.66		0.23	0.034	mg/Kg	☼	09/14/22 11:33	09/15/22 14:45	1
Calcium	2160	B	56.4	3.7	mg/Kg	☼	09/14/22 11:33	09/15/22 14:45	1
Chromium	19.0		5.6	2.3	mg/Kg	☼	09/14/22 11:33	09/16/22 16:06	10
Cobalt	12.0		0.56	0.056	mg/Kg	☼	09/14/22 11:33	09/15/22 14:45	1
Copper	59.3		1.1	0.24	mg/Kg	☼	09/14/22 11:33	09/15/22 14:45	1
Iron	113000		113	39.5	mg/Kg	☼	09/14/22 11:33	09/16/22 16:06	10
Lead	77.4		11.3	2.7	mg/Kg	☼	09/14/22 11:33	09/16/22 16:06	10
Magnesium	851	B	22.6	1.0	mg/Kg	☼	09/14/22 11:33	09/15/22 14:45	1
Manganese	790	B	2.3	0.36	mg/Kg	☼	09/14/22 11:33	09/16/22 16:06	10
Nickel	20.7	J	56.4	2.6	mg/Kg	☼	09/14/22 11:33	09/16/22 16:06	10
Potassium	797		33.8	22.6	mg/Kg	☼	09/14/22 11:33	09/15/22 14:45	1
Selenium	0.68	J	4.5	0.45	mg/Kg	☼	09/14/22 11:33	09/16/22 16:02	1
Silver	ND		0.68	0.23	mg/Kg	☼	09/14/22 11:33	09/15/22 14:45	1
Sodium	101	J	158	14.7	mg/Kg	☼	09/14/22 11:33	09/15/22 14:45	1
Thallium	ND		6.8	0.34	mg/Kg	☼	09/14/22 11:33	09/15/22 14:45	1
Vanadium	33.4		5.6	1.2	mg/Kg	☼	09/14/22 11:33	09/16/22 16:06	10
Zinc	45.9		2.3	0.72	mg/Kg	☼	09/14/22 11:33	09/15/22 14:45	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.057		0.021	0.0049	mg/Kg	☼	09/15/22 10:09	09/15/22 13:55	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201563-1

Client Sample ID: FDUP_091222
Date Collected: 09/12/22 00:00
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-5
Matrix: Solid
Percent Solids: 89.4

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.1	0.51	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
1,1,1-Trichloroethane	ND		5.1	0.37	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
1,1,2,2-Tetrachloroethane	ND	*3	5.1	0.82	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.1	1.2	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
1,1,2-Trichloroethane	ND		5.1	0.66	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
1,1-Dichloroethane	ND		5.1	0.62	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
1,1-Dichloroethene	ND		5.1	0.62	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
1,2,3-Trimethylbenzene	ND	*3	5.1	1.0	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
1,2,4-Trichlorobenzene	ND	*3	5.1	0.31	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
1,2,4-Trimethylbenzene	ND	*3	5.1	0.97	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
1,2-Dibromo-3-Chloropropane	ND	*3	5.1	2.5	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
1,2-Dibromoethane	ND		5.1	0.65	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
1,2-Dichlorobenzene	ND	*3	5.1	0.40	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
1,2-Dichloroethane	ND		5.1	0.25	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
1,2-Dichloropropane	ND		5.1	2.5	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
1,3,5-Trimethylbenzene	ND	*3	5.1	0.33	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
1,3-Dichlorobenzene	ND	*3	5.1	0.26	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
1,4-Dichlorobenzene	ND	*3	5.1	0.71	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
2-Butanone (MEK)	ND		25	1.9	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
2-Hexanone	ND		25	2.5	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.7	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
Acetone	ND		25	4.3	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
Benzene	ND		5.1	0.25	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
Bromodichloromethane	ND		5.1	0.68	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
Bromoform	ND		5.1	2.5	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
Bromomethane	ND		5.1	0.46	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
Carbon disulfide	ND		5.1	2.5	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
Carbon tetrachloride	ND		5.1	0.49	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
Chlorobenzene	ND		5.1	0.67	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
Chloroethane	ND		5.1	1.1	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
Chloroform	0.33	J B	5.1	0.31	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
Chloromethane	ND		5.1	0.31	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
cis-1,2-Dichloroethene	ND		5.1	0.65	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
cis-1,3-Dichloropropene	ND		5.1	0.73	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
Cyclohexane	ND		5.1	0.71	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
Dibromochloromethane	ND		5.1	0.65	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
Dichlorodifluoromethane	ND		5.1	0.42	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
Ethylbenzene	ND		5.1	0.35	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
Isopropylbenzene	ND	*3	5.1	0.77	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
m,p-Xylene	ND		10	0.85	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
Methyl acetate	ND		25	3.1	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
Methyl tert-butyl ether	ND		5.1	0.50	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
Methylcyclohexane	ND		5.1	0.77	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
Methylene Chloride	ND		5.1	2.3	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
n-Butylbenzene	ND	*3	5.1	0.44	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
N-Propylbenzene	ND	*3	5.1	0.41	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
o-Xylene	ND		5.1	0.66	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
sec-Butylbenzene	ND	*3	5.1	0.44	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
Styrene	ND		5.1	0.25	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201563-1

Client Sample ID: FDUP_091222
Date Collected: 09/12/22 00:00
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-5
Matrix: Solid
Percent Solids: 89.4

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND	*3	5.1	0.53	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
Tetrachloroethene	ND		5.1	0.68	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
Toluene	ND		5.1	0.38	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
trans-1,2-Dichloroethene	ND		5.1	0.52	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
trans-1,3-Dichloropropene	ND		5.1	2.2	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
Trichloroethene	ND		5.1	1.1	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
Trichlorofluoromethane	ND		5.1	0.48	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
Vinyl chloride	ND		5.1	0.62	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1
Xylenes, Total	ND		10	0.85	ug/Kg	☼	09/13/22 13:00	09/15/22 22:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*64 - 126*	*09/13/22 13:00*	*09/15/22 22:51*	*1*
4-Bromofluorobenzene (Surr)	*77*		*72 - 126*	*09/13/22 13:00*	*09/15/22 22:51*	*1*
Dibromofluoromethane (Surr)	*107*		*60 - 140*	*09/13/22 13:00*	*09/15/22 22:51*	*1*
Toluene-d8 (Surr)	*128*	*S1+*	*71 - 125*	*09/13/22 13:00*	*09/15/22 22:51*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		110	61	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
2,4,5-Trichlorophenol	ND		190	51	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
2,4,6-Trichlorophenol	ND		190	37	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
2,4-Dichlorophenol	ND		190	20	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
2,4-Dimethylphenol	ND		190	45	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
2,4-Dinitrophenol	ND		1800	860	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
2,4-Dinitrotoluene	ND		190	39	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
2,6-Dinitrotoluene	ND		190	22	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
2-Chloronaphthalene	ND		190	31	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
2-Chlorophenol	ND		360	34	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
2-Methylnaphthalene	ND		190	37	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
2-Methylphenol	ND		190	22	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
2-Nitroaniline	ND		360	28	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
2-Nitrophenol	ND		190	53	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
3,3'-Dichlorobenzidine	ND		360	220	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
3-Nitroaniline	ND		360	52	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
4,6-Dinitro-2-methylphenol	ND		360	190	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
4-Bromophenyl phenyl ether	ND		190	26	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
4-Chloro-3-methylphenol	ND		190	46	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
4-Chloroaniline	ND		190	46	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
4-Chlorophenyl phenyl ether	ND		190	23	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
4-Methylphenol	ND		360	22	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
4-Nitroaniline	ND		360	98	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
4-Nitrophenol	ND		360	130	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Acenaphthene	ND		190	28	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Acenaphthylene	ND		190	24	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Acetophenone	ND		190	25	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Anthracene	ND		190	46	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Atrazine	ND		190	65	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Benzaldehyde	ND		190	150	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Benzo[a]anthracene	73	J	190	19	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Benzo[a]pyrene	91	J	190	28	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1

Client Sample ID: FDUP_091222
Date Collected: 09/12/22 00:00
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-5
Matrix: Solid
Percent Solids: 89.4

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	150	J	190	30	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Benzo[g,h,i]perylene	59	J	190	20	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Benzo[k]fluoranthene	57	J	190	24	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Biphenyl	ND		190	28	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
bis (2-chloroisopropyl) ether	ND		190	37	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Bis(2-chloroethoxy)methane	ND		190	40	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Bis(2-chloroethyl)ether	ND		190	24	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Bis(2-ethylhexyl) phthalate	ND		190	64	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Butyl benzyl phthalate	32	J	190	31	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Caprolactam	ND		190	56	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Carbazole	ND		190	22	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Chrysene	130	J	190	42	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Dibenz(a,h)anthracene	ND		190	33	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Dibenzofuran	ND		190	22	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Diethyl phthalate	89	J B	190	24	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Dimethyl phthalate	ND		190	22	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Di-n-butyl phthalate	ND		190	32	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Di-n-octyl phthalate	ND		190	22	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Fluoranthene	220		190	20	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Fluorene	ND		190	22	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Hexachlorobenzene	ND		190	25	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Hexachlorobutadiene	ND		190	28	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Hexachlorocyclopentadiene	ND		190	25	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Hexachloroethane	ND		190	24	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Indeno[1,2,3-cd]pyrene	72	J	190	23	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Isophorone	ND		190	40	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Naphthalene	ND		190	24	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Nitrobenzene	ND		190	21	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
N-Nitrosodi-n-propylamine	ND		190	32	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
N-Nitrosodiphenylamine	ND		190	150	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Pentachlorophenol	ND		360	190	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Phenanthrene	170	J	190	28	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Phenol	ND		190	29	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1
Pyrene	180	J	190	22	ug/Kg	☼	09/14/22 15:47	09/15/22 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*102*		*54 - 120*	*09/14/22 15:47*	*09/15/22 18:04*	*1*
2-Fluorobiphenyl (Surr)	*91*		*60 - 120*	*09/14/22 15:47*	*09/15/22 18:04*	*1*
2-Fluorophenol (Surr)	*81*		*52 - 120*	*09/14/22 15:47*	*09/15/22 18:04*	*1*
Nitrobenzene-d5 (Surr)	*83*		*53 - 120*	*09/14/22 15:47*	*09/15/22 18:04*	*1*
Phenol-d5 (Surr)	*82*		*54 - 120*	*09/14/22 15:47*	*09/15/22 18:04*	*1*
p-Terphenyl-d14 (Surr)	*104*		*79 - 130*	*09/14/22 15:47*	*09/15/22 18:04*	*1*

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.54	0.36	ug/Kg	☼	09/15/22 08:50	09/15/22 19:48	1
Perfluoropentanoic acid (PFPeA)	ND		0.22	0.059	ug/Kg	☼	09/15/22 08:50	09/15/22 19:48	1
Perfluorohexanoic acid (PFHxA)	0.050	J	0.22	0.049	ug/Kg	☼	09/15/22 08:50	09/15/22 19:48	1
Perfluoroheptanoic acid (PFHpA)	0.071	J	0.22	0.042	ug/Kg	☼	09/15/22 08:50	09/15/22 19:48	1
Perfluorooctanoic acid (PFOA)	0.33		0.22	0.062	ug/Kg	☼	09/15/22 08:50	09/15/22 19:48	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201563-1

Client Sample ID: FDUP_091222
Date Collected: 09/12/22 00:00
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-5
Matrix: Solid
Percent Solids: 89.4

Method: EPA 537 IDA - EPA 537 Isotope Dilution (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	ND		0.22	0.037	ug/Kg	☼	09/15/22 08:50	09/15/22 19:48	1
Perfluorodecanoic acid (PFDA)	ND		0.22	0.030	ug/Kg	☼	09/15/22 08:50	09/15/22 19:48	1
Perfluoroundecanoic acid (PFUnA)	ND		0.22	0.029	ug/Kg	☼	09/15/22 08:50	09/15/22 19:48	1
Perfluorododecanoic acid (PFDoA)	ND		0.22	0.027	ug/Kg	☼	09/15/22 08:50	09/15/22 19:48	1
Perfluorotridecanoic acid (PFTriA)	ND		0.22	0.027	ug/Kg	☼	09/15/22 08:50	09/15/22 19:48	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.22	0.028	ug/Kg	☼	09/15/22 08:50	09/15/22 19:48	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.22	0.036	ug/Kg	☼	09/15/22 08:50	09/15/22 19:48	1
Perfluorohexanesulfonic acid (PFHxS)	**0.055**	**J**	0.22	0.044	ug/Kg	☼	09/15/22 08:50	09/15/22 19:48	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.22	0.025	ug/Kg	☼	09/15/22 08:50	09/15/22 19:48	1
Perfluorooctanesulfonic acid (PFOS)	**0.49**		0.22	0.12	ug/Kg	☼	09/15/22 08:50	09/15/22 19:48	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.22	0.020	ug/Kg	☼	09/15/22 08:50	09/15/22 19:48	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.22	0.037	ug/Kg	☼	09/15/22 08:50	09/15/22 19:48	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.2	0.12	ug/Kg	☼	09/15/22 08:50	09/15/22 19:48	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.2	0.089	ug/Kg	☼	09/15/22 08:50	09/15/22 19:48	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.2	0.061	ug/Kg	☼	09/15/22 08:50	09/15/22 19:48	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.2	0.040	ug/Kg	☼	09/15/22 08:50	09/15/22 19:48	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*80*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:48*	*1*
13C4 PFHpA	*87*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:48*	*1*
13C4 PFOA	*92*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:48*	*1*
13C4 PFOS	*74*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:48*	*1*
13C5 PFNA	*89*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:48*	*1*
13C4 PFBA	*84*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:48*	*1*
13C2 PFHxA	*90*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:48*	*1*
13C2 PFDA	*88*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:48*	*1*
13C2 PFUnA	*86*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:48*	*1*
13C2 PFDoA	*84*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:48*	*1*
13C8 FOSA	*78*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:48*	*1*
13C5 PFPeA	*85*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:48*	*1*
13C2 PFTeDA	*84*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:48*	*1*
d3-NMeFOSAA	*81*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:48*	*1*
d5-NEtFOSAA	*83*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:48*	*1*
M2-6:2 FTS	*87*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:48*	*1*
M2-8:2 FTS	*84*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:48*	*1*
13C3 PFBS	*83*		*50 - 150*	*09/15/22 08:50*	*09/15/22 19:48*	*1*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**6850**		11.0	4.9	mg/Kg	☼	09/14/22 11:33	09/15/22 14:49	1
Antimony	**10.0**	**J**	16.6	0.44	mg/Kg	☼	09/14/22 11:33	09/15/22 14:49	1
Arsenic	**12.9**		2.2	0.44	mg/Kg	☼	09/14/22 11:33	09/15/22 14:49	1
Barium	**70.3**		0.55	0.12	mg/Kg	☼	09/14/22 11:33	09/15/22 14:49	1
Beryllium	**0.44**		0.22	0.031	mg/Kg	☼	09/14/22 11:33	09/15/22 14:49	1
Cadmium	**0.72**		0.22	0.033	mg/Kg	☼	09/14/22 11:33	09/15/22 14:49	1
Calcium	**2130**	**B**	55.2	3.6	mg/Kg	☼	09/14/22 11:33	09/15/22 14:49	1
Chromium	**20.2**		0.55	0.22	mg/Kg	☼	09/14/22 11:33	09/16/22 16:10	1

Client Sample ID: FDUP_091222

Date Collected: 09/12/22 00:00
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-5
Matrix: Solid
Percent Solids: 89.4

Method: SW846 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	14.1		0.55	0.055	mg/Kg	☼	09/14/22 11:33	09/15/22 14:49	1
Copper	70.5		1.1	0.23	mg/Kg	☼	09/14/22 11:33	09/15/22 14:49	1
Iron	145000		110	38.6	mg/Kg	☼	09/14/22 11:33	09/16/22 16:14	10
Lead	82.2		11.0	2.6	mg/Kg	☼	09/14/22 11:33	09/16/22 16:14	10
Magnesium	1050	B	22.1	1.0	mg/Kg	☼	09/14/22 11:33	09/15/22 14:49	1
Manganese	885	B	2.2	0.35	mg/Kg	☼	09/14/22 11:33	09/16/22 16:14	10
Nickel	29.5	J	55.2	2.5	mg/Kg	☼	09/14/22 11:33	09/16/22 16:14	10
Potassium	1230		33.1	22.1	mg/Kg	☼	09/14/22 11:33	09/15/22 14:49	1
Selenium	0.99	J	4.4	0.44	mg/Kg	☼	09/14/22 11:33	09/16/22 16:10	1
Silver	ND		0.66	0.22	mg/Kg	☼	09/14/22 11:33	09/15/22 14:49	1
Sodium	93.2	J	155	14.4	mg/Kg	☼	09/14/22 11:33	09/15/22 14:49	1
Thallium	ND		6.6	0.33	mg/Kg	☼	09/14/22 11:33	09/15/22 14:49	1
Vanadium	41.4		5.5	1.2	mg/Kg	☼	09/14/22 11:33	09/16/22 16:14	10
Zinc	49.6		2.2	0.71	mg/Kg	☼	09/14/22 11:33	09/15/22 14:49	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.049		0.020	0.0047	mg/Kg	☼	09/15/22 10:09	09/15/22 13:56	1

Client Sample ID: FB_091222

Date Collected: 09/12/22 00:00
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-6
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/13/22 18:46	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/13/22 18:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/13/22 18:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/13/22 18:46	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/13/22 18:46	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/13/22 18:46	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/13/22 18:46	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			09/13/22 18:46	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/13/22 18:46	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/13/22 18:46	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/13/22 18:46	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/13/22 18:46	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/13/22 18:46	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/13/22 18:46	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/13/22 18:46	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/13/22 18:46	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/13/22 18:46	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/13/22 18:46	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/13/22 18:46	1
2-Hexanone	ND		5.0	1.2	ug/L			09/13/22 18:46	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/13/22 18:46	1
Acetone	ND		10	3.0	ug/L			09/13/22 18:46	1
Benzene	ND		1.0	0.41	ug/L			09/13/22 18:46	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/13/22 18:46	1
Bromoform	ND		1.0	0.26	ug/L			09/13/22 18:46	1

Client Sample ID: FB_091222
Date Collected: 09/12/22 00:00
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-6
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		1.0	0.69	ug/L			09/13/22 18:46	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/13/22 18:46	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/13/22 18:46	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/13/22 18:46	1
Chloroethane	ND		1.0	0.32	ug/L			09/13/22 18:46	1
Chloroform	ND		1.0	0.34	ug/L			09/13/22 18:46	1
Chloromethane	ND		1.0	0.35	ug/L			09/13/22 18:46	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/13/22 18:46	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/13/22 18:46	1
Cyclohexane	ND		1.0	0.18	ug/L			09/13/22 18:46	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/13/22 18:46	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/13/22 18:46	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/13/22 18:46	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/13/22 18:46	1
m,p-Xylene	ND		2.0	0.66	ug/L			09/13/22 18:46	1
Methyl acetate	ND		2.5	1.3	ug/L			09/13/22 18:46	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/13/22 18:46	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/13/22 18:46	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/13/22 18:46	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/13/22 18:46	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/13/22 18:46	1
o-Xylene	ND		1.0	0.76	ug/L			09/13/22 18:46	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/13/22 18:46	1
Styrene	ND		1.0	0.73	ug/L			09/13/22 18:46	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/13/22 18:46	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/13/22 18:46	1
Toluene	ND		1.0	0.51	ug/L			09/13/22 18:46	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/13/22 18:46	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/13/22 18:46	1
Trichloroethene	ND		1.0	0.46	ug/L			09/13/22 18:46	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/13/22 18:46	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/13/22 18:46	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/13/22 18:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*77 - 120*		*09/13/22 18:46*	*1*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*		*09/13/22 18:46*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*09/13/22 18:46*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*09/13/22 18:46*	*1*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.23	0.11	ug/L		09/14/22 08:19	09/15/22 21:57	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*39*		*15 - 110*	*09/14/22 08:19*	*09/15/22 21:57*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		09/14/22 08:46	09/15/22 17:11	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		09/14/22 08:46	09/15/22 17:11	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201563-1

Client Sample ID: FB_091222
Date Collected: 09/12/22 00:00
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-6
Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		09/14/22 08:46	09/15/22 17:11	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		09/14/22 08:46	09/15/22 17:11	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		09/14/22 08:46	09/15/22 17:11	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		09/14/22 08:46	09/15/22 17:11	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		09/14/22 08:46	09/15/22 17:11	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		09/14/22 08:46	09/15/22 17:11	1
2-Chlorophenol	ND		5.0	0.53	ug/L		09/14/22 08:46	09/15/22 17:11	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		09/14/22 08:46	09/15/22 17:11	1
2-Methylphenol	ND		5.0	0.40	ug/L		09/14/22 08:46	09/15/22 17:11	1
2-Nitroaniline	ND		10	0.42	ug/L		09/14/22 08:46	09/15/22 17:11	1
2-Nitrophenol	ND		5.0	0.48	ug/L		09/14/22 08:46	09/15/22 17:11	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		09/14/22 08:46	09/15/22 17:11	1
3-Nitroaniline	ND		10	0.48	ug/L		09/14/22 08:46	09/15/22 17:11	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		09/14/22 08:46	09/15/22 17:11	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		09/14/22 08:46	09/15/22 17:11	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		09/14/22 08:46	09/15/22 17:11	1
4-Chloroaniline	ND		5.0	0.59	ug/L		09/14/22 08:46	09/15/22 17:11	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		09/14/22 08:46	09/15/22 17:11	1
4-Methylphenol	ND		10	0.36	ug/L		09/14/22 08:46	09/15/22 17:11	1
4-Nitroaniline	ND		10	0.25	ug/L		09/14/22 08:46	09/15/22 17:11	1
4-Nitrophenol	ND		10	1.5	ug/L		09/14/22 08:46	09/15/22 17:11	1
Acenaphthene	ND		5.0	0.41	ug/L		09/14/22 08:46	09/15/22 17:11	1
Acenaphthylene	ND		5.0	0.38	ug/L		09/14/22 08:46	09/15/22 17:11	1
Acetophenone	ND		5.0	0.54	ug/L		09/14/22 08:46	09/15/22 17:11	1
Anthracene	ND		5.0	0.28	ug/L		09/14/22 08:46	09/15/22 17:11	1
Atrazine	ND		5.0	0.46	ug/L		09/14/22 08:46	09/15/22 17:11	1
Benzaldehyde	ND		5.0	0.27	ug/L		09/14/22 08:46	09/15/22 17:11	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		09/14/22 08:46	09/15/22 17:11	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		09/14/22 08:46	09/15/22 17:11	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		09/14/22 08:46	09/15/22 17:11	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		09/14/22 08:46	09/15/22 17:11	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		09/14/22 08:46	09/15/22 17:11	1
Biphenyl	ND		5.0	0.65	ug/L		09/14/22 08:46	09/15/22 17:11	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		09/14/22 08:46	09/15/22 17:11	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		09/14/22 08:46	09/15/22 17:11	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		09/14/22 08:46	09/15/22 17:11	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		09/14/22 08:46	09/15/22 17:11	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		09/14/22 08:46	09/15/22 17:11	1
Caprolactam	ND		5.0	2.2	ug/L		09/14/22 08:46	09/15/22 17:11	1
Carbazole	ND		5.0	0.30	ug/L		09/14/22 08:46	09/15/22 17:11	1
Chrysene	ND		5.0	0.33	ug/L		09/14/22 08:46	09/15/22 17:11	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		09/14/22 08:46	09/15/22 17:11	1
Dibenzofuran	ND		10	0.51	ug/L		09/14/22 08:46	09/15/22 17:11	1
Diethyl phthalate	ND		5.0	0.22	ug/L		09/14/22 08:46	09/15/22 17:11	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		09/14/22 08:46	09/15/22 17:11	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		09/14/22 08:46	09/15/22 17:11	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		09/14/22 08:46	09/15/22 17:11	1
Fluoranthene	ND		5.0	0.40	ug/L		09/14/22 08:46	09/15/22 17:11	1
Fluorene	ND		5.0	0.36	ug/L		09/14/22 08:46	09/15/22 17:11	1

Client Sample ID: FB_091222
Date Collected: 09/12/22 00:00
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-6
Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND		5.0	0.51	ug/L		09/14/22 08:46	09/15/22 17:11	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		09/14/22 08:46	09/15/22 17:11	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		09/14/22 08:46	09/15/22 17:11	1
Hexachloroethane	ND		5.0	0.59	ug/L		09/14/22 08:46	09/15/22 17:11	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		09/14/22 08:46	09/15/22 17:11	1
Isophorone	ND		5.0	0.43	ug/L		09/14/22 08:46	09/15/22 17:11	1
Naphthalene	ND		5.0	0.76	ug/L		09/14/22 08:46	09/15/22 17:11	1
Nitrobenzene	ND		5.0	0.29	ug/L		09/14/22 08:46	09/15/22 17:11	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		09/14/22 08:46	09/15/22 17:11	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		09/14/22 08:46	09/15/22 17:11	1
Pentachlorophenol	ND		10	2.2	ug/L		09/14/22 08:46	09/15/22 17:11	1
Phenanthrene	ND		5.0	0.44	ug/L		09/14/22 08:46	09/15/22 17:11	1
Phenol	ND		5.0	0.39	ug/L		09/14/22 08:46	09/15/22 17:11	1
Pyrene	ND		5.0	0.34	ug/L		09/14/22 08:46	09/15/22 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*91*		*41 - 120*	*09/14/22 08:46*	*09/15/22 17:11*	*1*
2-Fluorobiphenyl (Surr)	*93*		*48 - 120*	*09/14/22 08:46*	*09/15/22 17:11*	*1*
2-Fluorophenol (Surr)	*62*		*35 - 120*	*09/14/22 08:46*	*09/15/22 17:11*	*1*
Nitrobenzene-d5 (Surr)	*76*		*46 - 120*	*09/14/22 08:46*	*09/15/22 17:11*	*1*
Phenol-d5 (Surr)	*47*		*22 - 120*	*09/14/22 08:46*	*09/15/22 17:11*	*1*
p-Terphenyl-d14 (Surr)	*106*		*60 - 148*	*09/14/22 08:46*	*09/15/22 17:11*	*1*

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.4	1.1	ng/L		09/19/22 11:42	09/19/22 18:11	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	0.60	ng/L		09/19/22 11:42	09/19/22 18:11	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	0.58	ng/L		09/19/22 11:42	09/19/22 18:11	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.48	ng/L		09/19/22 11:42	09/19/22 18:11	1
Perfluorooctanoic acid (PFOA)	ND		1.8	0.68	ng/L		09/19/22 11:42	09/19/22 18:11	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.44	ng/L		09/19/22 11:42	09/19/22 18:11	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.41	ng/L		09/19/22 11:42	09/19/22 18:11	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.49	ng/L		09/19/22 11:42	09/19/22 18:11	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.44	ng/L		09/19/22 11:42	09/19/22 18:11	1
Perfluorotridecanoic acid (PFTriA)	ND		1.8	0.43	ng/L		09/19/22 11:42	09/19/22 18:11	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.57	ng/L		09/19/22 11:42	09/19/22 18:11	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	0.55	ng/L		09/19/22 11:42	09/19/22 18:11	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.49	ng/L		09/19/22 11:42	09/19/22 18:11	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.8	0.36	ng/L		09/19/22 11:42	09/19/22 18:11	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.76	ng/L		09/19/22 11:42	09/19/22 18:11	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.36	ng/L		09/19/22 11:42	09/19/22 18:11	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.8	0.82	ng/L		09/19/22 11:42	09/19/22 18:11	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.4	1.7	ng/L		09/19/22 11:42	09/19/22 18:11	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.4	1.4	ng/L		09/19/22 11:42	09/19/22 18:11	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		4.4	1.2	ng/L		09/19/22 11:42	09/19/22 18:11	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		1.8	0.68	ng/L		09/19/22 11:42	09/19/22 18:11	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201563-1

Client Sample ID: FB_091222

Date Collected: 09/12/22 00:00
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-6

Matrix: Water

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*91*		*50 - 150*	*09/19/22 11:42*	*09/19/22 18:11*	*1*
13C4 PFHpA	*99*		*50 - 150*	*09/19/22 11:42*	*09/19/22 18:11*	*1*
13C4 PFOA	*98*		*50 - 150*	*09/19/22 11:42*	*09/19/22 18:11*	*1*
13C4 PFOS	*93*		*50 - 150*	*09/19/22 11:42*	*09/19/22 18:11*	*1*
13C5 PFNA	*93*		*50 - 150*	*09/19/22 11:42*	*09/19/22 18:11*	*1*
13C4 PFBA	*96*		*50 - 150*	*09/19/22 11:42*	*09/19/22 18:11*	*1*
13C2 PFHxA	*98*		*50 - 150*	*09/19/22 11:42*	*09/19/22 18:11*	*1*
13C2 PFDA	*93*		*50 - 150*	*09/19/22 11:42*	*09/19/22 18:11*	*1*
13C2 PFUnA	*91*		*50 - 150*	*09/19/22 11:42*	*09/19/22 18:11*	*1*
13C2 PFDoA	*82*		*50 - 150*	*09/19/22 11:42*	*09/19/22 18:11*	*1*
13C8 FOSA	*79*		*50 - 150*	*09/19/22 11:42*	*09/19/22 18:11*	*1*
13C5 PFPeA	*100*		*50 - 150*	*09/19/22 11:42*	*09/19/22 18:11*	*1*
13C2 PFTeDA	*79*		*50 - 150*	*09/19/22 11:42*	*09/19/22 18:11*	*1*
d3-NMeFOSAA	*89*		*50 - 150*	*09/19/22 11:42*	*09/19/22 18:11*	*1*
d5-NEtFOSAA	*87*		*50 - 150*	*09/19/22 11:42*	*09/19/22 18:11*	*1*
M2-6:2 FTS	*100*		*50 - 150*	*09/19/22 11:42*	*09/19/22 18:11*	*1*
M2-8:2 FTS	*96*		*50 - 150*	*09/19/22 11:42*	*09/19/22 18:11*	*1*
13C3 PFBS	*95*		*50 - 150*	*09/19/22 11:42*	*09/19/22 18:11*	*1*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		09/14/22 08:55	09/14/22 20:22	1
Antimony	ND		0.020	0.0068	mg/L		09/14/22 08:55	09/14/22 20:22	1
Arsenic	ND		0.015	0.0056	mg/L		09/14/22 08:55	09/14/22 20:22	1
Barium	ND		0.0020	0.00070	mg/L		09/14/22 08:55	09/14/22 20:22	1
Beryllium	ND		0.0020	0.00030	mg/L		09/14/22 08:55	09/14/22 20:22	1
Cadmium	ND		0.0020	0.00050	mg/L		09/14/22 08:55	09/14/22 20:22	1
Calcium	ND		0.50	0.10	mg/L		09/14/22 08:55	09/14/22 20:22	1
Chromium	ND		0.0040	0.0010	mg/L		09/14/22 08:55	09/14/22 20:22	1
Cobalt	ND		0.0040	0.00063	mg/L		09/14/22 08:55	09/14/22 20:22	1
Copper	ND		0.010	0.0016	mg/L		09/14/22 08:55	09/14/22 20:22	1
Iron	ND		0.050	0.019	mg/L		09/14/22 08:55	09/14/22 20:22	1
Lead	ND		0.010	0.0030	mg/L		09/14/22 08:55	09/14/22 20:22	1
Magnesium	ND		0.20	0.043	mg/L		09/14/22 08:55	09/14/22 20:22	1
Manganese	ND		0.0030	0.00040	mg/L		09/14/22 08:55	09/14/22 20:22	1
Nickel	ND		0.010	0.0013	mg/L		09/14/22 08:55	09/14/22 20:22	1
Potassium	**0.25**	**J B**	0.50	0.10	mg/L		09/14/22 08:55	09/14/22 20:22	1
Selenium	ND		0.025	0.0087	mg/L		09/14/22 08:55	09/14/22 20:22	1
Silver	ND		0.0060	0.0017	mg/L		09/14/22 08:55	09/14/22 20:22	1
Sodium	ND		1.0	0.32	mg/L		09/14/22 08:55	09/14/22 20:22	1
Thallium	ND		0.020	0.010	mg/L		09/14/22 08:55	09/14/22 20:22	1
Vanadium	ND		0.0050	0.0015	mg/L		09/14/22 08:55	09/14/22 20:22	1
Zinc	ND		0.010	0.0015	mg/L		09/14/22 08:55	09/14/22 20:22	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		09/14/22 10:49	09/14/22 15:01	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201563-1

Client Sample ID: TB_091222
Date Collected: 09/12/22 00:00
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-7
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/13/22 19:10	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/13/22 19:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/13/22 19:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/13/22 19:10	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/13/22 19:10	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/13/22 19:10	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/13/22 19:10	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			09/13/22 19:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/13/22 19:10	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/13/22 19:10	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/13/22 19:10	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/13/22 19:10	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/13/22 19:10	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/13/22 19:10	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/13/22 19:10	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/13/22 19:10	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/13/22 19:10	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/13/22 19:10	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/13/22 19:10	1
2-Hexanone	ND		5.0	1.2	ug/L			09/13/22 19:10	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/13/22 19:10	1
Acetone	ND		10	3.0	ug/L			09/13/22 19:10	1
Benzene	ND		1.0	0.41	ug/L			09/13/22 19:10	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/13/22 19:10	1
Bromoform	ND		1.0	0.26	ug/L			09/13/22 19:10	1
Bromomethane	ND		1.0	0.69	ug/L			09/13/22 19:10	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/13/22 19:10	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/13/22 19:10	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/13/22 19:10	1
Chloroethane	ND		1.0	0.32	ug/L			09/13/22 19:10	1
Chloroform	ND		1.0	0.34	ug/L			09/13/22 19:10	1
Chloromethane	ND		1.0	0.35	ug/L			09/13/22 19:10	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/13/22 19:10	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/13/22 19:10	1
Cyclohexane	ND		1.0	0.18	ug/L			09/13/22 19:10	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/13/22 19:10	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/13/22 19:10	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/13/22 19:10	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/13/22 19:10	1
m,p-Xylene	ND		2.0	0.66	ug/L			09/13/22 19:10	1
Methyl acetate	ND		2.5	1.3	ug/L			09/13/22 19:10	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/13/22 19:10	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/13/22 19:10	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/13/22 19:10	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/13/22 19:10	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/13/22 19:10	1
o-Xylene	ND		1.0	0.76	ug/L			09/13/22 19:10	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/13/22 19:10	1
Styrene	ND		1.0	0.73	ug/L			09/13/22 19:10	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201563-1

Client Sample ID: TB_091222
Date Collected: 09/12/22 00:00
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-7
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/13/22 19:10	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/13/22 19:10	1
Toluene	ND		1.0	0.51	ug/L			09/13/22 19:10	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/13/22 19:10	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/13/22 19:10	1
Trichloroethene	ND		1.0	0.46	ug/L			09/13/22 19:10	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/13/22 19:10	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/13/22 19:10	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/13/22 19:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*77 - 120*		*09/13/22 19:10*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*09/13/22 19:10*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*09/13/22 19:10*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*09/13/22 19:10*	*1*

Surrogate Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201563-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(64-126)	(72-126)	(60-140)	(71-125)
480-201563-1	SS1 (0-2)	108	78	104	129 S1+
480-201563-2	SS1 (0-6)	109	78	105	136 S1+
480-201563-3	SS1 (6-12)	107	72	102	132 S1+
480-201563-4	SS1 (12-24)	108	84	102	120
480-201563-5	FDUP_091222	112	77	107	128 S1+
LCS 480-641451/1-A	Lab Control Sample	103	95	100	108
LCS 480-641652/1-A	Lab Control Sample	100	94	96	107
MB 480-641451/2-A	Method Blank	101	98	97	106
MB 480-641652/2-A	Method Blank	103	98	97	107

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-201563-6	FB_091222	92	108	103	92
480-201563-7	TB_091222	94	103	101	91
LCS 480-641153/6	Lab Control Sample	95	104	103	93
MB 480-641153/9	Method Blank	95	102	99	90

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(54-120)	(60-120)	(52-120)	(53-120)	(54-120)	(79-130)
480-201563-1	SS1 (0-2)	103	86	75	71	79	102
480-201563-2	SS1 (0-6)	104	82	71	65	73	100
480-201563-3	SS1 (6-12)	86	75	68	66	66	89
480-201563-4	SS1 (12-24)	88	80	70	71	71	93
480-201563-5	FDUP_091222	102	91	81	83	82	104
LCS 480-641440/2-A	Lab Control Sample	104	90	81	82	84	100
MB 480-641440/1-A	Method Blank	86	90	85	84	82	96

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)

Surrogate Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201563-1

PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		TBP	FBP	2FP	NBZ	PHL	TPHd14		
Lab Sample ID	Client Sample ID	(41-120)	(48-120)	(35-120)	(46-120)	(22-120)	(60-148)		
480-201563-6	FB_091222	91	93	62	76	47	106		
LCS 480-641314/2-A	Lab Control Sample	99	86	61	73	51	95		
MB 480-641314/1-A	Method Blank	85	99	63	76	46	105		

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Isotope Dilution Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201563-1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water — **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	DXE (15-110)
480-201563-6	FB_091222	39
LCS 480-641309/2-A	Lab Control Sample	41
MB 480-641309/1-A	Method Blank	37

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 537 IDA - EPA 537 Isotope Dilution

Matrix: Solid — **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFHxS (50-150)	C4PFHA (50-150)	PFOA (50-150)	PFOS (50-150)	PFNA (50-150)	PFBA (50-150)	PFHxA (50-150)	PFDA (50-150)
480-201563-1	SS1 (0-2)	81	92	91	76	84	90	90	91
480-201563-3	SS1 (6-12)	86	93	98	84	87	91	91	89
480-201563-4	SS1 (12-24)	85	95	91	82	92	93	92	87
480-201563-5	FDUP_091222	80	87	92	74	89	84	90	88
LCS 200-183583/2-A	Lab Control Sample	82	90	90	70	85	89	90	73
MB 200-183583/1-A	Method Blank	78	83	87	69	81	83	85	73

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFUnA (50-150)	PFDoA (50-150)	PFOSA (50-150)	PFPeA (50-150)	PFTDA (50-150)	d3NMFOS (50-150)	d5NEFOS (50-150)	M262FTS (50-150)
480-201563-1	SS1 (0-2)	85	89	74	91	84	85	97	103
480-201563-3	SS1 (6-12)	88	95	80	91	87	92	98	97
480-201563-4	SS1 (12-24)	91	93	83	94	96	90	91	101
480-201563-5	FDUP_091222	86	84	78	85	84	81	83	87
LCS 200-183583/2-A	Lab Control Sample	61	60	64	89	68	69	67	88
MB 200-183583/1-A	Method Blank	72	68	64	83	77	76	71	81

		Percent Isotope Dilution Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	M282FTS (50-150)	C3PFBS (50-150)
480-201563-1	SS1 (0-2)	113	83
480-201563-3	SS1 (6-12)	105	88
480-201563-4	SS1 (12-24)	112	91
480-201563-5	FDUP_091222	84	83
LCS 200-183583/2-A	Lab Control Sample	72	86
MB 200-183583/1-A	Method Blank	77	80

Surrogate Legend

PFHxS = 18O2 PFHxS
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFOS = 13C4 PFOS
PFNA = 13C5 PFNA
PFBA = 13C4 PFBA
PFHxA = 13C2 PFHxA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFOSA = 13C8 FOSA

Isotope Dilution Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201563-1

PFPeA = 13C5 PFPeA
PFTDA = 13C2 PFTeDA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
C3PFBS = 13C3 PFBS

Method: 537 IDA - EPA 537 Isotope Dilution

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFHxS (50-150)	C4PFHA (50-150)	PFOA (50-150)	PFOS (50-150)	PFNA (50-150)	PFBA (50-150)	PFHxA (50-150)	PFDA (50-150)
480-201563-6	FB_091222	91	99	98	93	93	96	98	93
LCS 200-183671/2-A	Lab Control Sample	98	99	101	97	98	96	100	99
LCSD 200-183671/3-A	Lab Control Sample Dup	88	94	100	95	96	92	96	93
MB 200-183671/1-A	Method Blank	96	101	103	94	100	90	101	98

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFUnA (50-150)	PFDoA (50-150)	PFOSA (50-150)	PFPeA (50-150)	PFTDA (50-150)	d3NMFOS (50-150)	d5NEFOS (50-150)	M262FTS (50-150)
480-201563-6	FB_091222	91	82	79	100	79	89	87	100
LCS 200-183671/2-A	Lab Control Sample	94	86	78	93	87	91	93	102
LCSD 200-183671/3-A	Lab Control Sample Dup	89	85	73	93	80	96	85	95
MB 200-183671/1-A	Method Blank	99	92	84	96	94	93	95	96

		Percent Isotope Dilution Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	M282FTS (50-150)	C3PFBS (50-150)
480-201563-6	FB_091222	96	95
LCS 200-183671/2-A	Lab Control Sample	101	96
LCSD 200-183671/3-A	Lab Control Sample Dup	95	91
MB 200-183671/1-A	Method Blank	104	91

Surrogate Legend

PFHxS = 18O2 PFHxS
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFOS = 13C4 PFOS
PFNA = 13C5 PFNA
PFBA = 13C4 PFBA
PFHxA = 13C2 PFHxA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFOSA = 13C8 FOSA
PFPeA = 13C5 PFPeA
PFTDA = 13C2 PFTeDA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
C3PFBS = 13C3 PFBS

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-641153/9
Matrix: Water
Analysis Batch: 641153

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/13/22 14:15	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/13/22 14:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/13/22 14:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/13/22 14:15	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/13/22 14:15	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/13/22 14:15	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/13/22 14:15	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			09/13/22 14:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/13/22 14:15	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/13/22 14:15	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/13/22 14:15	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/13/22 14:15	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/13/22 14:15	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/13/22 14:15	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/13/22 14:15	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/13/22 14:15	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/13/22 14:15	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/13/22 14:15	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/13/22 14:15	1
2-Hexanone	ND		5.0	1.2	ug/L			09/13/22 14:15	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/13/22 14:15	1
Acetone	ND		10	3.0	ug/L			09/13/22 14:15	1
Benzene	ND		1.0	0.41	ug/L			09/13/22 14:15	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/13/22 14:15	1
Bromoform	ND		1.0	0.26	ug/L			09/13/22 14:15	1
Bromomethane	ND		1.0	0.69	ug/L			09/13/22 14:15	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/13/22 14:15	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/13/22 14:15	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/13/22 14:15	1
Chloroethane	ND		1.0	0.32	ug/L			09/13/22 14:15	1
Chloroform	ND		1.0	0.34	ug/L			09/13/22 14:15	1
Chloromethane	ND		1.0	0.35	ug/L			09/13/22 14:15	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/13/22 14:15	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/13/22 14:15	1
Cyclohexane	ND		1.0	0.18	ug/L			09/13/22 14:15	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/13/22 14:15	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/13/22 14:15	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/13/22 14:15	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/13/22 14:15	1
m,p-Xylene	ND		2.0	0.66	ug/L			09/13/22 14:15	1
Methyl acetate	ND		2.5	1.3	ug/L			09/13/22 14:15	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/13/22 14:15	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/13/22 14:15	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/13/22 14:15	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/13/22 14:15	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/13/22 14:15	1
o-Xylene	ND		1.0	0.76	ug/L			09/13/22 14:15	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/13/22 14:15	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-641153/9
Matrix: Water
Analysis Batch: 641153

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0	0.73	ug/L			09/13/22 14:15	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/13/22 14:15	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/13/22 14:15	1
Toluene	ND		1.0	0.51	ug/L			09/13/22 14:15	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/13/22 14:15	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/13/22 14:15	1
Trichloroethene	ND		1.0	0.46	ug/L			09/13/22 14:15	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/13/22 14:15	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/13/22 14:15	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/13/22 14:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*77 - 120*		*09/13/22 14:15*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*09/13/22 14:15*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*09/13/22 14:15*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*09/13/22 14:15*	*1*

Lab Sample ID: LCS 480-641153/6
Matrix: Water
Analysis Batch: 641153

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	25.0	26.8		ug/L		107	80 - 120
1,1,1-Trichloroethane	25.0	26.8		ug/L		107	73 - 126
1,1,2,2-Tetrachloroethane	25.0	19.9		ug/L		80	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	19.8		ug/L		79	61 - 148
1,1,2-Trichloroethane	25.0	22.3		ug/L		89	76 - 122
1,1-Dichloroethane	25.0	22.5		ug/L		90	77 - 120
1,1-Dichloroethene	25.0	21.2		ug/L		85	66 - 127
1,2,4-Trichlorobenzene	25.0	23.9		ug/L		96	79 - 122
1,2,4-Trimethylbenzene	25.0	25.4		ug/L		102	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	23.8		ug/L		95	56 - 134
1,2-Dibromoethane	25.0	24.1		ug/L		96	77 - 120
1,2-Dichlorobenzene	25.0	24.0		ug/L		96	80 - 124
1,2-Dichloroethane	25.0	24.1		ug/L		96	75 - 120
1,2-Dichloropropane	25.0	22.2		ug/L		89	76 - 120
1,3,5-Trimethylbenzene	25.0	24.9		ug/L		99	77 - 121
1,3-Dichlorobenzene	25.0	22.8		ug/L		91	77 - 120
1,4-Dichlorobenzene	25.0	23.0		ug/L		92	80 - 120
2-Butanone (MEK)	125	103		ug/L		83	57 - 140
2-Hexanone	125	98.8		ug/L		79	65 - 127
4-Methyl-2-pentanone (MIBK)	125	91.3		ug/L		73	71 - 125
Acetone	125	135		ug/L		108	56 - 142
Benzene	25.0	22.8		ug/L		91	71 - 124
Bromodichloromethane	25.0	26.9		ug/L		108	80 - 122
Bromoform	25.0	30.6		ug/L		123	61 - 132
Bromomethane	25.0	22.3		ug/L		89	55 - 144
Carbon disulfide	25.0	25.3		ug/L		101	59 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-641153/6
Matrix: Water
Analysis Batch: 641153

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon tetrachloride	25.0	25.9		ug/L		104	72 - 134
Chlorobenzene	25.0	22.8		ug/L		91	80 - 120
Chloroethane	25.0	21.6		ug/L		86	69 - 136
Chloroform	25.0	23.8		ug/L		95	73 - 127
Chloromethane	25.0	17.4		ug/L		70	68 - 124
cis-1,2-Dichloroethene	25.0	23.4		ug/L		94	74 - 124
cis-1,3-Dichloropropene	25.0	26.5		ug/L		106	74 - 124
Cyclohexane	25.0	21.0		ug/L		84	59 - 135
Dibromochloromethane	25.0	29.8		ug/L		119	75 - 125
Dichlorodifluoromethane	25.0	20.2		ug/L		81	59 - 135
Ethylbenzene	25.0	23.6		ug/L		94	77 - 123
Isopropylbenzene	25.0	24.5		ug/L		98	77 - 122
m,p-Xylene	25.0	24.1		ug/L		96	76 - 122
Methyl acetate	50.0	37.2		ug/L		74	74 - 133
Methyl tert-butyl ether	25.0	24.9		ug/L		99	77 - 120
Methylcyclohexane	25.0	22.7		ug/L		91	68 - 134
Methylene Chloride	25.0	23.9		ug/L		96	75 - 124
n-Butylbenzene	25.0	24.3		ug/L		97	71 - 128
N-Propylbenzene	25.0	23.0		ug/L		92	75 - 127
o-Xylene	25.0	24.7		ug/L		99	76 - 122
sec-Butylbenzene	25.0	24.7		ug/L		99	74 - 127
Styrene	25.0	24.6		ug/L		98	80 - 120
tert-Butylbenzene	25.0	25.0		ug/L		100	75 - 123
Tetrachloroethene	25.0	23.7		ug/L		95	74 - 122
Toluene	25.0	23.3		ug/L		93	80 - 122
trans-1,2-Dichloroethene	25.0	23.8		ug/L		95	73 - 127
trans-1,3-Dichloropropene	25.0	27.4		ug/L		110	80 - 120
Trichloroethene	25.0	24.2		ug/L		97	74 - 123
Trichlorofluoromethane	25.0	25.7		ug/L		103	62 - 150
Vinyl chloride	25.0	20.1		ug/L		80	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*77 - 120*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*
Dibromofluoromethane (Surr)	*103*		*75 - 123*
Toluene-d8 (Surr)	*93*		*80 - 120*

Lab Sample ID: MB 480-641451/2-A
Matrix: Solid
Analysis Batch: 641452

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641451

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.50	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		09/14/22 17:15	09/14/22 20:46	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-641451/2-A
Matrix: Solid
Analysis Batch: 641452

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641451

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,2,3-Trimethylbenzene	ND		5.0	1.0	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
2-Hexanone	ND		25	2.5	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Acetone	ND		25	4.2	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Benzene	ND		5.0	0.25	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Bromoform	ND		5.0	2.5	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Bromomethane	ND		5.0	0.45	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Chloroethane	ND		5.0	1.1	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Chloroform	0.465	J	5.0	0.31	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Chloromethane	ND		5.0	0.30	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Cyclohexane	ND		5.0	0.70	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
m,p-Xylene	ND		10	0.84	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Methyl acetate	ND		25	3.0	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
o-Xylene	ND		5.0	0.65	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Styrene	ND		5.0	0.25	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Toluene	ND		5.0	0.38	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Trichloroethene	ND		5.0	1.1	ug/Kg		09/14/22 17:15	09/14/22 20:46	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-641451/2-A
Matrix: Solid
Analysis Batch: 641452

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641451

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Xylenes, Total	ND		10	0.84	ug/Kg		09/14/22 17:15	09/14/22 20:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*64 - 126*	*09/14/22 17:15*	*09/14/22 20:46*	*1*
4-Bromofluorobenzene (Surr)	*98*		*72 - 126*	*09/14/22 17:15*	*09/14/22 20:46*	*1*
Dibromofluoromethane (Surr)	*97*		*60 - 140*	*09/14/22 17:15*	*09/14/22 20:46*	*1*
Toluene-d8 (Surr)	*106*		*71 - 125*	*09/14/22 17:15*	*09/14/22 20:46*	*1*

Lab Sample ID: LCS 480-641451/1-A
Matrix: Solid
Analysis Batch: 641452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641451

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	48.0		ug/Kg		96	74 - 127
1,1,1-Trichloroethane	50.0	45.1		ug/Kg		90	77 - 121
1,1,2,2-Tetrachloroethane	50.0	51.2		ug/Kg		102	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	44.2		ug/Kg		88	60 - 140
1,1,2-Trichloroethane	50.0	49.8		ug/Kg		100	78 - 122
1,1-Dichloroethane	50.0	47.6		ug/Kg		95	73 - 126
1,1-Dichloroethene	50.0	45.6		ug/Kg		91	59 - 125
1,2,4-Trichlorobenzene	50.0	48.7		ug/Kg		97	64 - 120
1,2,4-Trimethylbenzene	50.0	51.5		ug/Kg		103	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	52.0		ug/Kg		104	63 - 124
1,2-Dibromoethane	50.0	47.9		ug/Kg		96	78 - 120
1,2-Dichlorobenzene	50.0	49.7		ug/Kg		99	75 - 120
1,2-Dichloroethane	50.0	47.0		ug/Kg		94	77 - 122
1,2-Dichloropropane	50.0	48.9		ug/Kg		98	75 - 124
1,3,5-Trimethylbenzene	50.0	51.2		ug/Kg		102	74 - 120
1,3-Dichlorobenzene	50.0	50.4		ug/Kg		101	74 - 120
1,4-Dichlorobenzene	50.0	49.6		ug/Kg		99	73 - 120
2-Butanone (MEK)	250	252		ug/Kg		101	70 - 134
2-Hexanone	250	256		ug/Kg		102	59 - 130
4-Methyl-2-pentanone (MIBK)	250	253		ug/Kg		101	65 - 133
Acetone	250	244		ug/Kg		97	61 - 137
Benzene	50.0	47.3		ug/Kg		95	79 - 127
Bromodichloromethane	50.0	48.5		ug/Kg		97	80 - 122
Bromoform	50.0	49.2		ug/Kg		98	68 - 126
Bromomethane	50.0	52.1		ug/Kg		104	37 - 149
Carbon disulfide	50.0	45.0		ug/Kg		90	64 - 131
Carbon tetrachloride	50.0	45.4		ug/Kg		91	75 - 135
Chlorobenzene	50.0	48.4		ug/Kg		97	76 - 124
Chloroethane	50.0	52.0		ug/Kg		104	69 - 135
Chloroform	50.0	45.0		ug/Kg		90	80 - 120
Chloromethane	50.0	52.2		ug/Kg		104	63 - 127
cis-1,2-Dichloroethene	50.0	46.5		ug/Kg		93	81 - 120
cis-1,3-Dichloropropene	50.0	49.0		ug/Kg		98	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-641451/1-A
Matrix: Solid
Analysis Batch: 641452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641451

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyclohexane	50.0	49.2		ug/Kg		98	65 - 120
Dibromochloromethane	50.0	50.5		ug/Kg		101	76 - 125
Dichlorodifluoromethane	50.0	48.9		ug/Kg		98	57 - 142
Ethylbenzene	50.0	47.6		ug/Kg		95	80 - 120
Isopropylbenzene	50.0	52.0		ug/Kg		104	72 - 120
m,p-Xylene	50.0	47.8		ug/Kg		96	70 - 130
Methyl acetate	100	94.3		ug/Kg		94	55 - 136
Methyl tert-butyl ether	50.0	46.8		ug/Kg		94	63 - 125
Methylcyclohexane	50.0	46.3		ug/Kg		93	60 - 140
Methylene Chloride	50.0	49.2		ug/Kg		98	61 - 127
n-Butylbenzene	50.0	50.9		ug/Kg		102	70 - 120
N-Propylbenzene	50.0	51.3		ug/Kg		103	70 - 130
o-Xylene	50.0	46.9		ug/Kg		94	70 - 130
sec-Butylbenzene	50.0	51.4		ug/Kg		103	74 - 120
Styrene	50.0	47.4		ug/Kg		95	80 - 120
tert-Butylbenzene	50.0	52.2		ug/Kg		104	73 - 120
Tetrachloroethene	50.0	46.8		ug/Kg		94	74 - 122
Toluene	50.0	48.2		ug/Kg		96	74 - 128
trans-1,2-Dichloroethene	50.0	45.5		ug/Kg		91	78 - 126
trans-1,3-Dichloropropene	50.0	50.0		ug/Kg		100	73 - 123
Trichloroethene	50.0	46.5		ug/Kg		93	77 - 129
Trichlorofluoromethane	50.0	48.9		ug/Kg		98	65 - 146
Vinyl chloride	50.0	50.9		ug/Kg		102	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*64 - 126*
4-Bromofluorobenzene (Surr)	*95*		*72 - 126*
Dibromofluoromethane (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*108*		*71 - 125*

Lab Sample ID: MB 480-641652/2-A
Matrix: Solid
Analysis Batch: 641653

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641652

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.50	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,2,3-Trimethylbenzene	ND		5.0	1.0	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		09/15/22 17:41	09/15/22 21:15	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-641652/2-A
Matrix: Solid
Analysis Batch: 641653

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641652

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
2-Hexanone	ND		25	2.5	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Acetone	ND		25	4.2	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Benzene	ND		5.0	0.25	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Bromoform	ND		5.0	2.5	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Bromomethane	ND		5.0	0.45	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Chloroethane	ND		5.0	1.1	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Chloroform	0.559	J	5.0	0.31	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Chloromethane	ND		5.0	0.30	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Cyclohexane	ND		5.0	0.70	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
m,p-Xylene	ND		10	0.84	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Methyl acetate	ND		25	3.0	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
o-Xylene	ND		5.0	0.65	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Styrene	ND		5.0	0.25	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Toluene	ND		5.0	0.38	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Trichloroethene	ND		5.0	1.1	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Xylenes, Total	ND		10	0.84	ug/Kg		09/15/22 17:41	09/15/22 21:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*64 - 126*	*09/15/22 17:41*	*09/15/22 21:15*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-641652/2-A
Matrix: Solid
Analysis Batch: 641653

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641652

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*98*		*72 - 126*	*09/15/22 17:41*	*09/15/22 21:15*	*1*
Dibromofluoromethane (Surr)	*97*		*60 - 140*	*09/15/22 17:41*	*09/15/22 21:15*	*1*
Toluene-d8 (Surr)	*107*		*71 - 125*	*09/15/22 17:41*	*09/15/22 21:15*	*1*

Lab Sample ID: LCS 480-641652/1-A
Matrix: Solid
Analysis Batch: 641653

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641652

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	44.9		ug/Kg		90	74 - 127
1,1,1-Trichloroethane	50.0	42.8		ug/Kg		86	77 - 121
1,1,2,2-Tetrachloroethane	50.0	47.4		ug/Kg		95	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	40.4		ug/Kg		81	60 - 140
1,1,2-Trichloroethane	50.0	46.0		ug/Kg		92	78 - 122
1,1-Dichloroethane	50.0	45.4		ug/Kg		91	73 - 126
1,1-Dichloroethene	50.0	42.6		ug/Kg		85	59 - 125
1,2,4-Trichlorobenzene	50.0	45.3		ug/Kg		91	64 - 120
1,2,4-Trimethylbenzene	50.0	49.7		ug/Kg		99	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	45.8		ug/Kg		92	63 - 124
1,2-Dibromoethane	50.0	44.2		ug/Kg		88	78 - 120
1,2-Dichlorobenzene	50.0	46.0		ug/Kg		92	75 - 120
1,2-Dichloroethane	50.0	42.8		ug/Kg		86	77 - 122
1,2-Dichloropropane	50.0	45.3		ug/Kg		91	75 - 124
1,3,5-Trimethylbenzene	50.0	49.4		ug/Kg		99	74 - 120
1,3-Dichlorobenzene	50.0	47.1		ug/Kg		94	74 - 120
1,4-Dichlorobenzene	50.0	46.5		ug/Kg		93	73 - 120
2-Butanone (MEK)	250	229		ug/Kg		92	70 - 134
2-Hexanone	250	240		ug/Kg		96	59 - 130
4-Methyl-2-pentanone (MIBK)	250	238		ug/Kg		95	65 - 133
Acetone	250	226		ug/Kg		90	61 - 137
Benzene	50.0	44.3		ug/Kg		89	79 - 127
Bromodichloromethane	50.0	44.1		ug/Kg		88	80 - 122
Bromoform	50.0	43.7		ug/Kg		87	68 - 126
Bromomethane	50.0	49.8		ug/Kg		100	37 - 149
Carbon disulfide	50.0	42.2		ug/Kg		84	64 - 131
Carbon tetrachloride	50.0	42.8		ug/Kg		86	75 - 135
Chlorobenzene	50.0	45.5		ug/Kg		91	76 - 124
Chloroethane	50.0	51.2		ug/Kg		102	69 - 135
Chloroform	50.0	42.7		ug/Kg		85	80 - 120
Chloromethane	50.0	52.8		ug/Kg		106	63 - 127
cis-1,2-Dichloroethene	50.0	43.3		ug/Kg		87	81 - 120
cis-1,3-Dichloropropene	50.0	44.2		ug/Kg		88	80 - 120
Cyclohexane	50.0	47.8		ug/Kg		96	65 - 120
Dibromochloromethane	50.0	46.7		ug/Kg		93	76 - 125
Dichlorodifluoromethane	50.0	48.7		ug/Kg		97	57 - 142
Ethylbenzene	50.0	46.5		ug/Kg		93	80 - 120
Isopropylbenzene	50.0	50.1		ug/Kg		100	72 - 120
m,p-Xylene	50.0	45.4		ug/Kg		91	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-641652/1-A
Matrix: Solid
Analysis Batch: 641653

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641652

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methyl acetate	100	87.8		ug/Kg		88	55 - 136
Methyl tert-butyl ether	50.0	42.5		ug/Kg		85	63 - 125
Methylcyclohexane	50.0	44.5		ug/Kg		89	60 - 140
Methylene Chloride	50.0	45.4		ug/Kg		91	61 - 127
n-Butylbenzene	50.0	49.9		ug/Kg		100	70 - 120
N-Propylbenzene	50.0	49.8		ug/Kg		100	70 - 130
o-Xylene	50.0	45.3		ug/Kg		91	70 - 130
sec-Butylbenzene	50.0	50.2		ug/Kg		100	74 - 120
Styrene	50.0	44.8		ug/Kg		90	80 - 120
tert-Butylbenzene	50.0	50.0		ug/Kg		100	73 - 120
Tetrachloroethene	50.0	45.1		ug/Kg		90	74 - 122
Toluene	50.0	46.3		ug/Kg		93	74 - 128
trans-1,2-Dichloroethene	50.0	43.1		ug/Kg		86	78 - 126
trans-1,3-Dichloropropene	50.0	45.8		ug/Kg		92	73 - 123
Trichloroethene	50.0	43.5		ug/Kg		87	77 - 129
Trichlorofluoromethane	50.0	49.1		ug/Kg		98	65 - 146
Vinyl chloride	50.0	50.9		ug/Kg		102	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*64 - 126*
4-Bromofluorobenzene (Surr)	*94*		*72 - 126*
Dibromofluoromethane (Surr)	*96*		*60 - 140*
Toluene-d8 (Surr)	*107*		*71 - 125*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-641314/1-A
Matrix: Water
Analysis Batch: 641491

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641314

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		09/14/22 08:46	09/15/22 11:43	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		09/14/22 08:46	09/15/22 11:43	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		09/14/22 08:46	09/15/22 11:43	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		09/14/22 08:46	09/15/22 11:43	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		09/14/22 08:46	09/15/22 11:43	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		09/14/22 08:46	09/15/22 11:43	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		09/14/22 08:46	09/15/22 11:43	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		09/14/22 08:46	09/15/22 11:43	1
2-Chlorophenol	ND		5.0	0.53	ug/L		09/14/22 08:46	09/15/22 11:43	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		09/14/22 08:46	09/15/22 11:43	1
2-Methylphenol	ND		5.0	0.40	ug/L		09/14/22 08:46	09/15/22 11:43	1
2-Nitroaniline	ND		10	0.42	ug/L		09/14/22 08:46	09/15/22 11:43	1
2-Nitrophenol	ND		5.0	0.48	ug/L		09/14/22 08:46	09/15/22 11:43	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		09/14/22 08:46	09/15/22 11:43	1
3-Nitroaniline	ND		10	0.48	ug/L		09/14/22 08:46	09/15/22 11:43	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		09/14/22 08:46	09/15/22 11:43	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		09/14/22 08:46	09/15/22 11:43	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		09/14/22 08:46	09/15/22 11:43	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-641314/1-A
Matrix: Water
Analysis Batch: 641491

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641314

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND		5.0	0.59	ug/L		09/14/22 08:46	09/15/22 11:43	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		09/14/22 08:46	09/15/22 11:43	1
4-Methylphenol	ND		10	0.36	ug/L		09/14/22 08:46	09/15/22 11:43	1
4-Nitroaniline	ND		10	0.25	ug/L		09/14/22 08:46	09/15/22 11:43	1
4-Nitrophenol	ND		10	1.5	ug/L		09/14/22 08:46	09/15/22 11:43	1
Acenaphthene	ND		5.0	0.41	ug/L		09/14/22 08:46	09/15/22 11:43	1
Acenaphthylene	ND		5.0	0.38	ug/L		09/14/22 08:46	09/15/22 11:43	1
Acetophenone	ND		5.0	0.54	ug/L		09/14/22 08:46	09/15/22 11:43	1
Anthracene	ND		5.0	0.28	ug/L		09/14/22 08:46	09/15/22 11:43	1
Atrazine	ND		5.0	0.46	ug/L		09/14/22 08:46	09/15/22 11:43	1
Benzaldehyde	ND		5.0	0.27	ug/L		09/14/22 08:46	09/15/22 11:43	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		09/14/22 08:46	09/15/22 11:43	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		09/14/22 08:46	09/15/22 11:43	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		09/14/22 08:46	09/15/22 11:43	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		09/14/22 08:46	09/15/22 11:43	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		09/14/22 08:46	09/15/22 11:43	1
Biphenyl	ND		5.0	0.65	ug/L		09/14/22 08:46	09/15/22 11:43	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		09/14/22 08:46	09/15/22 11:43	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		09/14/22 08:46	09/15/22 11:43	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		09/14/22 08:46	09/15/22 11:43	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		09/14/22 08:46	09/15/22 11:43	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		09/14/22 08:46	09/15/22 11:43	1
Caprolactam	ND		5.0	2.2	ug/L		09/14/22 08:46	09/15/22 11:43	1
Carbazole	ND		5.0	0.30	ug/L		09/14/22 08:46	09/15/22 11:43	1
Chrysene	ND		5.0	0.33	ug/L		09/14/22 08:46	09/15/22 11:43	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		09/14/22 08:46	09/15/22 11:43	1
Dibenzofuran	ND		10	0.51	ug/L		09/14/22 08:46	09/15/22 11:43	1
Diethyl phthalate	ND		5.0	0.22	ug/L		09/14/22 08:46	09/15/22 11:43	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		09/14/22 08:46	09/15/22 11:43	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		09/14/22 08:46	09/15/22 11:43	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		09/14/22 08:46	09/15/22 11:43	1
Fluoranthene	ND		5.0	0.40	ug/L		09/14/22 08:46	09/15/22 11:43	1
Fluorene	ND		5.0	0.36	ug/L		09/14/22 08:46	09/15/22 11:43	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		09/14/22 08:46	09/15/22 11:43	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		09/14/22 08:46	09/15/22 11:43	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		09/14/22 08:46	09/15/22 11:43	1
Hexachloroethane	ND		5.0	0.59	ug/L		09/14/22 08:46	09/15/22 11:43	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		09/14/22 08:46	09/15/22 11:43	1
Isophorone	ND		5.0	0.43	ug/L		09/14/22 08:46	09/15/22 11:43	1
Naphthalene	ND		5.0	0.76	ug/L		09/14/22 08:46	09/15/22 11:43	1
Nitrobenzene	ND		5.0	0.29	ug/L		09/14/22 08:46	09/15/22 11:43	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		09/14/22 08:46	09/15/22 11:43	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		09/14/22 08:46	09/15/22 11:43	1
Pentachlorophenol	ND		10	2.2	ug/L		09/14/22 08:46	09/15/22 11:43	1
Phenanthrene	ND		5.0	0.44	ug/L		09/14/22 08:46	09/15/22 11:43	1
Phenol	ND		5.0	0.39	ug/L		09/14/22 08:46	09/15/22 11:43	1
Pyrene	ND		5.0	0.34	ug/L		09/14/22 08:46	09/15/22 11:43	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-641314/1-A
Matrix: Water
Analysis Batch: 641491

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641314

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	85		41 - 120	09/14/22 08:46	09/15/22 11:43	1
2-Fluorobiphenyl (Surr)	99		48 - 120	09/14/22 08:46	09/15/22 11:43	1
2-Fluorophenol (Surr)	63		35 - 120	09/14/22 08:46	09/15/22 11:43	1
Nitrobenzene-d5 (Surr)	76		46 - 120	09/14/22 08:46	09/15/22 11:43	1
Phenol-d5 (Surr)	46		22 - 120	09/14/22 08:46	09/15/22 11:43	1
p-Terphenyl-d14 (Surr)	105		60 - 148	09/14/22 08:46	09/15/22 11:43	1

Lab Sample ID: LCS 480-641314/2-A
Matrix: Water
Analysis Batch: 641491

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641314

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	32.0	29.7		ug/L		93	65 - 126
2,4,6-Trichlorophenol	32.0	28.5		ug/L		89	64 - 120
2,4-Dichlorophenol	32.0	29.4		ug/L		92	63 - 120
2,4-Dimethylphenol	32.0	28.7		ug/L		90	47 - 120
2,4-Dinitrophenol	64.0	65.4		ug/L		102	31 - 137
2,4-Dinitrotoluene	32.0	31.9		ug/L		100	69 - 120
2,6-Dinitrotoluene	32.0	31.4		ug/L		98	68 - 120
2-Chloronaphthalene	32.0	32.8		ug/L		102	58 - 120
2-Chlorophenol	32.0	24.5		ug/L		76	48 - 120
2-Methylnaphthalene	32.0	24.7		ug/L		77	59 - 120
2-Methylphenol	32.0	25.7		ug/L		80	39 - 120
2-Nitroaniline	32.0	30.3		ug/L		95	54 - 127
2-Nitrophenol	32.0	28.4		ug/L		89	52 - 125
3,3'-Dichlorobenzidine	64.0	59.7		ug/L		93	49 - 135
3-Nitroaniline	32.0	28.0		ug/L		88	51 - 120
4,6-Dinitro-2-methylphenol	64.0	69.8		ug/L		109	46 - 136
4-Bromophenyl phenyl ether	32.0	30.5		ug/L		95	65 - 120
4-Chloro-3-methylphenol	32.0	28.8		ug/L		90	61 - 123
4-Chloroaniline	32.0	20.2		ug/L		63	30 - 120
4-Chlorophenyl phenyl ether	32.0	28.0		ug/L		88	62 - 120
4-Methylphenol	32.0	27.2		ug/L		85	29 - 131
4-Nitroaniline	32.0	29.0		ug/L		91	65 - 120
4-Nitrophenol	64.0	51.3		ug/L		80	45 - 120
Acenaphthene	32.0	27.7		ug/L		87	60 - 120
Acenaphthylene	32.0	28.4		ug/L		89	63 - 120
Acetophenone	32.0	28.5		ug/L		89	45 - 120
Anthracene	32.0	31.6		ug/L		99	67 - 120
Atrazine	64.0	65.6		ug/L		103	71 - 130
Benzaldehyde	64.0	51.6		ug/L		81	10 - 140
Benzo[a]anthracene	32.0	30.5		ug/L		95	70 - 121
Benzo[a]pyrene	32.0	31.5		ug/L		98	60 - 123
Benzo[b]fluoranthene	32.0	34.6		ug/L		108	66 - 126
Benzo[g,h,i]perylene	32.0	29.8		ug/L		93	66 - 150
Benzo[k]fluoranthene	32.0	31.7		ug/L		99	65 - 124
Biphenyl	32.0	26.9		ug/L		84	59 - 120
bis (2-chloroisopropyl) ether	32.0	24.2		ug/L		76	21 - 136

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-641314/2-A
Matrix: Water
Analysis Batch: 641491

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641314

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bis(2-chloroethoxy)methane	32.0	27.6		ug/L		86	50 - 128
Bis(2-chloroethyl)ether	32.0	29.4		ug/L		92	44 - 120
Bis(2-ethylhexyl) phthalate	32.0	31.9		ug/L		100	63 - 139
Butyl benzyl phthalate	32.0	31.8		ug/L		99	70 - 129
Caprolactam	64.0	22.6		ug/L		35	22 - 120
Carbazole	32.0	32.9		ug/L		103	66 - 123
Chrysene	32.0	30.1		ug/L		94	69 - 120
Dibenz(a,h)anthracene	32.0	30.9		ug/L		97	65 - 135
Dibenzofuran	32.0	28.3		ug/L		88	66 - 120
Diethyl phthalate	32.0	30.5		ug/L		95	59 - 127
Dimethyl phthalate	32.0	30.3		ug/L		95	68 - 120
Di-n-butyl phthalate	32.0	31.4		ug/L		98	69 - 131
Di-n-octyl phthalate	32.0	31.9		ug/L		100	63 - 140
Fluoranthene	32.0	30.9		ug/L		96	69 - 126
Fluorene	32.0	30.0		ug/L		94	66 - 120
Hexachlorobenzene	32.0	31.1		ug/L		97	61 - 120
Hexachlorobutadiene	32.0	20.6		ug/L		64	35 - 120
Hexachlorocyclopentadiene	32.0	21.4		ug/L		67	31 - 120
Hexachloroethane	32.0	20.4		ug/L		64	43 - 120
Indeno[1,2,3-cd]pyrene	32.0	30.7		ug/L		96	69 - 146
Isophorone	32.0	29.1		ug/L		91	55 - 120
Naphthalene	32.0	26.0		ug/L		81	57 - 120
Nitrobenzene	32.0	27.7		ug/L		86	53 - 123
N-Nitrosodi-n-propylamine	32.0	29.8		ug/L		93	32 - 140
N-Nitrosodiphenylamine	32.0	31.0		ug/L		97	61 - 120
Pentachlorophenol	64.0	60.1		ug/L		94	29 - 136
Phenanthrene	32.0	31.0		ug/L		97	68 - 120
Phenol	32.0	17.3		ug/L		54	17 - 120
Pyrene	32.0	30.4		ug/L		95	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*99*		*41 - 120*
2-Fluorobiphenyl (Surr)	*86*		*48 - 120*
2-Fluorophenol (Surr)	*61*		*35 - 120*
Nitrobenzene-d5 (Surr)	*73*		*46 - 120*
Phenol-d5 (Surr)	*51*		*22 - 120*
p-Terphenyl-d14 (Surr)	*95*		*60 - 148*

Lab Sample ID: MB 480-641440/1-A
Matrix: Solid
Analysis Batch: 641495

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641440

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		97	54	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
2,4,5-Trichlorophenol	ND		170	45	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
2,4,6-Trichlorophenol	ND		170	33	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
2,4-Dimethylphenol	ND		170	40	ug/Kg		09/14/22 15:47	09/15/22 11:49	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-641440/1-A
Matrix: Solid
Analysis Batch: 641495

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641440

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	ND		1600	760	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
2,4-Dinitrotoluene	ND		170	34	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
2,6-Dinitrotoluene	ND		170	19	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
2-Chloronaphthalene	ND		170	27	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
2-Chlorophenol	ND		320	30	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
2-Methylnaphthalene	ND		170	33	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
2-Methylphenol	ND		170	19	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
2-Nitroaniline	ND		320	24	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
2-Nitrophenol	ND		170	47	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
3,3'-Dichlorobenzidine	ND		320	190	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
3-Nitroaniline	ND		320	46	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
4,6-Dinitro-2-methylphenol	ND		320	170	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
4-Bromophenyl phenyl ether	ND		170	23	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
4-Chloro-3-methylphenol	ND		170	41	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
4-Chloroaniline	ND		170	41	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
4-Chlorophenyl phenyl ether	ND		170	20	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
4-Methylphenol	ND		320	19	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
4-Nitroaniline	ND		320	87	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
4-Nitrophenol	ND		320	120	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Acenaphthene	ND		170	24	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Acenaphthylene	ND		170	21	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Acetophenone	ND		170	22	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Anthracene	ND		170	41	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Atrazine	ND		170	57	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Benzaldehyde	ND		170	130	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Benzo[a]anthracene	ND		170	17	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Benzo[a]pyrene	ND		170	24	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Benzo[b]fluoranthene	ND		170	26	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Benzo[k]fluoranthene	ND		170	21	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Biphenyl	ND		170	24	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
bis (2-chloroisopropyl) ether	ND		170	33	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Bis(2-chloroethoxy)methane	ND		170	35	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Bis(2-chloroethyl)ether	ND		170	21	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Bis(2-ethylhexyl) phthalate	ND		170	56	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Butyl benzyl phthalate	ND		170	27	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Caprolactam	ND		170	50	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Carbazole	ND		170	19	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Chrysene	ND		170	37	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Dibenz(a,h)anthracene	ND		170	29	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Dibenzofuran	ND		170	19	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Diethyl phthalate	56.3	J	170	21	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Dimethyl phthalate	ND		170	19	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Di-n-butyl phthalate	ND		170	28	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Di-n-octyl phthalate	ND		170	19	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Fluoranthene	ND		170	18	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Fluorene	ND		170	19	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Hexachlorobenzene	ND		170	22	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Hexachlorobutadiene	ND		170	24	ug/Kg		09/14/22 15:47	09/15/22 11:49	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-641440/1-A
Matrix: Solid
Analysis Batch: 641495

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641440

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	ND		170	22	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Hexachloroethane	ND		170	21	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Indeno[1,2,3-cd]pyrene	ND		170	20	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Isophorone	ND		170	35	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Naphthalene	ND		170	21	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Nitrobenzene	ND		170	19	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
N-Nitrosodi-n-propylamine	ND		170	28	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
N-Nitrosodiphenylamine	ND		170	130	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Pentachlorophenol	ND		320	170	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Phenanthrene	ND		170	24	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Phenol	ND		170	25	ug/Kg		09/14/22 15:47	09/15/22 11:49	1
Pyrene	ND		170	19	ug/Kg		09/14/22 15:47	09/15/22 11:49	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*86*		*54 - 120*	*09/14/22 15:47*	*09/15/22 11:49*	*1*
2-Fluorobiphenyl (Surr)	*90*		*60 - 120*	*09/14/22 15:47*	*09/15/22 11:49*	*1*
2-Fluorophenol (Surr)	*85*		*52 - 120*	*09/14/22 15:47*	*09/15/22 11:49*	*1*
Nitrobenzene-d5 (Surr)	*84*		*53 - 120*	*09/14/22 15:47*	*09/15/22 11:49*	*1*
Phenol-d5 (Surr)	*82*		*54 - 120*	*09/14/22 15:47*	*09/15/22 11:49*	*1*
p-Terphenyl-d14 (Surr)	*96*		*79 - 130*	*09/14/22 15:47*	*09/15/22 11:49*	*1*

Lab Sample ID: LCS 480-641440/2-A
Matrix: Solid
Analysis Batch: 641495

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641440

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	1640	745		ug/Kg		45	23 - 120
2,4,5-Trichlorophenol	1640	1630		ug/Kg		99	59 - 126
2,4,6-Trichlorophenol	1640	1630		ug/Kg		99	59 - 123
2,4-Dichlorophenol	1640	1520		ug/Kg		93	61 - 120
2,4-Dimethylphenol	1640	1510		ug/Kg		92	59 - 120
2,4-Dinitrophenol	3280	3350		ug/Kg		102	41 - 146
2,4-Dinitrotoluene	1640	1670		ug/Kg		102	63 - 120
2,6-Dinitrotoluene	1640	1640		ug/Kg		100	66 - 120
2-Chloronaphthalene	1640	1470		ug/Kg		90	57 - 120
2-Chlorophenol	1640	1360		ug/Kg		83	53 - 120
2-Methylnaphthalene	1640	1350		ug/Kg		82	59 - 120
2-Methylphenol	1640	1400		ug/Kg		86	54 - 120
2-Nitroaniline	1640	1570		ug/Kg		96	61 - 120
2-Nitrophenol	1640	1500		ug/Kg		91	56 - 120
3,3'-Dichlorobenzidine	3280	2870		ug/Kg		87	54 - 120
3-Nitroaniline	1640	1410		ug/Kg		86	48 - 120
4,6-Dinitro-2-methylphenol	3280	3450		ug/Kg		105	49 - 122
4-Bromophenyl phenyl ether	1640	1630		ug/Kg		99	58 - 120
4-Chloro-3-methylphenol	1640	1540		ug/Kg		94	61 - 120
4-Chloroaniline	1640	1170		ug/Kg		71	38 - 120
4-Chlorophenyl phenyl ether	1640	1570		ug/Kg		95	63 - 124
4-Methylphenol	1640	1430		ug/Kg		87	55 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-641440/2-A
Matrix: Solid
Analysis Batch: 641495

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641440

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4-Nitroaniline	1640	1560		ug/Kg		95	56 - 120
4-Nitrophenol	3280	3220		ug/Kg		98	43 - 147
Acenaphthene	1640	1490		ug/Kg		91	62 - 120
Acenaphthylene	1640	1570		ug/Kg		96	58 - 121
Acetophenone	1640	1320		ug/Kg		81	54 - 120
Anthracene	1640	1590		ug/Kg		97	62 - 120
Atrazine	3280	3440		ug/Kg		105	60 - 127
Benzaldehyde	3280	1880	E	ug/Kg		57	10 - 150
Benzo[a]anthracene	1640	1620		ug/Kg		99	65 - 120
Benzo[a]pyrene	1640	1610		ug/Kg		98	64 - 120
Benzo[b]fluoranthene	1640	1570		ug/Kg		96	64 - 120
Benzo[g,h,i]perylene	1640	1590		ug/Kg		97	45 - 145
Benzo[k]fluoranthene	1640	1640		ug/Kg		100	65 - 120
Biphenyl	1640	1480		ug/Kg		90	59 - 120
bis (2-chloroisopropyl) ether	1640	1200		ug/Kg		73	44 - 120
Bis(2-chloroethoxy)methane	1640	1360		ug/Kg		83	55 - 120
Bis(2-chloroethyl)ether	1640	1280		ug/Kg		78	45 - 120
Bis(2-ethylhexyl) phthalate	1640	1650		ug/Kg		100	61 - 133
Butyl benzyl phthalate	1640	1690		ug/Kg		103	61 - 129
Caprolactam	3280	3330		ug/Kg		102	47 - 120
Carbazole	1640	1620		ug/Kg		99	65 - 120
Chrysene	1640	1560		ug/Kg		95	64 - 120
Dibenz(a,h)anthracene	1640	1670		ug/Kg		102	54 - 132
Dibenzofuran	1640	1550		ug/Kg		94	63 - 120
Diethyl phthalate	1640	1670		ug/Kg		102	66 - 120
Dimethyl phthalate	1640	1590		ug/Kg		97	65 - 124
Di-n-butyl phthalate	1640	1730		ug/Kg		105	58 - 130
Di-n-octyl phthalate	1640	1690		ug/Kg		103	57 - 133
Fluoranthene	1640	1600		ug/Kg		98	62 - 120
Fluorene	1640	1570		ug/Kg		96	63 - 120
Hexachlorobenzene	1640	1610		ug/Kg		98	60 - 120
Hexachlorobutadiene	1640	1300		ug/Kg		79	45 - 120
Hexachlorocyclopentadiene	1640	1280		ug/Kg		78	47 - 120
Hexachloroethane	1640	1170		ug/Kg		71	41 - 120
Indeno[1,2,3-cd]pyrene	1640	1640		ug/Kg		100	56 - 134
Isophorone	1640	1400		ug/Kg		85	56 - 120
Naphthalene	1640	1350		ug/Kg		82	55 - 120
Nitrobenzene	1640	1370		ug/Kg		83	54 - 120
N-Nitrosodi-n-propylamine	1640	1340		ug/Kg		82	52 - 120
N-Nitrosodiphenylamine	1640	1620		ug/Kg		99	51 - 128
Pentachlorophenol	3280	3140		ug/Kg		96	51 - 120
Phenanthrene	1640	1590		ug/Kg		97	60 - 120
Phenol	1640	1420		ug/Kg		86	53 - 120
Pyrene	1640	1590		ug/Kg		97	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*104*		*54 - 120*
2-Fluorobiphenyl (Surr)	*90*		*60 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-641440/2-A
Matrix: Solid
Analysis Batch: 641495

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641440

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorophenol (Surr)	81		52 - 120
Nitrobenzene-d5 (Surr)	82		53 - 120
Phenol-d5 (Surr)	84		54 - 120
p-Terphenyl-d14 (Surr)	100		79 - 130

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-641309/1-A
Matrix: Water
Analysis Batch: 641604

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641309

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		09/14/22 08:19	09/15/22 15:45	1

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dioxane-d8	37		15 - 110	09/14/22 08:19	09/15/22 15:45	1

Lab Sample ID: LCS 480-641309/2-A
Matrix: Water
Analysis Batch: 641604

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641309

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	2.00	2.52		ug/L		126	40 - 140

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
1,4-Dioxane-d8	41		15 - 110

Method: 537 IDA - EPA 537 Isotope Dilution

Lab Sample ID: MB 200-183583/1-A
Matrix: Solid
Analysis Batch: 183606

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 183583

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.50	0.33	ug/Kg		09/15/22 08:50	09/15/22 16:23	1
Perfluoropentanoic acid (PFPeA)	ND		0.20	0.055	ug/Kg		09/15/22 08:50	09/15/22 16:23	1
Perfluorohexanoic acid (PFHxA)	ND		0.20	0.046	ug/Kg		09/15/22 08:50	09/15/22 16:23	1
Perfluoroheptanoic acid (PFHpA)	ND		0.20	0.039	ug/Kg		09/15/22 08:50	09/15/22 16:23	1
Perfluorooctanoic acid (PFOA)	ND		0.20	0.058	ug/Kg		09/15/22 08:50	09/15/22 16:23	1
Perfluorononanoic acid (PFNA)	ND		0.20	0.034	ug/Kg		09/15/22 08:50	09/15/22 16:23	1
Perfluorodecanoic acid (PFDA)	ND		0.20	0.028	ug/Kg		09/15/22 08:50	09/15/22 16:23	1
Perfluoroundecanoic acid (PFUnA)	ND		0.20	0.027	ug/Kg		09/15/22 08:50	09/15/22 16:23	1
Perfluorododecanoic acid (PFDoA)	0.0275	J	0.20	0.025	ug/Kg		09/15/22 08:50	09/15/22 16:23	1
Perfluorotridecanoic acid (PFTriA)	0.0274	J	0.20	0.025	ug/Kg		09/15/22 08:50	09/15/22 16:23	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.20	0.026	ug/Kg		09/15/22 08:50	09/15/22 16:23	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.20	0.033	ug/Kg		09/15/22 08:50	09/15/22 16:23	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.20	0.041	ug/Kg		09/15/22 08:50	09/15/22 16:23	1
Perfluoroheptanesulfonic acid (PFHpS)	0.0238	J	0.20	0.023	ug/Kg		09/15/22 08:50	09/15/22 16:23	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.20	0.11	ug/Kg		09/15/22 08:50	09/15/22 16:23	1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: MB 200-183583/1-A
Matrix: Solid
Analysis Batch: 183606

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 183583

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorodecanesulfonic acid (PFDS)	0.0214	J	0.20	0.019	ug/Kg		09/15/22 08:50	09/15/22 16:23	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.20	0.034	ug/Kg		09/15/22 08:50	09/15/22 16:23	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.0	0.11	ug/Kg		09/15/22 08:50	09/15/22 16:23	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.0	0.083	ug/Kg		09/15/22 08:50	09/15/22 16:23	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.0	0.057	ug/Kg		09/15/22 08:50	09/15/22 16:23	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.0	0.037	ug/Kg		09/15/22 08:50	09/15/22 16:23	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*78*		*50 - 150*	*09/15/22 08:50*	*09/15/22 16:23*	*1*
13C4 PFHpA	*83*		*50 - 150*	*09/15/22 08:50*	*09/15/22 16:23*	*1*
13C4 PFOA	*87*		*50 - 150*	*09/15/22 08:50*	*09/15/22 16:23*	*1*
13C4 PFOS	*69*		*50 - 150*	*09/15/22 08:50*	*09/15/22 16:23*	*1*
13C5 PFNA	*81*		*50 - 150*	*09/15/22 08:50*	*09/15/22 16:23*	*1*
13C4 PFBA	*83*		*50 - 150*	*09/15/22 08:50*	*09/15/22 16:23*	*1*
13C2 PFHxA	*85*		*50 - 150*	*09/15/22 08:50*	*09/15/22 16:23*	*1*
13C2 PFDA	*73*		*50 - 150*	*09/15/22 08:50*	*09/15/22 16:23*	*1*
13C2 PFUnA	*72*		*50 - 150*	*09/15/22 08:50*	*09/15/22 16:23*	*1*
13C2 PFDoA	*68*		*50 - 150*	*09/15/22 08:50*	*09/15/22 16:23*	*1*
13C8 FOSA	*64*		*50 - 150*	*09/15/22 08:50*	*09/15/22 16:23*	*1*
13C5 PFPeA	*83*		*50 - 150*	*09/15/22 08:50*	*09/15/22 16:23*	*1*
13C2 PFTeDA	*77*		*50 - 150*	*09/15/22 08:50*	*09/15/22 16:23*	*1*
d3-NMeFOSAA	*76*		*50 - 150*	*09/15/22 08:50*	*09/15/22 16:23*	*1*
d5-NEtFOSAA	*71*		*50 - 150*	*09/15/22 08:50*	*09/15/22 16:23*	*1*
M2-6:2 FTS	*81*		*50 - 150*	*09/15/22 08:50*	*09/15/22 16:23*	*1*
M2-8:2 FTS	*77*		*50 - 150*	*09/15/22 08:50*	*09/15/22 16:23*	*1*
13C3 PFBS	*80*		*50 - 150*	*09/15/22 08:50*	*09/15/22 16:23*	*1*

Lab Sample ID: LCS 200-183583/2-A
Matrix: Solid
Analysis Batch: 183606

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 183583

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	2.00	1.91		ug/Kg		95	60 - 140
Perfluoropentanoic acid (PFPeA)	2.00	1.99		ug/Kg		100	60 - 140
Perfluorohexanoic acid (PFHxA)	2.00	1.95		ug/Kg		97	60 - 140
Perfluoroheptanoic acid (PFHpA)	2.00	1.95		ug/Kg		98	60 - 140
Perfluorooctanoic acid (PFOA)	2.00	1.97		ug/Kg		98	60 - 140
Perfluorononanoic acid (PFNA)	2.00	1.98		ug/Kg		99	60 - 140
Perfluorodecanoic acid (PFDA)	2.00	1.97		ug/Kg		98	60 - 140
Perfluoroundecanoic acid (PFUnA)	2.00	2.06		ug/Kg		103	60 - 140
Perfluorododecanoic acid (PFDoA)	2.00	1.98		ug/Kg		99	60 - 140
Perfluorotridecanoic acid (PFTriA)	2.00	2.08		ug/Kg		104	60 - 140
Perfluorotetradecanoic acid (PFTeA)	2.00	2.12		ug/Kg		106	60 - 140

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 200-183583/2-A
Matrix: Solid
Analysis Batch: 183606

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 183583

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanesulfonic acid (PFBS)	1.77	1.72		ug/Kg		97	60 - 140
Perfluorohexanesulfonic acid (PFHxS)	1.82	1.78		ug/Kg		98	60 - 140
Perfluoroheptanesulfonic acid (PFHpS)	1.90	2.13		ug/Kg		112	60 - 140
Perfluorooctanesulfonic acid (PFOS)	1.86	1.79		ug/Kg		96	60 - 140
Perfluorodecanesulfonic acid (PFDS)	1.93	1.56		ug/Kg		81	60 - 140
Perfluorooctanesulfonamide (PFOSA)	2.00	2.01		ug/Kg		100	60 - 140
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.00	2.06		ug/Kg		103	60 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.00	1.80	J	ug/Kg		90	60 - 140
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	1.90	1.87	J	ug/Kg		99	50 - 150
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	1.92	1.88	J	ug/Kg		98	60 - 140

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
18O2 PFHxS	*82*		*50 - 150*
13C4 PFHpA	*90*		*50 - 150*
13C4 PFOA	*90*		*50 - 150*
13C4 PFOS	*70*		*50 - 150*
13C5 PFNA	*85*		*50 - 150*
13C4 PFBA	*89*		*50 - 150*
13C2 PFHxA	*90*		*50 - 150*
13C2 PFDA	*73*		*50 - 150*
13C2 PFUnA	*61*		*50 - 150*
13C2 PFDoA	*60*		*50 - 150*
13C8 FOSA	*64*		*50 - 150*
13C5 PFPeA	*89*		*50 - 150*
13C2 PFTeDA	*68*		*50 - 150*
d3-NMeFOSAA	*69*		*50 - 150*
d5-NEtFOSAA	*67*		*50 - 150*
M2-6:2 FTS	*88*		*50 - 150*
M2-8:2 FTS	*72*		*50 - 150*
13C3 PFBS	*86*		*50 - 150*

Lab Sample ID: MB 200-183671/1-A
Matrix: Water
Analysis Batch: 183694

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 183671

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		5.0	1.2	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.68	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.65	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.54	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.76	ng/L		09/19/22 11:42	09/19/22 17:30	1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: MB 200-183671/1-A
Matrix: Water
Analysis Batch: 183694

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 183671

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	ND		2.0	0.49	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.46	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.55	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.49	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.48	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.64	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.62	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.55	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		2.0	0.41	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.85	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.40	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluorooctanesulfonamide (PFOSA)	ND		2.0	0.92	ng/L		09/19/22 11:42	09/19/22 17:30	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		5.0	1.9	ng/L		09/19/22 11:42	09/19/22 17:30	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		5.0	1.6	ng/L		09/19/22 11:42	09/19/22 17:30	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		5.0	1.3	ng/L		09/19/22 11:42	09/19/22 17:30	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.0	0.77	ng/L		09/19/22 11:42	09/19/22 17:30	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*96*		*50 - 150*	*09/19/22 11:42*	*09/19/22 17:30*	*1*
13C4 PFHpA	*101*		*50 - 150*	*09/19/22 11:42*	*09/19/22 17:30*	*1*
13C4 PFOA	*103*		*50 - 150*	*09/19/22 11:42*	*09/19/22 17:30*	*1*
13C4 PFOS	*94*		*50 - 150*	*09/19/22 11:42*	*09/19/22 17:30*	*1*
13C5 PFNA	*100*		*50 - 150*	*09/19/22 11:42*	*09/19/22 17:30*	*1*
13C4 PFBA	*90*		*50 - 150*	*09/19/22 11:42*	*09/19/22 17:30*	*1*
13C2 PFHxA	*101*		*50 - 150*	*09/19/22 11:42*	*09/19/22 17:30*	*1*
13C2 PFDA	*98*		*50 - 150*	*09/19/22 11:42*	*09/19/22 17:30*	*1*
13C2 PFUnA	*99*		*50 - 150*	*09/19/22 11:42*	*09/19/22 17:30*	*1*
13C2 PFDoA	*92*		*50 - 150*	*09/19/22 11:42*	*09/19/22 17:30*	*1*
13C8 FOSA	*84*		*50 - 150*	*09/19/22 11:42*	*09/19/22 17:30*	*1*
13C5 PFPeA	*96*		*50 - 150*	*09/19/22 11:42*	*09/19/22 17:30*	*1*
13C2 PFTeDA	*94*		*50 - 150*	*09/19/22 11:42*	*09/19/22 17:30*	*1*
d3-NMeFOSAA	*93*		*50 - 150*	*09/19/22 11:42*	*09/19/22 17:30*	*1*
d5-NEtFOSAA	*95*		*50 - 150*	*09/19/22 11:42*	*09/19/22 17:30*	*1*
M2-6:2 FTS	*96*		*50 - 150*	*09/19/22 11:42*	*09/19/22 17:30*	*1*
M2-8:2 FTS	*104*		*50 - 150*	*09/19/22 11:42*	*09/19/22 17:30*	*1*
13C3 PFBS	*91*		*50 - 150*	*09/19/22 11:42*	*09/19/22 17:30*	*1*

Lab Sample ID: LCS 200-183671/2-A
Matrix: Water
Analysis Batch: 183694

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 183671

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	80.0	81.5		ng/L		102	70 - 130
Perfluoropentanoic acid (PFPeA)	80.0	91.2		ng/L		114	70 - 130
Perfluorohexanoic acid (PFHxA)	80.0	84.3		ng/L		105	70 - 130

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 200-183671/2-A
Matrix: Water
Analysis Batch: 183694

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 183671

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoroheptanoic acid (PFHpA)	80.0	81.0		ng/L		101	70 - 130
Perfluorooctanoic acid (PFOA)	80.0	85.2		ng/L		106	70 - 130
Perfluorononanoic acid (PFNA)	80.0	84.8		ng/L		106	70 - 130
Perfluorodecanoic acid (PFDA)	80.0	85.5		ng/L		107	70 - 130
Perfluoroundecanoic acid (PFUnA)	80.0	83.7		ng/L		105	70 - 130
Perfluorododecanoic acid (PFDoA)	80.0	85.9		ng/L		107	70 - 130
Perfluorotridecanoic acid (PFTriA)	80.0	83.7		ng/L		105	70 - 130
Perfluorotetradecanoic acid (PFTeA)	80.0	80.1		ng/L		100	70 - 130
Perfluorobutanesulfonic acid (PFBS)	70.7	74.1		ng/L		105	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	72.8	73.4		ng/L		101	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	76.2	79.6		ng/L		104	70 - 130
Perfluorooctanesulfonic acid (PFOS)	74.2	74.5		ng/L		100	70 - 130
Perfluorodecanesulfonic acid (PFDS)	77.1	74.4		ng/L		97	70 - 130
Perfluorooctanesulfonamide (PFOSA)	80.0	80.9		ng/L		101	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	80.0	85.9		ng/L		107	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	80.0	80.9		ng/L		101	70 - 130
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	75.8	79.8		ng/L		105	60 - 140
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	76.6	82.8		ng/L		108	70 - 130

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
18O2 PFHxS	*98*		*50 - 150*
13C4 PFHpA	*99*		*50 - 150*
13C4 PFOA	*101*		*50 - 150*
13C4 PFOS	*97*		*50 - 150*
13C5 PFNA	*98*		*50 - 150*
13C4 PFBA	*96*		*50 - 150*
13C2 PFHxA	*100*		*50 - 150*
13C2 PFDA	*99*		*50 - 150*
13C2 PFUnA	*94*		*50 - 150*
13C2 PFDoA	*86*		*50 - 150*
13C8 FOSA	*78*		*50 - 150*
13C5 PFPeA	*93*		*50 - 150*
13C2 PFTeDA	*87*		*50 - 150*
d3-NMeFOSAA	*91*		*50 - 150*
d5-NEtFOSAA	*93*		*50 - 150*
M2-6:2 FTS	*102*		*50 - 150*
M2-8:2 FTS	*101*		*50 - 150*
13C3 PFBS	*96*		*50 - 150*

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCSD 200-183671/3-A
Matrix: Water
Analysis Batch: 183694

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 183671

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)			80.0	82.6		ng/L		103	70 - 130	1	30
Perfluoropentanoic acid (PFPeA)			80.0	86.4		ng/L		108	70 - 130	5	30
Perfluorohexanoic acid (PFHxA)			80.0	84.0		ng/L		105	70 - 130	0	30
Perfluoroheptanoic acid (PFHpA)			80.0	85.4		ng/L		107	70 - 130	5	30
Perfluorooctanoic acid (PFOA)			80.0	76.5		ng/L		96	70 - 130	11	30
Perfluorononanoic acid (PFNA)			80.0	82.7		ng/L		103	70 - 130	2	30
Perfluorodecanoic acid (PFDA)			80.0	93.3		ng/L		117	70 - 130	9	30
Perfluoroundecanoic acid (PFUnA)			80.0	86.3		ng/L		108	70 - 130	3	30
Perfluorododecanoic acid (PFDoA)			80.0	82.8		ng/L		104	70 - 130	4	30
Perfluorotridecanoic acid (PFTriA)			80.0	80.9		ng/L		101	70 - 130	3	30
Perfluorotetradecanoic acid (PFTeA)			80.0	81.5		ng/L		102	70 - 130	2	30
Perfluorobutanesulfonic acid (PFBS)			70.7	72.6		ng/L		103	70 - 130	2	30
Perfluorohexanesulfonic acid (PFHxS)			72.8	77.6		ng/L		107	70 - 130	6	30
Perfluoroheptanesulfonic acid (PFHpS)			76.2	78.5		ng/L		103	70 - 130	1	30
Perfluorooctanesulfonic acid (PFOS)			74.2	74.2		ng/L		100	70 - 130	0	30
Perfluorodecanesulfonic acid (PFDS)			77.1	71.4		ng/L		93	70 - 130	4	30
Perfluorooctanesulfonamide (PFOSA)			80.0	80.9		ng/L		101	70 - 130	0	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)			80.0	81.9		ng/L		102	70 - 130	5	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			80.0	81.2		ng/L		101	70 - 130	0	30
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)			75.8	84.8		ng/L		112	60 - 140	6	30
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)			76.6	80.5		ng/L		105	70 - 130	3	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
18O2 PFHxS	*88*		*50 - 150*
13C4 PFHpA	*94*		*50 - 150*
13C4 PFOA	*100*		*50 - 150*
13C4 PFOS	*95*		*50 - 150*
13C5 PFNA	*96*		*50 - 150*
13C4 PFBA	*92*		*50 - 150*
13C2 PFHxA	*96*		*50 - 150*
13C2 PFDA	*93*		*50 - 150*
13C2 PFUnA	*89*		*50 - 150*
13C2 PFDoA	*85*		*50 - 150*
13C8 FOSA	*73*		*50 - 150*
13C5 PFPeA	*93*		*50 - 150*
13C2 PFTeDA	*80*		*50 - 150*
d3-NMeFOSAA	*96*		*50 - 150*
d5-NEtFOSAA	*85*		*50 - 150*

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCSD 200-183671/3-A
Matrix: Water
Analysis Batch: 183694

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 183671

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
M2-6:2 FTS	*95*		*50 - 150*
M2-8:2 FTS	*95*		*50 - 150*
13C3 PFBS	*91*		*50 - 150*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-641268/1-A
Matrix: Water
Analysis Batch: 641529

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641268

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		09/14/22 08:55	09/14/22 18:13	1
Antimony	ND		0.020	0.0068	mg/L		09/14/22 08:55	09/14/22 18:13	1
Arsenic	ND		0.015	0.0056	mg/L		09/14/22 08:55	09/14/22 18:13	1
Barium	ND		0.0020	0.00070	mg/L		09/14/22 08:55	09/14/22 18:13	1
Beryllium	ND		0.0020	0.00030	mg/L		09/14/22 08:55	09/14/22 18:13	1
Cadmium	ND		0.0020	0.00050	mg/L		09/14/22 08:55	09/14/22 18:13	1
Calcium	ND		0.50	0.10	mg/L		09/14/22 08:55	09/14/22 18:13	1
Chromium	ND		0.0040	0.0010	mg/L		09/14/22 08:55	09/14/22 18:13	1
Cobalt	ND		0.0040	0.00063	mg/L		09/14/22 08:55	09/14/22 18:13	1
Copper	ND		0.010	0.0016	mg/L		09/14/22 08:55	09/14/22 18:13	1
Iron	ND		0.050	0.019	mg/L		09/14/22 08:55	09/14/22 18:13	1
Lead	ND		0.010	0.0030	mg/L		09/14/22 08:55	09/14/22 18:13	1
Magnesium	ND		0.20	0.043	mg/L		09/14/22 08:55	09/14/22 18:13	1
Manganese	ND		0.0030	0.00040	mg/L		09/14/22 08:55	09/14/22 18:13	1
Nickel	ND		0.010	0.0013	mg/L		09/14/22 08:55	09/14/22 18:13	1
Potassium	0.168	J	0.50	0.10	mg/L		09/14/22 08:55	09/14/22 18:13	1
Selenium	ND		0.025	0.0087	mg/L		09/14/22 08:55	09/14/22 18:13	1
Silver	ND		0.0060	0.0017	mg/L		09/14/22 08:55	09/14/22 18:13	1
Sodium	ND		1.0	0.32	mg/L		09/14/22 08:55	09/14/22 18:13	1
Thallium	ND		0.020	0.010	mg/L		09/14/22 08:55	09/14/22 18:13	1
Vanadium	ND		0.0050	0.0015	mg/L		09/14/22 08:55	09/14/22 18:13	1
Zinc	0.00195	J	0.010	0.0015	mg/L		09/14/22 08:55	09/14/22 18:13	1

Lab Sample ID: LCS 480-641268/2-A
Matrix: Water
Analysis Batch: 641529

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641268

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	10.0	10.07		mg/L		101	80 - 120
Antimony	0.200	0.206		mg/L		103	80 - 120
Arsenic	0.201	0.202		mg/L		101	80 - 120
Barium	0.200	0.210		mg/L		105	80 - 120
Beryllium	0.200	0.207		mg/L		104	80 - 120
Cadmium	0.200	0.200		mg/L		100	80 - 120
Calcium	10.0	10.0		mg/L		100	80 - 120
Chromium	0.200	0.201		mg/L		101	80 - 120
Cobalt	0.200	0.197		mg/L		99	80 - 120
Copper	0.200	0.211		mg/L		106	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-641268/2-A
Matrix: Water
Analysis Batch: 641529

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641268

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	10.0	10.10		mg/L		101	80 - 120
Lead	0.201	0.196		mg/L		98	80 - 120
Magnesium	10.0	10.16		mg/L		102	80 - 120
Manganese	0.200	0.215		mg/L		108	80 - 120
Nickel	0.200	0.198		mg/L		99	80 - 120
Potassium	10.0	10.23		mg/L		102	80 - 120
Selenium	0.200	0.201		mg/L		100	80 - 120
Silver	0.0500	0.0515		mg/L		103	80 - 120
Sodium	10.0	9.72		mg/L		97	80 - 120
Thallium	0.200	0.202		mg/L		101	80 - 120
Vanadium	0.201	0.202		mg/L		101	80 - 120
Zinc	0.200	0.207		mg/L		103	80 - 120

Lab Sample ID: LCSD 480-641268/3-A
Matrix: Water
Analysis Batch: 641529

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 641268

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	10.0	9.92		mg/L		99	80 - 120	2	20
Antimony	0.200	0.203		mg/L		101	80 - 120	1	20
Arsenic	0.201	0.204		mg/L		102	80 - 120	1	20
Barium	0.200	0.209		mg/L		105	80 - 120	0	20
Beryllium	0.200	0.209		mg/L		105	80 - 120	1	20
Cadmium	0.200	0.200		mg/L		100	80 - 120	0	20
Calcium	10.0	10.03		mg/L		100	80 - 120	0	20
Chromium	0.200	0.200		mg/L		100	80 - 120	1	20
Cobalt	0.200	0.198		mg/L		99	80 - 120	0	20
Copper	0.200	0.208		mg/L		104	80 - 120	2	20
Iron	10.0	10.20		mg/L		102	80 - 120	1	20
Lead	0.201	0.196		mg/L		98	80 - 120	0	20
Magnesium	10.0	9.95		mg/L		99	80 - 120	2	20
Manganese	0.200	0.212		mg/L		106	80 - 120	1	20
Nickel	0.200	0.196		mg/L		98	80 - 120	1	20
Potassium	10.0	10.07		mg/L		101	80 - 120	2	20
Selenium	0.200	0.198		mg/L		99	80 - 120	1	20
Silver	0.0500	0.0507		mg/L		101	80 - 120	2	20
Sodium	10.0	9.74		mg/L		97	80 - 120	0	20
Thallium	0.200	0.201		mg/L		100	80 - 120	1	20
Vanadium	0.201	0.200		mg/L		100	80 - 120	1	20
Zinc	0.200	0.206		mg/L		103	80 - 120	1	20

Lab Sample ID: MB 480-641372/1-A
Matrix: Solid
Analysis Batch: 641700

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641372

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		9.7	4.3	mg/Kg		09/14/22 11:33	09/15/22 13:01	1
Antimony	ND		14.5	0.39	mg/Kg		09/14/22 11:33	09/15/22 13:01	1
Arsenic	ND		1.9	0.39	mg/Kg		09/14/22 11:33	09/15/22 13:01	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 480-641372/1-A
Matrix: Solid
Analysis Batch: 641700

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641372

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		0.48	0.11	mg/Kg		09/14/22 11:33	09/15/22 13:01	1
Beryllium	ND		0.19	0.027	mg/Kg		09/14/22 11:33	09/15/22 13:01	1
Cadmium	ND		0.19	0.029	mg/Kg		09/14/22 11:33	09/15/22 13:01	1
Calcium	3.53	J	48.4	3.2	mg/Kg		09/14/22 11:33	09/15/22 13:01	1
Chromium	ND		0.48	0.19	mg/Kg		09/14/22 11:33	09/15/22 13:01	1
Cobalt	ND		0.48	0.048	mg/Kg		09/14/22 11:33	09/15/22 13:01	1
Copper	ND		0.97	0.20	mg/Kg		09/14/22 11:33	09/15/22 13:01	1
Iron	ND		9.7	3.4	mg/Kg		09/14/22 11:33	09/15/22 13:01	1
Lead	ND		0.97	0.23	mg/Kg		09/14/22 11:33	09/15/22 13:01	1
Magnesium	1.80	J	19.4	0.90	mg/Kg		09/14/22 11:33	09/15/22 13:01	1
Manganese	0.0455	J	0.19	0.031	mg/Kg		09/14/22 11:33	09/15/22 13:01	1
Nickel	ND		4.8	0.22	mg/Kg		09/14/22 11:33	09/15/22 13:01	1
Potassium	ND		29.0	19.4	mg/Kg		09/14/22 11:33	09/15/22 13:01	1
Selenium	ND		3.9	0.39	mg/Kg		09/14/22 11:33	09/15/22 13:01	1
Silver	ND		0.58	0.19	mg/Kg		09/14/22 11:33	09/15/22 13:01	1
Sodium	ND		135	12.6	mg/Kg		09/14/22 11:33	09/15/22 13:01	1
Thallium	ND		5.8	0.29	mg/Kg		09/14/22 11:33	09/15/22 13:01	1
Vanadium	ND		0.48	0.11	mg/Kg		09/14/22 11:33	09/15/22 13:01	1
Zinc	ND		1.9	0.62	mg/Kg		09/14/22 11:33	09/15/22 13:01	1

Lab Sample ID: LCDSRM 480-641372/3-A
Matrix: Solid
Analysis Batch: 641700

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 641372

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum			8630	9660		mg/Kg		111.9	50.6 - 149.5	0	20
Antimony			129	85.88		mg/Kg		66.6	19.8 - 250.4	0	20
Arsenic			84.5	72.32		mg/Kg		85.6	70.1 - 130.2	1	20
Barium			249	213.5		mg/Kg		85.8	75.1 - 124.9	5	20
Beryllium			163	138.6		mg/Kg		85.0	74.8 - 125.2	11	20
Cadmium			99.0	82.56		mg/Kg		83.4	74.9 - 125.3	6	20
Calcium			4760	4247		mg/Kg		89.2	72.7 - 127.5	3	20
Chromium			122	103.9		mg/Kg		85.1	70.2 - 130.3	3	20
Cobalt			61.7	59.03		mg/Kg		95.7	75.0 - 125.1	1	20
Copper			61.5	52.02		mg/Kg		84.6	75.0 - 124.9	1	20
Iron			14500	12550		mg/Kg		86.6	35.8 - 164.1	3	20
Lead			123	116.9		mg/Kg		95.0	71.8 - 128.5	1	20
Magnesium			2360	2219		mg/Kg		94.0	62.7 - 137.7	0	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCDSRM 480-641372/3-A
Matrix: Solid
Analysis Batch: 641700

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 641372

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Manganese	456	391.1		mg/Kg		85.8	76.8 - 123.5	0	20
Nickel	135	128.6		mg/Kg		95.3	70.1 - 130.4	3	20
Potassium	2090	2212		mg/Kg		105.8	59.3 - 140.7	1	20
Selenium	121	101.6		mg/Kg		84.0	66.4 - 133.9	1	20
Silver	33.6	36.22		mg/Kg		107.8	68.5 - 131.3	1	20
Sodium	136	163.3		mg/Kg		120.1	35.4 - 164.0	2	20
Thallium	144	144.2		mg/Kg		100.1	70.1 - 129.9	2	20
Vanadium	186	160.3		mg/Kg		86.2	74.2 - 126.3	1	20
Zinc	295	245.8		mg/Kg		83.3	70.2 - 130.2	0	20

Lab Sample ID: LCSSRM 480-641372/2-A
Matrix: Solid
Analysis Batch: 641700

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641372

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	8630	9667		mg/Kg		112.0	50.6 - 149.5
Antimony	129	86.14		mg/Kg		66.8	19.8 - 250.4
Arsenic	84.5	72.90		mg/Kg		86.3	70.1 - 130.2
Barium	249	224.8		mg/Kg		90.3	75.1 - 124.9
Beryllium	163	154.8		mg/Kg		95.0	74.8 - 125.2
Cadmium	99.0	87.65		mg/Kg		88.5	74.9 - 125.3
Calcium	4760	4368		mg/Kg		91.8	72.7 - 127.5
Chromium	122	107.0		mg/Kg		87.7	70.2 - 130.3
Cobalt	61.7	59.77		mg/Kg		96.9	75.0 - 125.1
Copper	61.5	52.47		mg/Kg		85.3	75.0 - 124.9
Iron	14500	12220		mg/Kg		84.3	35.8 - 164.1
Lead	123	118.1		mg/Kg		96.0	71.8 - 128.5
Magnesium	2360	2221		mg/Kg		94.1	62.7 - 137.7
Manganese	456	392.8		mg/Kg		86.2	76.8 - 123.5
Nickel	135	132.0		mg/Kg		97.8	70.1 - 130.4

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-641372/2-A
Matrix: Solid
Analysis Batch: 641700

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641372

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Potassium	2090	2186		mg/Kg		104.6	59.3 - 140.7
Selenium	121	102.8		mg/Kg		85.0	66.4 - 133.9
Silver	33.6	36.02		mg/Kg		107.2	68.5 - 131.3
Sodium	136	166.0		mg/Kg		122.1	35.4 - 164.0
Thallium	144	147.5		mg/Kg		102.4	70.1 - 129.9
Vanadium	186	161.3		mg/Kg		86.7	74.2 - 126.3
Zinc	295	245.7		mg/Kg		83.3	70.2 - 130.2

Lab Sample ID: 480-201563-1 MS
Matrix: Solid
Analysis Batch: 641700

Client Sample ID: SS1 (0-2)
Prep Type: Total/NA
Prep Batch: 641372

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	9000	F1	2530	16640	F1	mg/Kg	☼	301	75 - 125
Antimony	2.3	J F1	50.6	38.71	F1	mg/Kg	☼	72	75 - 125
Arsenic	9.9		50.8	56.97		mg/Kg	☼	93	75 - 125
Barium	86.9	F1	50.6	155.9	F1	mg/Kg	☼	136	75 - 125
Beryllium	0.46		50.6	47.52		mg/Kg	☼	93	75 - 125
Cadmium	0.75		50.6	45.74		mg/Kg	☼	89	75 - 125
Calcium	2810	B	2540	5336		mg/Kg	☼	100	75 - 125
Chromium	14.2		50.6	63.32		mg/Kg	☼	97	75 - 125
Cobalt	7.0		50.6	57.64		mg/Kg	☼	100	75 - 125
Copper	20.5		50.6	66.80		mg/Kg	☼	91	75 - 125
Iron	23100		2540	24500	4	mg/Kg	☼	56	75 - 125
Lead	88.4		50.8	137.3		mg/Kg	☼	96	75 - 125
Magnesium	2220	B	2530	4812		mg/Kg	☼	102	75 - 125
Manganese	427	B	50.6	502.3	4	mg/Kg	☼	149	75 - 125
Nickel	16.2		50.6	66.93		mg/Kg	☼	100	75 - 125
Potassium	1740	F1	2540	5864	F1	mg/Kg	☼	163	75 - 125
Silver	ND		12.7	11.56		mg/Kg	☼	91	75 - 125
Sodium	58.6	J	2530	2356		mg/Kg	☼	91	75 - 125
Thallium	ND		50.6	49.69		mg/Kg	☼	98	75 - 125
Vanadium	15.8		50.8	69.33		mg/Kg	☼	105	75 - 125
Zinc	119		50.6	164.9		mg/Kg	☼	90	75 - 125

Lab Sample ID: 480-201563-1 MS
Matrix: Solid
Analysis Batch: 641878

Client Sample ID: SS1 (0-2)
Prep Type: Total/NA
Prep Batch: 641372

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Selenium	1.0	J	50.6	46.44		mg/Kg	☼	90	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-201563-1 MSD
Matrix: Solid
Analysis Batch: 641700

Client Sample ID: SS1 (0-2)
Prep Type: Total/NA
Prep Batch: 641372

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	9000	F1	2320	16170	F1	mg/Kg	☼	309	75 - 125	3	20
Antimony	2.3	J F1	46.4	36.03	F1	mg/Kg	☼	73	75 - 125	7	20
Arsenic	9.9		46.5	52.62		mg/Kg	☼	92	75 - 125	8	20
Barium	86.9	F1	46.4	147.4	F1	mg/Kg	☼	131	75 - 125	6	20
Beryllium	0.46		46.4	44.79		mg/Kg	☼	96	75 - 125	6	20
Cadmium	0.75		46.4	42.93		mg/Kg	☼	91	75 - 125	6	20
Calcium	2810	B	2320	4773		mg/Kg	☼	85	75 - 125	11	20
Chromium	14.2		46.4	60.37		mg/Kg	☼	100	75 - 125	5	20
Cobalt	7.0		46.4	54.22		mg/Kg	☼	102	75 - 125	6	20
Copper	20.5		46.4	63.08		mg/Kg	☼	92	75 - 125	6	20
Iron	23100		2320	23440	4	mg/Kg	☼	15	75 - 125	4	20
Lead	88.4		46.5	133.8		mg/Kg	☼	98	75 - 125	3	20
Magnesium	2220	B	2320	4542		mg/Kg	☼	100	75 - 125	6	20
Manganese	427	B	46.4	461.1	4	mg/Kg	☼	73	75 - 125	9	20
Nickel	16.2		46.4	62.90		mg/Kg	☼	101	75 - 125	6	20
Potassium	1740	F1	2320	5639	F1	mg/Kg	☼	168	75 - 125	4	20
Silver	ND		11.6	10.74		mg/Kg	☼	93	75 - 125	7	20
Sodium	58.6	J	2320	2217		mg/Kg	☼	93	75 - 125	6	20
Thallium	ND		46.4	45.76		mg/Kg	☼	99	75 - 125	8	20
Vanadium	15.8		46.5	64.78		mg/Kg	☼	105	75 - 125	7	20
Zinc	119		46.4	157.8		mg/Kg	☼	83	75 - 125	4	20

Lab Sample ID: 480-201563-1 MSD
Matrix: Solid
Analysis Batch: 641878

Client Sample ID: SS1 (0-2)
Prep Type: Total/NA
Prep Batch: 641372

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Selenium	1.0	J	46.4	43.88		mg/Kg	☼	92	75 - 125	6	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-641370/1-A
Matrix: Water
Analysis Batch: 641443

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641370

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		09/14/22 10:49	09/14/22 14:26	1

Lab Sample ID: LCS 480-641370/2-A
Matrix: Water
Analysis Batch: 641443

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641370

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00667	0.00665		mg/L		100	80 - 120		

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-641435/1-A
Matrix: Solid
Analysis Batch: 641616

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641435

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021	0.0048	mg/Kg		09/15/22 10:09	09/15/22 13:33	1

Lab Sample ID: LCSSRM 480-641435/2-A
Matrix: Solid
Analysis Batch: 641616

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641435

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			18.9	17.75		mg/Kg		93.9	59.8 - 139.7		

QC Association Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201563-1

GC/MS VOA

Analysis Batch: 641153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201563-6	FB_091222	Total/NA	Water	8260C	
480-201563-7	TB_091222	Total/NA	Water	8260C	
MB 480-641153/9	Method Blank	Total/NA	Water	8260C	
LCS 480-641153/6	Lab Control Sample	Total/NA	Water	8260C	

Prep Batch: 641451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201563-4	SS1 (12-24)	Total/NA	Solid	5035A_L	
MB 480-641451/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-641451/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

Analysis Batch: 641452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201563-4	SS1 (12-24)	Total/NA	Solid	8260C	641451
MB 480-641451/2-A	Method Blank	Total/NA	Solid	8260C	641451
LCS 480-641451/1-A	Lab Control Sample	Total/NA	Solid	8260C	641451

Prep Batch: 641652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201563-1	SS1 (0-2)	Total/NA	Solid	5035A_L	
480-201563-2	SS1 (0-6)	Total/NA	Solid	5035A_L	
480-201563-3	SS1 (6-12)	Total/NA	Solid	5035A_L	
480-201563-5	FDUP_091222	Total/NA	Solid	5035A_L	
MB 480-641652/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-641652/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

Analysis Batch: 641653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201563-1	SS1 (0-2)	Total/NA	Solid	8260C	641652
480-201563-2	SS1 (0-6)	Total/NA	Solid	8260C	641652
480-201563-3	SS1 (6-12)	Total/NA	Solid	8260C	641652
480-201563-5	FDUP_091222	Total/NA	Solid	8260C	641652
MB 480-641652/2-A	Method Blank	Total/NA	Solid	8260C	641652
LCS 480-641652/1-A	Lab Control Sample	Total/NA	Solid	8260C	641652

GC/MS Semi VOA

Prep Batch: 641309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201563-6	FB_091222	Total/NA	Water	3510C	
MB 480-641309/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-641309/2-A	Lab Control Sample	Total/NA	Water	3510C	

Prep Batch: 641314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201563-6	FB_091222	Total/NA	Water	3510C	
MB 480-641314/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-641314/2-A	Lab Control Sample	Total/NA	Water	3510C	

GC/MS Semi VOA

Prep Batch: 641440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201563-1	SS1 (0-2)	Total/NA	Solid	3550C	
480-201563-2	SS1 (0-6)	Total/NA	Solid	3550C	
480-201563-3	SS1 (6-12)	Total/NA	Solid	3550C	
480-201563-4	SS1 (12-24)	Total/NA	Solid	3550C	
480-201563-5	FDUP_091222	Total/NA	Solid	3550C	
MB 480-641440/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-641440/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 641491

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201563-6	FB_091222	Total/NA	Water	8270D	641314
MB 480-641314/1-A	Method Blank	Total/NA	Water	8270D	641314
LCS 480-641314/2-A	Lab Control Sample	Total/NA	Water	8270D	641314

Analysis Batch: 641495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201563-1	SS1 (0-2)	Total/NA	Solid	8270D	641440
480-201563-2	SS1 (0-6)	Total/NA	Solid	8270D	641440
480-201563-3	SS1 (6-12)	Total/NA	Solid	8270D	641440
480-201563-4	SS1 (12-24)	Total/NA	Solid	8270D	641440
480-201563-5	FDUP_091222	Total/NA	Solid	8270D	641440
MB 480-641440/1-A	Method Blank	Total/NA	Solid	8270D	641440
LCS 480-641440/2-A	Lab Control Sample	Total/NA	Solid	8270D	641440

Analysis Batch: 641604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201563-6	FB_091222	Total/NA	Water	8270D SIM ID	641309
MB 480-641309/1-A	Method Blank	Total/NA	Water	8270D SIM ID	641309
LCS 480-641309/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	641309

LCMS

Prep Batch: 183583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201563-1	SS1 (0-2)	Total/NA	Solid	SHAKE	
480-201563-3	SS1 (6-12)	Total/NA	Solid	SHAKE	
480-201563-4	SS1 (12-24)	Total/NA	Solid	SHAKE	
480-201563-5	FDUP_091222	Total/NA	Solid	SHAKE	
MB 200-183583/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 200-183583/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

Analysis Batch: 183606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201563-1	SS1 (0-2)	Total/NA	Solid	537 IDA	183583
480-201563-3	SS1 (6-12)	Total/NA	Solid	537 IDA	183583
480-201563-4	SS1 (12-24)	Total/NA	Solid	537 IDA	183583
480-201563-5	FDUP_091222	Total/NA	Solid	537 IDA	183583
MB 200-183583/1-A	Method Blank	Total/NA	Solid	537 IDA	183583
LCS 200-183583/2-A	Lab Control Sample	Total/NA	Solid	537 IDA	183583

QC Association Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201563-1

LCMS

Prep Batch: 183671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201563-6	FB_091222	Total/NA	Water	3535	
MB 200-183671/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-183671/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 200-183671/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 183694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201563-6	FB_091222	Total/NA	Water	537 IDA	183671
MB 200-183671/1-A	Method Blank	Total/NA	Water	537 IDA	183671
LCS 200-183671/2-A	Lab Control Sample	Total/NA	Water	537 IDA	183671
LCSD 200-183671/3-A	Lab Control Sample Dup	Total/NA	Water	537 IDA	183671

Metals

Prep Batch: 641268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201563-6	FB_091222	Total/NA	Water	3005A	
MB 480-641268/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-641268/2-A	Lab Control Sample	Total/NA	Water	3005A	
LCSD 480-641268/3-A	Lab Control Sample Dup	Total/NA	Water	3005A	

Prep Batch: 641370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201563-6	FB_091222	Total/NA	Water	7470A	
MB 480-641370/1-A	Method Blank	Total/NA	Water	7470A	
LCS 480-641370/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 641372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201563-1	SS1 (0-2)	Total/NA	Solid	3050B	
480-201563-2	SS1 (0-6)	Total/NA	Solid	3050B	
480-201563-3	SS1 (6-12)	Total/NA	Solid	3050B	
480-201563-4	SS1 (12-24)	Total/NA	Solid	3050B	
480-201563-5	FDUP_091222	Total/NA	Solid	3050B	
MB 480-641372/1-A	Method Blank	Total/NA	Solid	3050B	
LCDSRM 480-641372/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 480-641372/2-A	Lab Control Sample	Total/NA	Solid	3050B	
480-201563-1 MS	SS1 (0-2)	Total/NA	Solid	3050B	
480-201563-1 MSD	SS1 (0-2)	Total/NA	Solid	3050B	

Prep Batch: 641435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201563-1	SS1 (0-2)	Total/NA	Solid	7471B	
480-201563-2	SS1 (0-6)	Total/NA	Solid	7471B	
480-201563-3	SS1 (6-12)	Total/NA	Solid	7471B	
480-201563-4	SS1 (12-24)	Total/NA	Solid	7471B	
480-201563-5	FDUP_091222	Total/NA	Solid	7471B	
MB 480-641435/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-641435/2-A	Lab Control Sample	Total/NA	Solid	7471B	

Metals

Analysis Batch: 641443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201563-6	FB_091222	Total/NA	Water	7470A	641370
MB 480-641370/1-A	Method Blank	Total/NA	Water	7470A	641370
LCS 480-641370/2-A	Lab Control Sample	Total/NA	Water	7470A	641370

Analysis Batch: 641529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201563-6	FB_091222	Total/NA	Water	6010C	641268
MB 480-641268/1-A	Method Blank	Total/NA	Water	6010C	641268
LCS 480-641268/2-A	Lab Control Sample	Total/NA	Water	6010C	641268
LCSD 480-641268/3-A	Lab Control Sample Dup	Total/NA	Water	6010C	641268

Analysis Batch: 641616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201563-1	SS1 (0-2)	Total/NA	Solid	7471B	641435
480-201563-2	SS1 (0-6)	Total/NA	Solid	7471B	641435
480-201563-3	SS1 (6-12)	Total/NA	Solid	7471B	641435
480-201563-4	SS1 (12-24)	Total/NA	Solid	7471B	641435
480-201563-5	FDUP_091222	Total/NA	Solid	7471B	641435
MB 480-641435/1-A	Method Blank	Total/NA	Solid	7471B	641435
LCSSRM 480-641435/2-A	Lab Control Sample	Total/NA	Solid	7471B	641435

Analysis Batch: 641700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201563-1	SS1 (0-2)	Total/NA	Solid	6010C	641372
480-201563-2	SS1 (0-6)	Total/NA	Solid	6010C	641372
480-201563-3	SS1 (6-12)	Total/NA	Solid	6010C	641372
480-201563-4	SS1 (12-24)	Total/NA	Solid	6010C	641372
480-201563-5	FDUP_091222	Total/NA	Solid	6010C	641372
MB 480-641372/1-A	Method Blank	Total/NA	Solid	6010C	641372
LCDSRM 480-641372/3-A	Lab Control Sample Dup	Total/NA	Solid	6010C	641372
LCSSRM 480-641372/2-A	Lab Control Sample	Total/NA	Solid	6010C	641372
480-201563-1 MS	SS1 (0-2)	Total/NA	Solid	6010C	641372
480-201563-1 MSD	SS1 (0-2)	Total/NA	Solid	6010C	641372

Analysis Batch: 641878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201563-1	SS1 (0-2)	Total/NA	Solid	6010C	641372
480-201563-2	SS1 (0-6)	Total/NA	Solid	6010C	641372
480-201563-3	SS1 (6-12)	Total/NA	Solid	6010C	641372
480-201563-4	SS1 (12-24)	Total/NA	Solid	6010C	641372
480-201563-4	SS1 (12-24)	Total/NA	Solid	6010C	641372
480-201563-5	FDUP_091222	Total/NA	Solid	6010C	641372
480-201563-5	FDUP_091222	Total/NA	Solid	6010C	641372
480-201563-1 MS	SS1 (0-2)	Total/NA	Solid	6010C	641372
480-201563-1 MSD	SS1 (0-2)	Total/NA	Solid	6010C	641372

General Chemistry

Analysis Batch: 641256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201563-1	SS1 (0-2)	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 641256 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201563-2	SS1 (0-6)	Total/NA	Solid	Moisture	
480-201563-3	SS1 (6-12)	Total/NA	Solid	Moisture	
480-201563-4	SS1 (12-24)	Total/NA	Solid	Moisture	
480-201563-5	FDUP_091222	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201563-1

Client Sample ID: SS1 (0-2)
Date Collected: 09/12/22 16:35
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	641256	JMM	EET BUF	09/13/22 15:56

Client Sample ID: SS1 (0-2)
Date Collected: 09/12/22 16:35
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-1
Matrix: Solid
Percent Solids: 82.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			641652	CDC	EET BUF	09/13/22 13:00
Total/NA	Analysis	8260C		1	641653	CDC	EET BUF	09/15/22 21:38
Total/NA	Prep	3550C			641440	SJM	EET BUF	09/14/22 15:47
Total/NA	Analysis	8270D		5	641495	JMM	EET BUF	09/15/22 16:56
Total/NA	Prep	SHAKE			183583	KFW	EET BUR	09/15/22 08:50
Total/NA	Analysis	537 IDA		1	183606	ND	EET BUR	09/15/22 19:23
Total/NA	Prep	3050B			641372	VAK	EET BUF	09/14/22 11:33
Total/NA	Analysis	6010C		1	641700	BMB	EET BUF	09/15/22 14:07
Total/NA	Prep	3050B			641372	VAK	EET BUF	09/14/22 11:33
Total/NA	Analysis	6010C		1	641878	LMH	EET BUF	09/16/22 15:23
Total/NA	Prep	7471B			641435	NVK	EET BUF	09/15/22 10:09
Total/NA	Analysis	7471B		1	641616	NVK	EET BUF	09/15/22 13:51

Client Sample ID: SS1 (0-6)
Date Collected: 09/12/22 16:00
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	641256	JMM	EET BUF	09/13/22 15:56

Client Sample ID: SS1 (0-6)
Date Collected: 09/12/22 16:00
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-2
Matrix: Solid
Percent Solids: 80.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			641652	CDC	EET BUF	09/13/22 13:00
Total/NA	Analysis	8260C		1	641653	CDC	EET BUF	09/15/22 22:02
Total/NA	Prep	3550C			641440	SJM	EET BUF	09/14/22 15:47
Total/NA	Analysis	8270D		10	641495	JMM	EET BUF	09/15/22 17:13
Total/NA	Prep	3050B			641372	VAK	EET BUF	09/14/22 11:33
Total/NA	Analysis	6010C		1	641700	BMB	EET BUF	09/15/22 14:37
Total/NA	Prep	3050B			641372	VAK	EET BUF	09/14/22 11:33
Total/NA	Analysis	6010C		1	641878	LMH	EET BUF	09/16/22 15:54
Total/NA	Prep	7471B			641435	NVK	EET BUF	09/15/22 10:09
Total/NA	Analysis	7471B		1	641616	NVK	EET BUF	09/15/22 13:53

Client Sample ID: SS1 (6-12)
Date Collected: 09/12/22 16:05
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	641256	JMM	EET BUF	09/13/22 15:56

Client Sample ID: SS1 (6-12)
Date Collected: 09/12/22 16:05
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-3
Matrix: Solid
Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			641652	CDC	EET BUF	09/13/22 13:00
Total/NA	Analysis	8260C		1	641653	CDC	EET BUF	09/15/22 22:27
Total/NA	Prep	3550C			641440	SJM	EET BUF	09/14/22 15:47
Total/NA	Analysis	8270D		5	641495	JMM	EET BUF	09/15/22 17:30
Total/NA	Prep	SHAKE			183583	KFW	EET BUR	09/15/22 08:50
Total/NA	Analysis	537 IDA		1	183606	ND	EET BUR	09/15/22 19:32
Total/NA	Prep	3050B			641372	VAK	EET BUF	09/14/22 11:33
Total/NA	Analysis	6010C		1	641700	BMB	EET BUF	09/15/22 14:41
Total/NA	Prep	3050B			641372	VAK	EET BUF	09/14/22 11:33
Total/NA	Analysis	6010C		1	641878	LMH	EET BUF	09/16/22 15:58
Total/NA	Prep	7471B			641435	NVK	EET BUF	09/15/22 10:09
Total/NA	Analysis	7471B		1	641616	NVK	EET BUF	09/15/22 13:54

Client Sample ID: SS1 (12-24)
Date Collected: 09/12/22 16:10
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	641256	JMM	EET BUF	09/13/22 15:56

Client Sample ID: SS1 (12-24)
Date Collected: 09/12/22 16:10
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-4
Matrix: Solid
Percent Solids: 91.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			641451	CDC	EET BUF	09/13/22 13:00
Total/NA	Analysis	8260C		1	641452	CDC	EET BUF	09/15/22 01:45
Total/NA	Prep	3550C			641440	SJM	EET BUF	09/14/22 15:47
Total/NA	Analysis	8270D		1	641495	JMM	EET BUF	09/15/22 17:47
Total/NA	Prep	SHAKE			183583	KFW	EET BUR	09/15/22 08:50
Total/NA	Analysis	537 IDA		1	183606	ND	EET BUR	09/15/22 19:40
Total/NA	Prep	3050B			641372	VAK	EET BUF	09/14/22 11:33
Total/NA	Analysis	6010C		1	641700	BMB	EET BUF	09/15/22 14:45
Total/NA	Prep	3050B			641372	VAK	EET BUF	09/14/22 11:33
Total/NA	Analysis	6010C		1	641878	LMH	EET BUF	09/16/22 16:02
Total/NA	Prep	3050B			641372	VAK	EET BUF	09/14/22 11:33
Total/NA	Analysis	6010C		10	641878	LMH	EET BUF	09/16/22 16:06

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201563-1

Client Sample ID: SS1 (12-24)

Date Collected: 09/12/22 16:10
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-4

Matrix: Solid
Percent Solids: 91.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7471B			641435	NVK	EET BUF	09/15/22 10:09
Total/NA	Analysis	7471B		1	641616	NVK	EET BUF	09/15/22 13:55

Client Sample ID: FDUP_091222

Date Collected: 09/12/22 00:00
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-5

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	641256	JMM	EET BUF	09/13/22 15:56

Client Sample ID: FDUP_091222

Date Collected: 09/12/22 00:00
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-5

Matrix: Solid
Percent Solids: 89.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			641652	CDC	EET BUF	09/13/22 13:00
Total/NA	Analysis	8260C		1	641653	CDC	EET BUF	09/15/22 22:51
Total/NA	Prep	3550C			641440	SJM	EET BUF	09/14/22 15:47
Total/NA	Analysis	8270D		1	641495	JMM	EET BUF	09/15/22 18:04
Total/NA	Prep	SHAKE			183583	KFW	EET BUR	09/15/22 08:50
Total/NA	Analysis	537 IDA		1	183606	ND	EET BUR	09/15/22 19:48
Total/NA	Prep	3050B			641372	VAK	EET BUF	09/14/22 11:33
Total/NA	Analysis	6010C		1	641700	BMB	EET BUF	09/15/22 14:49
Total/NA	Prep	3050B			641372	VAK	EET BUF	09/14/22 11:33
Total/NA	Analysis	6010C		1	641878	LMH	EET BUF	09/16/22 16:10
Total/NA	Prep	3050B			641372	VAK	EET BUF	09/14/22 11:33
Total/NA	Analysis	6010C		10	641878	LMH	EET BUF	09/16/22 16:14
Total/NA	Prep	7471B			641435	NVK	EET BUF	09/15/22 10:09
Total/NA	Analysis	7471B		1	641616	NVK	EET BUF	09/15/22 13:56

Client Sample ID: FB_091222

Date Collected: 09/12/22 00:00
Date Received: 09/13/22 10:00

Lab Sample ID: 480-201563-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	641153	ATG	EET BUF	09/13/22 18:46
Total/NA	Prep	3510C			641314	JMP	EET BUF	09/14/22 08:46
Total/NA	Analysis	8270D		1	641491	JMM	EET BUF	09/15/22 17:11
Total/NA	Prep	3510C			641309	JMP	EET BUF	09/14/22 08:19
Total/NA	Analysis	8270D SIM ID		1	641604	PJQ	EET BUF	09/15/22 21:57
Total/NA	Prep	3535			183671	KFW	EET BUR	09/19/22 11:42
Total/NA	Analysis	537 IDA		1	183694	ND	EET BUR	09/19/22 18:11
Total/NA	Prep	3005A			641268	VAK	EET BUF	09/14/22 08:55
Total/NA	Analysis	6010C		1	641529	LMH	EET BUF	09/14/22 20:22

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201563-1

Client Sample ID: FB_091222

Lab Sample ID: 480-201563-6

Date Collected: 09/12/22 00:00

Matrix: Water

Date Received: 09/13/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	7470A			641370	VAK	EET BUF	09/14/22 10:49
Total/NA	Analysis	7470A		1	641443	NVK	EET BUF	09/14/22 15:01

Client Sample ID: TB_091222

Lab Sample ID: 480-201563-7

Date Collected: 09/12/22 00:00

Matrix: Water

Date Received: 09/13/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	641153	ATG	EET BUF	09/13/22 19:10

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201563-1

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	09-19-22

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	1,2,3-Trimethylbenzene
8260C	5035A_L	Solid	1,2,3-Trimethylbenzene
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Laboratory: Eurofins Burlington

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10391	04-01-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
537 IDA	3535	Water	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)
537 IDA	3535	Water	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)
537 IDA	3535	Water	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)
537 IDA	3535	Water	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)
537 IDA	3535	Water	Perfluorobutanesulfonic acid (PFBS)
537 IDA	3535	Water	Perfluorobutanoic acid (PFBA)
537 IDA	3535	Water	Perfluorodecanesulfonic acid (PFDS)
537 IDA	3535	Water	Perfluorodecanoic acid (PFDA)
537 IDA	3535	Water	Perfluorododecanoic acid (PFDoA)
537 IDA	3535	Water	Perfluoroheptanesulfonic acid (PFHpS)
537 IDA	3535	Water	Perfluoroheptanoic acid (PFHpA)
537 IDA	3535	Water	Perfluorohexanesulfonic acid (PFHxS)
537 IDA	3535	Water	Perfluorohexanoic acid (PFHxA)
537 IDA	3535	Water	Perfluorononanoic acid (PFNA)
537 IDA	3535	Water	Perfluorooctanesulfonamide (PFOSA)
537 IDA	3535	Water	Perfluorooctanesulfonic acid (PFOS)
537 IDA	3535	Water	Perfluorooctanoic acid (PFOA)
537 IDA	3535	Water	Perfluoropentanoic acid (PFPeA)
537 IDA	3535	Water	Perfluorotetradecanoic acid (PFTeA)
537 IDA	3535	Water	Perfluorotridecanoic acid (PFTriA)
537 IDA	3535	Water	Perfluoroundecanoic acid (PFUnA)
537 IDA	SHAKE	Solid	1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)
537 IDA	SHAKE	Solid	1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)
537 IDA	SHAKE	Solid	N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)
537 IDA	SHAKE	Solid	N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)
537 IDA	SHAKE	Solid	Perfluorobutanesulfonic acid (PFBS)

Laboratory: Eurofins Burlington (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
537 IDA	SHAKE	Solid	Perfluorobutanoic acid (PFBA)
537 IDA	SHAKE	Solid	Perfluorodecanesulfonic acid (PFDS)
537 IDA	SHAKE	Solid	Perfluorodecanoic acid (PFDA)
537 IDA	SHAKE	Solid	Perfluorododecanoic acid (PFDoA)
537 IDA	SHAKE	Solid	Perfluoroheptanesulfonic acid (PFHpS)
537 IDA	SHAKE	Solid	Perfluoroheptanoic acid (PFHpA)
537 IDA	SHAKE	Solid	Perfluorohexanesulfonic acid (PFHxS)
537 IDA	SHAKE	Solid	Perfluorohexanoic acid (PFHxA)
537 IDA	SHAKE	Solid	Perfluorononanoic acid (PFNA)
537 IDA	SHAKE	Solid	Perfluorooctanesulfonamide (PFOSA)
537 IDA	SHAKE	Solid	Perfluorooctanesulfonic acid (PFOS)
537 IDA	SHAKE	Solid	Perfluorooctanoic acid (PFOA)
537 IDA	SHAKE	Solid	Perfluoropentanoic acid (PFPeA)
537 IDA	SHAKE	Solid	Perfluorotetradecanoic acid (PFTeA)
537 IDA	SHAKE	Solid	Perfluorotridecanoic acid (PFTriA)
537 IDA	SHAKE	Solid	Perfluoroundecanoic acid (PFUnA)

Method Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201563-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	EET BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	EET BUF
537 IDA	EPA 537 Isotope Dilution	EPA	EET BUR
6010C	Metals (ICP)	SW846	EET BUF
7470A	Mercury (CVAA)	SW846	EET BUF
7471B	Mercury (CVAA)	SW846	EET BUF
Moisture	Percent Moisture	EPA	EET BUF
3005A	Preparation, Total Metals	SW846	EET BUF
3050B	Preparation, Metals	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
3535	Solid-Phase Extraction (SPE)	SW846	EET BUR
3550C	Ultrasonic Extraction	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF
5035A_L	Closed System Purge and Trap	SW846	EET BUF
7470A	Preparation, Mercury	SW846	EET BUF
7471B	Preparation, Mercury	SW846	EET BUF
SHAKE	Shake Extraction with Ultrasonic Bath Extraction	SW846	EET BUR

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Sample Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201563-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-201563-1	SS1 (0-2)	Solid	09/12/22 16:35	09/13/22 10:00
480-201563-2	SS1 (0-6)	Solid	09/12/22 16:00	09/13/22 10:00
480-201563-3	SS1 (6-12)	Solid	09/12/22 16:05	09/13/22 10:00
480-201563-4	SS1 (12-24)	Solid	09/12/22 16:10	09/13/22 10:00
480-201563-5	FDUP_091222	Solid	09/12/22 00:00	09/13/22 10:00
480-201563-6	FB_091222	Water	09/12/22 00:00	09/13/22 10:00
480-201563-7	TB_091222	Water	09/12/22 00:00	09/13/22 10:00

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Phone (716) 691-7991

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Integral	Lab PM: Beninati, John	Carrier Tracking No(s):	COC No: 480-176844-37943.5
Client Contact: Mr. Glenn Esler	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin:	Page: Page 5 of 1
Company: Integral Consulting Inc	PWSID:			Job #:
Address: 319 SW Washington Ave Suite 1150	Due Date Requested: per Quote			
City: Portland	TAT Requested (days): Standard per Quote			
State, Zip: OR, 97204	Compliance Project: Δ Yes Δ No			
Phone: 503-943-3617(Tel)	PO #: Purchase Order not required			
Email: gesler@integral-corp.com	WO #:			
Project Name: ~~EE1032 Von Etton~~ EF1017- Refractories	Project #: ~~48024005~~ 48025298			
Site: Refractories	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, M - Hexane, N - None, O - AsNaO2, P - Na2O4S

480-201563 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6010C, 7471B	~~9012B - Cyanide, Total~~	8270D - TCL SVOCs	~~8015B_8032A_8041A~~	~~8015D_DRO - TPH_DRO~~	~~8015D_GRO - TPH_GRO~~	PFC_IDA - PFAS, Standard List (21 analytes)	8260C - TCL VOCs	8270D - TCL SVOCs + 1,4 Dioxane				Total Number	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	N	N						
SS1(0-2)	9/12/22	1635	G	Solid	N	N	X						X	X	X					PFAS Samples Submitted Separately
SS1(0-6)		1600		Solid	N	N	X		X					X	~~X~~					
SS1(6-12)		1605		Solid	N	N	X						X	X	X					
SS1(12-24)		1610		Solid	N	N	X						X	X	X					
FDUP-091222		—		Solid	N	N	X						X	X	X					
FB-091222	9/12/22		G	~~Solid~~ water	N	N	X						X	X	X					
TB-091222	9/12/22	—	—	water	N	N								X						

Kaitlyn Zatwarnicki 9/12/22

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) NYSDEC Cat B / Integral Specific EDD / per Quote

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company
Kaitlyn Zatwarnicki	9/12/22 1845	Integral	Courtney	9/13/22 1000	TAB
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: #1 3.4

Ver: 01/16/2019

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

480-201563 Chain of Custody

fins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Beninati, John		4.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New York		Job #: 480-201563-1
Address: 530 Community Drive, Suite 11,	Due Date Requested: 9/26/2022			
City: South Burlington	TAT Requested (days):			
State, Zip: VT, 05403				
Phone: 802-660-1990(Tel) 802-660-1919(Fax)	PO #:			
Email:	WO #:			
Project Name: Integral Consulting - EF1017 - Refractor	Project #: 48025298			
Site	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA/Shake_Bath_14D PFAS - NY 21 Analytes	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
SS1 (0-2) (480-201563-1)	9/12/22	16:35 Eastern		Solid			X	1	
SS1 (6-12) (480-201563-3)	9/12/22	16:05 Eastern		Solid			X	1	
SS1 (12-24) (480-201563-4)	9/12/22	16:10 Eastern		Solid			X	1	
FDUP_091222 (480-201563-5)	9/12/22	Eastern		Solid			X	1	

Note. Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing Northeast, LLC

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested. I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	9/13/22 1500	TAS	[signature]	9/14/22 1030	ERA-Burl
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks

Ver: 06/08/2021


Do not lift using this tag.
Part # 159469-434 MTW EXP 07/23
RT 916
FZ 915
1
10:30 A
1875
09.14
ment Testing
erica
ORIGIN ID:DKKA (716) 691-2600
SAMPLE RECEIPT
EUROFINS BUFFALO
10 HAZELWOOD DR
AMHERST, NY 14228
UNITED STATES US
SHIP DATE: 13SEP22
ACTWGT: 21.15 LB
CAD: 846654/CAFE3616
DIMS: 19x15x10 IN
BILL SENDER
TO SAMPLE MGT.
EUROFINS BURLINGTON
530 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 923-1026
REF: TA SOUTH BURLINGTON
577C1/EC8C/4320
FedEx
Express
J22202203280 1 AV
TRK# 0201 5754 0126 1875
WED - 14 SEP 10:30A
PRIORITY OVERNIGHT
NL BTVA
05403
VT-US BTV

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

480-201563 Chain of Custody

Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Beninati, John		19.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	New York	Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New York		Job #: 480-201563-1
Address: 530 Community Drive, Suite 11,	Due Date Requested: 9/26/2022			
City: South Burlington	TAT Requested (days):			
State, Zip: VT, 05403				
Phone: 802-660-1990(Tel) 802-660-1919(Fax)	PO #:			
Email	WO #:			
Project Name: EF1017 - Refractories	Project #: 48025298			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA/3535_IVWT PFAS - NY 21 Analytes	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
FB-091222 (480-201563-6)	9/12/22	Eastern		Water			X	2	

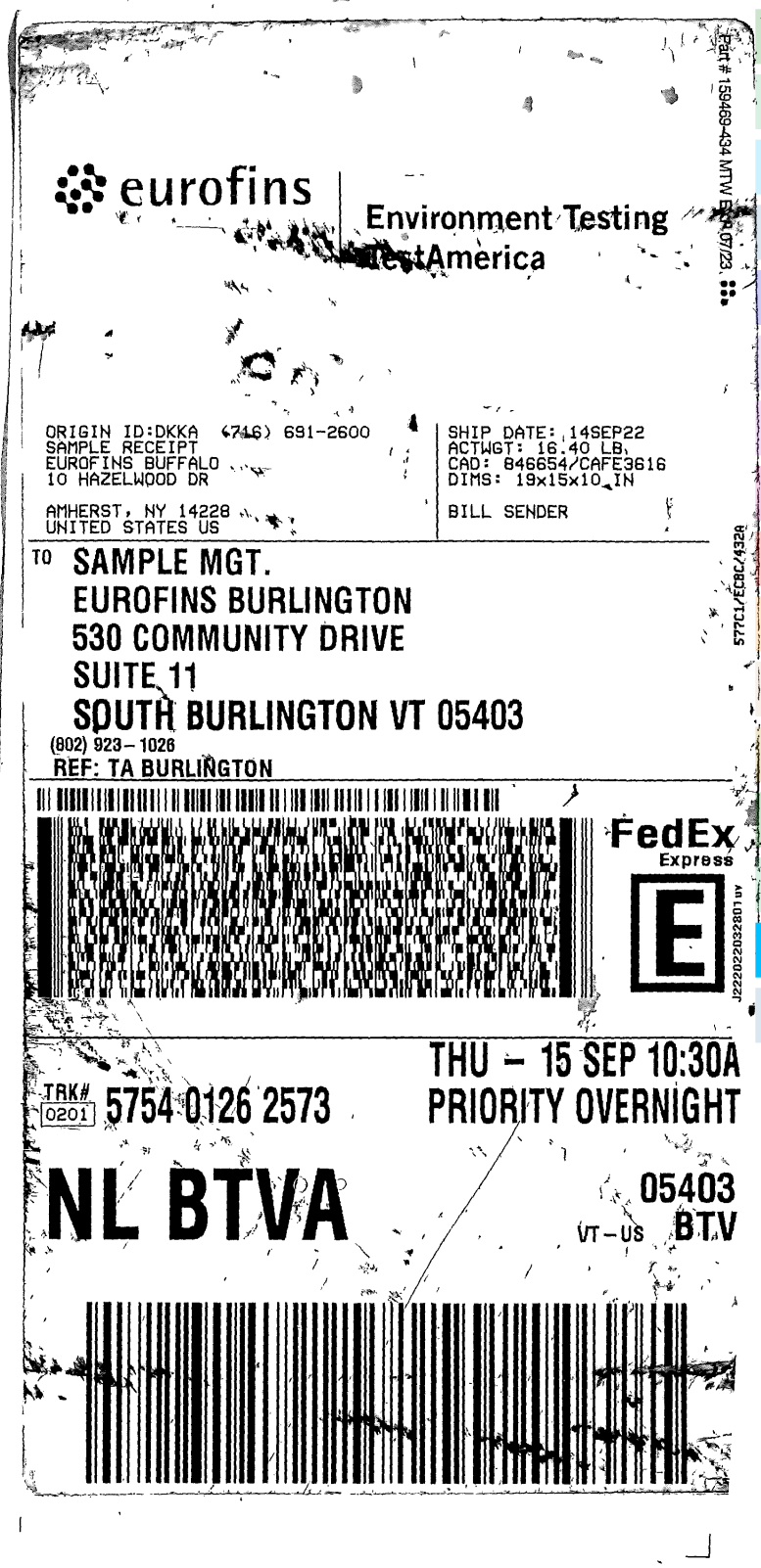
Note. Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing Northeast, LLC

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:		
Relinquished by:	Date/Time: 9-14-22 1800	Company: TAB	Received by:	Date/Time: 9/16/22 10:55	Company: TAB	
Relinquished by:	Date/Time	Company	Received by:	Date/Time.	Company	
Relinquished by:	Date/Time.	Company	Received by:	Date/Time.	Company	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021


eurofins
Environment Testing
TestAmerica
Part # 159469-434 MTW Rev. 07/23
ORIGIN ID:DKKA (716) 691-2600
SAMPLE RECEIPT
EUROFINS BUFFALO
10 HAZELWOOD DR
AMHERST, NY 14228
UNITED STATES US
SHIP DATE: 14SEP22
ACTWGT: 16.40 LB
CAD: 846654/CAFE3616
DIMS: 19x15x10 IN
BILL SENDER
TO SAMPLE MGT.
EUROFINS BURLINGTON
530 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 923-1026
REF: TA BURLINGTON
577C1/ECBC/4328
FedEx
Express
J222202033010
TRK# 0201 5754 0126 2573
THU - 15 SEP 10:30A
PRIORITY OVERNIGHT
NL BTVA
05403
VT-US BTV

Login Sample Receipt Checklist

Client: Integral Consulting Inc

Job Number: 480-201563-1

Login Number: 201563
List Number: 1
Creator: Wallace, Cameron

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	FREEZE TIME 9/13/22 1300
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	INTEGRAL
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Integral Consulting Inc

Job Number: 480-201563-1

Login Number: 201563
List Number: 2
Creator: Cunningham, Caroline R

List Source: Eurofins Burlington
List Creation: 09/14/22 03:13 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	1963520
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.0ºC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Integral Consulting Inc

Job Number: 480-201563-1

Login Number: 201563
List Number: 3
Creator: Cunningham, Caroline R

List Source: Eurofins Burlington
List Creation: 09/16/22 02:33 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	1963525
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	False	Water present in cooler; indicates evidence of melted ice.
Cooler Temperature is acceptable.	False	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	10.9ºC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-201615-1
Client Project/Site: EF1017 - Refractories - Shallow Soil

For:
Integral Consulting Inc
319 SW Washington Ave
Suite 1150
Portland, Oregon 97204

Attn: Mr. Glenn Esler

Authorized for release by:
9/28/2022 5:27:34 PM
Rebecca Jones, Project Management Assistant I
(716)504-9884
Rebecca.Jones@et.eurofinsus.com

Designee for

John Beninati, Project Manager
(716)504-9874
John.Beninati@et.eurofinsus.com

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 5
Detection Summary 8
Client Sample Results 18
Surrogate Summary 69
QC Sample Results 71
QC Association Summary 111
Lab Chronicle 117
Certification Summary 124
Method Summary 125
Sample Summary 126
Chain of Custody 127
Receipt Checklists 129

Definitions/Glossary

Client: Integral Consulting Inc
Job ID: 480-201615-1
Project/Site: EF1017 - Refractories - Shallow Soil

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
E	Result exceeded calibration range.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-201615-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-201615-1

Comments
No additional comments.

Receipt
The samples were received on 9/14/2022 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.4º C, 2.7º C and 3.9º C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-641452 recovered above the upper control limit for Isopropylbenzene, n-Butylbenzene, N-Propylbenzene, tert-Butylbenzene and Vinyl chloride. The sample(s) associated with this CCV were non-detects above the reporting limits for the affected analytes; therefore, the data have been reported. The associated sample is impacted: SS2 (0-6) (480-201615-2).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-641512 recovered above the upper control limit for Dibromochloromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: FB_091322 (480-201615-14) and TB_091322 (480-201615-15).

Method 8260C: Internal standard and/or surrogate responses for the following samples were outside control limits: SS2 (0-2) (480-201615-1), SS2 (0-2) (480-201615-1[MS]) and SS2 (0-2) (480-201615-1[MSD]). The samples confirm responses were outside control limits.

Method 8260C: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 480-641652 and analytical batch 480-641653 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected. The associated samples are: SS2 (0-2) (480-201615-1[MS]) and SS2 (0-2) (480-201615-1[MSD]).

Method 8260C: Internal standard and surrogate responses for the following samples were outside control limits: SS3 (0-2) (480-201615-5), SS3 (0-6) (480-201615-6), SS3 (6-12) (480-201615-7), SS3 (12-24) (480-201615-8), FDUP2_091322 (480-201615-9), SS4 (0-2) (480-201615-10), SS4 (0-6) (480-201615-11), SS4 (6-12) (480-201615-12) and SS4 (12-24) (480-201615-13). The samples were re-analyzed and responses were outside control limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270D: The following samples were diluted due to color, appearance, and viscosity: SS2 (0-2) (480-201615-1), SS2 (0-2) (480-201615-1[MS]), SS2 (0-2) (480-201615-1[MSD]), SS2 (0-6) (480-201615-2), SS2 (6-12) (480-201615-3), SS2 (6-12) (480-201615-3[MS]), SS2 (6-12) (480-201615-3[MSD]), SS3 (0-2) (480-201615-5), SS3 (0-6) (480-201615-6), SS3 (6-12) (480-201615-7), SS3 (12-24) (480-201615-8), FDUP2_091322 (480-201615-9), SS4 (0-2) (480-201615-10), SS4 (0-6) (480-201615-11), SS4 (6-12) (480-201615-12) and SS4 (12-24) (480-201615-13). Elevated reporting limits (RL) are provided.

Method 8270D: The following sample required a dilution due to the nature of the sample matrix: SS2 (0-2) (480-201615-1). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method 8270D: The method blank for preparation batch 480-641786 contained Diethyl phthalate above the reporting limit (RL). None of the samples associated with this method blank contained the target compound above the RL; therefore, re-extraction and/or re-analysis of samples were not performed.

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: SS2 (0-6) (480-201615-2). These results have been reported and qualified.

Method 8270D: The following samples were diluted due to the nature of the sample matrix: SS2 (0-2) (480-201615-1[MS]) and SS2 (0-2)

Job ID: 480-201615-1 (Continued)

Laboratory: Eurofins Buffalo (Continued)

(480-201615-1[MSD]). Because of this dilution, the surrogate spike and matrix spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method 8270D: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 480-641786 and analytical batch 480-642158 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected.

Method 8270D: The following compound has been spiked at a level above the upper range of the initial calibration: Benzaldehyde. The laboratory control sample (LCS) associated with preparation batch 480-641786 and analytical batch 480-642158 recovered within acceptable limits for this analyte and has been qualified with an "E" flag.

Method 8270D: The following sample was diluted due to the nature of the sample matrix: FB_091322 (480-201615-14). Elevated reporting limits (RLs) are provided.

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-642029 recovered outside acceptance criteria, low biased, for 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 3-Nitroaniline and Hexachlorocyclopentadiene. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-642029 recovered above the upper control limit for Carbazole. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: FB_091322 (480-201615-14).

Method 8270D: The laboratory control sample (LCS) for preparation batch 480-641523 and analytical batch 480-642029 recovered outside control limits for the following analytes: Carbazole. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported: FB_091322 (480-201615-14).

Method 8270D: The laboratory control sample (LCS) for preparation batch 480-641523 and analytical batch 480-642029 recovered outside control limits for the following analytes: Diethyl phthalate. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported: FB_091322 (480-201615-14).

Method 8270D: The method blank for preparation batch 480-641523 contained Diethyl phthalate above the reporting limit (RL). None of the samples associated with this method blank contained the target compound above the reporting limit; therefore, re-extraction and/or re-analysis of sample was not performed: FB_091322 (480-201615-14).

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-642901 recovered outside acceptance criteria, low biased, for Hexachlorocyclopentadiene. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6010C: The method blank for preparation batch 480-641524 and analytical batch 480-641879 contained Total Aluminum, Iron, and Manganese above the reporting limits (RL). Associated samples SS2 (0-2) (480-201615-1), SS2 (0-6) (480-201615-2), SS2 (6-12) (480-201615-3), SS2 (12-24) (480-201615-4), SS3 (0-2) (480-201615-5), SS3 (0-6) (480-201615-6), SS3 (6-12) (480-201615-7), SS3 (12-24) (480-201615-8), FDUP2_091322 (480-201615-9), SS4 (0-2) (480-201615-10), SS4 (0-6) (480-201615-11), SS4 (6-12) (480-201615-12) and SS4 (12-24) (480-201615-13) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Method 6010C: The serial dilution and post spike (480-201615-A-1-C PDS) and (480-201615-A-1-C SD ^5), associated with batch 480-641524, exceeded the quality control limits for Total Iron, Manganese, and Zinc. Sample matrix is suspected, therefore, no corrective action was necessary.

Method 6010C: The serial dilution (480-201615-A-1-C SD ^5) associated with batch 480-641879, exhibited results outside the quality control limits for Total Barium, Calcium, Chromium, and Magnesium. However, the post digestion spike (PDS) was compliant, therefore no corrective action was necessary.

Job ID: 480-201615-1 (Continued)

Laboratory: Eurofins Buffalo (Continued)

Method 6010C: The recovery of post spike, (480-201615-A-1-C PDS), associated with batch 480-641879, exhibited a result outside quality control limits for Total Aluminum. However, the serial dilution (SD) of this sample was compliant, therefore no corrective action was necessary.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Integral Consulting Inc
Job ID: 480-201615-1
Project/Site: EF1017 - Refractories - Shallow Soil

Client Sample ID: SS2 (0-2) — Lab Sample ID: 480-201615-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.45	J	6.3	0.39	ug/Kg	1	☼	8260C	Total/NA
Acenaphthylene	920	J F2	4700	600	ug/Kg	20	☼	8270D	Total/NA
Benzo[a]anthracene	1200	J F2	4700	470	ug/Kg	20	☼	8270D	Total/NA
Benzo[a]pyrene	1900	J F2	4700	680	ug/Kg	20	☼	8270D	Total/NA
Benzo[b]fluoranthene	1700	J F2	4700	740	ug/Kg	20	☼	8270D	Total/NA
Benzo[g,h,i]perylene	1300	J	4700	490	ug/Kg	20	☼	8270D	Total/NA
Benzo[k]fluoranthene	620	J F2	4700	600	ug/Kg	20	☼	8270D	Total/NA
Chrysene	1200	J F2	4700	1000	ug/Kg	20	☼	8270D	Total/NA
Diethyl phthalate	740	J B F1 F2	4700	600	ug/Kg	20	☼	8270D	Total/NA
Fluoranthene	1300	J F1 F2	4700	490	ug/Kg	20	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	1100	J	4700	570	ug/Kg	20	☼	8270D	Total/NA
Pyrene	1900	J	4700	550	ug/Kg	20	☼	8270D	Total/NA
Aluminum	11500	B	14.2	6.2	mg/Kg	1	☼	6010C	Total/NA
Antimony	2.0	J F1	21.2	0.57	mg/Kg	1	☼	6010C	Total/NA
Arsenic	9.3		2.8	0.57	mg/Kg	1	☼	6010C	Total/NA
Barium	103	B F1	0.71	0.16	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.54	B	0.28	0.040	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.33	B	0.28	0.042	mg/Kg	1	☼	6010C	Total/NA
Calcium	3870	B F1 F2	70.8	4.7	mg/Kg	1	☼	6010C	Total/NA
Chromium	15.2		0.71	0.28	mg/Kg	1	☼	6010C	Total/NA
Cobalt	8.3		0.71	0.071	mg/Kg	1	☼	6010C	Total/NA
Copper	21.3		1.4	0.30	mg/Kg	1	☼	6010C	Total/NA
Iron	21900	B	14.2	5.0	mg/Kg	1	☼	6010C	Total/NA
Lead	116		1.4	0.34	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2800	B F1	28.3	1.3	mg/Kg	1	☼	6010C	Total/NA
Manganese	513	B	0.28	0.045	mg/Kg	1	☼	6010C	Total/NA
Nickel	19.2		7.1	0.33	mg/Kg	1	☼	6010C	Total/NA
Potassium	2200	F1	42.5	28.3	mg/Kg	1	☼	6010C	Total/NA
Selenium	1.1	J	5.7	0.57	mg/Kg	1	☼	6010C	Total/NA
Sodium	73.0	J	198	18.4	mg/Kg	1	☼	6010C	Total/NA
Vanadium	19.0		0.71	0.16	mg/Kg	1	☼	6010C	Total/NA
Zinc	98.9		2.8	0.91	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.055		0.028	0.0065	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS2 (0-6) — Lab Sample ID: 480-201615-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	2.4	J	23	1.7	ug/Kg	1	☼	8260C	Total/NA
Acetone	9.4	J	23	3.9	ug/Kg	1	☼	8260C	Total/NA
Acenaphthylene	150	J	1000	140	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	1000		1000	100	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	1200		1000	150	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	1300		1000	170	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	750	J	1000	110	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	520	J	1000	140	ug/Kg	5	☼	8270D	Total/NA
Carbazole	120	J	1000	120	ug/Kg	5	☼	8270D	Total/NA
Chrysene	1100		1000	230	ug/Kg	5	☼	8270D	Total/NA
Dibenz(a,h)anthracene	180	J	1000	180	ug/Kg	5	☼	8270D	Total/NA
Diethyl phthalate	760	J B	1000	140	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	1900		1000	110	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	850	J	1000	130	ug/Kg	5	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample ID: SS2 (0-6) (Continued)
Lab Sample ID: 480-201615-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Phenanthrene	920	J	1000	150	ug/Kg	5	☼	8270D	Total/NA
Pyrene	1700		1000	120	ug/Kg	5	☼	8270D	Total/NA
Aluminum	11400	B	12.0	5.3	mg/Kg	1	☼	6010C	Total/NA
Antimony	1.1	J	18.0	0.48	mg/Kg	1	☼	6010C	Total/NA
Arsenic	7.4		2.4	0.48	mg/Kg	1	☼	6010C	Total/NA
Barium	107	B	0.60	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.54	B	0.24	0.034	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.26	B	0.24	0.036	mg/Kg	1	☼	6010C	Total/NA
Calcium	2620	B	60.2	4.0	mg/Kg	1	☼	6010C	Total/NA
Chromium	13.7		0.60	0.24	mg/Kg	1	☼	6010C	Total/NA
Cobalt	8.5		0.60	0.060	mg/Kg	1	☼	6010C	Total/NA
Copper	18.7		1.2	0.25	mg/Kg	1	☼	6010C	Total/NA
Iron	20000	B	12.0	4.2	mg/Kg	1	☼	6010C	Total/NA
Lead	54.3		1.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2780	B	24.1	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	467	B	0.24	0.039	mg/Kg	1	☼	6010C	Total/NA
Nickel	19.4		6.0	0.28	mg/Kg	1	☼	6010C	Total/NA
Potassium	2040		36.1	24.1	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.63	J	4.8	0.48	mg/Kg	1	☼	6010C	Total/NA
Sodium	54.2	J	168	15.6	mg/Kg	1	☼	6010C	Total/NA
Vanadium	17.8		0.60	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	72.5		2.4	0.77	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.066		0.025	0.0059	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS2 (6-12)
Lab Sample ID: 480-201615-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.44	J	5.4	0.41	ug/Kg	1	☼	8260C	Total/NA
Acenaphthylene	230	J	920	120	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	610	J	920	92	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	770	J	920	130	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	800	J	920	150	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	550	J	920	97	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	290	J	920	120	ug/Kg	5	☼	8270D	Total/NA
Chrysene	650	J	920	200	ug/Kg	5	☼	8270D	Total/NA
Diethyl phthalate	760	J B F1 F2	920	120	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	920		920	97	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	550	J	920	110	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	290	J	920	130	ug/Kg	5	☼	8270D	Total/NA
Pyrene	1000		920	110	ug/Kg	5	☼	8270D	Total/NA
Aluminum	12600	B	10.6	4.7	mg/Kg	1	☼	6010C	Total/NA
Antimony	1.5	J F1	16.0	0.43	mg/Kg	1	☼	6010C	Total/NA
Arsenic	9.3		2.1	0.43	mg/Kg	1	☼	6010C	Total/NA
Barium	129	B F1	0.53	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.55	B	0.21	0.030	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.19	J B	0.21	0.032	mg/Kg	1	☼	6010C	Total/NA
Calcium	4060	B F1	53.2	3.5	mg/Kg	1	☼	6010C	Total/NA
Chromium	15.0		0.53	0.21	mg/Kg	1	☼	6010C	Total/NA
Cobalt	11.0		0.53	0.053	mg/Kg	1	☼	6010C	Total/NA
Copper	31.8		1.1	0.22	mg/Kg	1	☼	6010C	Total/NA
Iron	26500	B	10.6	3.7	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS2 (6-12) (Continued)
Lab Sample ID: 480-201615-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Lead	47.9	F1	1.1	0.26	mg/Kg	1	☼	6010C	Total/NA
Magnesium	3920	B F1 F2	21.3	0.99	mg/Kg	1	☼	6010C	Total/NA
Manganese	406	B	0.21	0.034	mg/Kg	1	☼	6010C	Total/NA
Nickel	26.2		5.3	0.24	mg/Kg	1	☼	6010C	Total/NA
Potassium	1700	F1	31.9	21.3	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.70	J	4.3	0.43	mg/Kg	1	☼	6010C	Total/NA
Sodium	63.3	J	149	13.8	mg/Kg	1	☼	6010C	Total/NA
Vanadium	18.9		0.53	0.12	mg/Kg	1	☼	6010C	Total/NA
Zinc	76.7		2.1	0.68	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.026		0.022	0.0050	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS2 (12-24)
Lab Sample ID: 480-201615-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	120	J	180	18	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	150	J	180	27	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	180		180	29	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	100	J	180	20	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	78	J	180	24	ug/Kg	1	☼	8270D	Total/NA
Butyl benzyl phthalate	30	J	180	30	ug/Kg	1	☼	8270D	Total/NA
Chrysene	140	J	180	41	ug/Kg	1	☼	8270D	Total/NA
Diethyl phthalate	240	B	180	24	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	240		180	20	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	120	J	180	23	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	83	J	180	27	ug/Kg	1	☼	8270D	Total/NA
Pyrene	200		180	22	ug/Kg	1	☼	8270D	Total/NA
Aluminum	11100	B	11.5	5.1	mg/Kg	1	☼	6010C	Total/NA
Antimony	1.7	J	17.3	0.46	mg/Kg	1	☼	6010C	Total/NA
Arsenic	14.1		2.3	0.46	mg/Kg	1	☼	6010C	Total/NA
Barium	113	B	0.58	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.54	B	0.23	0.032	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.40	B	0.23	0.035	mg/Kg	1	☼	6010C	Total/NA
Calcium	15700	B	57.7	3.8	mg/Kg	1	☼	6010C	Total/NA
Chromium	13.0		0.58	0.23	mg/Kg	1	☼	6010C	Total/NA
Cobalt	9.0		0.58	0.058	mg/Kg	1	☼	6010C	Total/NA
Copper	28.7		1.2	0.24	mg/Kg	1	☼	6010C	Total/NA
Iron	21400	B	11.5	4.0	mg/Kg	1	☼	6010C	Total/NA
Lead	492		1.2	0.28	mg/Kg	1	☼	6010C	Total/NA
Magnesium	3090	B	23.1	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	343	B	0.23	0.037	mg/Kg	1	☼	6010C	Total/NA
Nickel	20.5		5.8	0.27	mg/Kg	1	☼	6010C	Total/NA
Potassium	1620		34.6	23.1	mg/Kg	1	☼	6010C	Total/NA
Sodium	109	J	162	15.0	mg/Kg	1	☼	6010C	Total/NA
Vanadium	18.6		0.58	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	74.1		2.3	0.74	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.11		0.022	0.0050	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS3 (0-2)
Lab Sample ID: 480-201615-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.48	J B	6.6	0.41	ug/Kg	1	☼	8260C	Total/NA
Benzo[a]anthracene	180	J	1100	110	ug/Kg	5	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS3 (0-2) (Continued)
Lab Sample ID: 480-201615-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	220	J	1100	160	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	310	J	1100	180	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	150	J	1100	120	ug/Kg	5	☼	8270D	Total/NA
Diethyl phthalate	710	J B	1100	140	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	350	J	1100	120	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	160	J	1100	140	ug/Kg	5	☼	8270D	Total/NA
Pyrene	280	J	1100	130	ug/Kg	5	☼	8270D	Total/NA
Aluminum	8960	B	13.3	5.9	mg/Kg	1	☼	6010C	Total/NA
Antimony	1.0	J	20.0	0.53	mg/Kg	1	☼	6010C	Total/NA
Arsenic	7.0		2.7	0.53	mg/Kg	1	☼	6010C	Total/NA
Barium	70.3	B	0.67	0.15	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.46	B	0.27	0.037	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.17	J B	0.27	0.040	mg/Kg	1	☼	6010C	Total/NA
Calcium	1970	B	66.6	4.4	mg/Kg	1	☼	6010C	Total/NA
Chromium	11.1		0.67	0.27	mg/Kg	1	☼	6010C	Total/NA
Cobalt	6.9		0.67	0.067	mg/Kg	1	☼	6010C	Total/NA
Copper	20.7		1.3	0.28	mg/Kg	1	☼	6010C	Total/NA
Iron	17200	B	13.3	4.7	mg/Kg	1	☼	6010C	Total/NA
Lead	42.7		1.3	0.32	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2060	B	26.6	1.2	mg/Kg	1	☼	6010C	Total/NA
Manganese	357	B	0.27	0.043	mg/Kg	1	☼	6010C	Total/NA
Nickel	15.4		6.7	0.31	mg/Kg	1	☼	6010C	Total/NA
Potassium	1630		39.9	26.6	mg/Kg	1	☼	6010C	Total/NA
Sodium	40.0	J	186	17.3	mg/Kg	1	☼	6010C	Total/NA
Vanadium	13.8		0.67	0.15	mg/Kg	1	☼	6010C	Total/NA
Zinc	59.4		2.7	0.85	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.048		0.025	0.0057	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS3 (0-6)
Lab Sample ID: 480-201615-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.1	J	26	4.4	ug/Kg	1	☼	8260C	Total/NA
Chloroform	0.44	J B	5.2	0.32	ug/Kg	1	☼	8260C	Total/NA
Benzo[a]anthracene	250	J	1100	110	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	270	J	1100	160	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	380	J	1100	170	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	180	J	1100	110	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	150	J	1100	140	ug/Kg	5	☼	8270D	Total/NA
Chrysene	270	J	1100	240	ug/Kg	5	☼	8270D	Total/NA
Diethyl phthalate	820	J B	1100	140	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	430	J	1100	110	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	200	J	1100	130	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	170	J	1100	160	ug/Kg	5	☼	8270D	Total/NA
Pyrene	400	J	1100	130	ug/Kg	5	☼	8270D	Total/NA
Aluminum	8720	B	12.7	5.6	mg/Kg	1	☼	6010C	Total/NA
Antimony	1.4	J	19.1	0.51	mg/Kg	1	☼	6010C	Total/NA
Arsenic	9.7		2.5	0.51	mg/Kg	1	☼	6010C	Total/NA
Barium	84.2	B	0.64	0.14	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.50	B	0.25	0.036	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.24	J B	0.25	0.038	mg/Kg	1	☼	6010C	Total/NA
Calcium	3080	B	63.7	4.2	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS3 (0-6) (Continued)
Lab Sample ID: 480-201615-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chromium	13.4		0.64	0.25	mg/Kg	1	☼	6010C	Total/NA
Cobalt	7.6		0.64	0.064	mg/Kg	1	☼	6010C	Total/NA
Copper	34.5		1.3	0.27	mg/Kg	1	☼	6010C	Total/NA
Iron	20300	B	12.7	4.5	mg/Kg	1	☼	6010C	Total/NA
Lead	65.3		1.3	0.31	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2200	B	25.5	1.2	mg/Kg	1	☼	6010C	Total/NA
Manganese	407	B	0.25	0.041	mg/Kg	1	☼	6010C	Total/NA
Nickel	16.2		6.4	0.29	mg/Kg	1	☼	6010C	Total/NA
Potassium	1520		38.2	25.5	mg/Kg	1	☼	6010C	Total/NA
Selenium	1.2	J	5.1	0.51	mg/Kg	1	☼	6010C	Total/NA
Sodium	55.9	J	178	16.6	mg/Kg	1	☼	6010C	Total/NA
Vanadium	16.8		0.64	0.14	mg/Kg	1	☼	6010C	Total/NA
Zinc	62.8		2.5	0.82	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.073		0.027	0.0062	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS3 (6-12)
Lab Sample ID: 480-201615-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	4.2	J	25	1.8	ug/Kg	1	☼	8260C	Total/NA
Acetone	23	J	25	4.2	ug/Kg	1	☼	8260C	Total/NA
Chloroform	0.37	J B	5.0	0.31	ug/Kg	1	☼	8260C	Total/NA
Benzo[a]anthracene	270	J	920	92	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	350	J	920	140	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	470	J	920	150	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	230	J	920	97	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	170	J	920	120	ug/Kg	5	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	1500		920	310	ug/Kg	5	☼	8270D	Total/NA
Butyl benzyl phthalate	150	J B	920	150	ug/Kg	5	☼	8270D	Total/NA
Chrysene	330	J	920	210	ug/Kg	5	☼	8270D	Total/NA
Diethyl phthalate	450	J B	920	120	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	560	J	920	97	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	250	J	920	110	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	230	J	920	140	ug/Kg	5	☼	8270D	Total/NA
Pyrene	480	J	920	110	ug/Kg	5	☼	8270D	Total/NA
Aluminum	7160	B	11.4	5.0	mg/Kg	1	☼	6010C	Total/NA
Antimony	1.2	J	17.1	0.46	mg/Kg	1	☼	6010C	Total/NA
Arsenic	8.8		2.3	0.46	mg/Kg	1	☼	6010C	Total/NA
Barium	57.1	B	0.57	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.36	B	0.23	0.032	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.39	B	0.23	0.034	mg/Kg	1	☼	6010C	Total/NA
Calcium	10100	B	57.1	3.8	mg/Kg	1	☼	6010C	Total/NA
Chromium	14.6		0.57	0.23	mg/Kg	1	☼	6010C	Total/NA
Cobalt	13.7		0.57	0.057	mg/Kg	1	☼	6010C	Total/NA
Copper	91.4		1.1	0.24	mg/Kg	1	☼	6010C	Total/NA
Iron	16700	B	11.4	4.0	mg/Kg	1	☼	6010C	Total/NA
Lead	93.4		1.1	0.27	mg/Kg	1	☼	6010C	Total/NA
Magnesium	3450	B	22.9	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	499	B	0.23	0.037	mg/Kg	1	☼	6010C	Total/NA
Nickel	13.9		5.7	0.26	mg/Kg	1	☼	6010C	Total/NA
Potassium	1150		34.3	22.9	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.76	J	4.6	0.46	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS3 (6-12) (Continued)
Lab Sample ID: 480-201615-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Silver	7.2		0.69	0.23	mg/Kg	1	☼	6010C	Total/NA
Sodium	95.6	J	160	14.9	mg/Kg	1	☼	6010C	Total/NA
Vanadium	14.9		0.57	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	73.1		2.3	0.73	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.061		0.021	0.0048	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS3 (12-24)
Lab Sample ID: 480-201615-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	4.6	J	32	2.3	ug/Kg	1	☼	8260C	Total/NA
Acetone	19	J	32	5.4	ug/Kg	1	☼	8260C	Total/NA
Benzene	0.95	J	6.4	0.31	ug/Kg	1	☼	8260C	Total/NA
Cyclohexane	1.1	J	6.4	0.90	ug/Kg	1	☼	8260C	Total/NA
Toluene	1.8	J *3	6.4	0.49	ug/Kg	1	☼	8260C	Total/NA
4-Methylphenol	240	J	3700	220	ug/Kg	10	☼	8270D	Total/NA
Anthracene	710	J	1900	460	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]anthracene	3900		1900	190	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]pyrene	3400		1900	280	ug/Kg	10	☼	8270D	Total/NA
Benzo[b]fluoranthene	4800		1900	300	ug/Kg	10	☼	8270D	Total/NA
Benzo[g,h,i]perylene	1600	J	1900	200	ug/Kg	10	☼	8270D	Total/NA
Benzo[k]fluoranthene	1900		1900	240	ug/Kg	10	☼	8270D	Total/NA
Carbazole	450	J	1900	220	ug/Kg	10	☼	8270D	Total/NA
Chrysene	3400		1900	420	ug/Kg	10	☼	8270D	Total/NA
Dibenz(a,h)anthracene	490	J	1900	330	ug/Kg	10	☼	8270D	Total/NA
Diethyl phthalate	540	J B	1900	240	ug/Kg	10	☼	8270D	Total/NA
Fluoranthene	5100		1900	200	ug/Kg	10	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	2300		1900	230	ug/Kg	10	☼	8270D	Total/NA
Phenanthrene	2200		1900	280	ug/Kg	10	☼	8270D	Total/NA
Pyrene	4100		1900	220	ug/Kg	10	☼	8270D	Total/NA
Aluminum	6450	B	10.9	4.8	mg/Kg	1	☼	6010C	Total/NA
Antimony	2.3	J	16.4	0.44	mg/Kg	1	☼	6010C	Total/NA
Arsenic	13.8		2.2	0.44	mg/Kg	1	☼	6010C	Total/NA
Barium	70.0	B	0.55	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.40	B	0.22	0.031	mg/Kg	1	☼	6010C	Total/NA
Cadmium	1.4	B	0.22	0.033	mg/Kg	1	☼	6010C	Total/NA
Calcium	18000	B	54.7	3.6	mg/Kg	1	☼	6010C	Total/NA
Chromium	12.3		0.55	0.22	mg/Kg	1	☼	6010C	Total/NA
Cobalt	5.2		0.55	0.055	mg/Kg	1	☼	6010C	Total/NA
Copper	25.3		1.1	0.23	mg/Kg	1	☼	6010C	Total/NA
Iron	26700	B	10.9	3.8	mg/Kg	1	☼	6010C	Total/NA
Lead	251		1.1	0.26	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2800	B	21.9	1.0	mg/Kg	1	☼	6010C	Total/NA
Manganese	504	B	0.22	0.035	mg/Kg	1	☼	6010C	Total/NA
Nickel	13.0		5.5	0.25	mg/Kg	1	☼	6010C	Total/NA
Potassium	1010		32.8	21.9	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.84	J	4.4	0.44	mg/Kg	1	☼	6010C	Total/NA
Sodium	140	J	153	14.2	mg/Kg	1	☼	6010C	Total/NA
Vanadium	17.3		0.55	0.12	mg/Kg	1	☼	6010C	Total/NA
Zinc	126		2.2	0.70	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.18		0.021	0.0048	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FDUP2_091322 — Lab Sample ID: 480-201615-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	13	J	28	4.7	ug/Kg	1	☼	8260C	Total/NA
Chloroform	0.47	J B	5.6	0.35	ug/Kg	1	☼	8260C	Total/NA
Methylcyclohexane	1.0	J	5.6	0.85	ug/Kg	1	☼	8260C	Total/NA
Acenaphthylene	250	J	1900	250	ug/Kg	10	☼	8270D	Total/NA
Anthracene	680	J	1900	480	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]anthracene	4000		1900	190	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]pyrene	3800		1900	280	ug/Kg	10	☼	8270D	Total/NA
Benzo[b]fluoranthene	5200		1900	310	ug/Kg	10	☼	8270D	Total/NA
Benzo[g,h,i]perylene	1800	J	1900	200	ug/Kg	10	☼	8270D	Total/NA
Benzo[k]fluoranthene	2000		1900	250	ug/Kg	10	☼	8270D	Total/NA
Carbazole	420	J	1900	230	ug/Kg	10	☼	8270D	Total/NA
Chrysene	3200		1900	430	ug/Kg	10	☼	8270D	Total/NA
Dibenz(a,h)anthracene	530	J	1900	340	ug/Kg	10	☼	8270D	Total/NA
Diethyl phthalate	700	J B	1900	250	ug/Kg	10	☼	8270D	Total/NA
Fluoranthene	6000		1900	200	ug/Kg	10	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	2600		1900	240	ug/Kg	10	☼	8270D	Total/NA
Phenanthrene	2100		1900	280	ug/Kg	10	☼	8270D	Total/NA
Pyrene	4700		1900	230	ug/Kg	10	☼	8270D	Total/NA
Aluminum	7370	B	12.0	5.3	mg/Kg	1	☼	6010C	Total/NA
Antimony	3.1	J	18.0	0.48	mg/Kg	1	☼	6010C	Total/NA
Arsenic	16.2		2.4	0.48	mg/Kg	1	☼	6010C	Total/NA
Barium	74.5	B	0.60	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.45	B	0.24	0.034	mg/Kg	1	☼	6010C	Total/NA
Cadmium	1.2	B	0.24	0.036	mg/Kg	1	☼	6010C	Total/NA
Calcium	18600	B	59.9	4.0	mg/Kg	1	☼	6010C	Total/NA
Chromium	13.7		0.60	0.24	mg/Kg	1	☼	6010C	Total/NA
Cobalt	6.4		0.60	0.060	mg/Kg	1	☼	6010C	Total/NA
Copper	29.3		1.2	0.25	mg/Kg	1	☼	6010C	Total/NA
Iron	32300	B	12.0	4.2	mg/Kg	1	☼	6010C	Total/NA
Lead	301		1.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Magnesium	3240	B	24.0	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	565	B	0.24	0.038	mg/Kg	1	☼	6010C	Total/NA
Nickel	15.3		6.0	0.28	mg/Kg	1	☼	6010C	Total/NA
Potassium	1240		35.9	24.0	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.94	J	4.8	0.48	mg/Kg	1	☼	6010C	Total/NA
Sodium	173		168	15.6	mg/Kg	1	☼	6010C	Total/NA
Vanadium	20.3		0.60	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	131		2.4	0.77	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.22		0.021	0.0049	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS4 (0-2) — Lab Sample ID: 480-201615-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.56	J B	8.3	0.51	ug/Kg	1	☼	8260C	Total/NA
Benzo[a]anthracene	160	J	1100	110	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	200	J	1100	160	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	320	J	1100	170	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	130	J	1100	110	ug/Kg	5	☼	8270D	Total/NA
Diethyl phthalate	720	J B	1100	140	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	320	J	1100	110	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	140	J	1100	130	ug/Kg	5	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS4 (0-2) (Continued)
Lab Sample ID: 480-201615-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyrene	260	J	1100	130	ug/Kg	5	☼	8270D	Total/NA
Aluminum	10400	B	13.2	5.8	mg/Kg	1	☼	6010C	Total/NA
Antimony	0.94	J	19.8	0.53	mg/Kg	1	☼	6010C	Total/NA
Arsenic	10.7		2.6	0.53	mg/Kg	1	☼	6010C	Total/NA
Barium	90.8	B	0.66	0.15	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.56	B	0.26	0.037	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.16	J B	0.26	0.040	mg/Kg	1	☼	6010C	Total/NA
Calcium	2030	B	66.0	4.4	mg/Kg	1	☼	6010C	Total/NA
Chromium	12.9		0.66	0.26	mg/Kg	1	☼	6010C	Total/NA
Cobalt	8.1		0.66	0.066	mg/Kg	1	☼	6010C	Total/NA
Copper	30.9		1.3	0.28	mg/Kg	1	☼	6010C	Total/NA
Iron	20300	B	13.2	4.6	mg/Kg	1	☼	6010C	Total/NA
Lead	52.6		1.3	0.32	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2250	B	26.4	1.2	mg/Kg	1	☼	6010C	Total/NA
Manganese	446	B	0.26	0.042	mg/Kg	1	☼	6010C	Total/NA
Nickel	17.7		6.6	0.30	mg/Kg	1	☼	6010C	Total/NA
Potassium	1870		39.6	26.4	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.93	J	5.3	0.53	mg/Kg	1	☼	6010C	Total/NA
Sodium	49.4	J	185	17.2	mg/Kg	1	☼	6010C	Total/NA
Vanadium	17.1		0.66	0.15	mg/Kg	1	☼	6010C	Total/NA
Zinc	67.0		2.6	0.85	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.071		0.025	0.0057	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS4 (0-6)
Lab Sample ID: 480-201615-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.37	J B	5.4	0.33	ug/Kg	1	☼	8260C	Total/NA
Benzo[a]anthracene	190	J	1000	100	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	200	J	1000	150	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	290	J	1000	160	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	120	J	1000	110	ug/Kg	5	☼	8270D	Total/NA
Diethyl phthalate	740	J B	1000	130	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	380	J	1000	110	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	130	J	1000	120	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	180	J	1000	150	ug/Kg	5	☼	8270D	Total/NA
Pyrene	310	J	1000	120	ug/Kg	5	☼	8270D	Total/NA
Aluminum	9760	B	11.8	5.2	mg/Kg	1	☼	6010C	Total/NA
Antimony	1.3	J	17.7	0.47	mg/Kg	1	☼	6010C	Total/NA
Arsenic	10.4		2.4	0.47	mg/Kg	1	☼	6010C	Total/NA
Barium	80.8	B	0.59	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.52	B	0.24	0.033	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.16	J B	0.24	0.035	mg/Kg	1	☼	6010C	Total/NA
Calcium	1990	B	58.9	3.9	mg/Kg	1	☼	6010C	Total/NA
Chromium	12.0		0.59	0.24	mg/Kg	1	☼	6010C	Total/NA
Cobalt	8.0		0.59	0.059	mg/Kg	1	☼	6010C	Total/NA
Copper	31.0		1.2	0.25	mg/Kg	1	☼	6010C	Total/NA
Iron	20000	B	11.8	4.1	mg/Kg	1	☼	6010C	Total/NA
Lead	50.3		1.2	0.28	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2200	B	23.6	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	402	B	0.24	0.038	mg/Kg	1	☼	6010C	Total/NA
Nickel	17.5		5.9	0.27	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS4 (0-6) (Continued) — Lab Sample ID: 480-201615-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Potassium	1600		35.3	23.6	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.89	J	4.7	0.47	mg/Kg	1	☼	6010C	Total/NA
Sodium	43.7	J	165	15.3	mg/Kg	1	☼	6010C	Total/NA
Vanadium	15.8		0.59	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	62.4		2.4	0.75	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.076		0.024	0.0055	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS4 (6-12) — Lab Sample ID: 480-201615-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.50	J B	6.1	0.38	ug/Kg	1	☼	8260C	Total/NA
Acenaphthylene	160	J	970	130	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	660	J	970	97	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	630	J	970	140	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	920	J	970	150	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	360	J	970	100	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	370	J	970	130	ug/Kg	5	☼	8270D	Total/NA
Chrysene	690	J	970	220	ug/Kg	5	☼	8270D	Total/NA
Diethyl phthalate	730	J B	970	130	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	1200		970	100	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	450	J	970	120	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	360	J	970	140	ug/Kg	5	☼	8270D	Total/NA
Pyrene	960	J	970	110	ug/Kg	5	☼	8270D	Total/NA
Aluminum	9800	B	12.1	5.3	mg/Kg	1	☼	6010C	Total/NA
Antimony	2.3	J	18.1	0.48	mg/Kg	1	☼	6010C	Total/NA
Arsenic	20.0		2.4	0.48	mg/Kg	1	☼	6010C	Total/NA
Barium	84.8	B	0.60	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.63	B	0.24	0.034	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.23	J B	0.24	0.036	mg/Kg	1	☼	6010C	Total/NA
Calcium	5060	B	60.4	4.0	mg/Kg	1	☼	6010C	Total/NA
Chromium	15.5		0.60	0.24	mg/Kg	1	☼	6010C	Total/NA
Cobalt	9.5		0.60	0.060	mg/Kg	1	☼	6010C	Total/NA
Copper	68.2		1.2	0.25	mg/Kg	1	☼	6010C	Total/NA
Iron	27400	B	12.1	4.2	mg/Kg	1	☼	6010C	Total/NA
Lead	94.9		1.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2740	B	24.2	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	323	B	0.24	0.039	mg/Kg	1	☼	6010C	Total/NA
Nickel	22.0		6.0	0.28	mg/Kg	1	☼	6010C	Total/NA
Potassium	1220		36.2	24.2	mg/Kg	1	☼	6010C	Total/NA
Selenium	2.1	J	4.8	0.48	mg/Kg	1	☼	6010C	Total/NA
Sodium	69.6	J	169	15.7	mg/Kg	1	☼	6010C	Total/NA
Vanadium	24.2		0.60	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	73.8		2.4	0.77	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.13		0.022	0.0051	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SS4 (12-24) — Lab Sample ID: 480-201615-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.59	J B	6.4	0.40	ug/Kg	1	☼	8260C	Total/NA
Acenaphthylene	190	J	970	130	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	490	J	970	97	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	480	J	970	140	ug/Kg	5	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SS4 (12-24) (Continued) — Lab Sample ID: 480-201615-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	810	J	970	150	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	310	J	970	100	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	320	J	970	130	ug/Kg	5	☼	8270D	Total/NA
Chrysene	590	J	970	220	ug/Kg	5	☼	8270D	Total/NA
Diethyl phthalate	240	J B	970	130	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	830	J	970	100	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	390	J	970	120	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	370	J	970	140	ug/Kg	5	☼	8270D	Total/NA
Pyrene	690	J	970	110	ug/Kg	5	☼	8270D	Total/NA
Aluminum	9310	B	12.1	5.3	mg/Kg	1	☼	6010C	Total/NA
Antimony	2.3	J	18.2	0.49	mg/Kg	1	☼	6010C	Total/NA
Arsenic	27.7		2.4	0.49	mg/Kg	1	☼	6010C	Total/NA
Barium	84.0	B	0.61	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.62	B	0.24	0.034	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.32	B	0.24	0.036	mg/Kg	1	☼	6010C	Total/NA
Calcium	9230	B	60.7	4.0	mg/Kg	1	☼	6010C	Total/NA
Chromium	15.2		0.61	0.24	mg/Kg	1	☼	6010C	Total/NA
Cobalt	8.9		0.61	0.061	mg/Kg	1	☼	6010C	Total/NA
Copper	67.9		1.2	0.25	mg/Kg	1	☼	6010C	Total/NA
Iron	23000	B	12.1	4.2	mg/Kg	1	☼	6010C	Total/NA
Lead	99.3		1.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Magnesium	4430	B	24.3	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	472	B	0.24	0.039	mg/Kg	1	☼	6010C	Total/NA
Nickel	21.1		6.1	0.28	mg/Kg	1	☼	6010C	Total/NA
Potassium	1600		36.4	24.3	mg/Kg	1	☼	6010C	Total/NA
Selenium	1.3	J	4.9	0.49	mg/Kg	1	☼	6010C	Total/NA
Sodium	81.5	J	170	15.8	mg/Kg	1	☼	6010C	Total/NA
Vanadium	19.4		0.61	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	83.4		2.4	0.78	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.067		0.024	0.0054	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: FB_091322 — Lab Sample ID: 480-201615-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl phthalate	21	J B *+	25	1.1	ug/L	5		8270D	Total/NA
Chromium	0.015		0.0040	0.0010	mg/L	1		6010C	Total/NA
Zinc	0.0015	J	0.010	0.0015	mg/L	1		6010C	Total/NA

Client Sample ID: TB_091322 — Lab Sample ID: 480-201615-15

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories - Shallow Soil

Job ID: 480-201615-1

Client Sample ID: SS2 (0-2)
Date Collected: 09/13/22 11:30
Date Received: 09/14/22 10:00

Lab Sample ID: 480-201615-1
Matrix: Solid
Percent Solids: 71.7

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		6.3	0.63	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
1,1,1-Trichloroethane	ND		6.3	0.46	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
1,1,2,2-Tetrachloroethane	ND	*3	6.3	1.0	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.3	1.4	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
1,1,2-Trichloroethane	ND		6.3	0.82	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
1,1-Dichloroethane	ND		6.3	0.77	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
1,1-Dichloroethene	ND		6.3	0.78	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
1,2,3-Trimethylbenzene	ND	*3	6.3	1.3	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
1,2,4-Trichlorobenzene	ND	F1 *3	6.3	0.39	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
1,2,4-Trimethylbenzene	ND	*3	6.3	1.2	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
1,2-Dibromo-3-Chloropropane	ND	*3	6.3	3.2	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
1,2-Dibromoethane	ND	F1	6.3	0.81	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
1,2-Dichlorobenzene	ND	F1 *3	6.3	0.50	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
1,2-Dichloroethane	ND	F2 F1	6.3	0.32	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
1,2-Dichloropropane	ND		6.3	3.2	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
1,3,5-Trimethylbenzene	ND	F1 *3	6.3	0.41	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
1,3-Dichlorobenzene	ND	*3	6.3	0.33	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
1,4-Dichlorobenzene	ND	F1 *3	6.3	0.89	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
2-Butanone (MEK)	ND	F1	32	2.3	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
2-Hexanone	ND	F1	32	3.2	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
4-Methyl-2-pentanone (MIBK)	ND		32	2.1	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
Acetone	ND	F1	32	5.3	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
Benzene	ND		6.3	0.31	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
Bromodichloromethane	ND	F2 F1	6.3	0.85	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
Bromoform	ND	F1	6.3	3.2	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
Bromomethane	ND		6.3	0.57	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
Carbon disulfide	ND		6.3	3.2	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
Carbon tetrachloride	ND		6.3	0.61	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
Chlorobenzene	ND		6.3	0.84	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
Chloroethane	ND		6.3	1.4	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
Chloroform	**0.45**	**J**	6.3	0.39	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
Chloromethane	ND		6.3	0.38	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
cis-1,2-Dichloroethene	ND	F1	6.3	0.81	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
cis-1,3-Dichloropropene	ND	F1	6.3	0.91	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
Cyclohexane	ND		6.3	0.89	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
Dibromochloromethane	ND	F1	6.3	0.81	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
Dichlorodifluoromethane	ND		6.3	0.52	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
Ethylbenzene	ND		6.3	0.44	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
Isopropylbenzene	ND	F1 *3	6.3	0.96	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
m,p-Xylene	ND		13	1.1	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
Methyl acetate	ND	F2 F1	32	3.8	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
Methyl tert-butyl ether	ND		6.3	0.62	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
Methylcyclohexane	ND		6.3	0.96	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
Methylene Chloride	ND		6.3	2.9	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
n-Butylbenzene	ND	F1 *3	6.3	0.55	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
N-Propylbenzene	ND	*3	6.3	0.51	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
o-Xylene	ND		6.3	0.83	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
sec-Butylbenzene	ND	*3	6.3	0.55	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
Styrene	ND	F1	6.3	0.32	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories - Shallow Soil

Job ID: 480-201615-1

Client Sample ID: SS2 (0-2)
Date Collected: 09/13/22 11:30
Date Received: 09/14/22 10:00

Lab Sample ID: 480-201615-1
Matrix: Solid
Percent Solids: 71.7

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND	*3	6.3	0.66	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
Tetrachloroethene	ND		6.3	0.85	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
Toluene	ND		6.3	0.48	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
trans-1,2-Dichloroethene	ND		6.3	0.65	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
trans-1,3-Dichloropropene	ND	F1	6.3	2.8	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
Trichloroethene	ND	F1	6.3	1.4	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
Trichlorofluoromethane	ND		6.3	0.60	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
Vinyl chloride	ND		6.3	0.77	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1
Xylenes, Total	ND		13	1.1	ug/Kg	☼	09/14/22 14:00	09/15/22 23:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*64 - 126*	*09/14/22 14:00*	*09/15/22 23:39*	*1*
4-Bromofluorobenzene (Surr)	*78*		*72 - 126*	*09/14/22 14:00*	*09/15/22 23:39*	*1*
Dibromofluoromethane (Surr)	*103*		*60 - 140*	*09/14/22 14:00*	*09/15/22 23:39*	*1*
Toluene-d8 (Surr)	*126*	*S1+*	*71 - 125*	*09/14/22 14:00*	*09/15/22 23:39*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND	F1	4700	1300	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
2,4,6-Trichlorophenol	ND	F1	4700	930	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
2,4-Dichlorophenol	ND	F2	4700	490	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
2,4-Dimethylphenol	ND		4700	1100	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
2,4-Dinitrophenol	ND		45000	21000	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
2,4-Dinitrotoluene	ND	F1 F2	4700	960	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
2,6-Dinitrotoluene	ND	F1 F2	4700	550	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
2-Chloronaphthalene	ND	F2	4700	770	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
2-Chlorophenol	ND	F2	9000	850	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
2-Methylnaphthalene	ND	F2	4700	930	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
2-Methylphenol	ND	F2	4700	550	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
2-Nitroaniline	ND	F1 F2	9000	680	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
2-Nitrophenol	ND	F2	4700	1300	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
3,3'-Dichlorobenzidine	ND		9000	5500	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
3-Nitroaniline	ND	F1	9000	1300	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
4,6-Dinitro-2-methylphenol	ND		9000	4700	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
4-Bromophenyl phenyl ether	ND	F1 F2	4700	660	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
4-Chloro-3-methylphenol	ND	F1	4700	1100	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
4-Chloroaniline	ND	F2	4700	1100	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
4-Chlorophenyl phenyl ether	ND	F2	4700	570	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
4-Methylphenol	ND	F2	9000	550	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
4-Nitroaniline	ND		9000	2400	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
4-Nitrophenol	ND	F1	9000	3300	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Acenaphthene	ND		4700	680	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Acenaphthylene	**920**	**J F2**	4700	600	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Acetophenone	ND	F2	4700	630	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Anthracene	ND	F1 F2	4700	1100	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Atrazine	ND	F2	4700	1600	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Benzaldehyde	ND	F1	4700	3700	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Benzo[a]anthracene	**1200**	**J F2**	4700	470	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Benzo[a]pyrene	**1900**	**J F2**	4700	680	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Benzo[b]fluoranthene	**1700**	**J F2**	4700	740	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20

Client Sample ID: SS2 (0-2)
Date Collected: 09/13/22 11:30
Date Received: 09/14/22 10:00

Lab Sample ID: 480-201615-1
Matrix: Solid
Percent Solids: 71.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	**1300**	**J**	4700	490	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Benzo[k]fluoranthene	**620**	**J F2**	4700	600	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Biphenyl	ND	F2	4700	680	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
bis (2-chloroisopropyl) ether	ND	F2	4700	930	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Bis(2-chloroethoxy)methane	ND	F2	4700	990	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Bis(2-chloroethyl)ether	ND	F1 F2	4700	600	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Bis(2-ethylhexyl) phthalate	ND	F1 F2	4700	1600	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Butyl benzyl phthalate	ND	F1 F2	4700	770	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Caprolactam	ND	F2	4700	1400	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Carbazole	ND	F1 F2	4700	550	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Chrysene	**1200**	**J F2**	4700	1000	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Dibenz(a,h)anthracene	ND		4700	820	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Dibenzofuran	ND	F2	4700	550	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Diethyl phthalate	**740**	**J B F1 F2**	4700	600	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Dimethyl phthalate	ND	F2	4700	550	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Di-n-butyl phthalate	ND	F1 F2	4700	790	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Di-n-octyl phthalate	ND	F1 F2	4700	550	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Fluoranthene	**1300**	**J F1 F2**	4700	490	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Fluorene	ND	F2	4700	550	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Hexachlorobenzene	ND	F1 F2	4700	630	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Hexachlorobutadiene	ND		4700	680	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Hexachlorocyclopentadiene	ND		4700	630	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Hexachloroethane	ND	F2	4700	600	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Indeno[1,2,3-cd]pyrene	**1100**	**J**	4700	570	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Isophorone	ND	F2	4700	990	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Naphthalene	ND	F2	4700	600	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Nitrobenzene	ND	F1 F2	4700	520	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
N-Nitrosodi-n-propylamine	ND	F2	4700	790	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
N-Nitrosodiphenylamine	ND		4700	3800	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Pentachlorophenol	ND		9000	4700	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Phenanthrene	ND	F1 F2	4700	680	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Phenol	ND	F2	4700	710	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20
Pyrene	**1900**	**J**	4700	550	ug/Kg	☼	09/16/22 15:42	09/21/22 12:35	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*137*	*S1+*	*54 - 120*	*09/16/22 15:42*	*09/21/22 12:35*	*20*
2-Fluorobiphenyl (Surr)	*101*		*60 - 120*	*09/16/22 15:42*	*09/21/22 12:35*	*20*
2-Fluorophenol (Surr)	*84*		*52 - 120*	*09/16/22 15:42*	*09/21/22 12:35*	*20*
Nitrobenzene-d5 (Surr)	*74*		*53 - 120*	*09/16/22 15:42*	*09/21/22 12:35*	*20*
Phenol-d5 (Surr)	*103*		*54 - 120*	*09/16/22 15:42*	*09/21/22 12:35*	*20*
p-Terphenyl-d14 (Surr)	*129*		*79 - 130*	*09/16/22 15:42*	*09/21/22 12:35*	*20*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**11500**	**B**	14.2	6.2	mg/Kg	☼	09/15/22 11:25	09/16/22 16:48	1
Antimony	**2.0**	**J F1**	21.2	0.57	mg/Kg	☼	09/15/22 11:25	09/16/22 16:48	1
Arsenic	**9.3**		2.8	0.57	mg/Kg	☼	09/15/22 11:25	09/16/22 16:48	1
Barium	**103**	**B F1**	0.71	0.16	mg/Kg	☼	09/15/22 11:25	09/16/22 16:48	1
Beryllium	**0.54**	**B**	0.28	0.040	mg/Kg	☼	09/15/22 11:25	09/16/22 16:48	1
Cadmium	**0.33**	**B**	0.28	0.042	mg/Kg	☼	09/15/22 11:25	09/16/22 16:48	1

Client Sample ID: SS2 (0-2)
Lab Sample ID: 480-201615-1

Date Collected: 09/13/22 11:30
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 71.7

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	3870	B F1 F2	70.8	4.7	mg/Kg	☼	09/15/22 11:25	09/16/22 16:48	1
Chromium	15.2		0.71	0.28	mg/Kg	☼	09/15/22 11:25	09/16/22 16:48	1
Cobalt	8.3		0.71	0.071	mg/Kg	☼	09/15/22 11:25	09/16/22 16:48	1
Copper	21.3		1.4	0.30	mg/Kg	☼	09/15/22 11:25	09/16/22 16:48	1
Iron	21900	B	14.2	5.0	mg/Kg	☼	09/15/22 11:25	09/16/22 16:48	1
Lead	116		1.4	0.34	mg/Kg	☼	09/15/22 11:25	09/16/22 16:48	1
Magnesium	2800	B F1	28.3	1.3	mg/Kg	☼	09/15/22 11:25	09/16/22 16:48	1
Manganese	513	B	0.28	0.045	mg/Kg	☼	09/15/22 11:25	09/16/22 16:48	1
Nickel	19.2		7.1	0.33	mg/Kg	☼	09/15/22 11:25	09/16/22 16:48	1
Potassium	2200	F1	42.5	28.3	mg/Kg	☼	09/15/22 11:25	09/16/22 16:48	1
Selenium	1.1	J	5.7	0.57	mg/Kg	☼	09/15/22 11:25	09/16/22 16:48	1
Silver	ND		0.85	0.28	mg/Kg	☼	09/15/22 11:25	09/16/22 16:48	1
Sodium	73.0	J	198	18.4	mg/Kg	☼	09/15/22 11:25	09/16/22 16:48	1
Thallium	ND		8.5	0.42	mg/Kg	☼	09/15/22 11:25	09/16/22 16:48	1
Vanadium	19.0		0.71	0.16	mg/Kg	☼	09/15/22 11:25	09/16/22 16:48	1
Zinc	98.9		2.8	0.91	mg/Kg	☼	09/15/22 11:25	09/16/22 16:48	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.055		0.028	0.0065	mg/Kg	☼	09/15/22 10:09	09/15/22 14:25	1

Client Sample ID: SS2 (0-6)
Lab Sample ID: 480-201615-2

Date Collected: 09/13/22 10:30
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 80.1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.6	0.46	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
1,1,1-Trichloroethane	ND		4.6	0.34	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
1,1,2,2-Tetrachloroethane	ND		4.6	0.75	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.6	1.1	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
1,1,2-Trichloroethane	ND		4.6	0.60	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
1,1-Dichloroethane	ND		4.6	0.57	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
1,1-Dichloroethene	ND		4.6	0.57	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
1,2,3-Trimethylbenzene	ND		4.6	0.95	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
1,2,4-Trichlorobenzene	ND		4.6	0.28	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
1,2,4-Trimethylbenzene	ND		4.6	0.89	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
1,2-Dibromo-3-Chloropropane	ND		4.6	2.3	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
1,2-Dibromoethane	ND		4.6	0.59	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
1,2-Dichlorobenzene	ND		4.6	0.36	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
1,2-Dichloroethane	ND		4.6	0.23	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
1,2-Dichloropropane	ND		4.6	2.3	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
1,3,5-Trimethylbenzene	ND		4.6	0.30	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
1,3-Dichlorobenzene	ND		4.6	0.24	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
1,4-Dichlorobenzene	ND		4.6	0.65	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
2-Butanone (MEK)	2.4	J	23	1.7	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
2-Hexanone	ND		23	2.3	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
4-Methyl-2-pentanone (MIBK)	ND		23	1.5	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
Acetone	9.4	J	23	3.9	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
Benzene	ND		4.6	0.23	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1

Client Sample ID: SS2 (0-6)
Lab Sample ID: 480-201615-2
Date Collected: 09/13/22 10:30
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 80.1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		4.6	0.62	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
Bromoform	ND		4.6	2.3	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
Bromomethane	ND		4.6	0.42	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
Carbon disulfide	ND		4.6	2.3	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
Carbon tetrachloride	ND		4.6	0.45	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
Chlorobenzene	ND		4.6	0.61	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
Chloroethane	ND		4.6	1.0	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
Chloroform	ND		4.6	0.29	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
Chloromethane	ND		4.6	0.28	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
cis-1,2-Dichloroethene	ND		4.6	0.59	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
cis-1,3-Dichloropropene	ND		4.6	0.67	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
Cyclohexane	ND		4.6	0.65	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
Dibromochloromethane	ND		4.6	0.59	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
Dichlorodifluoromethane	ND		4.6	0.38	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
Ethylbenzene	ND		4.6	0.32	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
Isopropylbenzene	ND		4.6	0.70	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
m,p-Xylene	ND		9.3	0.78	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
Methyl acetate	ND		23	2.8	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
Methyl tert-butyl ether	ND		4.6	0.46	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
Methylcyclohexane	ND		4.6	0.70	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
Methylene Chloride	ND		4.6	2.1	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
n-Butylbenzene	ND		4.6	0.40	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
N-Propylbenzene	ND		4.6	0.37	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
o-Xylene	ND		4.6	0.61	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
sec-Butylbenzene	ND		4.6	0.40	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
Styrene	ND		4.6	0.23	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
tert-Butylbenzene	ND		4.6	0.48	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
Tetrachloroethene	ND		4.6	0.62	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
Toluene	ND		4.6	0.35	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
trans-1,2-Dichloroethene	ND		4.6	0.48	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
trans-1,3-Dichloropropene	ND		4.6	2.0	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
Trichloroethene	ND		4.6	1.0	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
Trichlorofluoromethane	ND		4.6	0.44	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
Vinyl chloride	ND		4.6	0.57	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1
Xylenes, Total	ND		9.3	0.78	ug/Kg	☼	09/14/22 14:00	09/15/22 04:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*64 - 126*	*09/14/22 14:00*	*09/15/22 04:59*	*1*
4-Bromofluorobenzene (Surr)	*81*		*72 - 126*	*09/14/22 14:00*	*09/15/22 04:59*	*1*
Dibromofluoromethane (Surr)	*98*		*60 - 140*	*09/14/22 14:00*	*09/15/22 04:59*	*1*
Toluene-d8 (Surr)	*118*		*71 - 125*	*09/14/22 14:00*	*09/15/22 04:59*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		1000	280	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
2,4,6-Trichlorophenol	ND		1000	210	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
2,4-Dichlorophenol	ND		1000	110	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
2,4-Dimethylphenol	ND		1000	250	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
2,4-Dinitrophenol	ND		10000	4800	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
2,4-Dinitrotoluene	ND		1000	220	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5

Client Sample ID: SS2 (0-6)
Lab Sample ID: 480-201615-2
Date Collected: 09/13/22 10:30
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 80.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		1000	120	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
2-Chloronaphthalene	ND		1000	170	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
2-Chlorophenol	ND		2000	190	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
2-Methylnaphthalene	ND		1000	210	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
2-Methylphenol	ND		1000	120	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
2-Nitroaniline	ND		2000	150	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
2-Nitrophenol	ND		1000	300	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
3,3'-Dichlorobenzidine	ND		2000	1200	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
3-Nitroaniline	ND		2000	290	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
4,6-Dinitro-2-methylphenol	ND		2000	1000	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
4-Bromophenyl phenyl ether	ND		1000	150	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
4-Chloro-3-methylphenol	ND		1000	260	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
4-Chloroaniline	ND		1000	260	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
4-Chlorophenyl phenyl ether	ND		1000	130	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
4-Methylphenol	ND		2000	120	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
4-Nitroaniline	ND		2000	550	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
4-Nitrophenol	ND		2000	730	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Acenaphthene	ND		1000	150	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Acenaphthylene	**150**	**J**	1000	140	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Acetophenone	ND		1000	140	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Anthracene	ND		1000	260	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Atrazine	ND		1000	360	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Benzaldehyde	ND		1000	830	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Benzo[a]anthracene	**1000**		1000	100	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Benzo[a]pyrene	**1200**		1000	150	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Benzo[b]fluoranthene	**1300**		1000	170	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Benzo[g,h,i]perylene	**750**	**J**	1000	110	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Benzo[k]fluoranthene	**520**	**J**	1000	140	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Biphenyl	ND		1000	150	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
bis (2-chloroisopropyl) ether	ND		1000	210	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Bis(2-chloroethoxy)methane	ND		1000	220	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Bis(2-chloroethyl)ether	ND		1000	140	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Bis(2-ethylhexyl) phthalate	ND		1000	360	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Butyl benzyl phthalate	ND		1000	170	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Caprolactam	ND		1000	310	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Carbazole	**120**	**J**	1000	120	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Chrysene	**1100**		1000	230	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Dibenz(a,h)anthracene	**180**	**J**	1000	180	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Dibenzofuran	ND		1000	120	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Diethyl phthalate	**760**	**J B**	1000	140	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Dimethyl phthalate	ND		1000	120	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Di-n-butyl phthalate	ND		1000	180	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Di-n-octyl phthalate	ND		1000	120	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Fluoranthene	**1900**		1000	110	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Fluorene	ND		1000	120	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Hexachlorobenzene	ND		1000	140	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Hexachlorobutadiene	ND		1000	150	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Hexachlorocyclopentadiene	ND		1000	140	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Hexachloroethane	ND		1000	140	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5

Client Sample ID: SS2 (0-6)
Date Collected: 09/13/22 10:30
Date Received: 09/14/22 10:00

Lab Sample ID: 480-201615-2
Matrix: Solid
Percent Solids: 80.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	850	J	1000	130	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Isophorone	ND		1000	220	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Naphthalene	ND		1000	140	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Nitrobenzene	ND		1000	120	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
N-Nitrosodi-n-propylamine	ND		1000	180	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
N-Nitrosodiphenylamine	ND		1000	850	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Pentachlorophenol	ND		2000	1000	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Phenanthrene	920	J	1000	150	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Phenol	ND		1000	160	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5
Pyrene	1700		1000	120	ug/Kg	☼	09/16/22 15:42	09/21/22 13:10	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*90*		*54 - 120*	*09/16/22 15:42*	*09/21/22 13:10*	*5*
2-Fluorobiphenyl (Surr)	*76*		*60 - 120*	*09/16/22 15:42*	*09/21/22 13:10*	*5*
2-Fluorophenol (Surr)	*56*		*52 - 120*	*09/16/22 15:42*	*09/21/22 13:10*	*5*
Nitrobenzene-d5 (Surr)	*52*	*S1-*	*53 - 120*	*09/16/22 15:42*	*09/21/22 13:10*	*5*
Phenol-d5 (Surr)	*61*		*54 - 120*	*09/16/22 15:42*	*09/21/22 13:10*	*5*
p-Terphenyl-d14 (Surr)	*103*		*79 - 130*	*09/16/22 15:42*	*09/21/22 13:10*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	11400	B	12.0	5.3	mg/Kg	☼	09/15/22 11:25	09/16/22 17:19	1
Antimony	1.1	J	18.0	0.48	mg/Kg	☼	09/15/22 11:25	09/16/22 17:19	1
Arsenic	7.4		2.4	0.48	mg/Kg	☼	09/15/22 11:25	09/16/22 17:19	1
Barium	107	B	0.60	0.13	mg/Kg	☼	09/15/22 11:25	09/16/22 17:19	1
Beryllium	0.54	B	0.24	0.034	mg/Kg	☼	09/15/22 11:25	09/16/22 17:19	1
Cadmium	0.26	B	0.24	0.036	mg/Kg	☼	09/15/22 11:25	09/16/22 17:19	1
Calcium	2620	B	60.2	4.0	mg/Kg	☼	09/15/22 11:25	09/16/22 17:19	1
Chromium	13.7		0.60	0.24	mg/Kg	☼	09/15/22 11:25	09/16/22 17:19	1
Cobalt	8.5		0.60	0.060	mg/Kg	☼	09/15/22 11:25	09/16/22 17:19	1
Copper	18.7		1.2	0.25	mg/Kg	☼	09/15/22 11:25	09/16/22 17:19	1
Iron	20000	B	12.0	4.2	mg/Kg	☼	09/15/22 11:25	09/16/22 17:19	1
Lead	54.3		1.2	0.29	mg/Kg	☼	09/15/22 11:25	09/16/22 17:19	1
Magnesium	2780	B	24.1	1.1	mg/Kg	☼	09/15/22 11:25	09/16/22 17:19	1
Manganese	467	B	0.24	0.039	mg/Kg	☼	09/15/22 11:25	09/16/22 17:19	1
Nickel	19.4		6.0	0.28	mg/Kg	☼	09/15/22 11:25	09/16/22 17:19	1
Potassium	2040		36.1	24.1	mg/Kg	☼	09/15/22 11:25	09/16/22 17:19	1
Selenium	0.63	J	4.8	0.48	mg/Kg	☼	09/15/22 11:25	09/16/22 17:19	1
Silver	ND		0.72	0.24	mg/Kg	☼	09/15/22 11:25	09/16/22 17:19	1
Sodium	54.2	J	168	15.6	mg/Kg	☼	09/15/22 11:25	09/16/22 17:19	1
Thallium	ND		7.2	0.36	mg/Kg	☼	09/15/22 11:25	09/16/22 17:19	1
Vanadium	17.8		0.60	0.13	mg/Kg	☼	09/15/22 11:25	09/16/22 17:19	1
Zinc	72.5		2.4	0.77	mg/Kg	☼	09/15/22 11:25	09/16/22 17:19	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.066		0.025	0.0059	mg/Kg	☼	09/15/22 10:09	09/15/22 14:30	1

Client: Integral Consulting Inc
Job ID: 480-201615-1
Project/Site: EF1017 - Refractories - Shallow Soil

Client Sample ID: SS2 (6-12)
Lab Sample ID: 480-201615-3
Date Collected: 09/13/22 10:35
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 91.5

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	F2	5.4	0.54	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
1,1,1-Trichloroethane	ND	F2	5.4	0.39	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
1,1,2,2-Tetrachloroethane	ND	F2	5.4	0.88	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F2	5.4	1.2	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
1,1,2-Trichloroethane	ND	F2	5.4	0.71	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
1,1-Dichloroethane	ND	F2	5.4	0.66	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
1,1-Dichloroethene	ND	F2	5.4	0.66	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
1,2,3-Trimethylbenzene	ND		5.4	1.1	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
1,2,4-Trichlorobenzene	ND	F1	5.4	0.33	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
1,2,4-Trimethylbenzene	ND		5.4	1.0	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
1,2-Dibromo-3-Chloropropane	ND	F2	5.4	2.7	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
1,2-Dibromoethane	ND	F1	5.4	0.70	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
1,2-Dichlorobenzene	ND	F1	5.4	0.42	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
1,2-Dichloroethane	ND	F2	5.4	0.27	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
1,2-Dichloropropane	ND	F2	5.4	2.7	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
1,3,5-Trimethylbenzene	ND	F2	5.4	0.35	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
1,3-Dichlorobenzene	ND	F1	5.4	0.28	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
1,4-Dichlorobenzene	ND	F1	5.4	0.76	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
2-Butanone (MEK)	ND	F2 F1	27	2.0	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
2-Hexanone	ND		27	2.7	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
4-Methyl-2-pentanone (MIBK)	ND	F2	27	1.8	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
Acetone	ND	F2	27	4.6	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
Benzene	ND	F2	5.4	0.27	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
Bromodichloromethane	ND	F2	5.4	0.73	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
Bromoform	ND	F2	5.4	2.7	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
Bromomethane	ND	F2	5.4	0.49	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
Carbon disulfide	ND		5.4	2.7	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
Carbon tetrachloride	ND	F2	5.4	0.53	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
Chlorobenzene	ND		5.4	0.72	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
Chloroethane	ND	F2	5.4	1.2	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
Chloroform	ND	F2	5.4	0.34	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
Chloromethane	ND	F2	5.4	0.33	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
cis-1,2-Dichloroethene	ND	F2	5.4	0.70	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
cis-1,3-Dichloropropene	ND	F1	5.4	0.78	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
Cyclohexane	ND	F2	5.4	0.76	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
Dibromochloromethane	ND		5.4	0.70	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
Dichlorodifluoromethane	ND	F2	5.4	0.45	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
Ethylbenzene	ND		5.4	0.37	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
Isopropylbenzene	ND	F2	5.4	0.82	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
m,p-Xylene	ND		11	0.91	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
Methyl acetate	ND	F2	27	3.3	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
Methyl tert-butyl ether	ND	F2	5.4	0.53	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
Methylcyclohexane	ND		5.4	0.83	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
Methylene Chloride	ND	F2	5.4	2.5	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
n-Butylbenzene	ND	F1	5.4	0.47	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
N-Propylbenzene	ND		5.4	0.43	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
o-Xylene	ND	F2	5.4	0.71	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
sec-Butylbenzene	ND		5.4	0.47	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
Styrene	ND	F1	5.4	0.27	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1

Client Sample ID: SS2 (6-12)
Date Collected: 09/13/22 10:35
Date Received: 09/14/22 10:00

Lab Sample ID: 480-201615-3
Matrix: Solid
Percent Solids: 91.5

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		5.4	0.56	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
Tetrachloroethene	ND		5.4	0.73	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
Toluene	**0.44**	**J**	5.4	0.41	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
trans-1,2-Dichloroethene	ND	F1	5.4	0.56	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
trans-1,3-Dichloropropene	ND	F1	5.4	2.4	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
Trichloroethene	ND	F1	5.4	1.2	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
Trichlorofluoromethane	ND	F2	5.4	0.51	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
Vinyl chloride	ND	F2	5.4	0.66	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1
Xylenes, Total	ND		11	0.91	ug/Kg	☼	09/14/22 14:00	09/18/22 21:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*64 - 126*	*09/14/22 14:00*	*09/18/22 21:29*	*1*
4-Bromofluorobenzene (Surr)	*89*		*72 - 126*	*09/14/22 14:00*	*09/18/22 21:29*	*1*
Dibromofluoromethane (Surr)	*99*		*60 - 140*	*09/14/22 14:00*	*09/18/22 21:29*	*1*
Toluene-d8 (Surr)	*108*		*71 - 125*	*09/14/22 14:00*	*09/18/22 21:29*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		920	250	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
2,4,6-Trichlorophenol	ND		920	180	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
2,4-Dichlorophenol	ND	F2	920	97	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
2,4-Dimethylphenol	ND		920	220	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
2,4-Dinitrophenol	ND		8900	4200	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
2,4-Dinitrotoluene	ND		920	190	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
2,6-Dinitrotoluene	ND		920	110	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
2-Chloronaphthalene	ND		920	150	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
2-Chlorophenol	ND	F2	1800	170	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
2-Methylnaphthalene	ND	F2	920	180	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
2-Methylphenol	ND	F2	920	110	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
2-Nitroaniline	ND	F2	1800	130	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
2-Nitrophenol	ND	F2	920	260	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
3,3'-Dichlorobenzidine	ND		1800	1100	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
3-Nitroaniline	ND		1800	250	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
4,6-Dinitro-2-methylphenol	ND		1800	920	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
4-Bromophenyl phenyl ether	ND		920	130	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
4-Chloro-3-methylphenol	ND		920	230	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
4-Chloroaniline	ND		920	230	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
4-Chlorophenyl phenyl ether	ND		920	110	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
4-Methylphenol	ND	F2	1800	110	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
4-Nitroaniline	ND		1800	480	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
4-Nitrophenol	ND		1800	640	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Acenaphthene	ND		920	130	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Acenaphthylene	**230**	**J**	920	120	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Acetophenone	ND	F2	920	120	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Anthracene	ND		920	230	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Atrazine	ND		920	320	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Benzaldehyde	ND	F2	920	730	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Benzo[a]anthracene	**610**	**J**	920	92	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Benzo[a]pyrene	**770**	**J**	920	130	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Benzo[b]fluoranthene	**800**	**J**	920	150	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5

Client Sample ID: SS2 (6-12)
Date Collected: 09/13/22 10:35
Date Received: 09/14/22 10:00

Lab Sample ID: 480-201615-3
Matrix: Solid
Percent Solids: 91.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	**550**	**J**	920	97	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Benzo[k]fluoranthene	**290**	**J**	920	120	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Biphenyl	ND	F2	920	130	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
bis (2-chloroisopropyl) ether	ND	F2	920	180	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Bis(2-chloroethoxy)methane	ND	F2	920	190	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Bis(2-chloroethyl)ether	ND	F2	920	120	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Bis(2-ethylhexyl) phthalate	ND		920	310	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Butyl benzyl phthalate	ND		920	150	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Caprolactam	ND		920	270	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Carbazole	ND		920	110	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Chrysene	**650**	**J**	920	200	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Dibenz(a,h)anthracene	ND		920	160	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Dibenzofuran	ND		920	110	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Diethyl phthalate	**760**	**J B F1 F2**	920	120	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Dimethyl phthalate	ND		920	110	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Di-n-butyl phthalate	ND		920	160	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Di-n-octyl phthalate	ND	F2	920	110	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Fluoranthene	**920**		920	97	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Fluorene	ND		920	110	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Hexachlorobenzene	ND		920	120	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Hexachlorobutadiene	ND		920	130	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Hexachlorocyclopentadiene	ND		920	120	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Hexachloroethane	ND		920	120	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Indeno[1,2,3-cd]pyrene	**550**	**J**	920	110	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Isophorone	ND	F2	920	190	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Naphthalene	ND		920	120	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Nitrobenzene	ND	F2	920	100	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
N-Nitrosodi-n-propylamine	ND		920	160	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
N-Nitrosodiphenylamine	ND		920	740	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Pentachlorophenol	ND		1800	920	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Phenanthrene	**290**	**J**	920	130	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Phenol	ND		920	140	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5
Pyrene	**1000**		920	110	ug/Kg	☼	09/16/22 15:42	09/21/22 12:53	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*88*		*54 - 120*	*09/16/22 15:42*	*09/21/22 12:53*	*5*
2-Fluorobiphenyl (Surr)	*95*		*60 - 120*	*09/16/22 15:42*	*09/21/22 12:53*	*5*
2-Fluorophenol (Surr)	*77*		*52 - 120*	*09/16/22 15:42*	*09/21/22 12:53*	*5*
Nitrobenzene-d5 (Surr)	*78*		*53 - 120*	*09/16/22 15:42*	*09/21/22 12:53*	*5*
Phenol-d5 (Surr)	*76*		*54 - 120*	*09/16/22 15:42*	*09/21/22 12:53*	*5*
p-Terphenyl-d14 (Surr)	*102*		*79 - 130*	*09/16/22 15:42*	*09/21/22 12:53*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**12600**	**B**	10.6	4.7	mg/Kg	☼	09/15/22 11:25	09/16/22 17:23	1
Antimony	**1.5**	**J F1**	16.0	0.43	mg/Kg	☼	09/15/22 11:25	09/16/22 17:23	1
Arsenic	**9.3**		2.1	0.43	mg/Kg	☼	09/15/22 11:25	09/16/22 17:23	1
Barium	**129**	**B F1**	0.53	0.12	mg/Kg	☼	09/15/22 11:25	09/16/22 17:23	1
Beryllium	**0.55**	**B**	0.21	0.030	mg/Kg	☼	09/15/22 11:25	09/16/22 17:23	1
Cadmium	**0.19**	**J B**	0.21	0.032	mg/Kg	☼	09/15/22 11:25	09/16/22 17:23	1

Client Sample ID: SS2 (6-12)
Lab Sample ID: 480-201615-3

Date Collected: 09/13/22 10:35
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 91.5

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	4060	B F1	53.2	3.5	mg/Kg	☼	09/15/22 11:25	09/16/22 17:23	1
Chromium	15.0		0.53	0.21	mg/Kg	☼	09/15/22 11:25	09/16/22 17:23	1
Cobalt	11.0		0.53	0.053	mg/Kg	☼	09/15/22 11:25	09/16/22 17:23	1
Copper	31.8		1.1	0.22	mg/Kg	☼	09/15/22 11:25	09/16/22 17:23	1
Iron	26500	B	10.6	3.7	mg/Kg	☼	09/15/22 11:25	09/16/22 17:23	1
Lead	47.9	F1	1.1	0.26	mg/Kg	☼	09/15/22 11:25	09/16/22 17:23	1
Magnesium	3920	B F1 F2	21.3	0.99	mg/Kg	☼	09/15/22 11:25	09/16/22 17:23	1
Manganese	406	B	0.21	0.034	mg/Kg	☼	09/15/22 11:25	09/16/22 17:23	1
Nickel	26.2		5.3	0.24	mg/Kg	☼	09/15/22 11:25	09/16/22 17:23	1
Potassium	1700	F1	31.9	21.3	mg/Kg	☼	09/15/22 11:25	09/16/22 17:23	1
Selenium	0.70	J	4.3	0.43	mg/Kg	☼	09/15/22 11:25	09/16/22 17:23	1
Silver	ND		0.64	0.21	mg/Kg	☼	09/15/22 11:25	09/16/22 17:23	1
Sodium	63.3	J	149	13.8	mg/Kg	☼	09/15/22 11:25	09/16/22 17:23	1
Thallium	ND		6.4	0.32	mg/Kg	☼	09/15/22 11:25	09/16/22 17:23	1
Vanadium	18.9		0.53	0.12	mg/Kg	☼	09/15/22 11:25	09/16/22 17:23	1
Zinc	76.7		2.1	0.68	mg/Kg	☼	09/15/22 11:25	09/16/22 17:23	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.022	0.0050	mg/Kg	☼	09/15/22 10:09	09/15/22 14:31	1

Client Sample ID: SS2 (12-24)
Lab Sample ID: 480-201615-4

Date Collected: 09/13/22 10:40
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 90.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.4	0.24	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
1,1,1-Trichloroethane	ND		2.4	0.18	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
1,1,2,2-Tetrachloroethane	ND		2.4	0.39	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.4	0.55	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
1,1,2-Trichloroethane	ND		2.4	0.32	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
1,1-Dichloroethane	ND		2.4	0.30	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
1,1-Dichloroethene	ND		2.4	0.30	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
1,2,3-Trimethylbenzene	ND		2.4	0.50	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
1,2,4-Trichlorobenzene	ND		2.4	0.15	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
1,2,4-Trimethylbenzene	ND		2.4	0.47	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
1,2-Dibromo-3-Chloropropane	ND		2.4	1.2	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
1,2-Dibromoethane	ND		2.4	0.31	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
1,2-Dichlorobenzene	ND		2.4	0.19	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
1,2-Dichloroethane	ND		2.4	0.12	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
1,2-Dichloropropane	ND		2.4	1.2	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
1,3,5-Trimethylbenzene	ND		2.4	0.16	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
1,3-Dichlorobenzene	ND		2.4	0.13	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
1,4-Dichlorobenzene	ND		2.4	0.34	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
2-Butanone (MEK)	ND		12	0.89	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
2-Hexanone	ND		12	1.2	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
4-Methyl-2-pentanone (MIBK)	ND		12	0.80	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
Acetone	ND		12	2.0	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
Benzene	ND		2.4	0.12	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1

Client Sample ID: SS2 (12-24)
Lab Sample ID: 480-201615-4
Date Collected: 09/13/22 10:40
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 90.4

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		2.4	0.33	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
Bromoform	ND		2.4	1.2	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
Bromomethane	ND		2.4	0.22	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
Carbon disulfide	ND		2.4	1.2	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
Carbon tetrachloride	ND		2.4	0.24	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
Chlorobenzene	ND		2.4	0.32	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
Chloroethane	ND		2.4	0.55	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
Chloroform	ND		2.4	0.15	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
Chloromethane	ND		2.4	0.15	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
cis-1,2-Dichloroethene	ND		2.4	0.31	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
cis-1,3-Dichloropropene	ND		2.4	0.35	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
Cyclohexane	ND		2.4	0.34	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
Dibromochloromethane	ND		2.4	0.31	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
Dichlorodifluoromethane	ND		2.4	0.20	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
Ethylbenzene	ND		2.4	0.17	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
Isopropylbenzene	ND		2.4	0.37	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
m,p-Xylene	ND		4.9	0.41	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
Methyl acetate	ND		12	1.5	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
Methyl tert-butyl ether	ND		2.4	0.24	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
Methylcyclohexane	ND		2.4	0.37	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
Methylene Chloride	ND		2.4	1.1	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
n-Butylbenzene	ND		2.4	0.21	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
N-Propylbenzene	ND		2.4	0.19	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
o-Xylene	ND		2.4	0.32	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
sec-Butylbenzene	ND		2.4	0.21	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
Styrene	ND		2.4	0.12	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
tert-Butylbenzene	ND		2.4	0.25	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
Tetrachloroethene	ND		2.4	0.33	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
Toluene	ND		2.4	0.18	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
trans-1,2-Dichloroethene	ND		2.4	0.25	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
trans-1,3-Dichloropropene	ND		2.4	1.1	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
Trichloroethene	ND		2.4	0.54	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
Trichlorofluoromethane	ND		2.4	0.23	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
Vinyl chloride	ND		2.4	0.30	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1
Xylenes, Total	ND		4.9	0.41	ug/Kg	☼	09/14/22 14:00	09/15/22 23:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*64 - 126*	*09/14/22 14:00*	*09/15/22 23:15*	*1*
4-Bromofluorobenzene (Surr)	*94*		*72 - 126*	*09/14/22 14:00*	*09/15/22 23:15*	*1*
Dibromofluoromethane (Surr)	*98*		*60 - 140*	*09/14/22 14:00*	*09/15/22 23:15*	*1*
Toluene-d8 (Surr)	*106*		*71 - 125*	*09/14/22 14:00*	*09/15/22 23:15*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		180	50	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
2,4,6-Trichlorophenol	ND		180	37	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
2,4-Dichlorophenol	ND		180	20	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
2,4-Dimethylphenol	ND		180	45	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
2,4-Dinitrophenol	ND		1800	850	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
2,4-Dinitrotoluene	ND		180	38	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1

Client Sample ID: SS2 (12-24)
Lab Sample ID: 480-201615-4
Date Collected: 09/13/22 10:40
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 90.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		180	22	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
2-Chloronaphthalene	ND		180	30	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
2-Chlorophenol	ND		360	34	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
2-Methylnaphthalene	ND		180	37	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
2-Methylphenol	ND		180	22	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
2-Nitroaniline	ND		360	27	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
2-Nitrophenol	ND		180	52	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
3,3'-Dichlorobenzidine	ND		360	220	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
3-Nitroaniline	ND		360	51	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
4,6-Dinitro-2-methylphenol	ND		360	180	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
4-Bromophenyl phenyl ether	ND		180	26	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
4-Chloro-3-methylphenol	ND		180	46	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
4-Chloroaniline	ND		180	46	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
4-Chlorophenyl phenyl ether	ND		180	23	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
4-Methylphenol	ND		360	22	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
4-Nitroaniline	ND		360	97	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
4-Nitrophenol	ND		360	130	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Acenaphthene	ND		180	27	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Acenaphthylene	ND		180	24	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Acetophenone	ND		180	25	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Anthracene	ND		180	46	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Atrazine	ND		180	64	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Benzaldehyde	ND		180	150	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Benzo[a]anthracene	**120**	**J**	180	18	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Benzo[a]pyrene	**150**	**J**	180	27	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Benzo[b]fluoranthene	**180**		180	29	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Benzo[g,h,i]perylene	**100**	**J**	180	20	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Benzo[k]fluoranthene	**78**	**J**	180	24	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Biphenyl	ND		180	27	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
bis (2-chloroisopropyl) ether	ND		180	37	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Bis(2-chloroethoxy)methane	ND		180	39	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Bis(2-chloroethyl)ether	ND		180	24	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Bis(2-ethylhexyl) phthalate	ND		180	63	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Butyl benzyl phthalate	**30**	**J**	180	30	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Caprolactam	ND		180	55	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Carbazole	ND		180	22	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Chrysene	**140**	**J**	180	41	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Dibenz(a,h)anthracene	ND		180	33	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Dibenzofuran	ND		180	22	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Diethyl phthalate	**240**	**B**	180	24	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Dimethyl phthalate	ND		180	22	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Di-n-butyl phthalate	ND		180	31	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Di-n-octyl phthalate	ND		180	22	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Fluoranthene	**240**		180	20	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Fluorene	ND		180	22	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Hexachlorobenzene	ND		180	25	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Hexachlorobutadiene	ND		180	27	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Hexachlorocyclopentadiene	ND		180	25	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Hexachloroethane	ND		180	24	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1

Client Sample ID: SS2 (12-24)
Date Collected: 09/13/22 10:40
Date Received: 09/14/22 10:00

Lab Sample ID: 480-201615-4
Matrix: Solid
Percent Solids: 90.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	**120**	**J**	180	23	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Isophorone	ND		180	39	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Naphthalene	ND		180	24	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Nitrobenzene	ND		180	21	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
N-Nitrosodi-n-propylamine	ND		180	31	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
N-Nitrosodiphenylamine	ND		180	150	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Pentachlorophenol	ND		360	180	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Phenanthrene	**83**	**J**	180	27	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Phenol	ND		180	28	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1
Pyrene	**200**		180	22	ug/Kg	☼	09/26/22 15:42	09/27/22 15:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*107*		*54 - 120*	*09/26/22 15:42*	*09/27/22 15:49*	*1*
2-Fluorobiphenyl (Surr)	*91*		*60 - 120*	*09/26/22 15:42*	*09/27/22 15:49*	*1*
2-Fluorophenol (Surr)	*78*		*52 - 120*	*09/26/22 15:42*	*09/27/22 15:49*	*1*
Nitrobenzene-d5 (Surr)	*79*		*53 - 120*	*09/26/22 15:42*	*09/27/22 15:49*	*1*
Phenol-d5 (Surr)	*82*		*54 - 120*	*09/26/22 15:42*	*09/27/22 15:49*	*1*
p-Terphenyl-d14 (Surr)	*108*		*79 - 130*	*09/26/22 15:42*	*09/27/22 15:49*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**11100**	**B**	11.5	5.1	mg/Kg	☼	09/15/22 11:25	09/16/22 17:35	1
Antimony	**1.7**	**J**	17.3	0.46	mg/Kg	☼	09/15/22 11:25	09/16/22 17:35	1
Arsenic	**14.1**		2.3	0.46	mg/Kg	☼	09/15/22 11:25	09/16/22 17:35	1
Barium	**113**	**B**	0.58	0.13	mg/Kg	☼	09/15/22 11:25	09/16/22 17:35	1
Beryllium	**0.54**	**B**	0.23	0.032	mg/Kg	☼	09/15/22 11:25	09/16/22 17:35	1
Cadmium	**0.40**	**B**	0.23	0.035	mg/Kg	☼	09/15/22 11:25	09/16/22 17:35	1
Calcium	**15700**	**B**	57.7	3.8	mg/Kg	☼	09/15/22 11:25	09/16/22 17:35	1
Chromium	**13.0**		0.58	0.23	mg/Kg	☼	09/15/22 11:25	09/16/22 17:35	1
Cobalt	**9.0**		0.58	0.058	mg/Kg	☼	09/15/22 11:25	09/16/22 17:35	1
Copper	**28.7**		1.2	0.24	mg/Kg	☼	09/15/22 11:25	09/16/22 17:35	1
Iron	**21400**	**B**	11.5	4.0	mg/Kg	☼	09/15/22 11:25	09/16/22 17:35	1
Lead	**492**		1.2	0.28	mg/Kg	☼	09/15/22 11:25	09/16/22 17:35	1
Magnesium	**3090**	**B**	23.1	1.1	mg/Kg	☼	09/15/22 11:25	09/16/22 17:35	1
Manganese	**343**	**B**	0.23	0.037	mg/Kg	☼	09/15/22 11:25	09/16/22 17:35	1
Nickel	**20.5**		5.8	0.27	mg/Kg	☼	09/15/22 11:25	09/16/22 17:35	1
Potassium	**1620**		34.6	23.1	mg/Kg	☼	09/15/22 11:25	09/16/22 17:35	1
Selenium	ND		4.6	0.46	mg/Kg	☼	09/15/22 11:25	09/16/22 17:35	1
Silver	ND		0.69	0.23	mg/Kg	☼	09/15/22 11:25	09/16/22 17:35	1
Sodium	**109**	**J**	162	15.0	mg/Kg	☼	09/15/22 11:25	09/16/22 17:35	1
Thallium	ND		6.9	0.35	mg/Kg	☼	09/15/22 11:25	09/16/22 17:35	1
Vanadium	**18.6**		0.58	0.13	mg/Kg	☼	09/15/22 11:25	09/16/22 17:35	1
Zinc	**74.1**		2.3	0.74	mg/Kg	☼	09/15/22 11:25	09/16/22 17:35	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.11**		0.022	0.0050	mg/Kg	☼	09/15/22 10:09	09/15/22 14:39	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories - Shallow Soil

Job ID: 480-201615-1

Client Sample ID: SS3 (0-2)
Date Collected: 09/13/22 11:20
Date Received: 09/14/22 10:00

Lab Sample ID: 480-201615-5
Matrix: Solid
Percent Solids: 76.0

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		6.6	0.66	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
1,1,1-Trichloroethane	ND		6.6	0.48	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
1,1,2,2-Tetrachloroethane	ND	*3	6.6	1.1	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.6	1.5	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
1,1,2-Trichloroethane	ND		6.6	0.86	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
1,1-Dichloroethane	ND		6.6	0.81	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
1,1-Dichloroethene	ND		6.6	0.81	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
1,2,3-Trimethylbenzene	ND	*3	6.6	1.4	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
1,2,4-Trichlorobenzene	ND	*3	6.6	0.40	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
1,2,4-Trimethylbenzene	ND	*3	6.6	1.3	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
1,2-Dibromo-3-Chloropropane	ND	*3	6.6	3.3	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
1,2-Dibromoethane	ND		6.6	0.85	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
1,2-Dichlorobenzene	ND	*3	6.6	0.52	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
1,2-Dichloroethane	ND		6.6	0.33	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
1,2-Dichloropropane	ND		6.6	3.3	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
1,3,5-Trimethylbenzene	ND	*3	6.6	0.43	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
1,3-Dichlorobenzene	ND	*3	6.6	0.34	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
1,4-Dichlorobenzene	ND	*3	6.6	0.93	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
2-Butanone (MEK)	ND		33	2.4	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
2-Hexanone	ND		33	3.3	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
4-Methyl-2-pentanone (MIBK)	ND		33	2.2	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
Acetone	ND		33	5.6	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
Benzene	ND		6.6	0.33	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
Bromodichloromethane	ND		6.6	0.89	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
Bromoform	ND		6.6	3.3	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
Bromomethane	ND		6.6	0.60	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
Carbon disulfide	ND		6.6	3.3	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
Carbon tetrachloride	ND		6.6	0.64	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
Chlorobenzene	ND		6.6	0.88	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
Chloroethane	ND		6.6	1.5	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
Chloroform	**0.48**	**J B**	6.6	0.41	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
Chloromethane	ND		6.6	0.40	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
cis-1,2-Dichloroethene	ND		6.6	0.85	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
cis-1,3-Dichloropropene	ND		6.6	0.96	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
Cyclohexane	ND		6.6	0.93	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
Dibromochloromethane	ND		6.6	0.85	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
Dichlorodifluoromethane	ND		6.6	0.55	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
Ethylbenzene	ND		6.6	0.46	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
Isopropylbenzene	ND	*3	6.6	1.0	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
m,p-Xylene	ND		13	1.1	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
Methyl acetate	ND		33	4.0	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
Methyl tert-butyl ether	ND		6.6	0.65	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
Methylcyclohexane	ND		6.6	1.0	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
Methylene Chloride	ND		6.6	3.1	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
n-Butylbenzene	ND	*3	6.6	0.58	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
N-Propylbenzene	ND	*3	6.6	0.53	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
o-Xylene	ND		6.6	0.87	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
sec-Butylbenzene	ND	*3	6.6	0.58	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
Styrene	ND		6.6	0.33	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories - Shallow Soil

Job ID: 480-201615-1

Client Sample ID: SS3 (0-2)

Date Collected: 09/13/22 11:20
Date Received: 09/14/22 10:00

Lab Sample ID: 480-201615-5

Matrix: Solid
Percent Solids: 76.0

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND	*3	6.6	0.69	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
Tetrachloroethene	ND		6.6	0.89	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
Toluene	ND		6.6	0.50	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
trans-1,2-Dichloroethene	ND		6.6	0.68	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
trans-1,3-Dichloropropene	ND		6.6	2.9	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
Trichloroethene	ND		6.6	1.5	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
Trichlorofluoromethane	ND		6.6	0.63	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
Vinyl chloride	ND		6.6	0.81	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1
Xylenes, Total	ND		13	1.1	ug/Kg	☼	09/14/22 14:00	09/18/22 21:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*64 - 126*	*09/14/22 14:00*	*09/18/22 21:53*	*1*
4-Bromofluorobenzene (Surr)	*74*		*72 - 126*	*09/14/22 14:00*	*09/18/22 21:53*	*1*
Dibromofluoromethane (Surr)	*105*		*60 - 140*	*09/14/22 14:00*	*09/18/22 21:53*	*1*
Toluene-d8 (Surr)	*133*	*S1+*	*71 - 125*	*09/14/22 14:00*	*09/18/22 21:53*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		1100	300	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
2,4,6-Trichlorophenol	ND		1100	220	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
2,4-Dichlorophenol	ND		1100	120	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
2,4-Dimethylphenol	ND		1100	270	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
2,4-Dinitrophenol	ND		11000	5100	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
2,4-Dinitrotoluene	ND		1100	230	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
2,6-Dinitrotoluene	ND		1100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
2-Chloronaphthalene	ND		1100	180	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
2-Chlorophenol	ND		2100	200	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
2-Methylnaphthalene	ND		1100	220	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
2-Methylphenol	ND		1100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
2-Nitroaniline	ND		2100	160	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
2-Nitrophenol	ND		1100	310	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
3,3'-Dichlorobenzidine	ND		2100	1300	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
3-Nitroaniline	ND		2100	310	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
4,6-Dinitro-2-methylphenol	ND		2100	1100	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
4-Bromophenyl phenyl ether	ND		1100	160	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
4-Chloro-3-methylphenol	ND		1100	270	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
4-Chloroaniline	ND		1100	270	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
4-Chlorophenyl phenyl ether	ND		1100	140	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
4-Methylphenol	ND		2100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
4-Nitroaniline	ND		2100	580	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
4-Nitrophenol	ND		2100	780	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Acenaphthene	ND		1100	160	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Acenaphthylene	ND		1100	140	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Acetophenone	ND		1100	150	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Anthracene	ND		1100	270	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Atrazine	ND		1100	380	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Benzaldehyde	ND		1100	880	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Benzo[a]anthracene	**180**	**J**	1100	110	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Benzo[a]pyrene	**220**	**J**	1100	160	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Benzo[b]fluoranthene	**310**	**J**	1100	180	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5

Client Sample ID: SS3 (0-2)
Date Collected: 09/13/22 11:20
Date Received: 09/14/22 10:00

Lab Sample ID: 480-201615-5
Matrix: Solid
Percent Solids: 76.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	**150**	**J**	1100	120	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Benzo[k]fluoranthene	ND		1100	140	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Biphenyl	ND		1100	160	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
bis (2-chloroisopropyl) ether	ND		1100	220	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Bis(2-chloroethoxy)methane	ND		1100	230	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Bis(2-chloroethyl)ether	ND		1100	140	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Bis(2-ethylhexyl) phthalate	ND		1100	380	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Butyl benzyl phthalate	ND		1100	180	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Caprolactam	ND		1100	330	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Carbazole	ND		1100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Chrysene	ND		1100	250	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Dibenz(a,h)anthracene	ND		1100	200	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Dibenzofuran	ND		1100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Diethyl phthalate	**710**	**J B**	1100	140	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Dimethyl phthalate	ND		1100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Di-n-butyl phthalate	ND		1100	190	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Di-n-octyl phthalate	ND		1100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Fluoranthene	**350**	**J**	1100	120	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Fluorene	ND		1100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Hexachlorobenzene	ND		1100	150	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Hexachlorobutadiene	ND		1100	160	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Hexachlorocyclopentadiene	ND		1100	150	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Hexachloroethane	ND		1100	140	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Indeno[1,2,3-cd]pyrene	**160**	**J**	1100	140	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Isophorone	ND		1100	230	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Naphthalene	ND		1100	140	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Nitrobenzene	ND		1100	120	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
N-Nitrosodi-n-propylamine	ND		1100	190	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
N-Nitrosodiphenylamine	ND		1100	900	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Pentachlorophenol	ND		2100	1100	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Phenanthrene	ND		1100	160	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Phenol	ND		1100	170	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5
Pyrene	**280**	**J**	1100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 13:44	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*96*		*54 - 120*	*09/16/22 15:42*	*09/21/22 13:44*	*5*
2-Fluorobiphenyl (Surr)	*81*		*60 - 120*	*09/16/22 15:42*	*09/21/22 13:44*	*5*
2-Fluorophenol (Surr)	*76*		*52 - 120*	*09/16/22 15:42*	*09/21/22 13:44*	*5*
Nitrobenzene-d5 (Surr)	*73*		*53 - 120*	*09/16/22 15:42*	*09/21/22 13:44*	*5*
Phenol-d5 (Surr)	*75*		*54 - 120*	*09/16/22 15:42*	*09/21/22 13:44*	*5*
p-Terphenyl-d14 (Surr)	*97*		*79 - 130*	*09/16/22 15:42*	*09/21/22 13:44*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8960**	**B**	13.3	5.9	mg/Kg	☼	09/15/22 11:25	09/16/22 17:38	1
Antimony	**1.0**	**J**	20.0	0.53	mg/Kg	☼	09/15/22 11:25	09/16/22 17:38	1
Arsenic	**7.0**		2.7	0.53	mg/Kg	☼	09/15/22 11:25	09/16/22 17:38	1
Barium	**70.3**	**B**	0.67	0.15	mg/Kg	☼	09/15/22 11:25	09/16/22 17:38	1
Beryllium	**0.46**	**B**	0.27	0.037	mg/Kg	☼	09/15/22 11:25	09/16/22 17:38	1
Cadmium	**0.17**	**J B**	0.27	0.040	mg/Kg	☼	09/15/22 11:25	09/16/22 17:38	1

Client Sample ID: SS3 (0-2)
Lab Sample ID: 480-201615-5

Date Collected: 09/13/22 11:20
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 76.0

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	**1970**	**B**	66.6	4.4	mg/Kg	☼	09/15/22 11:25	09/16/22 17:38	1
Chromium	**11.1**		0.67	0.27	mg/Kg	☼	09/15/22 11:25	09/16/22 17:38	1
Cobalt	**6.9**		0.67	0.067	mg/Kg	☼	09/15/22 11:25	09/16/22 17:38	1
Copper	**20.7**		1.3	0.28	mg/Kg	☼	09/15/22 11:25	09/16/22 17:38	1
Iron	**17200**	**B**	13.3	4.7	mg/Kg	☼	09/15/22 11:25	09/16/22 17:38	1
Lead	**42.7**		1.3	0.32	mg/Kg	☼	09/15/22 11:25	09/16/22 17:38	1
Magnesium	**2060**	**B**	26.6	1.2	mg/Kg	☼	09/15/22 11:25	09/16/22 17:38	1
Manganese	**357**	**B**	0.27	0.043	mg/Kg	☼	09/15/22 11:25	09/16/22 17:38	1
Nickel	**15.4**		6.7	0.31	mg/Kg	☼	09/15/22 11:25	09/16/22 17:38	1
Potassium	**1630**		39.9	26.6	mg/Kg	☼	09/15/22 11:25	09/16/22 17:38	1
Selenium	ND		5.3	0.53	mg/Kg	☼	09/15/22 11:25	09/16/22 17:38	1
Silver	ND		0.80	0.27	mg/Kg	☼	09/15/22 11:25	09/16/22 17:38	1
Sodium	**40.0**	**J**	186	17.3	mg/Kg	☼	09/15/22 11:25	09/16/22 17:38	1
Thallium	ND		8.0	0.40	mg/Kg	☼	09/15/22 11:25	09/16/22 17:38	1
Vanadium	**13.8**		0.67	0.15	mg/Kg	☼	09/15/22 11:25	09/16/22 17:38	1
Zinc	**59.4**		2.7	0.85	mg/Kg	☼	09/15/22 11:25	09/16/22 17:38	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.048**		0.025	0.0057	mg/Kg	☼	09/15/22 10:09	09/15/22 14:40	1

Client Sample ID: SS3 (0-6)
Lab Sample ID: 480-201615-6

Date Collected: 09/13/22 09:50
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 78.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	*3	5.2	0.52	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
1,1,1-Trichloroethane	ND		5.2	0.38	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
1,1,2,2-Tetrachloroethane	ND	*3	5.2	0.85	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.2	1.2	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
1,1,2-Trichloroethane	ND	*3	5.2	0.68	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
1,1-Dichloroethane	ND		5.2	0.64	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
1,1-Dichloroethene	ND		5.2	0.64	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
1,2,3-Trimethylbenzene	ND	*3	5.2	1.1	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
1,2,4-Trichlorobenzene	ND	*3	5.2	0.32	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
1,2,4-Trimethylbenzene	ND	*3	5.2	1.0	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
1,2-Dibromo-3-Chloropropane	ND	*3	5.2	2.6	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
1,2-Dibromoethane	ND	*3	5.2	0.67	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
1,2-Dichlorobenzene	ND	*3	5.2	0.41	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
1,2-Dichloroethane	ND		5.2	0.26	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
1,2-Dichloropropane	ND		5.2	2.6	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
1,3,5-Trimethylbenzene	ND	*3	5.2	0.34	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
1,3-Dichlorobenzene	ND	*3	5.2	0.27	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
1,4-Dichlorobenzene	ND	*3	5.2	0.73	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
2-Butanone (MEK)	ND		26	1.9	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
2-Hexanone	ND	*3	26	2.6	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
4-Methyl-2-pentanone (MIBK)	ND	*3	26	1.7	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
Acetone	**5.1**	**J**	26	4.4	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
Benzene	ND		5.2	0.26	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1

Client Sample ID: SS3 (0-6)
Lab Sample ID: 480-201615-6
Date Collected: 09/13/22 09:50
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 78.2

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		5.2	0.70	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
Bromoform	ND	*3	5.2	2.6	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
Bromomethane	ND		5.2	0.47	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
Carbon disulfide	ND		5.2	2.6	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
Carbon tetrachloride	ND		5.2	0.51	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
Chlorobenzene	ND	*3	5.2	0.69	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
Chloroethane	ND		5.2	1.2	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
Chloroform	**0.44**	**J B**	5.2	0.32	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
Chloromethane	ND		5.2	0.32	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
cis-1,2-Dichloroethene	ND		5.2	0.67	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
cis-1,3-Dichloropropene	ND		5.2	0.75	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
Cyclohexane	ND		5.2	0.73	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
Dibromochloromethane	ND	*3	5.2	0.67	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
Dichlorodifluoromethane	ND		5.2	0.43	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
Ethylbenzene	ND	*3	5.2	0.36	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
Isopropylbenzene	ND	*3	5.2	0.79	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
m,p-Xylene	ND	*3	10	0.88	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
Methyl acetate	ND		26	3.2	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
Methyl tert-butyl ether	ND		5.2	0.51	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
Methylcyclohexane	ND		5.2	0.80	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
Methylene Chloride	ND		5.2	2.4	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
n-Butylbenzene	ND	*3	5.2	0.46	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
N-Propylbenzene	ND	*3	5.2	0.42	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
o-Xylene	ND	*3	5.2	0.68	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
sec-Butylbenzene	ND	*3	5.2	0.46	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
Styrene	ND	*3	5.2	0.26	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
tert-Butylbenzene	ND	*3	5.2	0.54	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
Tetrachloroethene	ND	*3	5.2	0.70	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
Toluene	ND	*3	5.2	0.40	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
trans-1,2-Dichloroethene	ND		5.2	0.54	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
trans-1,3-Dichloropropene	ND	*3	5.2	2.3	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
Trichloroethene	ND		5.2	1.2	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
Trichlorofluoromethane	ND		5.2	0.50	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
Vinyl chloride	ND		5.2	0.64	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1
Xylenes, Total	ND		10	0.88	ug/Kg	☼	09/14/22 14:00	09/18/22 22:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*64 - 126*	*09/14/22 14:00*	*09/18/22 22:17*	*1*
4-Bromofluorobenzene (Surr)	*70*	*S1- *3*	*72 - 126*	*09/14/22 14:00*	*09/18/22 22:17*	*1*
Dibromofluoromethane (Surr)	*110*		*60 - 140*	*09/14/22 14:00*	*09/18/22 22:17*	*1*
Toluene-d8 (Surr)	*138*	*S1+ *3*	*71 - 125*	*09/14/22 14:00*	*09/18/22 22:17*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		1100	290	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
2,4,6-Trichlorophenol	ND		1100	210	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
2,4-Dichlorophenol	ND		1100	110	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
2,4-Dimethylphenol	ND		1100	260	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
2,4-Dinitrophenol	ND		10000	4900	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
2,4-Dinitrotoluene	ND		1100	220	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories - Shallow Soil

Job ID: 480-201615-1

Client Sample ID: SS3 (0-6)
Date Collected: 09/13/22 09:50
Date Received: 09/14/22 10:00

Lab Sample ID: 480-201615-6
Matrix: Solid
Percent Solids: 78.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		1100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
2-Chloronaphthalene	ND		1100	180	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
2-Chlorophenol	ND		2100	200	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
2-Methylnaphthalene	ND		1100	210	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
2-Methylphenol	ND		1100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
2-Nitroaniline	ND		2100	160	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
2-Nitrophenol	ND		1100	300	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
3,3'-Dichlorobenzidine	ND		2100	1300	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
3-Nitroaniline	ND		2100	300	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
4,6-Dinitro-2-methylphenol	ND		2100	1100	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
4-Bromophenyl phenyl ether	ND		1100	150	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
4-Chloro-3-methylphenol	ND		1100	260	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
4-Chloroaniline	ND		1100	260	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
4-Chlorophenyl phenyl ether	ND		1100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
4-Methylphenol	ND		2100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
4-Nitroaniline	ND		2100	560	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
4-Nitrophenol	ND		2100	750	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Acenaphthene	ND		1100	160	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Acenaphthylene	ND		1100	140	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Acetophenone	ND		1100	140	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Anthracene	ND		1100	260	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Atrazine	ND		1100	370	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Benzaldehyde	ND		1100	850	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Benzo[a]anthracene	**250**	**J**	1100	110	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Benzo[a]pyrene	**270**	**J**	1100	160	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Benzo[b]fluoranthene	**380**	**J**	1100	170	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Benzo[g,h,i]perylene	**180**	**J**	1100	110	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Benzo[k]fluoranthene	**150**	**J**	1100	140	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Biphenyl	ND		1100	160	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
bis (2-chloroisopropyl) ether	ND		1100	210	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Bis(2-chloroethoxy)methane	ND		1100	230	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Bis(2-chloroethyl)ether	ND		1100	140	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Bis(2-ethylhexyl) phthalate	ND		1100	360	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Butyl benzyl phthalate	ND		1100	180	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Caprolactam	ND		1100	320	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Carbazole	ND		1100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Chrysene	**270**	**J**	1100	240	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Dibenz(a,h)anthracene	ND		1100	190	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Dibenzofuran	ND		1100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Diethyl phthalate	**820**	**J B**	1100	140	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Dimethyl phthalate	ND		1100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Di-n-butyl phthalate	ND		1100	180	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Di-n-octyl phthalate	ND		1100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Fluoranthene	**430**	**J**	1100	110	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Fluorene	ND		1100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Hexachlorobenzene	ND		1100	140	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Hexachlorobutadiene	ND		1100	160	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Hexachlorocyclopentadiene	ND		1100	140	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Hexachloroethane	ND		1100	140	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5

Client Sample ID: SS3 (0-6)
Date Collected: 09/13/22 09:50
Date Received: 09/14/22 10:00

Lab Sample ID: 480-201615-6
Matrix: Solid
Percent Solids: 78.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	**200**	**J**	1100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Isophorone	ND		1100	230	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Naphthalene	ND		1100	140	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Nitrobenzene	ND		1100	120	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
N-Nitrosodi-n-propylamine	ND		1100	180	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
N-Nitrosodiphenylamine	ND		1100	870	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Pentachlorophenol	ND		2100	1100	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Phenanthrene	**170**	**J**	1100	160	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Phenol	ND		1100	160	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5
Pyrene	**400**	**J**	1100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 14:01	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*92*		*54 - 120*	*09/16/22 15:42*	*09/21/22 14:01*	*5*
2-Fluorobiphenyl (Surr)	*77*		*60 - 120*	*09/16/22 15:42*	*09/21/22 14:01*	*5*
2-Fluorophenol (Surr)	*69*		*52 - 120*	*09/16/22 15:42*	*09/21/22 14:01*	*5*
Nitrobenzene-d5 (Surr)	*67*		*53 - 120*	*09/16/22 15:42*	*09/21/22 14:01*	*5*
Phenol-d5 (Surr)	*69*		*54 - 120*	*09/16/22 15:42*	*09/21/22 14:01*	*5*
p-Terphenyl-d14 (Surr)	*93*		*79 - 130*	*09/16/22 15:42*	*09/21/22 14:01*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8720**	**B**	12.7	5.6	mg/Kg	☼	09/15/22 11:25	09/16/22 17:42	1
Antimony	**1.4**	**J**	19.1	0.51	mg/Kg	☼	09/15/22 11:25	09/16/22 17:42	1
Arsenic	**9.7**		2.5	0.51	mg/Kg	☼	09/15/22 11:25	09/16/22 17:42	1
Barium	**84.2**	**B**	0.64	0.14	mg/Kg	☼	09/15/22 11:25	09/16/22 17:42	1
Beryllium	**0.50**	**B**	0.25	0.036	mg/Kg	☼	09/15/22 11:25	09/16/22 17:42	1
Cadmium	**0.24**	**J B**	0.25	0.038	mg/Kg	☼	09/15/22 11:25	09/16/22 17:42	1
Calcium	**3080**	**B**	63.7	4.2	mg/Kg	☼	09/15/22 11:25	09/16/22 17:42	1
Chromium	**13.4**		0.64	0.25	mg/Kg	☼	09/15/22 11:25	09/16/22 17:42	1
Cobalt	**7.6**		0.64	0.064	mg/Kg	☼	09/15/22 11:25	09/16/22 17:42	1
Copper	**34.5**		1.3	0.27	mg/Kg	☼	09/15/22 11:25	09/16/22 17:42	1
Iron	**20300**	**B**	12.7	4.5	mg/Kg	☼	09/15/22 11:25	09/16/22 17:42	1
Lead	**65.3**		1.3	0.31	mg/Kg	☼	09/15/22 11:25	09/16/22 17:42	1
Magnesium	**2200**	**B**	25.5	1.2	mg/Kg	☼	09/15/22 11:25	09/16/22 17:42	1
Manganese	**407**	**B**	0.25	0.041	mg/Kg	☼	09/15/22 11:25	09/16/22 17:42	1
Nickel	**16.2**		6.4	0.29	mg/Kg	☼	09/15/22 11:25	09/16/22 17:42	1
Potassium	**1520**		38.2	25.5	mg/Kg	☼	09/15/22 11:25	09/16/22 17:42	1
Selenium	**1.2**	**J**	5.1	0.51	mg/Kg	☼	09/15/22 11:25	09/16/22 17:42	1
Silver	ND		0.76	0.25	mg/Kg	☼	09/15/22 11:25	09/16/22 17:42	1
Sodium	**55.9**	**J**	178	16.6	mg/Kg	☼	09/15/22 11:25	09/16/22 17:42	1
Thallium	ND		7.6	0.38	mg/Kg	☼	09/15/22 11:25	09/16/22 17:42	1
Vanadium	**16.8**		0.64	0.14	mg/Kg	☼	09/15/22 11:25	09/16/22 17:42	1
Zinc	**62.8**		2.5	0.82	mg/Kg	☼	09/15/22 11:25	09/16/22 17:42	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.073**		0.027	0.0062	mg/Kg	☼	09/15/22 10:09	09/15/22 14:42	1

Client Sample ID: SS3 (6-12)
Date Collected: 09/13/22 09:55
Date Received: 09/14/22 10:00

Lab Sample ID: 480-201615-7
Matrix: Solid
Percent Solids: 91.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	*3	5.0	0.50	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
1,1,2,2-Tetrachloroethane	ND	*3	5.0	0.81	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
1,1,2-Trichloroethane	ND	*3	5.0	0.65	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
1,2,3-Trimethylbenzene	ND	*3	5.0	1.0	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
1,2,4-Trichlorobenzene	ND	*3	5.0	0.30	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
1,2,4-Trimethylbenzene	ND	*3	5.0	0.95	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
1,2-Dibromo-3-Chloropropane	ND	*3	5.0	2.5	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
1,2-Dibromoethane	ND	*3	5.0	0.64	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
1,2-Dichlorobenzene	ND	*3	5.0	0.39	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
1,3,5-Trimethylbenzene	ND	*3	5.0	0.32	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
1,3-Dichlorobenzene	ND	*3	5.0	0.26	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
1,4-Dichlorobenzene	ND	*3	5.0	0.70	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
2-Butanone (MEK)	**4.2**	**J**	25	1.8	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
2-Hexanone	ND	*3	25	2.5	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
4-Methyl-2-pentanone (MIBK)	ND	*3	25	1.6	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
Acetone	**23**	**J**	25	4.2	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
Benzene	ND		5.0	0.24	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
Bromoform	ND	*3	5.0	2.5	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
Bromomethane	ND		5.0	0.45	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
Carbon disulfide	ND		5.0	2.5	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
Chlorobenzene	ND	*3	5.0	0.66	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
Chloroethane	ND		5.0	1.1	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
Chloroform	**0.37**	**J B**	5.0	0.31	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
Chloromethane	ND		5.0	0.30	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
Cyclohexane	ND		5.0	0.70	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
Dibromochloromethane	ND	*3	5.0	0.64	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
Ethylbenzene	ND	*3	5.0	0.34	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
Isopropylbenzene	ND	*3	5.0	0.75	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
m,p-Xylene	ND	*3	9.9	0.84	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
Methyl acetate	ND		25	3.0	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
Methylene Chloride	ND		5.0	2.3	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
n-Butylbenzene	ND	*3	5.0	0.43	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
N-Propylbenzene	ND	*3	5.0	0.40	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
o-Xylene	ND	*3	5.0	0.65	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
sec-Butylbenzene	ND	*3	5.0	0.43	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
Styrene	ND	*3	5.0	0.25	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1

Client Sample ID: SS3 (6-12)
Lab Sample ID: 480-201615-7
Date Collected: 09/13/22 09:55
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 91.4

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND	*3	5.0	0.52	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
Tetrachloroethene	ND	*3	5.0	0.67	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
Toluene	ND	*3	5.0	0.38	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
trans-1,2-Dichloroethene	ND		5.0	0.51	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
trans-1,3-Dichloropropene	ND	*3	5.0	2.2	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
Trichloroethene	ND		5.0	1.1	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
Vinyl chloride	ND		5.0	0.61	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1
Xylenes, Total	ND		9.9	0.84	ug/Kg	☼	09/14/22 14:00	09/18/22 22:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*64 - 126*	*09/14/22 14:00*	*09/18/22 22:41*	*1*
4-Bromofluorobenzene (Surr)	*66*	*S1- *3*	*72 - 126*	*09/14/22 14:00*	*09/18/22 22:41*	*1*
Dibromofluoromethane (Surr)	*104*		*60 - 140*	*09/14/22 14:00*	*09/18/22 22:41*	*1*
Toluene-d8 (Surr)	*144*	*S1+ *3*	*71 - 125*	*09/14/22 14:00*	*09/18/22 22:41*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		920	250	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
2,4,6-Trichlorophenol	ND		920	180	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
2,4-Dichlorophenol	ND		920	97	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
2,4-Dimethylphenol	ND		920	220	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
2,4-Dinitrophenol	ND		9000	4200	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
2,4-Dinitrotoluene	ND		920	190	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
2,6-Dinitrotoluene	ND		920	110	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
2-Chloronaphthalene	ND		920	150	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
2-Chlorophenol	ND		1800	170	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
2-Methylnaphthalene	ND		920	180	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
2-Methylphenol	ND		920	110	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
2-Nitroaniline	ND		1800	140	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
2-Nitrophenol	ND		920	260	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
3,3'-Dichlorobenzidine	ND		1800	1100	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
3-Nitroaniline	ND		1800	250	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
4,6-Dinitro-2-methylphenol	ND		1800	920	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
4-Bromophenyl phenyl ether	ND		920	130	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
4-Chloro-3-methylphenol	ND		920	230	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
4-Chloroaniline	ND		920	230	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
4-Chlorophenyl phenyl ether	ND		920	110	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
4-Methylphenol	ND		1800	110	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
4-Nitroaniline	ND		1800	480	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
4-Nitrophenol	ND		1800	640	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Acenaphthene	ND		920	140	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Acenaphthylene	ND		920	120	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Acetophenone	ND		920	120	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Anthracene	ND		920	230	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Atrazine	ND		920	320	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Benzaldehyde	ND		920	730	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Benzo[a]anthracene	**270**	**J**	920	92	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Benzo[a]pyrene	**350**	**J**	920	140	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Benzo[b]fluoranthene	**470**	**J**	920	150	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5

Client Sample ID: SS3 (6-12)

Date Collected: 09/13/22 09:55
Date Received: 09/14/22 10:00

Lab Sample ID: 480-201615-7

Matrix: Solid
Percent Solids: 91.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	**230**	**J**	920	97	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Benzo[k]fluoranthene	**170**	**J**	920	120	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Biphenyl	ND		920	140	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
bis (2-chloroisopropyl) ether	ND		920	180	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Bis(2-chloroethoxy)methane	ND		920	190	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Bis(2-chloroethyl)ether	ND		920	120	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Bis(2-ethylhexyl) phthalate	**1500**		920	310	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Butyl benzyl phthalate	**150**	**J B**	920	150	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Caprolactam	ND		920	280	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Carbazole	ND		920	110	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Chrysene	**330**	**J**	920	210	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Dibenz(a,h)anthracene	ND		920	160	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Dibenzofuran	ND		920	110	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Diethyl phthalate	**450**	**J B**	920	120	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Dimethyl phthalate	ND		920	110	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Di-n-butyl phthalate	ND		920	160	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Di-n-octyl phthalate	ND		920	110	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Fluoranthene	**560**	**J**	920	97	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Fluorene	ND		920	110	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Hexachlorobenzene	ND		920	120	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Hexachlorobutadiene	ND		920	140	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Hexachlorocyclopentadiene	ND		920	120	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Hexachloroethane	ND		920	120	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Indeno[1,2,3-cd]pyrene	**250**	**J**	920	110	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Isophorone	ND		920	190	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Naphthalene	ND		920	120	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Nitrobenzene	ND		920	100	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
N-Nitrosodi-n-propylamine	ND		920	160	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
N-Nitrosodiphenylamine	ND		920	750	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Pentachlorophenol	ND		1800	920	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Phenanthrene	**230**	**J**	920	140	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Phenol	ND		920	140	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5
Pyrene	**480**	**J**	920	110	ug/Kg	☼	09/16/22 15:42	09/21/22 14:18	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*92*		*54 - 120*	*09/16/22 15:42*	*09/21/22 14:18*	*5*
2-Fluorobiphenyl (Surr)	*84*		*60 - 120*	*09/16/22 15:42*	*09/21/22 14:18*	*5*
2-Fluorophenol (Surr)	*70*		*52 - 120*	*09/16/22 15:42*	*09/21/22 14:18*	*5*
Nitrobenzene-d5 (Surr)	*71*		*53 - 120*	*09/16/22 15:42*	*09/21/22 14:18*	*5*
Phenol-d5 (Surr)	*74*		*54 - 120*	*09/16/22 15:42*	*09/21/22 14:18*	*5*
p-Terphenyl-d14 (Surr)	*100*		*79 - 130*	*09/16/22 15:42*	*09/21/22 14:18*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**7160**	**B**	11.4	5.0	mg/Kg	☼	09/15/22 11:25	09/16/22 17:46	1
Antimony	**1.2**	**J**	17.1	0.46	mg/Kg	☼	09/15/22 11:25	09/16/22 17:46	1
Arsenic	**8.8**		2.3	0.46	mg/Kg	☼	09/15/22 11:25	09/16/22 17:46	1
Barium	**57.1**	**B**	0.57	0.13	mg/Kg	☼	09/15/22 11:25	09/16/22 17:46	1
Beryllium	**0.36**	**B**	0.23	0.032	mg/Kg	☼	09/15/22 11:25	09/16/22 17:46	1
Cadmium	**0.39**	**B**	0.23	0.034	mg/Kg	☼	09/15/22 11:25	09/16/22 17:46	1

Client Sample ID: SS3 (6-12)
Lab Sample ID: 480-201615-7

Date Collected: 09/13/22 09:55
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 91.4

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	10100	B	57.1	3.8	mg/Kg	☼	09/15/22 11:25	09/16/22 17:46	1
Chromium	14.6		0.57	0.23	mg/Kg	☼	09/15/22 11:25	09/16/22 17:46	1
Cobalt	13.7		0.57	0.057	mg/Kg	☼	09/15/22 11:25	09/16/22 17:46	1
Copper	91.4		1.1	0.24	mg/Kg	☼	09/15/22 11:25	09/16/22 17:46	1
Iron	16700	B	11.4	4.0	mg/Kg	☼	09/15/22 11:25	09/16/22 17:46	1
Lead	93.4		1.1	0.27	mg/Kg	☼	09/15/22 11:25	09/16/22 17:46	1
Magnesium	3450	B	22.9	1.1	mg/Kg	☼	09/15/22 11:25	09/16/22 17:46	1
Manganese	499	B	0.23	0.037	mg/Kg	☼	09/15/22 11:25	09/16/22 17:46	1
Nickel	13.9		5.7	0.26	mg/Kg	☼	09/15/22 11:25	09/16/22 17:46	1
Potassium	1150		34.3	22.9	mg/Kg	☼	09/15/22 11:25	09/16/22 17:46	1
Selenium	0.76	J	4.6	0.46	mg/Kg	☼	09/15/22 11:25	09/16/22 17:46	1
Silver	7.2		0.69	0.23	mg/Kg	☼	09/15/22 11:25	09/16/22 17:46	1
Sodium	95.6	J	160	14.9	mg/Kg	☼	09/15/22 11:25	09/16/22 17:46	1
Thallium	ND		6.9	0.34	mg/Kg	☼	09/15/22 11:25	09/16/22 17:46	1
Vanadium	14.9		0.57	0.13	mg/Kg	☼	09/15/22 11:25	09/16/22 17:46	1
Zinc	73.1		2.3	0.73	mg/Kg	☼	09/15/22 11:25	09/16/22 17:46	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.061		0.021	0.0048	mg/Kg	☼	09/15/22 10:09	09/15/22 14:43	1

Client Sample ID: SS3 (12-24)
Lab Sample ID: 480-201615-8

Date Collected: 09/13/22 10:00
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 89.7

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	*3	6.4	0.64	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
1,1,1-Trichloroethane	ND		6.4	0.47	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
1,1,2,2-Tetrachloroethane	ND	*3	6.4	1.0	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.4	1.5	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
1,1,2-Trichloroethane	ND	*3	6.4	0.83	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
1,1-Dichloroethane	ND		6.4	0.78	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
1,1-Dichloroethene	ND		6.4	0.79	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
1,2,3-Trimethylbenzene	ND	*3	6.4	1.3	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
1,2,4-Trichlorobenzene	ND	*3	6.4	0.39	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
1,2,4-Trimethylbenzene	ND	*3	6.4	1.2	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
1,2-Dibromo-3-Chloropropane	ND	*3	6.4	3.2	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
1,2-Dibromoethane	ND	*3	6.4	0.82	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
1,2-Dichlorobenzene	ND	*3	6.4	0.50	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
1,2-Dichloroethane	ND		6.4	0.32	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
1,2-Dichloropropane	ND		6.4	3.2	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
1,3,5-Trimethylbenzene	ND	*3	6.4	0.41	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
1,3-Dichlorobenzene	ND	*3	6.4	0.33	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
1,4-Dichlorobenzene	ND	*3	6.4	0.90	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
2-Butanone (MEK)	4.6	J	32	2.3	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
2-Hexanone	ND	*3	32	3.2	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
4-Methyl-2-pentanone (MIBK)	ND	*3	32	2.1	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
Acetone	19	J	32	5.4	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
Benzene	0.95	J	6.4	0.31	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1

Client Sample ID: SS3 (12-24)
Lab Sample ID: 480-201615-8
Date Collected: 09/13/22 10:00
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 89.7

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		6.4	0.86	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
Bromoform	ND	*3	6.4	3.2	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
Bromomethane	ND		6.4	0.58	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
Carbon disulfide	ND		6.4	3.2	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
Carbon tetrachloride	ND		6.4	0.62	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
Chlorobenzene	ND	*3	6.4	0.85	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
Chloroethane	ND		6.4	1.5	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
Chloroform	ND		6.4	0.40	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
Chloromethane	ND		6.4	0.39	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
cis-1,2-Dichloroethene	ND		6.4	0.82	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
cis-1,3-Dichloropropene	ND		6.4	0.92	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
Cyclohexane	**1.1**	**J**	6.4	0.90	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
Dibromochloromethane	ND	*3	6.4	0.82	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
Dichlorodifluoromethane	ND		6.4	0.53	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
Ethylbenzene	ND	*3	6.4	0.44	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
Isopropylbenzene	ND	*3	6.4	0.97	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
m,p-Xylene	ND	*3	13	1.1	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
Methyl acetate	ND		32	3.9	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
Methyl tert-butyl ether	ND		6.4	0.63	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
Methylcyclohexane	ND		6.4	0.98	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
Methylene Chloride	ND		6.4	3.0	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
n-Butylbenzene	ND	*3	6.4	0.56	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
N-Propylbenzene	ND	*3	6.4	0.51	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
o-Xylene	ND	*3	6.4	0.84	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
sec-Butylbenzene	ND	*3	6.4	0.56	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
Styrene	ND	*3	6.4	0.32	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
tert-Butylbenzene	ND	*3	6.4	0.67	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
Tetrachloroethene	ND	*3	6.4	0.86	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
Toluene	**1.8**	**J *3**	6.4	0.49	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
trans-1,2-Dichloroethene	ND		6.4	0.66	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
trans-1,3-Dichloropropene	ND	*3	6.4	2.8	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
Trichloroethene	ND		6.4	1.4	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
Trichlorofluoromethane	ND		6.4	0.61	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
Vinyl chloride	ND		6.4	0.78	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1
Xylenes, Total	ND		13	1.1	ug/Kg	☼	09/14/22 14:00	09/18/22 23:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*127*	*S1+*	*64 - 126*	*09/14/22 14:00*	*09/18/22 23:05*	*1*
4-Bromofluorobenzene (Surr)	*63*	*S1- *3*	*72 - 126*	*09/14/22 14:00*	*09/18/22 23:05*	*1*
Dibromofluoromethane (Surr)	*119*		*60 - 140*	*09/14/22 14:00*	*09/18/22 23:05*	*1*
Toluene-d8 (Surr)	*152*	*S1+ *3*	*71 - 125*	*09/14/22 14:00*	*09/18/22 23:05*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		1900	510	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
2,4,6-Trichlorophenol	ND		1900	380	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
2,4-Dichlorophenol	ND		1900	200	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
2,4-Dimethylphenol	ND		1900	450	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
2,4-Dinitrophenol	ND		18000	8700	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
2,4-Dinitrotoluene	ND		1900	390	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10

Client Sample ID: SS3 (12-24)
Lab Sample ID: 480-201615-8
Date Collected: 09/13/22 10:00
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 89.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		1900	220	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
2-Chloronaphthalene	ND		1900	310	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
2-Chlorophenol	ND		3700	340	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
2-Methylnaphthalene	ND		1900	380	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
2-Methylphenol	ND		1900	220	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
2-Nitroaniline	ND		3700	280	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
2-Nitrophenol	ND		1900	530	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
3,3'-Dichlorobenzidine	ND		3700	2200	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
3-Nitroaniline	ND		3700	520	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
4,6-Dinitro-2-methylphenol	ND		3700	1900	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
4-Bromophenyl phenyl ether	ND		1900	270	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
4-Chloro-3-methylphenol	ND		1900	460	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
4-Chloroaniline	ND		1900	460	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
4-Chlorophenyl phenyl ether	ND		1900	230	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
4-Methylphenol	**240**	**J**	3700	220	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
4-Nitroaniline	ND		3700	980	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
4-Nitrophenol	ND		3700	1300	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Acenaphthene	ND		1900	280	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Acenaphthylene	ND		1900	240	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Acetophenone	ND		1900	250	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Anthracene	**710**	**J**	1900	460	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Atrazine	ND		1900	650	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Benzaldehyde	ND		1900	1500	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Benzo[a]anthracene	**3900**		1900	190	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Benzo[a]pyrene	**3400**		1900	280	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Benzo[b]fluoranthene	**4800**		1900	300	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Benzo[g,h,i]perylene	**1600**	**J**	1900	200	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Benzo[k]fluoranthene	**1900**		1900	240	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Biphenyl	ND		1900	280	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
bis (2-chloroisopropyl) ether	ND		1900	380	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Bis(2-chloroethoxy)methane	ND		1900	400	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Bis(2-chloroethyl)ether	ND		1900	240	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Bis(2-ethylhexyl) phthalate	ND		1900	640	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Butyl benzyl phthalate	ND		1900	310	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Caprolactam	ND		1900	560	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Carbazole	**450**	**J**	1900	220	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Chrysene	**3400**		1900	420	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Dibenz(a,h)anthracene	**490**	**J**	1900	330	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Dibenzofuran	ND		1900	220	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Diethyl phthalate	**540**	**J B**	1900	240	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Dimethyl phthalate	ND		1900	220	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Di-n-butyl phthalate	ND		1900	320	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Di-n-octyl phthalate	ND		1900	220	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Fluoranthene	**5100**		1900	200	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Fluorene	ND		1900	220	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Hexachlorobenzene	ND		1900	250	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Hexachlorobutadiene	ND		1900	280	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Hexachlorocyclopentadiene	ND		1900	250	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Hexachloroethane	ND		1900	240	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10

Client Sample ID: SS3 (12-24)
Date Collected: 09/13/22 10:00
Date Received: 09/14/22 10:00

Lab Sample ID: 480-201615-8
Matrix: Solid
Percent Solids: 89.7

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	**2300**		1900	230	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Isophorone	ND		1900	400	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Naphthalene	ND		1900	240	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Nitrobenzene	ND		1900	210	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
N-Nitrosodi-n-propylamine	ND		1900	320	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
N-Nitrosodiphenylamine	ND		1900	1500	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Pentachlorophenol	ND		3700	1900	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Phenanthrene	**2200**		1900	280	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Phenol	ND		1900	290	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10
Pyrene	**4100**		1900	220	ug/Kg	☼	09/16/22 15:42	09/21/22 14:35	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*86*		*54 - 120*	*09/16/22 15:42*	*09/21/22 14:35*	*10*
2-Fluorobiphenyl (Surr)	*89*		*60 - 120*	*09/16/22 15:42*	*09/21/22 14:35*	*10*
2-Fluorophenol (Surr)	*76*		*52 - 120*	*09/16/22 15:42*	*09/21/22 14:35*	*10*
Nitrobenzene-d5 (Surr)	*76*		*53 - 120*	*09/16/22 15:42*	*09/21/22 14:35*	*10*
Phenol-d5 (Surr)	*81*		*54 - 120*	*09/16/22 15:42*	*09/21/22 14:35*	*10*
p-Terphenyl-d14 (Surr)	*105*		*79 - 130*	*09/16/22 15:42*	*09/21/22 14:35*	*10*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**6450**	**B**	10.9	4.8	mg/Kg	☼	09/15/22 11:25	09/16/22 17:50	1
Antimony	**2.3**	**J**	16.4	0.44	mg/Kg	☼	09/15/22 11:25	09/16/22 17:50	1
Arsenic	**13.8**		2.2	0.44	mg/Kg	☼	09/15/22 11:25	09/16/22 17:50	1
Barium	**70.0**	**B**	0.55	0.12	mg/Kg	☼	09/15/22 11:25	09/16/22 17:50	1
Beryllium	**0.40**	**B**	0.22	0.031	mg/Kg	☼	09/15/22 11:25	09/16/22 17:50	1
Cadmium	**1.4**	**B**	0.22	0.033	mg/Kg	☼	09/15/22 11:25	09/16/22 17:50	1
Calcium	**18000**	**B**	54.7	3.6	mg/Kg	☼	09/15/22 11:25	09/16/22 17:50	1
Chromium	**12.3**		0.55	0.22	mg/Kg	☼	09/15/22 11:25	09/16/22 17:50	1
Cobalt	**5.2**		0.55	0.055	mg/Kg	☼	09/15/22 11:25	09/16/22 17:50	1
Copper	**25.3**		1.1	0.23	mg/Kg	☼	09/15/22 11:25	09/16/22 17:50	1
Iron	**26700**	**B**	10.9	3.8	mg/Kg	☼	09/15/22 11:25	09/16/22 17:50	1
Lead	**251**		1.1	0.26	mg/Kg	☼	09/15/22 11:25	09/16/22 17:50	1
Magnesium	**2800**	**B**	21.9	1.0	mg/Kg	☼	09/15/22 11:25	09/16/22 17:50	1
Manganese	**504**	**B**	0.22	0.035	mg/Kg	☼	09/15/22 11:25	09/16/22 17:50	1
Nickel	**13.0**		5.5	0.25	mg/Kg	☼	09/15/22 11:25	09/16/22 17:50	1
Potassium	**1010**		32.8	21.9	mg/Kg	☼	09/15/22 11:25	09/16/22 17:50	1
Selenium	**0.84**	**J**	4.4	0.44	mg/Kg	☼	09/15/22 11:25	09/16/22 17:50	1
Silver	ND		0.66	0.22	mg/Kg	☼	09/15/22 11:25	09/16/22 17:50	1
Sodium	**140**	**J**	153	14.2	mg/Kg	☼	09/15/22 11:25	09/16/22 17:50	1
Thallium	ND		6.6	0.33	mg/Kg	☼	09/15/22 11:25	09/16/22 17:50	1
Vanadium	**17.3**		0.55	0.12	mg/Kg	☼	09/15/22 11:25	09/16/22 17:50	1
Zinc	**126**		2.2	0.70	mg/Kg	☼	09/15/22 11:25	09/16/22 17:50	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.18**		0.021	0.0048	mg/Kg	☼	09/15/22 10:09	09/15/22 14:44	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories - Shallow Soil

Job ID: 480-201615-1

Client Sample ID: FDUP2_091322
Date Collected: 09/13/22 00:00
Date Received: 09/14/22 10:00

Lab Sample ID: 480-201615-9
Matrix: Solid
Percent Solids: 87.6

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	*3	5.6	0.56	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
1,1,1-Trichloroethane	ND		5.6	0.41	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
1,1,2,2-Tetrachloroethane	ND	*3	5.6	0.91	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.6	1.3	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
1,1,2-Trichloroethane	ND	*3	5.6	0.73	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
1,1-Dichloroethane	ND		5.6	0.68	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
1,1-Dichloroethene	ND		5.6	0.69	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
1,2,3-Trimethylbenzene	ND	*3	5.6	1.1	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
1,2,4-Trichlorobenzene	ND	*3	5.6	0.34	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
1,2,4-Trimethylbenzene	ND	*3	5.6	1.1	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
1,2-Dibromo-3-Chloropropane	ND	*3	5.6	2.8	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
1,2-Dibromoethane	ND	*3	5.6	0.72	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
1,2-Dichlorobenzene	ND	*3	5.6	0.44	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
1,2-Dichloroethane	ND		5.6	0.28	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
1,2-Dichloropropane	ND		5.6	2.8	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
1,3,5-Trimethylbenzene	ND	*3	5.6	0.36	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
1,3-Dichlorobenzene	ND	*3	5.6	0.29	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
1,4-Dichlorobenzene	ND	*3	5.6	0.78	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
2-Butanone (MEK)	ND		28	2.1	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
2-Hexanone	ND	*3	28	2.8	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
4-Methyl-2-pentanone (MIBK)	ND	*3	28	1.8	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
Acetone	**13**	**J**	28	4.7	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
Benzene	ND		5.6	0.27	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
Bromodichloromethane	ND		5.6	0.75	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
Bromoform	ND	*3	5.6	2.8	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
Bromomethane	ND		5.6	0.50	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
Carbon disulfide	ND		5.6	2.8	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
Carbon tetrachloride	ND		5.6	0.54	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
Chlorobenzene	ND	*3	5.6	0.74	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
Chloroethane	ND		5.6	1.3	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
Chloroform	**0.47**	**J B**	5.6	0.35	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
Chloromethane	ND		5.6	0.34	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
cis-1,2-Dichloroethene	ND		5.6	0.72	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
cis-1,3-Dichloropropene	ND		5.6	0.81	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
Cyclohexane	ND		5.6	0.78	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
Dibromochloromethane	ND	*3	5.6	0.72	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
Dichlorodifluoromethane	ND		5.6	0.46	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
Ethylbenzene	ND	*3	5.6	0.39	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
Isopropylbenzene	ND	*3	5.6	0.85	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
m,p-Xylene	ND	*3	11	0.94	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
Methyl acetate	ND		28	3.4	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
Methyl tert-butyl ether	ND		5.6	0.55	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
Methylcyclohexane	**1.0**	**J**	5.6	0.85	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
Methylene Chloride	ND		5.6	2.6	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
n-Butylbenzene	ND	*3	5.6	0.49	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
N-Propylbenzene	ND	*3	5.6	0.45	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
o-Xylene	ND	*3	5.6	0.73	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
sec-Butylbenzene	ND	*3	5.6	0.49	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
Styrene	ND	*3	5.6	0.28	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1

Client Sample ID: FDUP2_091322
Lab Sample ID: 480-201615-9
Date Collected: 09/13/22 00:00
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 87.6

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND	*3	5.6	0.58	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
Tetrachloroethene	ND	*3	5.6	0.75	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
Toluene	ND	*3	5.6	0.42	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
trans-1,2-Dichloroethene	ND		5.6	0.58	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
trans-1,3-Dichloropropene	ND	*3	5.6	2.5	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
Trichloroethene	ND		5.6	1.2	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
Trichlorofluoromethane	ND		5.6	0.53	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
Vinyl chloride	ND		5.6	0.68	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1
Xylenes, Total	ND		11	0.94	ug/Kg	☼	09/14/22 14:00	09/18/22 23:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*129*	*S1+*	*64 - 126*	*09/14/22 14:00*	*09/18/22 23:29*	*1*
4-Bromofluorobenzene (Surr)	*59*	*S1- *3*	*72 - 126*	*09/14/22 14:00*	*09/18/22 23:29*	*1*
Dibromofluoromethane (Surr)	*127*		*60 - 140*	*09/14/22 14:00*	*09/18/22 23:29*	*1*
Toluene-d8 (Surr)	*155*	*S1+ *3*	*71 - 125*	*09/14/22 14:00*	*09/18/22 23:29*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		1900	520	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
2,4,6-Trichlorophenol	ND		1900	380	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
2,4-Dichlorophenol	ND		1900	200	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
2,4-Dimethylphenol	ND		1900	460	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
2,4-Dinitrophenol	ND		19000	8900	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
2,4-Dinitrotoluene	ND		1900	400	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
2,6-Dinitrotoluene	ND		1900	230	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
2-Chloronaphthalene	ND		1900	320	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
2-Chlorophenol	ND		3700	350	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
2-Methylnaphthalene	ND		1900	380	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
2-Methylphenol	ND		1900	230	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
2-Nitroaniline	ND		3700	280	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
2-Nitrophenol	ND		1900	540	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
3,3'-Dichlorobenzidine	ND		3700	2300	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
3-Nitroaniline	ND		3700	530	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
4,6-Dinitro-2-methylphenol	ND		3700	1900	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
4-Bromophenyl phenyl ether	ND		1900	270	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
4-Chloro-3-methylphenol	ND		1900	480	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
4-Chloroaniline	ND		1900	480	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
4-Chlorophenyl phenyl ether	ND		1900	240	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
4-Methylphenol	ND		3700	230	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
4-Nitroaniline	ND		3700	1000	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
4-Nitrophenol	ND		3700	1300	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Acenaphthene	ND		1900	280	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Acenaphthylene	**250**	**J**	1900	250	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Acetophenone	ND		1900	260	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Anthracene	**680**	**J**	1900	480	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Atrazine	ND		1900	670	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Benzaldehyde	ND		1900	1500	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Benzo[a]anthracene	**4000**		1900	190	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Benzo[a]pyrene	**3800**		1900	280	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Benzo[b]fluoranthene	**5200**		1900	310	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10

Client Sample ID: FDUP2_091322

Date Collected: 09/13/22 00:00
Date Received: 09/14/22 10:00

Lab Sample ID: 480-201615-9

Matrix: Solid
Percent Solids: 87.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	**1800**	**J**	1900	200	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Benzo[k]fluoranthene	**2000**		1900	250	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Biphenyl	ND		1900	280	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
bis (2-chloroisopropyl) ether	ND		1900	380	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Bis(2-chloroethoxy)methane	ND		1900	410	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Bis(2-chloroethyl)ether	ND		1900	250	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Bis(2-ethylhexyl) phthalate	ND		1900	660	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Butyl benzyl phthalate	ND		1900	320	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Caprolactam	ND		1900	580	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Carbazole	**420**	**J**	1900	230	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Chrysene	**3200**		1900	430	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Dibenz(a,h)anthracene	**530**	**J**	1900	340	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Dibenzofuran	ND		1900	230	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Diethyl phthalate	**700**	**J B**	1900	250	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Dimethyl phthalate	ND		1900	230	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Di-n-butyl phthalate	ND		1900	330	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Di-n-octyl phthalate	ND		1900	230	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Fluoranthene	**6000**		1900	200	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Fluorene	ND		1900	230	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Hexachlorobenzene	ND		1900	260	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Hexachlorobutadiene	ND		1900	280	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Hexachlorocyclopentadiene	ND		1900	260	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Hexachloroethane	ND		1900	250	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Indeno[1,2,3-cd]pyrene	**2600**		1900	240	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Isophorone	ND		1900	410	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Naphthalene	ND		1900	250	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Nitrobenzene	ND		1900	210	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
N-Nitrosodi-n-propylamine	ND		1900	330	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
N-Nitrosodiphenylamine	ND		1900	1600	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Pentachlorophenol	ND		3700	1900	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Phenanthrene	**2100**		1900	280	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Phenol	ND		1900	290	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10
Pyrene	**4700**		1900	230	ug/Kg	☼	09/16/22 15:42	09/21/22 14:52	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*93*		*54 - 120*	*09/16/22 15:42*	*09/21/22 14:52*	*10*
2-Fluorobiphenyl (Surr)	*94*		*60 - 120*	*09/16/22 15:42*	*09/21/22 14:52*	*10*
2-Fluorophenol (Surr)	*78*		*52 - 120*	*09/16/22 15:42*	*09/21/22 14:52*	*10*
Nitrobenzene-d5 (Surr)	*80*		*53 - 120*	*09/16/22 15:42*	*09/21/22 14:52*	*10*
Phenol-d5 (Surr)	*88*		*54 - 120*	*09/16/22 15:42*	*09/21/22 14:52*	*10*
p-Terphenyl-d14 (Surr)	*111*		*79 - 130*	*09/16/22 15:42*	*09/21/22 14:52*	*10*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**7370**	**B**	12.0	5.3	mg/Kg	☼	09/15/22 11:25	09/16/22 18:05	1
Antimony	**3.1**	**J**	18.0	0.48	mg/Kg	☼	09/15/22 11:25	09/16/22 18:05	1
Arsenic	**16.2**		2.4	0.48	mg/Kg	☼	09/15/22 11:25	09/16/22 18:05	1
Barium	**74.5**	**B**	0.60	0.13	mg/Kg	☼	09/15/22 11:25	09/16/22 18:05	1
Beryllium	**0.45**	**B**	0.24	0.034	mg/Kg	☼	09/15/22 11:25	09/16/22 18:05	1
Cadmium	**1.2**	**B**	0.24	0.036	mg/Kg	☼	09/15/22 11:25	09/16/22 18:05	1

Client Sample ID: FDUP2_091322
Lab Sample ID: 480-201615-9
Date Collected: 09/13/22 00:00
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 87.6

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	18600	B	59.9	4.0	mg/Kg	☼	09/15/22 11:25	09/16/22 18:05	1
Chromium	13.7		0.60	0.24	mg/Kg	☼	09/15/22 11:25	09/16/22 18:05	1
Cobalt	6.4		0.60	0.060	mg/Kg	☼	09/15/22 11:25	09/16/22 18:05	1
Copper	29.3		1.2	0.25	mg/Kg	☼	09/15/22 11:25	09/16/22 18:05	1
Iron	32300	B	12.0	4.2	mg/Kg	☼	09/15/22 11:25	09/16/22 18:05	1
Lead	301		1.2	0.29	mg/Kg	☼	09/15/22 11:25	09/16/22 18:05	1
Magnesium	3240	B	24.0	1.1	mg/Kg	☼	09/15/22 11:25	09/16/22 18:05	1
Manganese	565	B	0.24	0.038	mg/Kg	☼	09/15/22 11:25	09/16/22 18:05	1
Nickel	15.3		6.0	0.28	mg/Kg	☼	09/15/22 11:25	09/16/22 18:05	1
Potassium	1240		35.9	24.0	mg/Kg	☼	09/15/22 11:25	09/16/22 18:05	1
Selenium	0.94	J	4.8	0.48	mg/Kg	☼	09/15/22 11:25	09/16/22 18:05	1
Silver	ND		0.72	0.24	mg/Kg	☼	09/15/22 11:25	09/16/22 18:05	1
Sodium	173		168	15.6	mg/Kg	☼	09/15/22 11:25	09/16/22 18:05	1
Thallium	ND		7.2	0.36	mg/Kg	☼	09/15/22 11:25	09/16/22 18:05	1
Vanadium	20.3		0.60	0.13	mg/Kg	☼	09/15/22 11:25	09/16/22 18:05	1
Zinc	131		2.4	0.77	mg/Kg	☼	09/15/22 11:25	09/16/22 18:05	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.22		0.021	0.0049	mg/Kg	☼	09/15/22 10:09	09/15/22 14:45	1

Client Sample ID: SS4 (0-2)
Lab Sample ID: 480-201615-10
Date Collected: 09/13/22 11:15
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 79.1

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		8.3	0.83	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
1,1,1-Trichloroethane	ND		8.3	0.60	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
1,1,2,2-Tetrachloroethane	ND	*3	8.3	1.3	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.3	1.9	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
1,1,2-Trichloroethane	ND		8.3	1.1	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
1,1-Dichloroethane	ND		8.3	1.0	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
1,1-Dichloroethene	ND		8.3	1.0	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
1,2,3-Trimethylbenzene	ND	*3	8.3	1.7	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
1,2,4-Trichlorobenzene	ND	*3	8.3	0.51	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
1,2,4-Trimethylbenzene	ND	*3	8.3	1.6	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
1,2-Dibromo-3-Chloropropane	ND	*3	8.3	4.2	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
1,2-Dibromoethane	ND		8.3	1.1	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
1,2-Dichlorobenzene	ND	*3	8.3	0.65	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
1,2-Dichloroethane	ND		8.3	0.42	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
1,2-Dichloropropane	ND		8.3	4.2	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
1,3,5-Trimethylbenzene	ND	*3	8.3	0.54	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
1,3-Dichlorobenzene	ND	*3	8.3	0.43	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
1,4-Dichlorobenzene	ND	*3	8.3	1.2	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
2-Butanone (MEK)	ND		42	3.0	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
2-Hexanone	ND		42	4.2	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
4-Methyl-2-pentanone (MIBK)	ND		42	2.7	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
Acetone	ND		42	7.0	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
Benzene	ND		8.3	0.41	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1

Client Sample ID: SS4 (0-2)
Lab Sample ID: 480-201615-10
Date Collected: 09/13/22 11:15
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 79.1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		8.3	1.1	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
Bromoform	ND		8.3	4.2	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
Bromomethane	ND		8.3	0.75	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
Carbon disulfide	ND		8.3	4.2	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
Carbon tetrachloride	ND		8.3	0.80	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
Chlorobenzene	ND		8.3	1.1	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
Chloroethane	ND		8.3	1.9	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
Chloroform	**0.56**	**J B**	8.3	0.51	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
Chloromethane	ND		8.3	0.50	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
cis-1,2-Dichloroethene	ND		8.3	1.1	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
cis-1,3-Dichloropropene	ND		8.3	1.2	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
Cyclohexane	ND		8.3	1.2	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
Dibromochloromethane	ND		8.3	1.1	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
Dichlorodifluoromethane	ND		8.3	0.69	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
Ethylbenzene	ND		8.3	0.57	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
Isopropylbenzene	ND	*3	8.3	1.3	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
m,p-Xylene	ND		17	1.4	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
Methyl acetate	ND		42	5.0	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
Methyl tert-butyl ether	ND		8.3	0.82	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
Methylcyclohexane	ND		8.3	1.3	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
Methylene Chloride	ND		8.3	3.8	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
n-Butylbenzene	ND	*3	8.3	0.72	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
N-Propylbenzene	ND	*3	8.3	0.66	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
o-Xylene	ND		8.3	1.1	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
sec-Butylbenzene	ND	*3	8.3	0.72	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
Styrene	ND		8.3	0.42	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
tert-Butylbenzene	ND	*3	8.3	0.86	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
Tetrachloroethene	ND		8.3	1.1	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
Toluene	ND		8.3	0.63	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
trans-1,2-Dichloroethene	ND		8.3	0.86	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
trans-1,3-Dichloropropene	ND		8.3	3.7	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
Trichloroethene	ND		8.3	1.8	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
Trichlorofluoromethane	ND		8.3	0.79	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
Vinyl chloride	ND		8.3	1.0	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1
Xylenes, Total	ND		17	1.4	ug/Kg	☼	09/14/22 14:00	09/18/22 23:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*64 - 126*	*09/14/22 14:00*	*09/18/22 23:54*	*1*
4-Bromofluorobenzene (Surr)	*73*		*72 - 126*	*09/14/22 14:00*	*09/18/22 23:54*	*1*
Dibromofluoromethane (Surr)	*104*		*60 - 140*	*09/14/22 14:00*	*09/18/22 23:54*	*1*
Toluene-d8 (Surr)	*133*	*S1+*	*71 - 125*	*09/14/22 14:00*	*09/18/22 23:54*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		1100	290	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
2,4,6-Trichlorophenol	ND		1100	210	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
2,4-Dichlorophenol	ND		1100	110	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
2,4-Dimethylphenol	ND		1100	260	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
2,4-Dinitrophenol	ND		10000	4900	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
2,4-Dinitrotoluene	ND		1100	220	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories - Shallow Soil

Job ID: 480-201615-1

Client Sample ID: SS4 (0-2)
Date Collected: 09/13/22 11:15
Date Received: 09/14/22 10:00

Lab Sample ID: 480-201615-10
Matrix: Solid
Percent Solids: 79.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		1100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
2-Chloronaphthalene	ND		1100	180	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
2-Chlorophenol	ND		2100	190	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
2-Methylnaphthalene	ND		1100	210	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
2-Methylphenol	ND		1100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
2-Nitroaniline	ND		2100	160	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
2-Nitrophenol	ND		1100	300	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
3,3'-Dichlorobenzidine	ND		2100	1300	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
3-Nitroaniline	ND		2100	290	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
4,6-Dinitro-2-methylphenol	ND		2100	1100	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
4-Bromophenyl phenyl ether	ND		1100	150	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
4-Chloro-3-methylphenol	ND		1100	260	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
4-Chloroaniline	ND		1100	260	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
4-Chlorophenyl phenyl ether	ND		1100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
4-Methylphenol	ND		2100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
4-Nitroaniline	ND		2100	560	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
4-Nitrophenol	ND		2100	750	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Acenaphthene	ND		1100	160	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Acenaphthylene	ND		1100	140	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Acetophenone	ND		1100	140	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Anthracene	ND		1100	260	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Atrazine	ND		1100	370	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Benzaldehyde	ND		1100	850	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Benzo[a]anthracene	**160**	**J**	1100	110	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Benzo[a]pyrene	**200**	**J**	1100	160	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Benzo[b]fluoranthene	**320**	**J**	1100	170	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Benzo[g,h,i]perylene	**130**	**J**	1100	110	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Benzo[k]fluoranthene	ND		1100	140	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Biphenyl	ND		1100	160	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
bis (2-chloroisopropyl) ether	ND		1100	210	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Bis(2-chloroethoxy)methane	ND		1100	230	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Bis(2-chloroethyl)ether	ND		1100	140	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Bis(2-ethylhexyl) phthalate	ND		1100	360	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Butyl benzyl phthalate	ND		1100	180	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Caprolactam	ND		1100	320	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Carbazole	ND		1100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Chrysene	ND		1100	240	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Dibenz(a,h)anthracene	ND		1100	190	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Dibenzofuran	ND		1100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Diethyl phthalate	**720**	**J B**	1100	140	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Dimethyl phthalate	ND		1100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Di-n-butyl phthalate	ND		1100	180	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Di-n-octyl phthalate	ND		1100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Fluoranthene	**320**	**J**	1100	110	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Fluorene	ND		1100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Hexachlorobenzene	ND		1100	140	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Hexachlorobutadiene	ND		1100	160	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Hexachlorocyclopentadiene	ND		1100	140	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Hexachloroethane	ND		1100	140	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5

Client Sample ID: SS4 (0-2)
Date Collected: 09/13/22 11:15
Date Received: 09/14/22 10:00

Lab Sample ID: 480-201615-10
Matrix: Solid
Percent Solids: 79.1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	**140**	**J**	1100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Isophorone	ND		1100	230	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Naphthalene	ND		1100	140	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Nitrobenzene	ND		1100	120	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
N-Nitrosodi-n-propylamine	ND		1100	180	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
N-Nitrosodiphenylamine	ND		1100	860	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Pentachlorophenol	ND		2100	1100	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Phenanthrene	ND		1100	160	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Phenol	ND		1100	160	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5
Pyrene	**260**	**J**	1100	130	ug/Kg	☼	09/16/22 15:42	09/21/22 15:09	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*94*		*54 - 120*	*09/16/22 15:42*	*09/21/22 15:09*	*5*
2-Fluorobiphenyl (Surr)	*87*		*60 - 120*	*09/16/22 15:42*	*09/21/22 15:09*	*5*
2-Fluorophenol (Surr)	*77*		*52 - 120*	*09/16/22 15:42*	*09/21/22 15:09*	*5*
Nitrobenzene-d5 (Surr)	*77*		*53 - 120*	*09/16/22 15:42*	*09/21/22 15:09*	*5*
Phenol-d5 (Surr)	*77*		*54 - 120*	*09/16/22 15:42*	*09/21/22 15:09*	*5*
p-Terphenyl-d14 (Surr)	*98*		*79 - 130*	*09/16/22 15:42*	*09/21/22 15:09*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**10400**	**B**	13.2	5.8	mg/Kg	☼	09/15/22 11:25	09/16/22 18:09	1
Antimony	**0.94**	**J**	19.8	0.53	mg/Kg	☼	09/15/22 11:25	09/16/22 18:09	1
Arsenic	**10.7**		2.6	0.53	mg/Kg	☼	09/15/22 11:25	09/16/22 18:09	1
Barium	**90.8**	**B**	0.66	0.15	mg/Kg	☼	09/15/22 11:25	09/16/22 18:09	1
Beryllium	**0.56**	**B**	0.26	0.037	mg/Kg	☼	09/15/22 11:25	09/16/22 18:09	1
Cadmium	**0.16**	**J B**	0.26	0.040	mg/Kg	☼	09/15/22 11:25	09/16/22 18:09	1
Calcium	**2030**	**B**	66.0	4.4	mg/Kg	☼	09/15/22 11:25	09/16/22 18:09	1
Chromium	**12.9**		0.66	0.26	mg/Kg	☼	09/15/22 11:25	09/16/22 18:09	1
Cobalt	**8.1**		0.66	0.066	mg/Kg	☼	09/15/22 11:25	09/16/22 18:09	1
Copper	**30.9**		1.3	0.28	mg/Kg	☼	09/15/22 11:25	09/16/22 18:09	1
Iron	**20300**	**B**	13.2	4.6	mg/Kg	☼	09/15/22 11:25	09/16/22 18:09	1
Lead	**52.6**		1.3	0.32	mg/Kg	☼	09/15/22 11:25	09/16/22 18:09	1
Magnesium	**2250**	**B**	26.4	1.2	mg/Kg	☼	09/15/22 11:25	09/16/22 18:09	1
Manganese	**446**	**B**	0.26	0.042	mg/Kg	☼	09/15/22 11:25	09/16/22 18:09	1
Nickel	**17.7**		6.6	0.30	mg/Kg	☼	09/15/22 11:25	09/16/22 18:09	1
Potassium	**1870**		39.6	26.4	mg/Kg	☼	09/15/22 11:25	09/16/22 18:09	1
Selenium	**0.93**	**J**	5.3	0.53	mg/Kg	☼	09/15/22 11:25	09/16/22 18:09	1
Silver	ND		0.79	0.26	mg/Kg	☼	09/15/22 11:25	09/16/22 18:09	1
Sodium	**49.4**	**J**	185	17.2	mg/Kg	☼	09/15/22 11:25	09/16/22 18:09	1
Thallium	ND		7.9	0.40	mg/Kg	☼	09/15/22 11:25	09/16/22 18:09	1
Vanadium	**17.1**		0.66	0.15	mg/Kg	☼	09/15/22 11:25	09/16/22 18:09	1
Zinc	**67.0**		2.6	0.85	mg/Kg	☼	09/15/22 11:25	09/16/22 18:09	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.071**		0.025	0.0057	mg/Kg	☼	09/15/22 10:09	09/15/22 14:47	1

Client Sample ID: SS4 (0-6)
Lab Sample ID: 480-201615-11
Date Collected: 09/13/22 09:10
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 82.6

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	*3	5.4	0.54	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
1,1,1-Trichloroethane	ND		5.4	0.39	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
1,1,2,2-Tetrachloroethane	ND	*3	5.4	0.87	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.4	1.2	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
1,1,2-Trichloroethane	ND	*3	5.4	0.70	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
1,1-Dichloroethane	ND		5.4	0.66	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
1,1-Dichloroethene	ND		5.4	0.66	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
1,2,3-Trimethylbenzene	ND	*3	5.4	1.1	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
1,2,4-Trichlorobenzene	ND	*3	5.4	0.33	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
1,2,4-Trimethylbenzene	ND	*3	5.4	1.0	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
1,2-Dibromo-3-Chloropropane	ND	*3	5.4	2.7	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
1,2-Dibromoethane	ND	*3	5.4	0.69	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
1,2-Dichlorobenzene	ND	*3	5.4	0.42	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
1,2-Dichloroethane	ND		5.4	0.27	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
1,2-Dichloropropane	ND		5.4	2.7	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
1,3,5-Trimethylbenzene	ND	*3	5.4	0.35	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
1,3-Dichlorobenzene	ND	*3	5.4	0.28	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
1,4-Dichlorobenzene	ND	*3	5.4	0.75	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
2-Butanone (MEK)	ND		27	2.0	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
2-Hexanone	ND	*3	27	2.7	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
4-Methyl-2-pentanone (MIBK)	ND	*3	27	1.8	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
Acetone	ND		27	4.5	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
Benzene	ND		5.4	0.26	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
Bromodichloromethane	ND		5.4	0.72	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
Bromoform	ND	*3	5.4	2.7	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
Bromomethane	ND		5.4	0.48	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
Carbon disulfide	ND		5.4	2.7	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
Carbon tetrachloride	ND		5.4	0.52	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
Chlorobenzene	ND	*3	5.4	0.71	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
Chloroethane	ND		5.4	1.2	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
Chloroform	**0.37**	**J B**	5.4	0.33	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
Chloromethane	ND		5.4	0.33	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
cis-1,2-Dichloroethene	ND		5.4	0.69	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
cis-1,3-Dichloropropene	ND		5.4	0.78	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
Cyclohexane	ND		5.4	0.75	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
Dibromochloromethane	ND	*3	5.4	0.69	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
Dichlorodifluoromethane	ND		5.4	0.45	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
Ethylbenzene	ND	*3	5.4	0.37	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
Isopropylbenzene	ND	*3	5.4	0.81	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
m,p-Xylene	ND	*3	11	0.91	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
Methyl acetate	ND		27	3.3	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
Methyl tert-butyl ether	ND		5.4	0.53	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
Methylcyclohexane	ND		5.4	0.82	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
Methylene Chloride	ND		5.4	2.5	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
n-Butylbenzene	ND	*3	5.4	0.47	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
N-Propylbenzene	ND	*3	5.4	0.43	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
o-Xylene	ND	*3	5.4	0.70	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
sec-Butylbenzene	ND	*3	5.4	0.47	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
Styrene	ND	*3	5.4	0.27	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories - Shallow Soil

Job ID: 480-201615-1

Client Sample ID: SS4 (0-6)
Date Collected: 09/13/22 09:10
Date Received: 09/14/22 10:00

Lab Sample ID: 480-201615-11
Matrix: Solid
Percent Solids: 82.6

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND	*3	5.4	0.56	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
Tetrachloroethene	ND	*3	5.4	0.72	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
Toluene	ND	*3	5.4	0.41	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
trans-1,2-Dichloroethene	ND		5.4	0.56	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
trans-1,3-Dichloropropene	ND	*3	5.4	2.4	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
Trichloroethene	ND		5.4	1.2	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
Trichlorofluoromethane	ND		5.4	0.51	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
Vinyl chloride	ND		5.4	0.66	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1
Xylenes, Total	ND		11	0.91	ug/Kg	☼	09/14/22 14:00	09/19/22 00:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*64 - 126*	*09/14/22 14:00*	*09/19/22 00:17*	*1*
4-Bromofluorobenzene (Surr)	*69*	*S1- *3*	*72 - 126*	*09/14/22 14:00*	*09/19/22 00:17*	*1*
Dibromofluoromethane (Surr)	*110*		*60 - 140*	*09/14/22 14:00*	*09/19/22 00:17*	*1*
Toluene-d8 (Surr)	*140*	*S1+ *3*	*71 - 125*	*09/14/22 14:00*	*09/19/22 00:17*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		1000	270	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
2,4,6-Trichlorophenol	ND		1000	200	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
2,4-Dichlorophenol	ND		1000	110	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
2,4-Dimethylphenol	ND		1000	240	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
2,4-Dinitrophenol	ND		9800	4600	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
2,4-Dinitrotoluene	ND		1000	210	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
2,6-Dinitrotoluene	ND		1000	120	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
2-Chloronaphthalene	ND		1000	170	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
2-Chlorophenol	ND		1900	180	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
2-Methylnaphthalene	ND		1000	200	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
2-Methylphenol	ND		1000	120	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
2-Nitroaniline	ND		1900	150	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
2-Nitrophenol	ND		1000	280	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
3,3'-Dichlorobenzidine	ND		1900	1200	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
3-Nitroaniline	ND		1900	280	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
4,6-Dinitro-2-methylphenol	ND		1900	1000	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
4-Bromophenyl phenyl ether	ND		1000	140	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
4-Chloro-3-methylphenol	ND		1000	250	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
4-Chloroaniline	ND		1000	250	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
4-Chlorophenyl phenyl ether	ND		1000	120	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
4-Methylphenol	ND		1900	120	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
4-Nitroaniline	ND		1900	530	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
4-Nitrophenol	ND		1900	700	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Acenaphthene	ND		1000	150	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Acenaphthylene	ND		1000	130	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Acetophenone	ND		1000	140	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Anthracene	ND		1000	250	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Atrazine	ND		1000	350	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Benzaldehyde	ND		1000	800	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Benzo[a]anthracene	**190**	**J**	1000	100	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Benzo[a]pyrene	**200**	**J**	1000	150	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Benzo[b]fluoranthene	**290**	**J**	1000	160	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5

Client: Integral Consulting Inc
Job ID: 480-201615-1
Project/Site: EF1017 - Refractories - Shallow Soil

Client Sample ID: SS4 (0-6)
Lab Sample ID: 480-201615-11
Date Collected: 09/13/22 09:10
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 82.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	**120**	**J**	1000	110	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Benzo[k]fluoranthene	ND		1000	130	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Biphenyl	ND		1000	150	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
bis (2-chloroisopropyl) ether	ND		1000	200	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Bis(2-chloroethoxy)methane	ND		1000	210	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Bis(2-chloroethyl)ether	ND		1000	130	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Bis(2-ethylhexyl) phthalate	ND		1000	340	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Butyl benzyl phthalate	ND		1000	170	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Caprolactam	ND		1000	300	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Carbazole	ND		1000	120	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Chrysene	ND		1000	220	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Dibenz(a,h)anthracene	ND		1000	180	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Dibenzofuran	ND		1000	120	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Diethyl phthalate	**740**	**J B**	1000	130	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Dimethyl phthalate	ND		1000	120	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Di-n-butyl phthalate	ND		1000	170	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Di-n-octyl phthalate	ND		1000	120	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Fluoranthene	**380**	**J**	1000	110	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Fluorene	ND		1000	120	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Hexachlorobenzene	ND		1000	140	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Hexachlorobutadiene	ND		1000	150	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Hexachlorocyclopentadiene	ND		1000	140	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Hexachloroethane	ND		1000	130	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Indeno[1,2,3-cd]pyrene	**130**	**J**	1000	120	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Isophorone	ND		1000	210	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Naphthalene	ND		1000	130	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Nitrobenzene	ND		1000	110	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
N-Nitrosodi-n-propylamine	ND		1000	170	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
N-Nitrosodiphenylamine	ND		1000	810	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Pentachlorophenol	ND		1900	1000	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Phenanthrene	**180**	**J**	1000	150	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Phenol	ND		1000	150	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5
Pyrene	**310**	**J**	1000	120	ug/Kg	☼	09/16/22 15:42	09/21/22 15:26	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*96*		*54 - 120*	*09/16/22 15:42*	*09/21/22 15:26*	*5*
2-Fluorobiphenyl (Surr)	*83*		*60 - 120*	*09/16/22 15:42*	*09/21/22 15:26*	*5*
2-Fluorophenol (Surr)	*79*		*52 - 120*	*09/16/22 15:42*	*09/21/22 15:26*	*5*
Nitrobenzene-d5 (Surr)	*82*		*53 - 120*	*09/16/22 15:42*	*09/21/22 15:26*	*5*
Phenol-d5 (Surr)	*79*		*54 - 120*	*09/16/22 15:42*	*09/21/22 15:26*	*5*
p-Terphenyl-d14 (Surr)	*105*		*79 - 130*	*09/16/22 15:42*	*09/21/22 15:26*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**9760**	**B**	11.8	5.2	mg/Kg	☼	09/15/22 11:25	09/16/22 18:13	1
Antimony	**1.3**	**J**	17.7	0.47	mg/Kg	☼	09/15/22 11:25	09/16/22 18:13	1
Arsenic	**10.4**		2.4	0.47	mg/Kg	☼	09/15/22 11:25	09/16/22 18:13	1
Barium	**80.8**	**B**	0.59	0.13	mg/Kg	☼	09/15/22 11:25	09/16/22 18:13	1
Beryllium	**0.52**	**B**	0.24	0.033	mg/Kg	☼	09/15/22 11:25	09/16/22 18:13	1
Cadmium	**0.16**	**J B**	0.24	0.035	mg/Kg	☼	09/15/22 11:25	09/16/22 18:13	1

Client Sample ID: SS4 (0-6)
Lab Sample ID: 480-201615-11

Date Collected: 09/13/22 09:10
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 82.6

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	1990	B	58.9	3.9	mg/Kg	☼	09/15/22 11:25	09/16/22 18:13	1
Chromium	12.0		0.59	0.24	mg/Kg	☼	09/15/22 11:25	09/16/22 18:13	1
Cobalt	8.0		0.59	0.059	mg/Kg	☼	09/15/22 11:25	09/16/22 18:13	1
Copper	31.0		1.2	0.25	mg/Kg	☼	09/15/22 11:25	09/16/22 18:13	1
Iron	20000	B	11.8	4.1	mg/Kg	☼	09/15/22 11:25	09/16/22 18:13	1
Lead	50.3		1.2	0.28	mg/Kg	☼	09/15/22 11:25	09/16/22 18:13	1
Magnesium	2200	B	23.6	1.1	mg/Kg	☼	09/15/22 11:25	09/16/22 18:13	1
Manganese	402	B	0.24	0.038	mg/Kg	☼	09/15/22 11:25	09/16/22 18:13	1
Nickel	17.5		5.9	0.27	mg/Kg	☼	09/15/22 11:25	09/16/22 18:13	1
Potassium	1600		35.3	23.6	mg/Kg	☼	09/15/22 11:25	09/16/22 18:13	1
Selenium	0.89	J	4.7	0.47	mg/Kg	☼	09/15/22 11:25	09/16/22 18:13	1
Silver	ND		0.71	0.24	mg/Kg	☼	09/15/22 11:25	09/16/22 18:13	1
Sodium	43.7	J	165	15.3	mg/Kg	☼	09/15/22 11:25	09/16/22 18:13	1
Thallium	ND		7.1	0.35	mg/Kg	☼	09/15/22 11:25	09/16/22 18:13	1
Vanadium	15.8		0.59	0.13	mg/Kg	☼	09/15/22 11:25	09/16/22 18:13	1
Zinc	62.4		2.4	0.75	mg/Kg	☼	09/15/22 11:25	09/16/22 18:13	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.076		0.024	0.0055	mg/Kg	☼	09/15/22 10:09	09/15/22 14:48	1

Client Sample ID: SS4 (6-12)
Lab Sample ID: 480-201615-12

Date Collected: 09/13/22 09:15
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 86.3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	*3	6.1	0.61	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
1,1,1-Trichloroethane	ND		6.1	0.44	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
1,1,2,2-Tetrachloroethane	ND	*3	6.1	0.99	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.1	1.4	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
1,1,2-Trichloroethane	ND	*3	6.1	0.80	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
1,1-Dichloroethane	ND		6.1	0.75	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
1,1-Dichloroethene	ND		6.1	0.75	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
1,2,3-Trimethylbenzene	ND	*3	6.1	1.2	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
1,2,4-Trichlorobenzene	ND	*3	6.1	0.37	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
1,2,4-Trimethylbenzene	ND	*3	6.1	1.2	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
1,2-Dibromo-3-Chloropropane	ND	*3	6.1	3.1	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
1,2-Dibromoethane	ND	*3	6.1	0.79	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
1,2-Dichlorobenzene	ND	*3	6.1	0.48	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
1,2-Dichloroethane	ND		6.1	0.31	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
1,2-Dichloropropane	ND		6.1	3.1	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
1,3,5-Trimethylbenzene	ND	*3	6.1	0.39	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
1,3-Dichlorobenzene	ND	*3	6.1	0.31	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
1,4-Dichlorobenzene	ND	*3	6.1	0.86	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
2-Butanone (MEK)	ND		31	2.2	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
2-Hexanone	ND	*3	31	3.1	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
4-Methyl-2-pentanone (MIBK)	ND	*3	31	2.0	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
Acetone	ND		31	5.2	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
Benzene	ND		6.1	0.30	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1

Client Sample ID: SS4 (6-12)
Lab Sample ID: 480-201615-12
Date Collected: 09/13/22 09:15
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 86.3

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		6.1	0.82	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
Bromoform	ND	*3	6.1	3.1	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
Bromomethane	ND		6.1	0.55	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
Carbon disulfide	ND		6.1	3.1	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
Carbon tetrachloride	ND		6.1	0.59	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
Chlorobenzene	ND	*3	6.1	0.81	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
Chloroethane	ND		6.1	1.4	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
Chloroform	**0.50**	**J B**	6.1	0.38	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
Chloromethane	ND		6.1	0.37	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
cis-1,2-Dichloroethene	ND		6.1	0.78	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
cis-1,3-Dichloropropene	ND		6.1	0.88	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
Cyclohexane	ND		6.1	0.86	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
Dibromochloromethane	ND	*3	6.1	0.78	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
Dichlorodifluoromethane	ND		6.1	0.51	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
Ethylbenzene	ND	*3	6.1	0.42	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
Isopropylbenzene	ND	*3	6.1	0.92	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
m,p-Xylene	ND	*3	12	1.0	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
Methyl acetate	ND		31	3.7	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
Methyl tert-butyl ether	ND		6.1	0.60	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
Methylcyclohexane	ND		6.1	0.93	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
Methylene Chloride	ND		6.1	2.8	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
n-Butylbenzene	ND	*3	6.1	0.53	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
N-Propylbenzene	ND	*3	6.1	0.49	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
o-Xylene	ND	*3	6.1	0.80	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
sec-Butylbenzene	ND	*3	6.1	0.53	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
Styrene	ND	*3	6.1	0.31	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
tert-Butylbenzene	ND	*3	6.1	0.64	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
Tetrachloroethene	ND	*3	6.1	0.82	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
Toluene	ND	*3	6.1	0.46	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
trans-1,2-Dichloroethene	ND		6.1	0.63	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
trans-1,3-Dichloropropene	ND	*3	6.1	2.7	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
Trichloroethene	ND		6.1	1.3	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
Trichlorofluoromethane	ND		6.1	0.58	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
Vinyl chloride	ND		6.1	0.75	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1
Xylenes, Total	ND		12	1.0	ug/Kg	☼	09/14/22 14:00	09/19/22 00:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*64 - 126*	*09/14/22 14:00*	*09/19/22 00:42*	*1*
4-Bromofluorobenzene (Surr)	*64*	*S1- *3*	*72 - 126*	*09/14/22 14:00*	*09/19/22 00:42*	*1*
Dibromofluoromethane (Surr)	*121*		*60 - 140*	*09/14/22 14:00*	*09/19/22 00:42*	*1*
Toluene-d8 (Surr)	*165*	*S1+ *3*	*71 - 125*	*09/14/22 14:00*	*09/19/22 00:42*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		970	260	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
2,4,6-Trichlorophenol	ND		970	190	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
2,4-Dichlorophenol	ND		970	100	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
2,4-Dimethylphenol	ND		970	230	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
2,4-Dinitrophenol	ND		9500	4500	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
2,4-Dinitrotoluene	ND		970	200	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5

Client Sample ID: SS4 (6-12)
Lab Sample ID: 480-201615-12
Date Collected: 09/13/22 09:15
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 86.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		970	110	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
2-Chloronaphthalene	ND		970	160	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
2-Chlorophenol	ND		1900	180	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
2-Methylnaphthalene	ND		970	190	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
2-Methylphenol	ND		970	110	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
2-Nitroaniline	ND		1900	140	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
2-Nitrophenol	ND		970	270	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
3,3'-Dichlorobenzidine	ND		1900	1100	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
3-Nitroaniline	ND		1900	270	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
4,6-Dinitro-2-methylphenol	ND		1900	970	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
4-Bromophenyl phenyl ether	ND		970	140	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
4-Chloro-3-methylphenol	ND		970	240	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
4-Chloroaniline	ND		970	240	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
4-Chlorophenyl phenyl ether	ND		970	120	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
4-Methylphenol	ND		1900	110	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
4-Nitroaniline	ND		1900	510	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
4-Nitrophenol	ND		1900	680	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Acenaphthene	ND		970	140	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Acenaphthylene	**160**	**J**	970	130	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Acetophenone	ND		970	130	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Anthracene	ND		970	240	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Atrazine	ND		970	340	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Benzaldehyde	ND		970	770	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Benzo[a]anthracene	**660**	**J**	970	97	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Benzo[a]pyrene	**630**	**J**	970	140	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Benzo[b]fluoranthene	**920**	**J**	970	150	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Benzo[g,h,i]perylene	**360**	**J**	970	100	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Benzo[k]fluoranthene	**370**	**J**	970	130	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Biphenyl	ND		970	140	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
bis (2-chloroisopropyl) ether	ND		970	190	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Bis(2-chloroethoxy)methane	ND		970	210	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Bis(2-chloroethyl)ether	ND		970	130	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Bis(2-ethylhexyl) phthalate	ND		970	330	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Butyl benzyl phthalate	ND		970	160	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Caprolactam	ND		970	290	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Carbazole	ND		970	110	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Chrysene	**690**	**J**	970	220	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Dibenz(a,h)anthracene	ND		970	170	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Dibenzofuran	ND		970	110	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Diethyl phthalate	**730**	**J B**	970	130	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Dimethyl phthalate	ND		970	110	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Di-n-butyl phthalate	ND		970	170	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Di-n-octyl phthalate	ND		970	110	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Fluoranthene	**1200**		970	100	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Fluorene	ND		970	110	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Hexachlorobenzene	ND		970	130	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Hexachlorobutadiene	ND		970	140	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Hexachlorocyclopentadiene	ND		970	130	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Hexachloroethane	ND		970	130	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5

Client Sample ID: SS4 (6-12)
Date Collected: 09/13/22 09:15
Date Received: 09/14/22 10:00

Lab Sample ID: 480-201615-12
Matrix: Solid
Percent Solids: 86.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	450	J	970	120	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Isophorone	ND		970	210	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Naphthalene	ND		970	130	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Nitrobenzene	ND		970	110	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
N-Nitrosodi-n-propylamine	ND		970	170	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
N-Nitrosodiphenylamine	ND		970	790	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Pentachlorophenol	ND		1900	970	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Phenanthrene	360	J	970	140	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Phenol	ND		970	150	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5
Pyrene	960	J	970	110	ug/Kg	☼	09/16/22 15:42	09/21/22 15:43	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*96*		*54 - 120*	*09/16/22 15:42*	*09/21/22 15:43*	*5*
2-Fluorobiphenyl (Surr)	*84*		*60 - 120*	*09/16/22 15:42*	*09/21/22 15:43*	*5*
2-Fluorophenol (Surr)	*75*		*52 - 120*	*09/16/22 15:42*	*09/21/22 15:43*	*5*
Nitrobenzene-d5 (Surr)	*71*		*53 - 120*	*09/16/22 15:42*	*09/21/22 15:43*	*5*
Phenol-d5 (Surr)	*74*		*54 - 120*	*09/16/22 15:42*	*09/21/22 15:43*	*5*
p-Terphenyl-d14 (Surr)	*100*		*79 - 130*	*09/16/22 15:42*	*09/21/22 15:43*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	9800	B	12.1	5.3	mg/Kg	☼	09/15/22 11:25	09/16/22 18:17	1
Antimony	2.3	J	18.1	0.48	mg/Kg	☼	09/15/22 11:25	09/16/22 18:17	1
Arsenic	20.0		2.4	0.48	mg/Kg	☼	09/15/22 11:25	09/16/22 18:17	1
Barium	84.8	B	0.60	0.13	mg/Kg	☼	09/15/22 11:25	09/16/22 18:17	1
Beryllium	0.63	B	0.24	0.034	mg/Kg	☼	09/15/22 11:25	09/16/22 18:17	1
Cadmium	0.23	J B	0.24	0.036	mg/Kg	☼	09/15/22 11:25	09/16/22 18:17	1
Calcium	5060	B	60.4	4.0	mg/Kg	☼	09/15/22 11:25	09/16/22 18:17	1
Chromium	15.5		0.60	0.24	mg/Kg	☼	09/15/22 11:25	09/16/22 18:17	1
Cobalt	9.5		0.60	0.060	mg/Kg	☼	09/15/22 11:25	09/16/22 18:17	1
Copper	68.2		1.2	0.25	mg/Kg	☼	09/15/22 11:25	09/16/22 18:17	1
Iron	27400	B	12.1	4.2	mg/Kg	☼	09/15/22 11:25	09/16/22 18:17	1
Lead	94.9		1.2	0.29	mg/Kg	☼	09/15/22 11:25	09/16/22 18:17	1
Magnesium	2740	B	24.2	1.1	mg/Kg	☼	09/15/22 11:25	09/16/22 18:17	1
Manganese	323	B	0.24	0.039	mg/Kg	☼	09/15/22 11:25	09/16/22 18:17	1
Nickel	22.0		6.0	0.28	mg/Kg	☼	09/15/22 11:25	09/16/22 18:17	1
Potassium	1220		36.2	24.2	mg/Kg	☼	09/15/22 11:25	09/16/22 18:17	1
Selenium	2.1	J	4.8	0.48	mg/Kg	☼	09/15/22 11:25	09/16/22 18:17	1
Silver	ND		0.72	0.24	mg/Kg	☼	09/15/22 11:25	09/16/22 18:17	1
Sodium	69.6	J	169	15.7	mg/Kg	☼	09/15/22 11:25	09/16/22 18:17	1
Thallium	ND		7.2	0.36	mg/Kg	☼	09/15/22 11:25	09/16/22 18:17	1
Vanadium	24.2		0.60	0.13	mg/Kg	☼	09/15/22 11:25	09/16/22 18:17	1
Zinc	73.8		2.4	0.77	mg/Kg	☼	09/15/22 11:25	09/16/22 18:17	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.13		0.022	0.0051	mg/Kg	☼	09/15/22 10:09	09/15/22 14:49	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories - Shallow Soil

Job ID: 480-201615-1

Client Sample ID: SS4 (12-24)
Date Collected: 09/13/22 09:20
Date Received: 09/14/22 10:00

Lab Sample ID: 480-201615-13
Matrix: Solid
Percent Solids: 85.8

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND	*3	6.4	0.64	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
1,1,1-Trichloroethane	ND		6.4	0.47	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
1,1,2,2-Tetrachloroethane	ND	*3	6.4	1.0	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.4	1.5	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
1,1,2-Trichloroethane	ND	*3	6.4	0.84	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
1,1-Dichloroethane	ND		6.4	0.78	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
1,1-Dichloroethene	ND		6.4	0.79	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
1,2,3-Trimethylbenzene	ND	*3	6.4	1.3	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
1,2,4-Trichlorobenzene	ND	*3	6.4	0.39	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
1,2,4-Trimethylbenzene	ND	*3	6.4	1.2	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
1,2-Dibromo-3-Chloropropane	ND	*3	6.4	3.2	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
1,2-Dibromoethane	ND	*3	6.4	0.83	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
1,2-Dichlorobenzene	ND	*3	6.4	0.50	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
1,2-Dichloroethane	ND		6.4	0.32	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
1,2-Dichloropropane	ND		6.4	3.2	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
1,3,5-Trimethylbenzene	ND	*3	6.4	0.41	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
1,3-Dichlorobenzene	ND	*3	6.4	0.33	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
1,4-Dichlorobenzene	ND	*3	6.4	0.90	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
2-Butanone (MEK)	ND		32	2.4	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
2-Hexanone	ND	*3	32	3.2	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
4-Methyl-2-pentanone (MIBK)	ND	*3	32	2.1	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
Acetone	ND		32	5.4	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
Benzene	ND		6.4	0.31	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
Bromodichloromethane	ND		6.4	0.86	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
Bromoform	ND	*3	6.4	3.2	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
Bromomethane	ND		6.4	0.58	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
Carbon disulfide	ND		6.4	3.2	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
Carbon tetrachloride	ND		6.4	0.62	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
Chlorobenzene	ND	*3	6.4	0.85	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
Chloroethane	ND		6.4	1.5	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
Chloroform	**0.59**	**J B**	6.4	0.40	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
Chloromethane	ND		6.4	0.39	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
cis-1,2-Dichloroethene	ND		6.4	0.82	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
cis-1,3-Dichloropropene	ND		6.4	0.93	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
Cyclohexane	ND		6.4	0.90	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
Dibromochloromethane	ND	*3	6.4	0.82	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
Dichlorodifluoromethane	ND		6.4	0.53	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
Ethylbenzene	ND	*3	6.4	0.44	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
Isopropylbenzene	ND	*3	6.4	0.97	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
m,p-Xylene	ND	*3	13	1.1	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
Methyl acetate	ND		32	3.9	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
Methyl tert-butyl ether	ND		6.4	0.63	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
Methylcyclohexane	ND		6.4	0.98	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
Methylene Chloride	ND		6.4	3.0	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
n-Butylbenzene	ND	*3	6.4	0.56	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
N-Propylbenzene	ND	*3	6.4	0.51	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
o-Xylene	ND	*3	6.4	0.84	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
sec-Butylbenzene	ND	*3	6.4	0.56	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
Styrene	ND	*3	6.4	0.32	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1

Client Sample ID: SS4 (12-24)
Lab Sample ID: 480-201615-13
Date Collected: 09/13/22 09:20
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 85.8

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND	*3	6.4	0.67	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
Tetrachloroethene	ND	*3	6.4	0.86	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
Toluene	ND	*3	6.4	0.49	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
trans-1,2-Dichloroethene	ND		6.4	0.66	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
trans-1,3-Dichloropropene	ND	*3	6.4	2.8	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
Trichloroethene	ND		6.4	1.4	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
Trichlorofluoromethane	ND		6.4	0.61	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
Vinyl chloride	ND		6.4	0.78	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1
Xylenes, Total	ND		13	1.1	ug/Kg	☼	09/14/22 14:00	09/19/22 01:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*64 - 126*	*09/14/22 14:00*	*09/19/22 01:05*	*1*
4-Bromofluorobenzene (Surr)	*67*	*S1- *3*	*72 - 126*	*09/14/22 14:00*	*09/19/22 01:05*	*1*
Dibromofluoromethane (Surr)	*115*		*60 - 140*	*09/14/22 14:00*	*09/19/22 01:05*	*1*
Toluene-d8 (Surr)	*155*	*S1+ *3*	*71 - 125*	*09/14/22 14:00*	*09/19/22 01:05*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		970	260	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
2,4,6-Trichlorophenol	ND		970	190	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
2,4-Dichlorophenol	ND		970	100	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
2,4-Dimethylphenol	ND		970	230	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
2,4-Dinitrophenol	ND		9500	4500	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
2,4-Dinitrotoluene	ND		970	200	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
2,6-Dinitrotoluene	ND		970	110	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
2-Chloronaphthalene	ND		970	160	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
2-Chlorophenol	ND		1900	180	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
2-Methylnaphthalene	ND		970	190	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
2-Methylphenol	ND		970	110	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
2-Nitroaniline	ND		1900	140	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
2-Nitrophenol	ND		970	270	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
3,3'-Dichlorobenzidine	ND		1900	1100	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
3-Nitroaniline	ND		1900	270	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
4,6-Dinitro-2-methylphenol	ND		1900	970	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
4-Bromophenyl phenyl ether	ND		970	140	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
4-Chloro-3-methylphenol	ND		970	240	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
4-Chloroaniline	ND		970	240	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
4-Chlorophenyl phenyl ether	ND		970	120	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
4-Methylphenol	ND		1900	110	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
4-Nitroaniline	ND		1900	510	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
4-Nitrophenol	ND		1900	680	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Acenaphthene	ND		970	140	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Acenaphthylene	**190**	**J**	970	130	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Acetophenone	ND		970	130	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Anthracene	ND		970	240	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Atrazine	ND		970	340	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Benzaldehyde	ND		970	770	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Benzo[a]anthracene	**490**	**J**	970	97	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Benzo[a]pyrene	**480**	**J**	970	140	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Benzo[b]fluoranthene	**810**	**J**	970	150	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories - Shallow Soil

Job ID: 480-201615-1

Client Sample ID: SS4 (12-24)
Date Collected: 09/13/22 09:20
Date Received: 09/14/22 10:00

Lab Sample ID: 480-201615-13
Matrix: Solid
Percent Solids: 85.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	**310**	**J**	970	100	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Benzo[k]fluoranthene	**320**	**J**	970	130	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Biphenyl	ND		970	140	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
bis (2-chloroisopropyl) ether	ND		970	190	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Bis(2-chloroethoxy)methane	ND		970	210	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Bis(2-chloroethyl)ether	ND		970	130	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Bis(2-ethylhexyl) phthalate	ND		970	330	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Butyl benzyl phthalate	ND		970	160	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Caprolactam	ND		970	290	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Carbazole	ND		970	110	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Chrysene	**590**	**J**	970	220	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Dibenz(a,h)anthracene	ND		970	170	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Dibenzofuran	ND		970	110	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Diethyl phthalate	**240**	**J B**	970	130	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Dimethyl phthalate	ND		970	110	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Di-n-butyl phthalate	ND		970	170	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Di-n-octyl phthalate	ND		970	110	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Fluoranthene	**830**	**J**	970	100	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Fluorene	ND		970	110	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Hexachlorobenzene	ND		970	130	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Hexachlorobutadiene	ND		970	140	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Hexachlorocyclopentadiene	ND		970	130	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Hexachloroethane	ND		970	130	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Indeno[1,2,3-cd]pyrene	**390**	**J**	970	120	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Isophorone	ND		970	210	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Naphthalene	ND		970	130	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Nitrobenzene	ND		970	110	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
N-Nitrosodi-n-propylamine	ND		970	170	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
N-Nitrosodiphenylamine	ND		970	790	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Pentachlorophenol	ND		1900	970	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Phenanthrene	**370**	**J**	970	140	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Phenol	ND		970	150	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5
Pyrene	**690**	**J**	970	110	ug/Kg	☼	09/16/22 15:42	09/21/22 16:00	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*93*		*54 - 120*	*09/16/22 15:42*	*09/21/22 16:00*	*5*
2-Fluorobiphenyl (Surr)	*82*		*60 - 120*	*09/16/22 15:42*	*09/21/22 16:00*	*5*
2-Fluorophenol (Surr)	*74*		*52 - 120*	*09/16/22 15:42*	*09/21/22 16:00*	*5*
Nitrobenzene-d5 (Surr)	*73*		*53 - 120*	*09/16/22 15:42*	*09/21/22 16:00*	*5*
Phenol-d5 (Surr)	*72*		*54 - 120*	*09/16/22 15:42*	*09/21/22 16:00*	*5*
p-Terphenyl-d14 (Surr)	*98*		*79 - 130*	*09/16/22 15:42*	*09/21/22 16:00*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**9310**	**B**	12.1	5.3	mg/Kg	☼	09/15/22 11:25	09/16/22 18:21	1
Antimony	**2.3**	**J**	18.2	0.49	mg/Kg	☼	09/15/22 11:25	09/16/22 18:21	1
Arsenic	**27.7**		2.4	0.49	mg/Kg	☼	09/15/22 11:25	09/16/22 18:21	1
Barium	**84.0**	**B**	0.61	0.13	mg/Kg	☼	09/15/22 11:25	09/16/22 18:21	1
Beryllium	**0.62**	**B**	0.24	0.034	mg/Kg	☼	09/15/22 11:25	09/16/22 18:21	1
Cadmium	**0.32**	**B**	0.24	0.036	mg/Kg	☼	09/15/22 11:25	09/16/22 18:21	1

Client Sample ID: SS4 (12-24)
Lab Sample ID: 480-201615-13

Date Collected: 09/13/22 09:20
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 85.8

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	9230	B	60.7	4.0	mg/Kg	☼	09/15/22 11:25	09/16/22 18:21	1
Chromium	15.2		0.61	0.24	mg/Kg	☼	09/15/22 11:25	09/16/22 18:21	1
Cobalt	8.9		0.61	0.061	mg/Kg	☼	09/15/22 11:25	09/16/22 18:21	1
Copper	67.9		1.2	0.25	mg/Kg	☼	09/15/22 11:25	09/16/22 18:21	1
Iron	23000	B	12.1	4.2	mg/Kg	☼	09/15/22 11:25	09/16/22 18:21	1
Lead	99.3		1.2	0.29	mg/Kg	☼	09/15/22 11:25	09/16/22 18:21	1
Magnesium	4430	B	24.3	1.1	mg/Kg	☼	09/15/22 11:25	09/16/22 18:21	1
Manganese	472	B	0.24	0.039	mg/Kg	☼	09/15/22 11:25	09/16/22 18:21	1
Nickel	21.1		6.1	0.28	mg/Kg	☼	09/15/22 11:25	09/16/22 18:21	1
Potassium	1600		36.4	24.3	mg/Kg	☼	09/15/22 11:25	09/16/22 18:21	1
Selenium	1.3	J	4.9	0.49	mg/Kg	☼	09/15/22 11:25	09/16/22 18:21	1
Silver	ND		0.73	0.24	mg/Kg	☼	09/15/22 11:25	09/16/22 18:21	1
Sodium	81.5	J	170	15.8	mg/Kg	☼	09/15/22 11:25	09/16/22 18:21	1
Thallium	ND		7.3	0.36	mg/Kg	☼	09/15/22 11:25	09/16/22 18:21	1
Vanadium	19.4		0.61	0.13	mg/Kg	☼	09/15/22 11:25	09/16/22 18:21	1
Zinc	83.4		2.4	0.78	mg/Kg	☼	09/15/22 11:25	09/16/22 18:21	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.067		0.024	0.0054	mg/Kg	☼	09/15/22 10:09	09/15/22 14:53	1

Client Sample ID: FB_091322
Lab Sample ID: 480-201615-14

Date Collected: 09/13/22 08:00
Matrix: Water
Date Received: 09/14/22 10:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/15/22 19:46	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/15/22 19:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/15/22 19:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/15/22 19:46	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/15/22 19:46	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/15/22 19:46	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/15/22 19:46	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			09/15/22 19:46	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/15/22 19:46	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/15/22 19:46	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/15/22 19:46	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/15/22 19:46	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/15/22 19:46	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/15/22 19:46	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/15/22 19:46	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/15/22 19:46	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/15/22 19:46	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/15/22 19:46	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/15/22 19:46	1
2-Hexanone	ND		5.0	1.2	ug/L			09/15/22 19:46	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/15/22 19:46	1
Acetone	ND		10	3.0	ug/L			09/15/22 19:46	1
Benzene	ND		1.0	0.41	ug/L			09/15/22 19:46	1

Client: Integral Consulting Inc
Job ID: 480-201615-1
Project/Site: EF1017 - Refractories - Shallow Soil

Client Sample ID: FB_091322
Lab Sample ID: 480-201615-14
Date Collected: 09/13/22 08:00
Matrix: Water
Date Received: 09/14/22 10:00

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		1.0	0.39	ug/L			09/15/22 19:46	1
Bromoform	ND		1.0	0.26	ug/L			09/15/22 19:46	1
Bromomethane	ND		1.0	0.69	ug/L			09/15/22 19:46	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/15/22 19:46	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/15/22 19:46	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/15/22 19:46	1
Chloroethane	ND		1.0	0.32	ug/L			09/15/22 19:46	1
Chloroform	ND		1.0	0.34	ug/L			09/15/22 19:46	1
Chloromethane	ND		1.0	0.35	ug/L			09/15/22 19:46	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/15/22 19:46	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/15/22 19:46	1
Cyclohexane	ND		1.0	0.18	ug/L			09/15/22 19:46	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/15/22 19:46	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/15/22 19:46	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/15/22 19:46	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/15/22 19:46	1
m,p-Xylene	ND		2.0	0.66	ug/L			09/15/22 19:46	1
Methyl acetate	ND		2.5	1.3	ug/L			09/15/22 19:46	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/15/22 19:46	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/15/22 19:46	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/15/22 19:46	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/15/22 19:46	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/15/22 19:46	1
o-Xylene	ND		1.0	0.76	ug/L			09/15/22 19:46	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/15/22 19:46	1
Styrene	ND		1.0	0.73	ug/L			09/15/22 19:46	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/15/22 19:46	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/15/22 19:46	1
Toluene	ND		1.0	0.51	ug/L			09/15/22 19:46	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/15/22 19:46	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/15/22 19:46	1
Trichloroethene	ND		1.0	0.46	ug/L			09/15/22 19:46	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/15/22 19:46	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/15/22 19:46	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/15/22 19:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*77 - 120*		*09/15/22 19:46*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*09/15/22 19:46*	*1*
Dibromofluoromethane (Surr)	*91*		*75 - 123*		*09/15/22 19:46*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*09/15/22 19:46*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		25	2.4	ug/L		09/15/22 09:21	09/20/22 17:09	5
2,4,6-Trichlorophenol	ND		25	3.1	ug/L		09/15/22 09:21	09/20/22 17:09	5
2,4-Dichlorophenol	ND		25	2.6	ug/L		09/15/22 09:21	09/20/22 17:09	5
2,4-Dimethylphenol	ND		25	2.5	ug/L		09/15/22 09:21	09/20/22 17:09	5
2,4-Dinitrophenol	ND		50	11	ug/L		09/15/22 09:21	09/20/22 17:09	5
2,4-Dinitrotoluene	ND		25	2.2	ug/L		09/15/22 09:21	09/20/22 17:09	5

Client: Integral Consulting Inc
Job ID: 480-201615-1
Project/Site: EF1017 - Refractories - Shallow Soil

Client Sample ID: FB_091322
Lab Sample ID: 480-201615-14
Date Collected: 09/13/22 08:00
Matrix: Water
Date Received: 09/14/22 10:00

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		25	2.0	ug/L		09/15/22 09:21	09/20/22 17:09	5
2-Chloronaphthalene	ND		25	2.3	ug/L		09/15/22 09:21	09/20/22 17:09	5
2-Chlorophenol	ND		25	2.7	ug/L		09/15/22 09:21	09/20/22 17:09	5
2-Methylnaphthalene	ND		25	3.0	ug/L		09/15/22 09:21	09/20/22 17:09	5
2-Methylphenol	ND		25	2.0	ug/L		09/15/22 09:21	09/20/22 17:09	5
2-Nitroaniline	ND		50	2.1	ug/L		09/15/22 09:21	09/20/22 17:09	5
2-Nitrophenol	ND		25	2.4	ug/L		09/15/22 09:21	09/20/22 17:09	5
3,3'-Dichlorobenzidine	ND		25	2.0	ug/L		09/15/22 09:21	09/20/22 17:09	5
3-Nitroaniline	ND		50	2.4	ug/L		09/15/22 09:21	09/20/22 17:09	5
4,6-Dinitro-2-methylphenol	ND		50	11	ug/L		09/15/22 09:21	09/20/22 17:09	5
4-Bromophenyl phenyl ether	ND		25	2.3	ug/L		09/15/22 09:21	09/20/22 17:09	5
4-Chloro-3-methylphenol	ND		25	2.3	ug/L		09/15/22 09:21	09/20/22 17:09	5
4-Chloroaniline	ND		25	3.0	ug/L		09/15/22 09:21	09/20/22 17:09	5
4-Chlorophenyl phenyl ether	ND		25	1.8	ug/L		09/15/22 09:21	09/20/22 17:09	5
4-Methylphenol	ND		50	1.8	ug/L		09/15/22 09:21	09/20/22 17:09	5
4-Nitroaniline	ND		50	1.3	ug/L		09/15/22 09:21	09/20/22 17:09	5
4-Nitrophenol	ND		50	7.6	ug/L		09/15/22 09:21	09/20/22 17:09	5
Acenaphthene	ND		25	2.1	ug/L		09/15/22 09:21	09/20/22 17:09	5
Acenaphthylene	ND		25	1.9	ug/L		09/15/22 09:21	09/20/22 17:09	5
Acetophenone	ND		25	2.7	ug/L		09/15/22 09:21	09/20/22 17:09	5
Anthracene	ND		25	1.4	ug/L		09/15/22 09:21	09/20/22 17:09	5
Atrazine	ND		25	2.3	ug/L		09/15/22 09:21	09/20/22 17:09	5
Benzaldehyde	ND		25	1.3	ug/L		09/15/22 09:21	09/20/22 17:09	5
Benzo[a]anthracene	ND		25	1.8	ug/L		09/15/22 09:21	09/20/22 17:09	5
Benzo[a]pyrene	ND		25	2.4	ug/L		09/15/22 09:21	09/20/22 17:09	5
Benzo[b]fluoranthene	ND		25	1.7	ug/L		09/15/22 09:21	09/20/22 17:09	5
Benzo[g,h,i]perylene	ND		25	1.8	ug/L		09/15/22 09:21	09/20/22 17:09	5
Benzo[k]fluoranthene	ND		25	3.7	ug/L		09/15/22 09:21	09/20/22 17:09	5
Biphenyl	ND		25	3.3	ug/L		09/15/22 09:21	09/20/22 17:09	5
bis (2-chloroisopropyl) ether	ND		25	2.6	ug/L		09/15/22 09:21	09/20/22 17:09	5
Bis(2-chloroethoxy)methane	ND		25	1.8	ug/L		09/15/22 09:21	09/20/22 17:09	5
Bis(2-chloroethyl)ether	ND		25	2.0	ug/L		09/15/22 09:21	09/20/22 17:09	5
Bis(2-ethylhexyl) phthalate	ND		25	11	ug/L		09/15/22 09:21	09/20/22 17:09	5
Butyl benzyl phthalate	ND		25	5.0	ug/L		09/15/22 09:21	09/20/22 17:09	5
Caprolactam	ND		25	11	ug/L		09/15/22 09:21	09/20/22 17:09	5
Carbazole	ND	*+	25	1.5	ug/L		09/15/22 09:21	09/20/22 17:09	5
Chrysene	ND		25	1.7	ug/L		09/15/22 09:21	09/20/22 17:09	5
Dibenz(a,h)anthracene	ND		25	2.1	ug/L		09/15/22 09:21	09/20/22 17:09	5
Dibenzofuran	ND		50	2.6	ug/L		09/15/22 09:21	09/20/22 17:09	5
Diethyl phthalate	**21**	**J B *+**	25	1.1	ug/L		09/15/22 09:21	09/20/22 17:09	5
Dimethyl phthalate	ND		25	1.8	ug/L		09/15/22 09:21	09/20/22 17:09	5
Di-n-butyl phthalate	ND		25	1.6	ug/L		09/15/22 09:21	09/20/22 17:09	5
Di-n-octyl phthalate	ND		25	2.4	ug/L		09/15/22 09:21	09/20/22 17:09	5
Fluoranthene	ND		25	2.0	ug/L		09/15/22 09:21	09/20/22 17:09	5
Fluorene	ND		25	1.8	ug/L		09/15/22 09:21	09/20/22 17:09	5
Hexachlorobenzene	ND		25	2.6	ug/L		09/15/22 09:21	09/20/22 17:09	5
Hexachlorobutadiene	ND		25	3.4	ug/L		09/15/22 09:21	09/20/22 17:09	5
Hexachlorocyclopentadiene	ND		25	3.0	ug/L		09/15/22 09:21	09/20/22 17:09	5
Hexachloroethane	ND		25	3.0	ug/L		09/15/22 09:21	09/20/22 17:09	5

Client: Integral Consulting Inc
Job ID: 480-201615-1
Project/Site: EF1017 - Refractories - Shallow Soil

Client Sample ID: FB_091322
Lab Sample ID: 480-201615-14
Date Collected: 09/13/22 08:00
Matrix: Water
Date Received: 09/14/22 10:00

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	ND		25	2.4	ug/L		09/15/22 09:21	09/20/22 17:09	5
Isophorone	ND		25	2.2	ug/L		09/15/22 09:21	09/20/22 17:09	5
Naphthalene	ND		25	3.8	ug/L		09/15/22 09:21	09/20/22 17:09	5
Nitrobenzene	ND		25	1.5	ug/L		09/15/22 09:21	09/20/22 17:09	5
N-Nitrosodi-n-propylamine	ND		25	2.7	ug/L		09/15/22 09:21	09/20/22 17:09	5
N-Nitrosodiphenylamine	ND		25	2.6	ug/L		09/15/22 09:21	09/20/22 17:09	5
Pentachlorophenol	ND		50	11	ug/L		09/15/22 09:21	09/20/22 17:09	5
Phenanthrene	ND		25	2.2	ug/L		09/15/22 09:21	09/20/22 17:09	5
Phenol	ND		25	2.0	ug/L		09/15/22 09:21	09/20/22 17:09	5
Pyrene	ND		25	1.7	ug/L		09/15/22 09:21	09/20/22 17:09	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*52*		*41 - 120*	*09/15/22 09:21*	*09/20/22 17:09*	*5*
2-Fluorobiphenyl (Surr)	*104*		*48 - 120*	*09/15/22 09:21*	*09/20/22 17:09*	*5*
2-Fluorophenol (Surr)	*60*		*35 - 120*	*09/15/22 09:21*	*09/20/22 17:09*	*5*
Nitrobenzene-d5 (Surr)	*83*		*46 - 120*	*09/15/22 09:21*	*09/20/22 17:09*	*5*
Phenol-d5 (Surr)	*49*		*22 - 120*	*09/15/22 09:21*	*09/20/22 17:09*	*5*
p-Terphenyl-d14 (Surr)	*108*		*60 - 148*	*09/15/22 09:21*	*09/20/22 17:09*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		09/19/22 09:28	09/19/22 16:07	1
Antimony	ND		0.020	0.0068	mg/L		09/19/22 09:28	09/19/22 16:07	1
Arsenic	ND		0.015	0.0056	mg/L		09/19/22 09:28	09/19/22 16:07	1
Barium	ND		0.0020	0.00070	mg/L		09/19/22 09:28	09/19/22 16:07	1
Beryllium	ND		0.0020	0.00030	mg/L		09/19/22 09:28	09/19/22 16:07	1
Cadmium	ND		0.0020	0.00050	mg/L		09/19/22 09:28	09/19/22 16:07	1
Calcium	ND		0.50	0.10	mg/L		09/19/22 09:28	09/19/22 16:07	1
Chromium	**0.015**		0.0040	0.0010	mg/L		09/19/22 09:28	09/19/22 16:07	1
Cobalt	ND		0.0040	0.00063	mg/L		09/19/22 09:28	09/19/22 16:07	1
Copper	ND		0.010	0.0016	mg/L		09/19/22 09:28	09/19/22 16:07	1
Iron	ND		0.050	0.019	mg/L		09/19/22 09:28	09/19/22 16:07	1
Lead	ND		0.010	0.0030	mg/L		09/19/22 09:28	09/19/22 16:07	1
Magnesium	ND		0.20	0.043	mg/L		09/19/22 09:28	09/19/22 16:07	1
Manganese	ND		0.0030	0.00040	mg/L		09/19/22 09:28	09/19/22 16:07	1
Nickel	ND		0.010	0.0013	mg/L		09/19/22 09:28	09/19/22 16:07	1
Potassium	ND		0.50	0.10	mg/L		09/19/22 09:28	09/19/22 16:07	1
Selenium	ND		0.025	0.0087	mg/L		09/19/22 09:28	09/19/22 16:07	1
Silver	ND		0.0060	0.0017	mg/L		09/19/22 09:28	09/19/22 16:07	1
Sodium	ND		1.0	0.32	mg/L		09/19/22 09:28	09/19/22 16:07	1
Thallium	ND		0.020	0.010	mg/L		09/19/22 09:28	09/19/22 16:07	1
Vanadium	ND		0.0050	0.0015	mg/L		09/19/22 09:28	09/19/22 16:07	1
Zinc	**0.0015**	**J**	0.010	0.0015	mg/L		09/19/22 09:28	09/19/22 16:07	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		09/15/22 12:03	09/15/22 15:59	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories - Shallow Soil

Job ID: 480-201615-1

Client Sample ID: TB_091322
Date Collected: 09/13/22 00:00
Date Received: 09/14/22 10:00

Lab Sample ID: 480-201615-15
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/15/22 20:09	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/15/22 20:09	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/15/22 20:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/15/22 20:09	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/15/22 20:09	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/15/22 20:09	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/15/22 20:09	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			09/15/22 20:09	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/15/22 20:09	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/15/22 20:09	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/15/22 20:09	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/15/22 20:09	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/15/22 20:09	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/15/22 20:09	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/15/22 20:09	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/15/22 20:09	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/15/22 20:09	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/15/22 20:09	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/15/22 20:09	1
2-Hexanone	ND		5.0	1.2	ug/L			09/15/22 20:09	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/15/22 20:09	1
Acetone	ND		10	3.0	ug/L			09/15/22 20:09	1
Benzene	ND		1.0	0.41	ug/L			09/15/22 20:09	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/15/22 20:09	1
Bromoform	ND		1.0	0.26	ug/L			09/15/22 20:09	1
Bromomethane	ND		1.0	0.69	ug/L			09/15/22 20:09	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/15/22 20:09	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/15/22 20:09	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/15/22 20:09	1
Chloroethane	ND		1.0	0.32	ug/L			09/15/22 20:09	1
Chloroform	ND		1.0	0.34	ug/L			09/15/22 20:09	1
Chloromethane	ND		1.0	0.35	ug/L			09/15/22 20:09	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/15/22 20:09	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/15/22 20:09	1
Cyclohexane	ND		1.0	0.18	ug/L			09/15/22 20:09	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/15/22 20:09	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/15/22 20:09	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/15/22 20:09	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/15/22 20:09	1
m,p-Xylene	ND		2.0	0.66	ug/L			09/15/22 20:09	1
Methyl acetate	ND		2.5	1.3	ug/L			09/15/22 20:09	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/15/22 20:09	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/15/22 20:09	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/15/22 20:09	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/15/22 20:09	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/15/22 20:09	1
o-Xylene	ND		1.0	0.76	ug/L			09/15/22 20:09	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/15/22 20:09	1
Styrene	ND		1.0	0.73	ug/L			09/15/22 20:09	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories - Shallow Soil

Job ID: 480-201615-1

Client Sample ID: TB_091322
Date Collected: 09/13/22 00:00
Date Received: 09/14/22 10:00

Lab Sample ID: 480-201615-15
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/15/22 20:09	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/15/22 20:09	1
Toluene	ND		1.0	0.51	ug/L			09/15/22 20:09	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/15/22 20:09	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/15/22 20:09	1
Trichloroethene	ND		1.0	0.46	ug/L			09/15/22 20:09	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/15/22 20:09	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/15/22 20:09	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/15/22 20:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*77 - 120*		*09/15/22 20:09*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*09/15/22 20:09*	*1*
Dibromofluoromethane (Surr)	*92*		*75 - 123*		*09/15/22 20:09*	*1*
Toluene-d8 (Surr)	*88*		*80 - 120*		*09/15/22 20:09*	*1*

Surrogate Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories - Shallow Soil

Job ID: 480-201615-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(64-126)	(72-126)	(60-140)	(71-125)
480-201615-1	SS2 (0-2)	108	78	103	126 S1+
480-201615-1 MS	SS2 (0-2)	92	77	96	123
480-201615-1 MSD	SS2 (0-2)	91	79	98	121
480-201615-2	SS2 (0-6)	101	81	98	118
480-201615-3	SS2 (6-12)	106	89	99	108
480-201615-3 MS	SS2 (6-12)	91	92	95	112
480-201615-3 MSD	SS2 (6-12)	95	88	101	112
480-201615-4	SS2 (12-24)	107	94	98	106
480-201615-5	SS3 (0-2)	109	74	105	133 S1+
480-201615-6	SS3 (0-6)	114	70 S1- *3	110	138 S1+ *3
480-201615-7	SS3 (6-12)	109	66 S1- *3	104	144 S1+ *3
480-201615-8	SS3 (12-24)	127 S1+	63 S1- *3	119	152 S1+ *3
480-201615-9	FDUP2_091322	129 S1+	59 S1- *3	127	155 S1+ *3
480-201615-10	SS4 (0-2)	108	73	104	133 S1+
480-201615-11	SS4 (0-6)	112	69 S1- *3	110	140 S1+ *3
480-201615-12	SS4 (6-12)	120	64 S1- *3	121	165 S1+ *3
480-201615-13	SS4 (12-24)	115	67 S1- *3	115	155 S1+ *3
LCS 480-641451/1-A	Lab Control Sample	103	95	100	108
LCS 480-641652/1-A	Lab Control Sample	100	94	96	107
LCS 480-641838/1-A	Lab Control Sample	102	94	99	108
MB 480-641451/2-A	Method Blank	101	98	97	106
MB 480-641652/2-A	Method Blank	103	98	97	107
MB 480-641838/2-A	Method Blank	105	94	100	104

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-201615-14	FB_091322	92	97	91	90
480-201615-15	TB_091322	90	102	92	88
LCS 480-641512/6	Lab Control Sample	85	103	82	88
MB 480-641512/8	Method Blank	91	101	90	91

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Surrogate Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories - Shallow Soil

Job ID: 480-201615-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(54-120)	(60-120)	(52-120)	(53-120)	(54-120)	(79-130)
480-201615-1	SS2 (0-2)	137 S1+	101	84	74	103	129
480-201615-1 MS	SS2 (0-2)	146 S1+	101	74	77	103	128
480-201615-1 MSD	SS2 (0-2)	120	70	44 S1-	44 S1-	70	97
480-201615-2	SS2 (0-6)	90	76	56	52 S1-	61	103
480-201615-3	SS2 (6-12)	88	95	77	78	76	102
480-201615-3 MS	SS2 (6-12)	105	73	52	57	63	109
480-201615-3 MSD	SS2 (6-12)	100	95	72	75	84	106
480-201615-4	SS2 (12-24)	107	91	78	79	82	108
480-201615-5	SS3 (0-2)	96	81	76	73	75	97
480-201615-6	SS3 (0-6)	92	77	69	67	69	93
480-201615-7	SS3 (6-12)	92	84	70	71	74	100
480-201615-8	SS3 (12-24)	86	89	76	76	81	105
480-201615-9	FDUP2_091322	93	94	78	80	88	111
480-201615-10	SS4 (0-2)	94	87	77	77	77	98
480-201615-11	SS4 (0-6)	96	83	79	82	79	105
480-201615-12	SS4 (6-12)	96	84	75	71	74	100
480-201615-13	SS4 (12-24)	93	82	74	73	72	98
LCS 480-641786/2-A	Lab Control Sample	90	81	75	74	79	89
LCS 480-642833/2-A	Lab Control Sample	93	84	69	77	77	98
MB 480-641786/1-A	Method Blank	86	81	80	91	82	99
MB 480-642833/1-A	Method Blank	104	105	97	99	97	112

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(41-120)	(48-120)	(35-120)	(46-120)	(22-120)	(60-148)
480-201615-14	FB_091322	52	104	60	83	49	108
LCS 480-641523/2-A	Lab Control Sample	90	83	55	69	47	95
MB 480-641523/1-A	Method Blank	63	88	53	73	43	100

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories - Shallow Soil

Job ID: 480-201615-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-641451/2-A
Matrix: Solid
Analysis Batch: 641452

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641451

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.50	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,2,3-Trimethylbenzene	ND		5.0	1.0	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
2-Hexanone	ND		25	2.5	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Acetone	ND		25	4.2	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Benzene	ND		5.0	0.25	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Bromoform	ND		5.0	2.5	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Bromomethane	ND		5.0	0.45	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Chloroethane	ND		5.0	1.1	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Chloroform	0.465	J	5.0	0.31	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Chloromethane	ND		5.0	0.30	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Cyclohexane	ND		5.0	0.70	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
m,p-Xylene	ND		10	0.84	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Methyl acetate	ND		25	3.0	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
o-Xylene	ND		5.0	0.65	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		09/14/22 17:15	09/14/22 20:46	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-641451/2-A
Matrix: Solid
Analysis Batch: 641452

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641451

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		5.0	0.25	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Toluene	ND		5.0	0.38	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Trichloroethene	ND		5.0	1.1	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		09/14/22 17:15	09/14/22 20:46	1
Xylenes, Total	ND		10	0.84	ug/Kg		09/14/22 17:15	09/14/22 20:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*64 - 126*	*09/14/22 17:15*	*09/14/22 20:46*	*1*
4-Bromofluorobenzene (Surr)	*98*		*72 - 126*	*09/14/22 17:15*	*09/14/22 20:46*	*1*
Dibromofluoromethane (Surr)	*97*		*60 - 140*	*09/14/22 17:15*	*09/14/22 20:46*	*1*
Toluene-d8 (Surr)	*106*		*71 - 125*	*09/14/22 17:15*	*09/14/22 20:46*	*1*

Lab Sample ID: LCS 480-641451/1-A
Matrix: Solid
Analysis Batch: 641452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641451

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	48.0		ug/Kg		96	74 - 127
1,1,1-Trichloroethane	50.0	45.1		ug/Kg		90	77 - 121
1,1,2,2-Tetrachloroethane	50.0	51.2		ug/Kg		102	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	44.2		ug/Kg		88	60 - 140
1,1,2-Trichloroethane	50.0	49.8		ug/Kg		100	78 - 122
1,1-Dichloroethane	50.0	47.6		ug/Kg		95	73 - 126
1,1-Dichloroethene	50.0	45.6		ug/Kg		91	59 - 125
1,2,4-Trichlorobenzene	50.0	48.7		ug/Kg		97	64 - 120
1,2,4-Trimethylbenzene	50.0	51.5		ug/Kg		103	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	52.0		ug/Kg		104	63 - 124
1,2-Dibromoethane	50.0	47.9		ug/Kg		96	78 - 120
1,2-Dichlorobenzene	50.0	49.7		ug/Kg		99	75 - 120
1,2-Dichloroethane	50.0	47.0		ug/Kg		94	77 - 122
1,2-Dichloropropane	50.0	48.9		ug/Kg		98	75 - 124
1,3,5-Trimethylbenzene	50.0	51.2		ug/Kg		102	74 - 120
1,3-Dichlorobenzene	50.0	50.4		ug/Kg		101	74 - 120
1,4-Dichlorobenzene	50.0	49.6		ug/Kg		99	73 - 120
2-Butanone (MEK)	250	252		ug/Kg		101	70 - 134
2-Hexanone	250	256		ug/Kg		102	59 - 130
4-Methyl-2-pentanone (MIBK)	250	253		ug/Kg		101	65 - 133
Acetone	250	244		ug/Kg		97	61 - 137
Benzene	50.0	47.3		ug/Kg		95	79 - 127
Bromodichloromethane	50.0	48.5		ug/Kg		97	80 - 122
Bromoform	50.0	49.2		ug/Kg		98	68 - 126
Bromomethane	50.0	52.1		ug/Kg		104	37 - 149
Carbon disulfide	50.0	45.0		ug/Kg		90	64 - 131

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-641451/1-A
Matrix: Solid
Analysis Batch: 641452

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641451

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon tetrachloride	50.0	45.4		ug/Kg		91	75 - 135
Chlorobenzene	50.0	48.4		ug/Kg		97	76 - 124
Chloroethane	50.0	52.0		ug/Kg		104	69 - 135
Chloroform	50.0	45.0		ug/Kg		90	80 - 120
Chloromethane	50.0	52.2		ug/Kg		104	63 - 127
cis-1,2-Dichloroethene	50.0	46.5		ug/Kg		93	81 - 120
cis-1,3-Dichloropropene	50.0	49.0		ug/Kg		98	80 - 120
Cyclohexane	50.0	49.2		ug/Kg		98	65 - 120
Dibromochloromethane	50.0	50.5		ug/Kg		101	76 - 125
Dichlorodifluoromethane	50.0	48.9		ug/Kg		98	57 - 142
Ethylbenzene	50.0	47.6		ug/Kg		95	80 - 120
Isopropylbenzene	50.0	52.0		ug/Kg		104	72 - 120
m,p-Xylene	50.0	47.8		ug/Kg		96	70 - 130
Methyl acetate	100	94.3		ug/Kg		94	55 - 136
Methyl tert-butyl ether	50.0	46.8		ug/Kg		94	63 - 125
Methylcyclohexane	50.0	46.3		ug/Kg		93	60 - 140
Methylene Chloride	50.0	49.2		ug/Kg		98	61 - 127
n-Butylbenzene	50.0	50.9		ug/Kg		102	70 - 120
N-Propylbenzene	50.0	51.3		ug/Kg		103	70 - 130
o-Xylene	50.0	46.9		ug/Kg		94	70 - 130
sec-Butylbenzene	50.0	51.4		ug/Kg		103	74 - 120
Styrene	50.0	47.4		ug/Kg		95	80 - 120
tert-Butylbenzene	50.0	52.2		ug/Kg		104	73 - 120
Tetrachloroethene	50.0	46.8		ug/Kg		94	74 - 122
Toluene	50.0	48.2		ug/Kg		96	74 - 128
trans-1,2-Dichloroethene	50.0	45.5		ug/Kg		91	78 - 126
trans-1,3-Dichloropropene	50.0	50.0		ug/Kg		100	73 - 123
Trichloroethene	50.0	46.5		ug/Kg		93	77 - 129
Trichlorofluoromethane	50.0	48.9		ug/Kg		98	65 - 146
Vinyl chloride	50.0	50.9		ug/Kg		102	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*64 - 126*
4-Bromofluorobenzene (Surr)	*95*		*72 - 126*
Dibromofluoromethane (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*108*		*71 - 125*

Lab Sample ID: MB 480-641512/8
Matrix: Water
Analysis Batch: 641512

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/15/22 14:05	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/15/22 14:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/15/22 14:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/15/22 14:05	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/15/22 14:05	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/15/22 14:05	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-641512/8
Matrix: Water
Analysis Batch: 641512

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/15/22 14:05	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			09/15/22 14:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/15/22 14:05	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/15/22 14:05	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/15/22 14:05	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/15/22 14:05	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/15/22 14:05	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/15/22 14:05	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/15/22 14:05	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/15/22 14:05	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/15/22 14:05	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/15/22 14:05	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/15/22 14:05	1
2-Hexanone	ND		5.0	1.2	ug/L			09/15/22 14:05	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/15/22 14:05	1
Acetone	ND		10	3.0	ug/L			09/15/22 14:05	1
Benzene	ND		1.0	0.41	ug/L			09/15/22 14:05	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/15/22 14:05	1
Bromoform	ND		1.0	0.26	ug/L			09/15/22 14:05	1
Bromomethane	ND		1.0	0.69	ug/L			09/15/22 14:05	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/15/22 14:05	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/15/22 14:05	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/15/22 14:05	1
Chloroethane	ND		1.0	0.32	ug/L			09/15/22 14:05	1
Chloroform	ND		1.0	0.34	ug/L			09/15/22 14:05	1
Chloromethane	ND		1.0	0.35	ug/L			09/15/22 14:05	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/15/22 14:05	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/15/22 14:05	1
Cyclohexane	ND		1.0	0.18	ug/L			09/15/22 14:05	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/15/22 14:05	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/15/22 14:05	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/15/22 14:05	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/15/22 14:05	1
m,p-Xylene	ND		2.0	0.66	ug/L			09/15/22 14:05	1
Methyl acetate	ND		2.5	1.3	ug/L			09/15/22 14:05	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/15/22 14:05	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/15/22 14:05	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/15/22 14:05	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/15/22 14:05	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/15/22 14:05	1
o-Xylene	ND		1.0	0.76	ug/L			09/15/22 14:05	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/15/22 14:05	1
Styrene	ND		1.0	0.73	ug/L			09/15/22 14:05	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/15/22 14:05	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/15/22 14:05	1
Toluene	ND		1.0	0.51	ug/L			09/15/22 14:05	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/15/22 14:05	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/15/22 14:05	1
Trichloroethene	ND		1.0	0.46	ug/L			09/15/22 14:05	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-641512/8
Matrix: Water
Analysis Batch: 641512

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/15/22 14:05	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/15/22 14:05	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/15/22 14:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*77 - 120*		*09/15/22 14:05*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*09/15/22 14:05*	*1*
Dibromofluoromethane (Surr)	*90*		*75 - 123*		*09/15/22 14:05*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*09/15/22 14:05*	*1*

Lab Sample ID: LCS 480-641512/6
Matrix: Water
Analysis Batch: 641512

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	25.0	27.5		ug/L		110	80 - 120
1,1,1-Trichloroethane	25.0	22.5		ug/L		90	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.4		ug/L		94	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	22.5		ug/L		90	61 - 148
1,1,2-Trichloroethane	25.0	24.3		ug/L		97	76 - 122
1,1-Dichloroethane	25.0	23.2		ug/L		93	77 - 120
1,1-Dichloroethene	25.0	21.6		ug/L		86	66 - 127
1,2,4-Trichlorobenzene	25.0	23.3		ug/L		93	79 - 122
1,2,4-Trimethylbenzene	25.0	24.9		ug/L		99	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	25.5		ug/L		102	56 - 134
1,2-Dibromoethane	25.0	24.9		ug/L		100	77 - 120
1,2-Dichlorobenzene	25.0	23.6		ug/L		95	80 - 124
1,2-Dichloroethane	25.0	22.9		ug/L		91	75 - 120
1,2-Dichloropropane	25.0	24.5		ug/L		98	76 - 120
1,3,5-Trimethylbenzene	25.0	23.4		ug/L		94	77 - 121
1,3-Dichlorobenzene	25.0	23.5		ug/L		94	77 - 120
1,4-Dichlorobenzene	25.0	23.7		ug/L		95	80 - 120
2-Butanone (MEK)	125	133		ug/L		106	57 - 140
2-Hexanone	125	138		ug/L		110	65 - 127
4-Methyl-2-pentanone (MIBK)	125	129		ug/L		103	71 - 125
Acetone	125	147		ug/L		117	56 - 142
Benzene	25.0	23.0		ug/L		92	71 - 124
Bromodichloromethane	25.0	24.2		ug/L		97	80 - 122
Bromoform	25.0	32.8		ug/L		131	61 - 132
Bromomethane	25.0	21.9		ug/L		88	55 - 144
Carbon disulfide	25.0	22.6		ug/L		90	59 - 134
Carbon tetrachloride	25.0	25.8		ug/L		103	72 - 134
Chlorobenzene	25.0	22.3		ug/L		89	80 - 120
Chloroethane	25.0	22.1		ug/L		89	69 - 136
Chloroform	25.0	22.0		ug/L		88	73 - 127
Chloromethane	25.0	23.5		ug/L		94	68 - 124
cis-1,2-Dichloroethene	25.0	22.0		ug/L		88	74 - 124
cis-1,3-Dichloropropene	25.0	25.8		ug/L		103	74 - 124

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-641512/6
Matrix: Water
Analysis Batch: 641512

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyclohexane	25.0	23.6		ug/L		94	59 - 135
Dibromochloromethane	25.0	28.6		ug/L		114	75 - 125
Dichlorodifluoromethane	25.0	19.8		ug/L		79	59 - 135
Ethylbenzene	25.0	23.3		ug/L		93	77 - 123
Isopropylbenzene	25.0	23.7		ug/L		95	77 - 122
m,p-Xylene	25.0	24.5		ug/L		98	76 - 122
Methyl acetate	50.0	48.2		ug/L		96	74 - 133
Methyl tert-butyl ether	25.0	22.3		ug/L		89	77 - 120
Methylcyclohexane	25.0	22.9		ug/L		92	68 - 134
Methylene Chloride	25.0	23.5		ug/L		94	75 - 124
n-Butylbenzene	25.0	23.1		ug/L		92	71 - 128
N-Propylbenzene	25.0	23.5		ug/L		94	75 - 127
o-Xylene	25.0	23.8		ug/L		95	76 - 122
sec-Butylbenzene	25.0	23.9		ug/L		96	74 - 127
Styrene	25.0	25.6		ug/L		102	80 - 120
tert-Butylbenzene	25.0	24.3		ug/L		97	75 - 123
Tetrachloroethene	25.0	22.5		ug/L		90	74 - 122
Toluene	25.0	22.8		ug/L		91	80 - 122
trans-1,2-Dichloroethene	25.0	22.1		ug/L		89	73 - 127
trans-1,3-Dichloropropene	25.0	26.3		ug/L		105	80 - 120
Trichloroethene	25.0	21.8		ug/L		87	74 - 123
Trichlorofluoromethane	25.0	22.0		ug/L		88	62 - 150
Vinyl chloride	25.0	23.0		ug/L		92	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*77 - 120*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*
Dibromofluoromethane (Surr)	*82*		*75 - 123*
Toluene-d8 (Surr)	*88*		*80 - 120*

Lab Sample ID: MB 480-641652/2-A
Matrix: Solid
Analysis Batch: 641653

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641652

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.50	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,2,3-Trimethylbenzene	ND		5.0	1.0	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		09/15/22 17:41	09/15/22 21:15	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-641652/2-A
Matrix: Solid
Analysis Batch: 641653

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641652

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
2-Hexanone	ND		25	2.5	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Acetone	ND		25	4.2	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Benzene	ND		5.0	0.25	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Bromoform	ND		5.0	2.5	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Bromomethane	ND		5.0	0.45	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Chloroethane	ND		5.0	1.1	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Chloroform	0.559	J	5.0	0.31	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Chloromethane	ND		5.0	0.30	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Cyclohexane	ND		5.0	0.70	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
m,p-Xylene	ND		10	0.84	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Methyl acetate	ND		25	3.0	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
o-Xylene	ND		5.0	0.65	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Styrene	ND		5.0	0.25	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Toluene	ND		5.0	0.38	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Trichloroethene	ND		5.0	1.1	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		09/15/22 17:41	09/15/22 21:15	1
Xylenes, Total	ND		10	0.84	ug/Kg		09/15/22 17:41	09/15/22 21:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*64 - 126*	*09/15/22 17:41*	*09/15/22 21:15*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-641652/2-A
Matrix: Solid
Analysis Batch: 641653

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641652

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*98*		*72 - 126*	*09/15/22 17:41*	*09/15/22 21:15*	*1*
Dibromofluoromethane (Surr)	*97*		*60 - 140*	*09/15/22 17:41*	*09/15/22 21:15*	*1*
Toluene-d8 (Surr)	*107*		*71 - 125*	*09/15/22 17:41*	*09/15/22 21:15*	*1*

Lab Sample ID: LCS 480-641652/1-A
Matrix: Solid
Analysis Batch: 641653

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641652

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	44.9		ug/Kg		90	74 - 127
1,1,1-Trichloroethane	50.0	42.8		ug/Kg		86	77 - 121
1,1,2,2-Tetrachloroethane	50.0	47.4		ug/Kg		95	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	40.4		ug/Kg		81	60 - 140
1,1,2-Trichloroethane	50.0	46.0		ug/Kg		92	78 - 122
1,1-Dichloroethane	50.0	45.4		ug/Kg		91	73 - 126
1,1-Dichloroethene	50.0	42.6		ug/Kg		85	59 - 125
1,2,4-Trichlorobenzene	50.0	45.3		ug/Kg		91	64 - 120
1,2,4-Trimethylbenzene	50.0	49.7		ug/Kg		99	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	45.8		ug/Kg		92	63 - 124
1,2-Dibromoethane	50.0	44.2		ug/Kg		88	78 - 120
1,2-Dichlorobenzene	50.0	46.0		ug/Kg		92	75 - 120
1,2-Dichloroethane	50.0	42.8		ug/Kg		86	77 - 122
1,2-Dichloropropane	50.0	45.3		ug/Kg		91	75 - 124
1,3,5-Trimethylbenzene	50.0	49.4		ug/Kg		99	74 - 120
1,3-Dichlorobenzene	50.0	47.1		ug/Kg		94	74 - 120
1,4-Dichlorobenzene	50.0	46.5		ug/Kg		93	73 - 120
2-Butanone (MEK)	250	229		ug/Kg		92	70 - 134
2-Hexanone	250	240		ug/Kg		96	59 - 130
4-Methyl-2-pentanone (MIBK)	250	238		ug/Kg		95	65 - 133
Acetone	250	226		ug/Kg		90	61 - 137
Benzene	50.0	44.3		ug/Kg		89	79 - 127
Bromodichloromethane	50.0	44.1		ug/Kg		88	80 - 122
Bromoform	50.0	43.7		ug/Kg		87	68 - 126
Bromomethane	50.0	49.8		ug/Kg		100	37 - 149
Carbon disulfide	50.0	42.2		ug/Kg		84	64 - 131
Carbon tetrachloride	50.0	42.8		ug/Kg		86	75 - 135
Chlorobenzene	50.0	45.5		ug/Kg		91	76 - 124
Chloroethane	50.0	51.2		ug/Kg		102	69 - 135
Chloroform	50.0	42.7		ug/Kg		85	80 - 120
Chloromethane	50.0	52.8		ug/Kg		106	63 - 127
cis-1,2-Dichloroethene	50.0	43.3		ug/Kg		87	81 - 120
cis-1,3-Dichloropropene	50.0	44.2		ug/Kg		88	80 - 120
Cyclohexane	50.0	47.8		ug/Kg		96	65 - 120
Dibromochloromethane	50.0	46.7		ug/Kg		93	76 - 125
Dichlorodifluoromethane	50.0	48.7		ug/Kg		97	57 - 142
Ethylbenzene	50.0	46.5		ug/Kg		93	80 - 120
Isopropylbenzene	50.0	50.1		ug/Kg		100	72 - 120
m,p-Xylene	50.0	45.4		ug/Kg		91	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-641652/1-A
Matrix: Solid
Analysis Batch: 641653

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641652

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methyl acetate	100	87.8		ug/Kg		88	55 - 136
Methyl tert-butyl ether	50.0	42.5		ug/Kg		85	63 - 125
Methylcyclohexane	50.0	44.5		ug/Kg		89	60 - 140
Methylene Chloride	50.0	45.4		ug/Kg		91	61 - 127
n-Butylbenzene	50.0	49.9		ug/Kg		100	70 - 120
N-Propylbenzene	50.0	49.8		ug/Kg		100	70 - 130
o-Xylene	50.0	45.3		ug/Kg		91	70 - 130
sec-Butylbenzene	50.0	50.2		ug/Kg		100	74 - 120
Styrene	50.0	44.8		ug/Kg		90	80 - 120
tert-Butylbenzene	50.0	50.0		ug/Kg		100	73 - 120
Tetrachloroethene	50.0	45.1		ug/Kg		90	74 - 122
Toluene	50.0	46.3		ug/Kg		93	74 - 128
trans-1,2-Dichloroethene	50.0	43.1		ug/Kg		86	78 - 126
trans-1,3-Dichloropropene	50.0	45.8		ug/Kg		92	73 - 123
Trichloroethene	50.0	43.5		ug/Kg		87	77 - 129
Trichlorofluoromethane	50.0	49.1		ug/Kg		98	65 - 146
Vinyl chloride	50.0	50.9		ug/Kg		102	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*64 - 126*
4-Bromofluorobenzene (Surr)	*94*		*72 - 126*
Dibromofluoromethane (Surr)	*96*		*60 - 140*
Toluene-d8 (Surr)	*107*		*71 - 125*

Lab Sample ID: 480-201615-1 MS
Matrix: Solid
Analysis Batch: 641653

Client Sample ID: SS2 (0-2)
Prep Type: Total/NA
Prep Batch: 641652

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	ND		64.0	60.8		ug/Kg	☼	95	74 - 127
1,1,1-Trichloroethane	ND		64.0	62.2		ug/Kg	☼	97	77 - 121
1,1,2,2-Tetrachloroethane	ND	*3	64.0	70.5	*3	ug/Kg	☼	110	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		64.0	56.9		ug/Kg	☼	89	60 - 140
1,1,2-Trichloroethane	ND		64.0	59.1		ug/Kg	☼	92	78 - 122
1,1-Dichloroethane	ND		64.0	65.1		ug/Kg	☼	102	73 - 126
1,1-Dichloroethene	ND		64.0	59.6		ug/Kg	☼	93	59 - 125
1,2,4-Trichlorobenzene	ND	F1 *3	64.0	20.8	*3 F1	ug/Kg	☼	33	64 - 120
1,2,4-Trimethylbenzene	ND	*3	64.0	75.1	*3	ug/Kg	☼	117	74 - 120
1,2-Dibromo-3-Chloropropane	ND	*3	64.0	49.2	*3	ug/Kg	☼	77	63 - 124
1,2-Dibromoethane	ND	F1	64.0	44.7	F1	ug/Kg	☼	70	78 - 120
1,2-Dichlorobenzene	ND	F1 *3	64.0	49.5	*3	ug/Kg	☼	77	75 - 120
1,2-Dichloroethane	ND	F2 F1	64.0	48.9	F1	ug/Kg	☼	76	77 - 122
1,2-Dichloropropane	ND		64.0	57.3		ug/Kg	☼	89	75 - 124
1,3,5-Trimethylbenzene	ND	F1 *3	64.0	78.0	*3 F1	ug/Kg	☼	122	74 - 120
1,3-Dichlorobenzene	ND	*3	64.0	52.2	*3	ug/Kg	☼	82	74 - 120
1,4-Dichlorobenzene	ND	F1 *3	64.0	49.2	*3	ug/Kg	☼	77	73 - 120
2-Butanone (MEK)	ND	F1	320	168	F1	ug/Kg	☼	53	70 - 134
2-Hexanone	ND	F1	320	179	F1	ug/Kg	☼	56	59 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-201615-1 MS
Matrix: Solid
Analysis Batch: 641653

Client Sample ID: SS2 (0-2)
Prep Type: Total/NA
Prep Batch: 641652

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
4-Methyl-2-pentanone (MIBK)	ND		320	242		ug/Kg	☼	76	65 - 133
Acetone	ND	F1	320	175	F1	ug/Kg	☼	55	61 - 137
Benzene	ND		64.0	59.0		ug/Kg	☼	92	79 - 127
Bromodichloromethane	ND	F2 F1	64.0	46.8	F1	ug/Kg	☼	73	80 - 122
Bromoform	ND	F1	64.0	35.6	F1	ug/Kg	☼	56	68 - 126
Bromomethane	ND		64.0	44.6		ug/Kg	☼	70	37 - 149
Carbon disulfide	ND		64.0	47.8		ug/Kg	☼	75	64 - 131
Carbon tetrachloride	ND		64.0	53.2		ug/Kg	☼	83	75 - 135
Chlorobenzene	ND		64.0	54.7		ug/Kg	☼	85	76 - 124
Chloroethane	ND		64.0	72.3		ug/Kg	☼	113	69 - 135
Chloroform	0.45	J	64.0	59.4		ug/Kg	☼	92	80 - 120
Chloromethane	ND		64.0	77.7		ug/Kg	☼	121	63 - 127
cis-1,2-Dichloroethene	ND	F1	64.0	52.9		ug/Kg	☼	83	80 - 120
cis-1,3-Dichloropropene	ND	F1	64.0	33.5	F1	ug/Kg	☼	52	80 - 120
Cyclohexane	ND		64.0	58.3		ug/Kg	☼	91	65 - 120
Dibromochloromethane	ND	F1	64.0	48.7		ug/Kg	☼	76	76 - 125
Dichlorodifluoromethane	ND		64.0	72.6		ug/Kg	☼	113	57 - 142
Ethylbenzene	ND		64.0	62.2		ug/Kg	☼	97	80 - 120
Isopropylbenzene	ND	F1 *3	64.0	91.9	*3 F1	ug/Kg	☼	144	72 - 120
m,p-Xylene	ND		64.0	58.8		ug/Kg	☼	92	70 - 130
Methyl acetate	ND	F2 F1	128	63.8	F1	ug/Kg	☼	50	55 - 136
Methyl tert-butyl ether	ND		64.0	52.6		ug/Kg	☼	82	63 - 125
Methylcyclohexane	ND		64.0	39.5		ug/Kg	☼	62	60 - 140
Methylene Chloride	ND		64.0	60.9		ug/Kg	☼	95	61 - 127
n-Butylbenzene	ND	F1 *3	64.0	44.5	*3 F1	ug/Kg	☼	69	70 - 120
N-Propylbenzene	ND	*3	64.0	77.1	*3	ug/Kg	☼	120	70 - 130
o-Xylene	ND		64.0	58.3		ug/Kg	☼	91	70 - 130
sec-Butylbenzene	ND	*3	64.0	63.1	*3	ug/Kg	☼	99	74 - 120
Styrene	ND	F1	64.0	46.0	F1	ug/Kg	☼	72	80 - 120
tert-Butylbenzene	ND	*3	64.0	73.6	*3	ug/Kg	☼	115	73 - 120
Tetrachloroethene	ND		64.0	57.4		ug/Kg	☼	90	74 - 122
Toluene	ND		64.0	67.0		ug/Kg	☼	105	74 - 128
trans-1,2-Dichloroethene	ND		64.0	52.1		ug/Kg	☼	81	78 - 126
trans-1,3-Dichloropropene	ND	F1	64.0	40.7	F1	ug/Kg	☼	64	73 - 123
Trichloroethene	ND	F1	64.0	50.2		ug/Kg	☼	78	77 - 129
Trichlorofluoromethane	ND		64.0	71.1		ug/Kg	☼	111	65 - 146
Vinyl chloride	ND		64.0	74.6		ug/Kg	☼	116	61 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*64 - 126*
4-Bromofluorobenzene (Surr)	*77*		*72 - 126*
Dibromofluoromethane (Surr)	*96*		*60 - 140*
Toluene-d8 (Surr)	*123*		*71 - 125*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-201615-1 MSD
Matrix: Solid
Analysis Batch: 641653

Client Sample ID: SS2 (0-2)
Prep Type: Total/NA
Prep Batch: 641652

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		87.1	76.7		ug/Kg	☼	88	74 - 127	23	30
1,1,1-Trichloroethane	ND		87.1	77.0		ug/Kg	☼	88	77 - 121	21	30
1,1,2,2-Tetrachloroethane	ND	*3	87.1	89.3	*3	ug/Kg	☼	103	80 - 120	23	30
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		87.1	60.5		ug/Kg	☼	70	60 - 140	6	30
1,1,2-Trichloroethane	ND		87.1	77.2		ug/Kg	☼	89	78 - 122	27	30
1,1-Dichloroethane	ND		87.1	83.3		ug/Kg	☼	96	73 - 126	24	30
1,1-Dichloroethene	ND		87.1	74.5		ug/Kg	☼	86	59 - 125	22	30
1,2,4-Trichlorobenzene	ND	F1 *3	87.1	26.3	*3 F1	ug/Kg	☼	30	64 - 120	23	30
1,2,4-Trimethylbenzene	ND	*3	87.1	91.3	*3	ug/Kg	☼	105	74 - 120	19	30
1,2-Dibromo-3-Chloropropane	ND	*3	87.1	62.7	*3	ug/Kg	☼	72	63 - 124	24	30
1,2-Dibromoethane	ND	F1	87.1	57.6	F1	ug/Kg	☼	66	78 - 120	25	30
1,2-Dichlorobenzene	ND	F1 *3	87.1	62.6	*3 F1	ug/Kg	☼	72	75 - 120	23	30
1,2-Dichloroethane	ND	F2 F1	87.1	66.7	F2	ug/Kg	☼	77	77 - 122	31	30
1,2-Dichloropropane	ND		87.1	77.5		ug/Kg	☼	89	75 - 124	30	30
1,3,5-Trimethylbenzene	ND	F1 *3	87.1	94.6	*3	ug/Kg	☼	109	74 - 120	19	30
1,3-Dichlorobenzene	ND	*3	87.1	64.9	*3	ug/Kg	☼	74	74 - 120	22	30
1,4-Dichlorobenzene	ND	F1 *3	87.1	62.3	*3 F1	ug/Kg	☼	72	73 - 120	23	30
2-Butanone (MEK)	ND	F1	435	221	F1	ug/Kg	☼	51	70 - 134	27	30
2-Hexanone	ND	F1	435	226	F1	ug/Kg	☼	52	59 - 130	23	30
4-Methyl-2-pentanone (MIBK)	ND		435	308		ug/Kg	☼	71	65 - 133	24	30
Acetone	ND	F1	435	223	F1	ug/Kg	☼	51	61 - 137	24	30
Benzene	ND		87.1	76.2		ug/Kg	☼	88	79 - 127	25	30
Bromodichloromethane	ND	F2 F1	87.1	64.4	F1 F2	ug/Kg	☼	74	80 - 122	32	30
Bromoform	ND	F1	87.1	47.4	F1	ug/Kg	☼	54	68 - 126	29	30
Bromomethane	ND		87.1	56.8		ug/Kg	☼	65	37 - 149	24	30
Carbon disulfide	ND		87.1	61.5		ug/Kg	☼	71	64 - 131	25	30
Carbon tetrachloride	ND		87.1	66.8		ug/Kg	☼	77	75 - 135	23	30
Chlorobenzene	ND		87.1	70.7		ug/Kg	☼	81	76 - 124	26	30
Chloroethane	ND		87.1	94.8		ug/Kg	☼	109	69 - 135	27	30
Chloroform	0.45	J	87.1	77.5		ug/Kg	☼	89	80 - 120	26	30
Chloromethane	ND		87.1	101		ug/Kg	☼	116	63 - 127	26	30
cis-1,2-Dichloroethene	ND	F1	87.1	68.9	F1	ug/Kg	☼	79	80 - 120	26	30
cis-1,3-Dichloropropene	ND	F1	87.1	43.3	F1	ug/Kg	☼	50	80 - 120	26	30
Cyclohexane	ND		87.1	74.9		ug/Kg	☼	86	65 - 120	25	30
Dibromochloromethane	ND	F1	87.1	65.1	F1	ug/Kg	☼	75	76 - 125	29	30
Dichlorodifluoromethane	ND		87.1	93.5		ug/Kg	☼	107	57 - 142	25	30
Ethylbenzene	ND		87.1	77.6		ug/Kg	☼	89	80 - 120	22	30
Isopropylbenzene	ND	F1 *3	87.1	109	*3 F1	ug/Kg	☼	126	72 - 120	17	30
m,p-Xylene	ND		87.1	73.2		ug/Kg	☼	84	70 - 130	22	30
Methyl acetate	ND	F2 F1	174	108	F2	ug/Kg	☼	62	55 - 136	51	30
Methyl tert-butyl ether	ND		87.1	69.1		ug/Kg	☼	79	63 - 125	27	30
Methylcyclohexane	ND		87.1	52.2		ug/Kg	☼	60	60 - 140	28	30
Methylene Chloride	ND		87.1	80.9		ug/Kg	☼	93	61 - 127	28	30
n-Butylbenzene	ND	F1 *3	87.1	56.0	*3 F1	ug/Kg	☼	64	70 - 120	23	30
N-Propylbenzene	ND	*3	87.1	93.6	*3	ug/Kg	☼	107	70 - 130	19	30
o-Xylene	ND		87.1	73.3		ug/Kg	☼	84	70 - 130	23	30
sec-Butylbenzene	ND	*3	87.1	78.0	*3	ug/Kg	☼	90	74 - 120	21	30
Styrene	ND	F1	87.1	57.8	F1	ug/Kg	☼	66	80 - 120	23	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-201615-1 MSD
Matrix: Solid
Analysis Batch: 641653

Client Sample ID: SS2 (0-2)
Prep Type: Total/NA
Prep Batch: 641652

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
tert-Butylbenzene	ND	*3	87.1	88.3	*3	ug/Kg	☼	101	73 - 120	18	30
Tetrachloroethene	ND		87.1	70.4		ug/Kg	☼	81	74 - 122	20	30
Toluene	ND		87.1	83.6		ug/Kg	☼	96	74 - 128	22	30
trans-1,2-Dichloroethene	ND		87.1	67.6		ug/Kg	☼	78	78 - 126	26	30
trans-1,3-Dichloropropene	ND	F1	87.1	50.9	F1	ug/Kg	☼	58	73 - 123	22	30
Trichloroethene	ND	F1	87.1	65.3	F1	ug/Kg	☼	75	77 - 129	26	30
Trichlorofluoromethane	ND		87.1	88.1		ug/Kg	☼	101	65 - 146	21	30
Vinyl chloride	ND		87.1	94.9		ug/Kg	☼	109	61 - 133	24	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*64 - 126*
4-Bromofluorobenzene (Surr)	*79*		*72 - 126*
Dibromofluoromethane (Surr)	*98*		*60 - 140*
Toluene-d8 (Surr)	*121*		*71 - 125*

Lab Sample ID: MB 480-641838/2-A
Matrix: Solid
Analysis Batch: 641839

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641838

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.50	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
1,2,3-Trimethylbenzene	ND		5.0	1.0	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
2-Hexanone	ND		25	2.5	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
Acetone	ND		25	4.2	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
Benzene	ND		5.0	0.25	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
Bromoform	ND		5.0	2.5	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
Bromomethane	ND		5.0	0.45	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		09/18/22 17:23	09/18/22 20:59	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-641838/2-A
Matrix: Solid
Analysis Batch: 641839

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641838

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		5.0	0.66	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
Chloroethane	ND		5.0	1.1	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
Chloroform	0.443	J	5.0	0.31	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
Chloromethane	ND		5.0	0.30	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
Cyclohexane	ND		5.0	0.70	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
m,p-Xylene	ND		10	0.84	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
Methyl acetate	ND		25	3.0	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
o-Xylene	ND		5.0	0.65	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
Styrene	ND		5.0	0.25	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
Toluene	ND		5.0	0.38	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
Trichloroethene	ND		5.0	1.1	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		09/18/22 17:23	09/18/22 20:59	1
Xylenes, Total	ND		10	0.84	ug/Kg		09/18/22 17:23	09/18/22 20:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*64 - 126*	*09/18/22 17:23*	*09/18/22 20:59*	*1*
4-Bromofluorobenzene (Surr)	*94*		*72 - 126*	*09/18/22 17:23*	*09/18/22 20:59*	*1*
Dibromofluoromethane (Surr)	*100*		*60 - 140*	*09/18/22 17:23*	*09/18/22 20:59*	*1*
Toluene-d8 (Surr)	*104*		*71 - 125*	*09/18/22 17:23*	*09/18/22 20:59*	*1*

Lab Sample ID: LCS 480-641838/1-A
Matrix: Solid
Analysis Batch: 641839

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641838

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	47.0		ug/Kg		94	74 - 127
1,1,1-Trichloroethane	50.0	43.8		ug/Kg		88	77 - 121
1,1,2,2-Tetrachloroethane	50.0	51.2		ug/Kg		102	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	41.7		ug/Kg		83	60 - 140
1,1,2-Trichloroethane	50.0	48.4		ug/Kg		97	78 - 122
1,1-Dichloroethane	50.0	46.6		ug/Kg		93	73 - 126

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-641838/1-A
Matrix: Solid
Analysis Batch: 641839

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641838

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1-Dichloroethene	50.0	42.7		ug/Kg		85	59 - 125
1,2,4-Trichlorobenzene	50.0	46.1		ug/Kg		92	64 - 120
1,2,4-Trimethylbenzene	50.0	50.1		ug/Kg		100	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	50.5		ug/Kg		101	63 - 124
1,2-Dibromoethane	50.0	46.4		ug/Kg		93	78 - 120
1,2-Dichlorobenzene	50.0	47.2		ug/Kg		94	75 - 120
1,2-Dichloroethane	50.0	45.7		ug/Kg		91	77 - 122
1,2-Dichloropropane	50.0	46.8		ug/Kg		94	75 - 124
1,3,5-Trimethylbenzene	50.0	49.1		ug/Kg		98	74 - 120
1,3-Dichlorobenzene	50.0	47.5		ug/Kg		95	74 - 120
1,4-Dichlorobenzene	50.0	47.4		ug/Kg		95	73 - 120
2-Butanone (MEK)	250	246		ug/Kg		98	70 - 134
2-Hexanone	250	268		ug/Kg		107	59 - 130
4-Methyl-2-pentanone (MIBK)	250	264		ug/Kg		106	65 - 133
Acetone	250	229		ug/Kg		92	61 - 137
Benzene	50.0	45.9		ug/Kg		92	79 - 127
Bromodichloromethane	50.0	46.6		ug/Kg		93	80 - 122
Bromoform	50.0	48.0		ug/Kg		96	68 - 126
Bromomethane	50.0	48.9		ug/Kg		98	37 - 149
Carbon disulfide	50.0	42.8		ug/Kg		86	64 - 131
Carbon tetrachloride	50.0	43.7		ug/Kg		87	75 - 135
Chlorobenzene	50.0	46.7		ug/Kg		93	76 - 124
Chloroethane	50.0	49.8		ug/Kg		100	69 - 135
Chloroform	50.0	44.1		ug/Kg		88	80 - 120
Chloromethane	50.0	50.8		ug/Kg		102	63 - 127
cis-1,2-Dichloroethene	50.0	44.7		ug/Kg		89	81 - 120
cis-1,3-Dichloropropene	50.0	45.9		ug/Kg		92	80 - 120
Cyclohexane	50.0	47.7		ug/Kg		95	65 - 120
Dibromochloromethane	50.0	50.0		ug/Kg		100	76 - 125
Dichlorodifluoromethane	50.0	42.8		ug/Kg		86	57 - 142
Ethylbenzene	50.0	47.0		ug/Kg		94	80 - 120
Isopropylbenzene	50.0	50.0		ug/Kg		100	72 - 120
m,p-Xylene	50.0	46.0		ug/Kg		92	70 - 130
Methyl acetate	100	94.4		ug/Kg		94	55 - 136
Methyl tert-butyl ether	50.0	45.3		ug/Kg		91	63 - 125
Methylcyclohexane	50.0	44.6		ug/Kg		89	60 - 140
Methylene Chloride	50.0	47.6		ug/Kg		95	61 - 127
n-Butylbenzene	50.0	49.2		ug/Kg		98	70 - 120
N-Propylbenzene	50.0	49.6		ug/Kg		99	70 - 130
o-Xylene	50.0	45.9		ug/Kg		92	70 - 130
sec-Butylbenzene	50.0	49.3		ug/Kg		99	74 - 120
Styrene	50.0	45.1		ug/Kg		90	80 - 120
tert-Butylbenzene	50.0	48.9		ug/Kg		98	73 - 120
Tetrachloroethene	50.0	44.7		ug/Kg		89	74 - 122
Toluene	50.0	46.3		ug/Kg		93	74 - 128
trans-1,2-Dichloroethene	50.0	43.6		ug/Kg		87	78 - 126
trans-1,3-Dichloropropene	50.0	49.0		ug/Kg		98	73 - 123
Trichloroethene	50.0	43.8		ug/Kg		88	77 - 129
Trichlorofluoromethane	50.0	46.5		ug/Kg		93	65 - 146

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-641838/1-A
Matrix: Solid
Analysis Batch: 641839

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641838

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Vinyl chloride			50.0	48.0		ug/Kg		96	61 - 133		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*64 - 126*
4-Bromofluorobenzene (Surr)	*94*		*72 - 126*
Dibromofluoromethane (Surr)	*99*		*60 - 140*
Toluene-d8 (Surr)	*108*		*71 - 125*

Lab Sample ID: 480-201615-3 MS
Matrix: Solid
Analysis Batch: 641839

Client Sample ID: SS2 (6-12)
Prep Type: Total/NA
Prep Batch: 641838

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1,1,2-Tetrachloroethane	ND	F2	42.8	37.6		ug/Kg	☼	88	74 - 127		
1,1,1-Trichloroethane	ND	F2	42.8	37.9		ug/Kg	☼	89	77 - 121		
1,1,2,2-Tetrachloroethane	ND	F2	42.8	34.8		ug/Kg	☼	81	80 - 120		
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F2	42.8	35.1		ug/Kg	☼	82	60 - 140		
1,1,2-Trichloroethane	ND	F2	42.8	36.5		ug/Kg	☼	85	78 - 122		
1,1-Dichloroethane	ND	F2	42.8	40.2		ug/Kg	☼	94	73 - 126		
1,1-Dichloroethene	ND	F2	42.8	37.5		ug/Kg	☼	88	59 - 125		
1,2,4-Trichlorobenzene	ND	F1	42.8	23.3	F1	ug/Kg	☼	54	64 - 120		
1,2,4-Trimethylbenzene	ND		42.8	41.8		ug/Kg	☼	98	74 - 120		
1,2-Dibromo-3-Chloropropane	ND	F2	42.8	28.6		ug/Kg	☼	67	63 - 124		
1,2-Dibromoethane	ND	F1	42.8	32.5	F1	ug/Kg	☼	76	78 - 120		
1,2-Dichlorobenzene	ND	F1	42.8	34.4		ug/Kg	☼	80	75 - 120		
1,2-Dichloroethane	ND	F2	42.8	34.1		ug/Kg	☼	80	77 - 122		
1,2-Dichloropropane	ND	F2	42.8	39.5		ug/Kg	☼	92	75 - 124		
1,3,5-Trimethylbenzene	ND	F2	42.8	42.6		ug/Kg	☼	99	74 - 120		
1,3-Dichlorobenzene	ND	F1	42.8	35.0		ug/Kg	☼	82	74 - 120		
1,4-Dichlorobenzene	ND	F1	42.8	33.7		ug/Kg	☼	79	73 - 120		
2-Butanone (MEK)	ND	F2 F1	214	141	F1	ug/Kg	☼	66	70 - 134		
2-Hexanone	ND		214	151		ug/Kg	☼	71	59 - 130		
4-Methyl-2-pentanone (MIBK)	ND	F2	214	160		ug/Kg	☼	75	65 - 133		
Acetone	ND	F2	214	134		ug/Kg	☼	63	61 - 137		
Benzene	ND	F2	42.8	39.2		ug/Kg	☼	92	79 - 127		
Bromodichloromethane	ND	F2	42.8	36.4		ug/Kg	☼	85	80 - 122		
Bromoform	ND	F2	42.8	30.4		ug/Kg	☼	71	68 - 126		
Bromomethane	ND	F2	42.8	43.9		ug/Kg	☼	102	37 - 149		
Carbon disulfide	ND		42.8	34.8		ug/Kg	☼	81	64 - 131		
Carbon tetrachloride	ND	F2	42.8	36.9		ug/Kg	☼	86	75 - 135		
Chlorobenzene	ND		42.8	37.2		ug/Kg	☼	87	76 - 124		
Chloroethane	ND	F2	42.8	46.8		ug/Kg	☼	109	69 - 135		
Chloroform	ND	F2	42.8	37.0		ug/Kg	☼	86	80 - 120		
Chloromethane	ND	F2	42.8	48.1		ug/Kg	☼	112	63 - 127		
cis-1,2-Dichloroethene	ND	F2	42.8	36.3		ug/Kg	☼	85	80 - 120		
cis-1,3-Dichloropropene	ND	F1	42.8	34.1		ug/Kg	☼	80	80 - 120		
Cyclohexane	ND	F2	42.8	40.0		ug/Kg	☼	93	65 - 120		
Dibromochloromethane	ND		42.8	36.9		ug/Kg	☼	86	76 - 125		

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-201615-3 MS
Matrix: Solid
Analysis Batch: 641839

Client Sample ID: SS2 (6-12)
Prep Type: Total/NA
Prep Batch: 641838

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Dichlorodifluoromethane	ND	F2	42.8	39.8		ug/Kg	☼	93	57 - 142
Ethylbenzene	ND		42.8	39.3		ug/Kg	☼	92	80 - 120
Isopropylbenzene	ND	F2	42.8	44.3		ug/Kg	☼	103	72 - 120
m,p-Xylene	ND		42.8	38.3		ug/Kg	☼	89	70 - 130
Methyl acetate	ND	F2	85.7	67.7		ug/Kg	☼	79	55 - 136
Methyl tert-butyl ether	ND	F2	42.8	33.7		ug/Kg	☼	79	63 - 125
Methylcyclohexane	ND		42.8	35.8		ug/Kg	☼	84	60 - 140
Methylene Chloride	ND	F2	42.8	38.7		ug/Kg	☼	90	61 - 127
n-Butylbenzene	ND	F1	42.8	35.5		ug/Kg	☼	83	70 - 120
N-Propylbenzene	ND		42.8	41.6		ug/Kg	☼	97	70 - 130
o-Xylene	ND	F2	42.8	38.0		ug/Kg	☼	89	70 - 130
sec-Butylbenzene	ND		42.8	41.6		ug/Kg	☼	97	74 - 120
Styrene	ND	F1	42.8	35.6		ug/Kg	☼	83	80 - 120
tert-Butylbenzene	ND		42.8	44.4		ug/Kg	☼	104	73 - 120
Tetrachloroethene	ND		42.8	37.1		ug/Kg	☼	87	74 - 122
Toluene	0.44	J	42.8	40.9		ug/Kg	☼	95	74 - 128
trans-1,2-Dichloroethene	ND	F1	42.8	36.0		ug/Kg	☼	84	78 - 126
trans-1,3-Dichloropropene	ND	F1	42.8	33.3		ug/Kg	☼	78	73 - 123
Trichloroethene	ND	F1	42.8	36.0		ug/Kg	☼	84	77 - 129
Trichlorofluoromethane	ND	F2	42.8	42.6		ug/Kg	☼	100	65 - 146
Vinyl chloride	ND	F2	42.8	45.0		ug/Kg	☼	105	61 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*64 - 126*
4-Bromofluorobenzene (Surr)	*92*		*72 - 126*
Dibromofluoromethane (Surr)	*95*		*60 - 140*
Toluene-d8 (Surr)	*112*		*71 - 125*

Lab Sample ID: 480-201615-3 MSD
Matrix: Solid
Analysis Batch: 641839

Client Sample ID: SS2 (6-12)
Prep Type: Total/NA
Prep Batch: 641838

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND	F2	61.7	54.5	F2	ug/Kg	☼	88	74 - 127	37	30
1,1,1-Trichloroethane	ND	F2	61.7	55.3	F2	ug/Kg	☼	90	77 - 121	37	30
1,1,2,2-Tetrachloroethane	ND	F2	61.7	53.0	F2	ug/Kg	☼	86	80 - 120	41	30
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	F2	61.7	49.2	F2	ug/Kg	☼	80	60 - 140	33	30
1,1,2-Trichloroethane	ND	F2	61.7	51.6	F2	ug/Kg	☼	84	78 - 122	34	30
1,1-Dichloroethane	ND	F2	61.7	58.4	F2	ug/Kg	☼	95	73 - 126	37	30
1,1-Dichloroethene	ND	F2	61.7	51.9	F2	ug/Kg	☼	84	59 - 125	32	30
1,2,4-Trichlorobenzene	ND	F1	61.7	22.4	F1	ug/Kg	☼	36	64 - 120	4	30
1,2,4-Trimethylbenzene	ND		61.7	56.8		ug/Kg	☼	92	74 - 120	30	30
1,2-Dibromo-3-Chloropropane	ND	F2	61.7	42.0	F2	ug/Kg	☼	68	63 - 124	38	30
1,2-Dibromoethane	ND	F1	61.7	42.5	F1	ug/Kg	☼	69	78 - 120	27	30
1,2-Dichlorobenzene	ND	F1	61.7	43.6	F1	ug/Kg	☼	71	75 - 120	24	30
1,2-Dichloroethane	ND	F2	61.7	47.6	F2	ug/Kg	☼	77	77 - 122	33	30
1,2-Dichloropropane	ND	F2	61.7	54.6	F2	ug/Kg	☼	88	75 - 124	32	30
1,3,5-Trimethylbenzene	ND	F2	61.7	58.3	F2	ug/Kg	☼	95	74 - 120	31	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-201615-3 MSD
Matrix: Solid
Analysis Batch: 641839

Client Sample ID: SS2 (6-12)
Prep Type: Total/NA
Prep Batch: 641838

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,3-Dichlorobenzene	ND	F1	61.7	42.7	F1	ug/Kg	☼	69	74 - 120	20	30
1,4-Dichlorobenzene	ND	F1	61.7	40.1	F1	ug/Kg	☼	65	73 - 120	17	30
2-Butanone (MEK)	ND	F2 F1	308	203	F2 F1	ug/Kg	☼	66	70 - 134	36	30
2-Hexanone	ND		308	192		ug/Kg	☼	62	59 - 130	23	30
4-Methyl-2-pentanone (MIBK)	ND	F2	308	234	F2	ug/Kg	☼	76	65 - 133	37	30
Acetone	ND	F2	308	208	F2	ug/Kg	☼	67	61 - 137	43	30
Benzene	ND	F2	61.7	54.9	F2	ug/Kg	☼	89	79 - 127	33	30
Bromodichloromethane	ND	F2	61.7	51.5	F2	ug/Kg	☼	84	80 - 122	34	30
Bromoform	ND	F2	61.7	42.0	F2	ug/Kg	☼	68	68 - 126	32	30
Bromomethane	ND	F2	61.7	59.9	F2	ug/Kg	☼	97	37 - 149	31	30
Carbon disulfide	ND		61.7	44.6		ug/Kg	☼	72	64 - 131	25	30
Carbon tetrachloride	ND	F2	61.7	53.4	F2	ug/Kg	☼	87	75 - 135	36	30
Chlorobenzene	ND		61.7	48.4		ug/Kg	☼	79	76 - 124	26	30
Chloroethane	ND	F2	61.7	66.0	F2	ug/Kg	☼	107	69 - 135	34	30
Chloroform	ND	F2	61.7	53.6	F2	ug/Kg	☼	87	80 - 120	37	30
Chloromethane	ND	F2	61.7	70.4	F2	ug/Kg	☼	114	63 - 127	38	30
cis-1,2-Dichloroethene	ND	F2	61.7	49.6	F2	ug/Kg	☼	80	80 - 120	31	30
cis-1,3-Dichloropropene	ND	F1	61.7	42.0	F1	ug/Kg	☼	68	80 - 120	21	30
Cyclohexane	ND	F2	61.7	54.9	F2	ug/Kg	☼	89	65 - 120	31	30
Dibromochloromethane	ND		61.7	50.1		ug/Kg	☼	81	76 - 125	30	30
Dichlorodifluoromethane	ND	F2	61.7	60.2	F2	ug/Kg	☼	98	57 - 142	41	30
Ethylbenzene	ND		61.7	52.1		ug/Kg	☼	85	80 - 120	28	30
Isopropylbenzene	ND	F2	61.7	63.5	F2	ug/Kg	☼	103	72 - 120	35	30
m,p-Xylene	ND		61.7	51.1		ug/Kg	☼	83	70 - 130	29	30
Methyl acetate	ND	F2	123	101	F2	ug/Kg	☼	81	55 - 136	39	30
Methyl tert-butyl ether	ND	F2	61.7	49.8	F2	ug/Kg	☼	81	63 - 125	39	30
Methylcyclohexane	ND		61.7	45.3		ug/Kg	☼	73	60 - 140	23	30
Methylene Chloride	ND	F2	61.7	55.8	F2	ug/Kg	☼	90	61 - 127	36	30
n-Butylbenzene	ND	F1	61.7	38.5	F1	ug/Kg	☼	62	70 - 120	8	30
N-Propylbenzene	ND		61.7	54.9		ug/Kg	☼	89	70 - 130	28	30
o-Xylene	ND	F2	61.7	51.8	F2	ug/Kg	☼	84	70 - 130	31	30
sec-Butylbenzene	ND		61.7	52.4		ug/Kg	☼	85	74 - 120	23	30
Styrene	ND	F1	61.7	43.6	F1	ug/Kg	☼	71	80 - 120	20	30
tert-Butylbenzene	ND		61.7	58.9		ug/Kg	☼	95	73 - 120	28	30
Tetrachloroethene	ND		61.7	48.6		ug/Kg	☼	79	74 - 122	27	30
Toluene	0.44	J	61.7	55.5		ug/Kg	☼	89	74 - 128	30	30
trans-1,2-Dichloroethene	ND	F1	61.7	46.9	F1	ug/Kg	☼	76	78 - 126	26	30
trans-1,3-Dichloropropene	ND	F1	61.7	39.5	F1	ug/Kg	☼	64	73 - 123	17	30
Trichloroethene	ND	F1	61.7	46.7	F1	ug/Kg	☼	76	77 - 129	26	30
Trichlorofluoromethane	ND	F2	61.7	62.0	F2	ug/Kg	☼	100	65 - 146	37	30
Vinyl chloride	ND	F2	61.7	64.7	F2	ug/Kg	☼	105	61 - 133	36	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*64 - 126*
4-Bromofluorobenzene (Surr)	*88*		*72 - 126*
Dibromofluoromethane (Surr)	*101*		*60 - 140*
Toluene-d8 (Surr)	*112*		*71 - 125*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-641523/1-A
Matrix: Water
Analysis Batch: 642029

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641523

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		09/15/22 09:21	09/20/22 11:38	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		09/15/22 09:21	09/20/22 11:38	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		09/15/22 09:21	09/20/22 11:38	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		09/15/22 09:21	09/20/22 11:38	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		09/15/22 09:21	09/20/22 11:38	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		09/15/22 09:21	09/20/22 11:38	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		09/15/22 09:21	09/20/22 11:38	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		09/15/22 09:21	09/20/22 11:38	1
2-Chlorophenol	ND		5.0	0.53	ug/L		09/15/22 09:21	09/20/22 11:38	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		09/15/22 09:21	09/20/22 11:38	1
2-Methylphenol	ND		5.0	0.40	ug/L		09/15/22 09:21	09/20/22 11:38	1
2-Nitroaniline	ND		10	0.42	ug/L		09/15/22 09:21	09/20/22 11:38	1
2-Nitrophenol	ND		5.0	0.48	ug/L		09/15/22 09:21	09/20/22 11:38	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		09/15/22 09:21	09/20/22 11:38	1
3-Nitroaniline	ND		10	0.48	ug/L		09/15/22 09:21	09/20/22 11:38	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		09/15/22 09:21	09/20/22 11:38	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		09/15/22 09:21	09/20/22 11:38	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		09/15/22 09:21	09/20/22 11:38	1
4-Chloroaniline	ND		5.0	0.59	ug/L		09/15/22 09:21	09/20/22 11:38	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		09/15/22 09:21	09/20/22 11:38	1
4-Methylphenol	ND		10	0.36	ug/L		09/15/22 09:21	09/20/22 11:38	1
4-Nitroaniline	ND		10	0.25	ug/L		09/15/22 09:21	09/20/22 11:38	1
4-Nitrophenol	ND		10	1.5	ug/L		09/15/22 09:21	09/20/22 11:38	1
Acenaphthene	ND		5.0	0.41	ug/L		09/15/22 09:21	09/20/22 11:38	1
Acenaphthylene	ND		5.0	0.38	ug/L		09/15/22 09:21	09/20/22 11:38	1
Acetophenone	ND		5.0	0.54	ug/L		09/15/22 09:21	09/20/22 11:38	1
Anthracene	ND		5.0	0.28	ug/L		09/15/22 09:21	09/20/22 11:38	1
Atrazine	ND		5.0	0.46	ug/L		09/15/22 09:21	09/20/22 11:38	1
Benzaldehyde	ND		5.0	0.27	ug/L		09/15/22 09:21	09/20/22 11:38	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		09/15/22 09:21	09/20/22 11:38	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		09/15/22 09:21	09/20/22 11:38	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		09/15/22 09:21	09/20/22 11:38	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		09/15/22 09:21	09/20/22 11:38	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		09/15/22 09:21	09/20/22 11:38	1
Biphenyl	ND		5.0	0.65	ug/L		09/15/22 09:21	09/20/22 11:38	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		09/15/22 09:21	09/20/22 11:38	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		09/15/22 09:21	09/20/22 11:38	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		09/15/22 09:21	09/20/22 11:38	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		09/15/22 09:21	09/20/22 11:38	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		09/15/22 09:21	09/20/22 11:38	1
Caprolactam	ND		5.0	2.2	ug/L		09/15/22 09:21	09/20/22 11:38	1
Carbazole	ND		5.0	0.30	ug/L		09/15/22 09:21	09/20/22 11:38	1
Chrysene	ND		5.0	0.33	ug/L		09/15/22 09:21	09/20/22 11:38	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		09/15/22 09:21	09/20/22 11:38	1
Dibenzofuran	ND		10	0.51	ug/L		09/15/22 09:21	09/20/22 11:38	1
Diethyl phthalate	11.7		5.0	0.22	ug/L		09/15/22 09:21	09/20/22 11:38	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		09/15/22 09:21	09/20/22 11:38	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		09/15/22 09:21	09/20/22 11:38	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-641523/1-A
Matrix: Water
Analysis Batch: 642029

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641523

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		09/15/22 09:21	09/20/22 11:38	1
Fluoranthene	ND		5.0	0.40	ug/L		09/15/22 09:21	09/20/22 11:38	1
Fluorene	ND		5.0	0.36	ug/L		09/15/22 09:21	09/20/22 11:38	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		09/15/22 09:21	09/20/22 11:38	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		09/15/22 09:21	09/20/22 11:38	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		09/15/22 09:21	09/20/22 11:38	1
Hexachloroethane	ND		5.0	0.59	ug/L		09/15/22 09:21	09/20/22 11:38	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		09/15/22 09:21	09/20/22 11:38	1
Isophorone	ND		5.0	0.43	ug/L		09/15/22 09:21	09/20/22 11:38	1
Naphthalene	ND		5.0	0.76	ug/L		09/15/22 09:21	09/20/22 11:38	1
Nitrobenzene	ND		5.0	0.29	ug/L		09/15/22 09:21	09/20/22 11:38	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		09/15/22 09:21	09/20/22 11:38	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		09/15/22 09:21	09/20/22 11:38	1
Pentachlorophenol	ND		10	2.2	ug/L		09/15/22 09:21	09/20/22 11:38	1
Phenanthrene	ND		5.0	0.44	ug/L		09/15/22 09:21	09/20/22 11:38	1
Phenol	ND		5.0	0.39	ug/L		09/15/22 09:21	09/20/22 11:38	1
Pyrene	ND		5.0	0.34	ug/L		09/15/22 09:21	09/20/22 11:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*63*		*41 - 120*	*09/15/22 09:21*	*09/20/22 11:38*	*1*
2-Fluorobiphenyl (Surr)	*88*		*48 - 120*	*09/15/22 09:21*	*09/20/22 11:38*	*1*
2-Fluorophenol (Surr)	*53*		*35 - 120*	*09/15/22 09:21*	*09/20/22 11:38*	*1*
Nitrobenzene-d5 (Surr)	*73*		*46 - 120*	*09/15/22 09:21*	*09/20/22 11:38*	*1*
Phenol-d5 (Surr)	*43*		*22 - 120*	*09/15/22 09:21*	*09/20/22 11:38*	*1*
p-Terphenyl-d14 (Surr)	*100*		*60 - 148*	*09/15/22 09:21*	*09/20/22 11:38*	*1*

Lab Sample ID: LCS 480-641523/2-A
Matrix: Water
Analysis Batch: 642029

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641523

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	32.0	29.1		ug/L		91	65 - 126
2,4,6-Trichlorophenol	32.0	27.6		ug/L		86	64 - 120
2,4-Dichlorophenol	32.0	26.9		ug/L		84	63 - 120
2,4-Dimethylphenol	32.0	25.9		ug/L		81	47 - 120
2,4-Dinitrophenol	64.0	62.6		ug/L		98	31 - 137
2,4-Dinitrotoluene	32.0	31.3		ug/L		98	69 - 120
2,6-Dinitrotoluene	32.0	29.5		ug/L		92	68 - 120
2-Chloronaphthalene	32.0	25.4		ug/L		79	58 - 120
2-Chlorophenol	32.0	23.4		ug/L		73	48 - 120
2-Methylnaphthalene	32.0	23.9		ug/L		75	59 - 120
2-Methylphenol	32.0	24.6		ug/L		77	39 - 120
2-Nitroaniline	32.0	30.5		ug/L		95	54 - 127
2-Nitrophenol	32.0	25.8		ug/L		81	52 - 125
3,3'-Dichlorobenzidine	64.0	57.3		ug/L		90	49 - 135
3-Nitroaniline	32.0	25.3		ug/L		79	51 - 120
4,6-Dinitro-2-methylphenol	64.0	65.8		ug/L		103	46 - 136
4-Bromophenyl phenyl ether	32.0	29.5		ug/L		92	65 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-641523/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 642029
Prep Batch: 641523

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4-Chloro-3-methylphenol	32.0	27.0		ug/L		85	61 - 123
4-Chloroaniline	32.0	18.2		ug/L		57	30 - 120
4-Chlorophenyl phenyl ether	32.0	27.7		ug/L		87	62 - 120
4-Methylphenol	32.0	25.1		ug/L		78	29 - 131
4-Nitroaniline	32.0	34.3		ug/L		107	65 - 120
4-Nitrophenol	64.0	50.8		ug/L		79	45 - 120
Acenaphthene	32.0	28.2		ug/L		88	60 - 120
Acenaphthylene	32.0	28.7		ug/L		90	63 - 120
Acetophenone	32.0	25.1		ug/L		78	45 - 120
Anthracene	32.0	32.2		ug/L		101	67 - 120
Atrazine	64.0	64.7		ug/L		101	71 - 130
Benzaldehyde	64.0	50.3		ug/L		79	10 - 140
Benzo[a]anthracene	32.0	29.9		ug/L		94	70 - 121
Benzo[a]pyrene	32.0	31.0		ug/L		97	60 - 123
Benzo[b]fluoranthene	32.0	31.7		ug/L		99	66 - 126
Benzo[g,h,i]perylene	32.0	29.2		ug/L		91	66 - 150
Benzo[k]fluoranthene	32.0	29.6		ug/L		93	65 - 124
Biphenyl	32.0	26.8		ug/L		84	59 - 120
bis (2-chloroisopropyl) ether	32.0	28.5		ug/L		89	21 - 136
Bis(2-chloroethoxy)methane	32.0	26.3		ug/L		82	50 - 128
Bis(2-chloroethyl)ether	32.0	24.1		ug/L		75	44 - 120
Bis(2-ethylhexyl) phthalate	32.0	30.8		ug/L		96	63 - 139
Butyl benzyl phthalate	32.0	32.7		ug/L		102	70 - 129
Caprolactam	64.0	23.0		ug/L		36	22 - 120
Carbazole	32.0	49.1	*+	ug/L		154	66 - 123
Chrysene	32.0	29.6		ug/L		93	69 - 120
Dibenz(a,h)anthracene	32.0	30.8		ug/L		96	65 - 135
Dibenzofuran	32.0	28.2		ug/L		88	66 - 120
Diethyl phthalate	32.0	42.4	*+	ug/L		132	59 - 127
Dimethyl phthalate	32.0	29.4		ug/L		92	68 - 120
Di-n-butyl phthalate	32.0	33.1		ug/L		103	69 - 131
Di-n-octyl phthalate	32.0	29.4		ug/L		92	63 - 140
Fluoranthene	32.0	32.8		ug/L		103	69 - 126
Fluorene	32.0	30.1		ug/L		94	66 - 120
Hexachlorobenzene	32.0	28.6		ug/L		89	61 - 120
Hexachlorobutadiene	32.0	19.0		ug/L		59	35 - 120
Hexachlorocyclopentadiene	32.0	17.6		ug/L		55	31 - 120
Hexachloroethane	32.0	21.0		ug/L		66	43 - 120
Indeno[1,2,3-cd]pyrene	32.0	30.8		ug/L		96	69 - 146
Isophorone	32.0	27.7		ug/L		87	55 - 120
Naphthalene	32.0	24.8		ug/L		78	57 - 120
Nitrobenzene	32.0	25.3		ug/L		79	53 - 123
N-Nitrosodi-n-propylamine	32.0	27.4		ug/L		86	32 - 140
N-Nitrosodiphenylamine	32.0	31.4		ug/L		98	61 - 120
Pentachlorophenol	64.0	59.3		ug/L		93	29 - 136
Phenanthrene	32.0	31.6		ug/L		99	68 - 120
Phenol	32.0	16.3		ug/L		51	17 - 120
Pyrene	32.0	31.4		ug/L		98	70 - 125

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-641523/2-A
Matrix: Water
Analysis Batch: 642029

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641523

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	90		41 - 120
2-Fluorobiphenyl (Surr)	83		48 - 120
2-Fluorophenol (Surr)	55		35 - 120
Nitrobenzene-d5 (Surr)	69		46 - 120
Phenol-d5 (Surr)	47		22 - 120
p-Terphenyl-d14 (Surr)	95		60 - 148

Lab Sample ID: MB 480-641786/1-A
Matrix: Solid
Analysis Batch: 642158

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641786

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		170	45	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
2,4,6-Trichlorophenol	ND		170	33	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
2,4-Dimethylphenol	ND		170	40	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
2,4-Dinitrophenol	ND		1600	760	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
2,4-Dinitrotoluene	ND		170	34	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
2-Chloronaphthalene	ND		170	27	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
2-Chlorophenol	ND		320	30	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
2-Methylnaphthalene	ND		170	33	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
2-Methylphenol	ND		170	20	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
2-Nitroaniline	ND		320	24	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
2-Nitrophenol	ND		170	47	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
3,3'-Dichlorobenzidine	ND		320	200	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
3-Nitroaniline	ND		320	46	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
4,6-Dinitro-2-methylphenol	ND		320	170	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
4-Bromophenyl phenyl ether	ND		170	23	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
4-Chloro-3-methylphenol	ND		170	41	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
4-Chloroaniline	ND		170	41	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
4-Chlorophenyl phenyl ether	ND		170	20	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
4-Methylphenol	ND		320	20	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
4-Nitroaniline	ND		320	87	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
4-Nitrophenol	ND		320	120	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Acenaphthene	ND		170	24	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Acenaphthylene	ND		170	21	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Acetophenone	ND		170	22	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Anthracene	ND		170	41	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Atrazine	ND		170	58	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Benzaldehyde	ND		170	130	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Benzo[a]anthracene	ND		170	17	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Benzo[a]pyrene	ND		170	24	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Benzo[b]fluoranthene	ND		170	26	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Benzo[k]fluoranthene	ND		170	21	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Biphenyl	ND		170	24	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
bis (2-chloroisopropyl) ether	ND		170	33	ug/Kg		09/16/22 15:42	09/21/22 10:53	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-641786/1-A
Matrix: Solid
Analysis Batch: 642158

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641786

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		170	35	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Bis(2-chloroethyl)ether	ND		170	21	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Bis(2-ethylhexyl) phthalate	ND		170	57	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Butyl benzyl phthalate	29.5	J	170	27	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Caprolactam	ND		170	50	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Carbazole	ND		170	20	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Chrysene	ND		170	37	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Dibenz(a,h)anthracene	ND		170	29	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Dibenzofuran	ND		170	20	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Diethyl phthalate	364		170	21	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Dimethyl phthalate	ND		170	20	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Di-n-butyl phthalate	ND		170	28	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Di-n-octyl phthalate	22.2	J	170	20	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Fluoranthene	ND		170	18	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Fluorene	ND		170	20	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Hexachlorobenzene	ND		170	22	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Hexachlorobutadiene	ND		170	24	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Hexachlorocyclopentadiene	ND		170	22	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Hexachloroethane	ND		170	21	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Indeno[1,2,3-cd]pyrene	ND		170	20	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Isophorone	ND		170	35	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Naphthalene	ND		170	21	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Nitrobenzene	ND		170	19	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
N-Nitrosodi-n-propylamine	ND		170	28	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
N-Nitrosodiphenylamine	ND		170	130	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Pentachlorophenol	ND		320	170	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Phenanthrene	ND		170	24	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Phenol	ND		170	25	ug/Kg		09/16/22 15:42	09/21/22 10:53	1
Pyrene	ND		170	20	ug/Kg		09/16/22 15:42	09/21/22 10:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*86*		*54 - 120*	*09/16/22 15:42*	*09/21/22 10:53*	*1*
2-Fluorobiphenyl (Surr)	*81*		*60 - 120*	*09/16/22 15:42*	*09/21/22 10:53*	*1*
2-Fluorophenol (Surr)	*80*		*52 - 120*	*09/16/22 15:42*	*09/21/22 10:53*	*1*
Nitrobenzene-d5 (Surr)	*91*		*53 - 120*	*09/16/22 15:42*	*09/21/22 10:53*	*1*
Phenol-d5 (Surr)	*82*		*54 - 120*	*09/16/22 15:42*	*09/21/22 10:53*	*1*
p-Terphenyl-d14 (Surr)	*99*		*79 - 130*	*09/16/22 15:42*	*09/21/22 10:53*	*1*

Lab Sample ID: LCS 480-641786/2-A
Matrix: Solid
Analysis Batch: 642158

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641786

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	1650	1490		ug/Kg		90	59 - 126
2,4,6-Trichlorophenol	1650	1480		ug/Kg		89	59 - 123
2,4-Dichlorophenol	1650	1390		ug/Kg		84	61 - 120
2,4-Dimethylphenol	1650	1400		ug/Kg		85	59 - 120
2,4-Dinitrophenol	3300	3170		ug/Kg		96	41 - 146

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-641786/2-A
Client Sample ID: Lab Control Sample
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 642158
Prep Batch: 641786

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-Dinitrotoluene	1650	1510		ug/Kg		91	63 - 120
2,6-Dinitrotoluene	1650	1480		ug/Kg		90	66 - 120
2-Chloronaphthalene	1650	1330		ug/Kg		81	57 - 120
2-Chlorophenol	1650	1270		ug/Kg		77	53 - 120
2-Methylnaphthalene	1650	1260		ug/Kg		76	59 - 120
2-Methylphenol	1650	1350		ug/Kg		82	54 - 120
2-Nitroaniline	1650	1480		ug/Kg		90	61 - 120
2-Nitrophenol	1650	1400		ug/Kg		84	56 - 120
3,3'-Dichlorobenzidine	3300	2740		ug/Kg		83	54 - 120
3-Nitroaniline	1650	1290		ug/Kg		78	48 - 120
4,6-Dinitro-2-methylphenol	3300	3300		ug/Kg		100	49 - 122
4-Bromophenyl phenyl ether	1650	1450		ug/Kg		88	58 - 120
4-Chloro-3-methylphenol	1650	1480		ug/Kg		90	61 - 120
4-Chloroaniline	1650	1080		ug/Kg		65	38 - 120
4-Chlorophenyl phenyl ether	1650	1310		ug/Kg		79	63 - 124
4-Methylphenol	1650	1370		ug/Kg		83	55 - 120
4-Nitroaniline	1650	1350		ug/Kg		82	56 - 120
4-Nitrophenol	3300	3090		ug/Kg		93	43 - 147
Acenaphthene	1650	1340		ug/Kg		81	62 - 120
Acenaphthylene	1650	1390		ug/Kg		84	58 - 121
Acetophenone	1650	1290		ug/Kg		78	54 - 120
Anthracene	1650	1480		ug/Kg		89	62 - 120
Atrazine	3300	2870		ug/Kg		87	60 - 127
Benzaldehyde	3300	1940	E	ug/Kg		59	10 - 150
Benzo[a]anthracene	1650	1540		ug/Kg		93	65 - 120
Benzo[a]pyrene	1650	1520		ug/Kg		92	64 - 120
Benzo[b]fluoranthene	1650	1520		ug/Kg		92	64 - 120
Benzo[g,h,i]perylene	1650	1500		ug/Kg		91	45 - 145
Benzo[k]fluoranthene	1650	1530		ug/Kg		92	65 - 120
Biphenyl	1650	1350		ug/Kg		81	59 - 120
bis (2-chloroisopropyl) ether	1650	1220		ug/Kg		74	44 - 120
Bis(2-chloroethoxy)methane	1650	1290		ug/Kg		78	55 - 120
Bis(2-chloroethyl)ether	1650	1210		ug/Kg		73	45 - 120
Bis(2-ethylhexyl) phthalate	1650	1590		ug/Kg		96	61 - 133
Butyl benzyl phthalate	1650	1580		ug/Kg		96	61 - 129
Caprolactam	3300	3110		ug/Kg		94	47 - 120
Carbazole	1650	1510		ug/Kg		91	65 - 120
Chrysene	1650	1430		ug/Kg		87	64 - 120
Dibenz(a,h)anthracene	1650	1590		ug/Kg		96	54 - 132
Dibenzofuran	1650	1360		ug/Kg		82	63 - 120
Diethyl phthalate	1650	1780		ug/Kg		108	66 - 120
Dimethyl phthalate	1650	1460		ug/Kg		88	65 - 124
Di-n-butyl phthalate	1650	1640		ug/Kg		99	58 - 130
Di-n-octyl phthalate	1650	1580		ug/Kg		95	57 - 133
Fluoranthene	1650	1490		ug/Kg		90	62 - 120
Fluorene	1650	1300		ug/Kg		79	63 - 120
Hexachlorobenzene	1650	1480		ug/Kg		89	60 - 120
Hexachlorobutadiene	1650	1190		ug/Kg		72	45 - 120
Hexachlorocyclopentadiene	1650	993		ug/Kg		60	47 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-641786/2-A
Matrix: Solid
Analysis Batch: 642158

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641786

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Hexachloroethane	1650	1100		ug/Kg		67	41 - 120
Indeno[1,2,3-cd]pyrene	1650	1570		ug/Kg		95	56 - 134
Isophorone	1650	1320		ug/Kg		80	56 - 120
Naphthalene	1650	1250		ug/Kg		76	55 - 120
Nitrobenzene	1650	1290		ug/Kg		78	54 - 120
N-Nitrosodi-n-propylamine	1650	1330		ug/Kg		81	52 - 120
N-Nitrosodiphenylamine	1650	1470		ug/Kg		89	51 - 128
Pentachlorophenol	3300	2860		ug/Kg		86	51 - 120
Phenanthrene	1650	1470		ug/Kg		89	60 - 120
Phenol	1650	1370		ug/Kg		83	53 - 120
Pyrene	1650	1450		ug/Kg		88	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*90*		*54 - 120*
2-Fluorobiphenyl (Surr)	*81*		*60 - 120*
2-Fluorophenol (Surr)	*75*		*52 - 120*
Nitrobenzene-d5 (Surr)	*74*		*53 - 120*
Phenol-d5 (Surr)	*79*		*54 - 120*
p-Terphenyl-d14 (Surr)	*89*		*79 - 130*

Lab Sample ID: 480-201615-1 MS
Matrix: Solid
Analysis Batch: 642158

Client Sample ID: SS2 (0-2)
Prep Type: Total/NA
Prep Batch: 641786

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	ND	F1	2280	2930	J F1	ug/Kg	☼	129	46 - 120
2,4,6-Trichlorophenol	ND	F1	2280	2870	J F1	ug/Kg	☼	126	41 - 123
2,4-Dichlorophenol	ND	F2	2280	2740	J	ug/Kg	☼	120	45 - 120
2,4-Dimethylphenol	ND		2280	2430	J	ug/Kg	☼	107	52 - 120
2,4-Dinitrophenol	ND		4560	ND		ug/Kg	☼	NC	41 - 146
2,4-Dinitrotoluene	ND	F1 F2	2280	3370	J F1	ug/Kg	☼	148	63 - 125
2,6-Dinitrotoluene	ND	F1 F2	2280	2970	J F1	ug/Kg	☼	130	66 - 120
2-Chloronaphthalene	ND	F2	2280	2310	J	ug/Kg	☼	101	57 - 120
2-Chlorophenol	ND	F2	2280	1910	J	ug/Kg	☼	84	43 - 120
2-Methylnaphthalene	ND	F2	2280	2090	J	ug/Kg	☼	92	55 - 120
2-Methylphenol	ND	F2	2280	2150	J	ug/Kg	☼	94	48 - 120
2-Nitroaniline	ND	F1 F2	2280	3190	J F1	ug/Kg	☼	140	61 - 120
2-Nitrophenol	ND	F2	2280	2640	J	ug/Kg	☼	116	37 - 120
3,3'-Dichlorobenzidine	ND		4560	5900	J	ug/Kg	☼	NC	37 - 126
3-Nitroaniline	ND	F1	2280	2970	J F1	ug/Kg	☼	130	48 - 120
4,6-Dinitro-2-methylphenol	ND		4560	7680	J	ug/Kg	☼	NC	23 - 149
4-Bromophenyl phenyl ether	ND	F1 F2	2280	2790	J F1	ug/Kg	☼	122	58 - 120
4-Chloro-3-methylphenol	ND	F1	2280	2990	J F1	ug/Kg	☼	131	49 - 125
4-Chloroaniline	ND	F2	2280	2020	J	ug/Kg	☼	89	38 - 120
4-Chlorophenyl phenyl ether	ND	F2	2280	2670	J	ug/Kg	☼	117	63 - 124
4-Methylphenol	ND	F2	2280	2520	J	ug/Kg	☼	111	50 - 120
4-Nitroaniline	ND		2280	2930	J	ug/Kg	☼	NC	47 - 120
4-Nitrophenol	ND	F1	4560	7610	J F1	ug/Kg	☼	167	31 - 147

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-201615-1 MS
Matrix: Solid
Analysis Batch: 642158

Client Sample ID: SS2 (0-2)
Prep Type: Total/NA
Prep Batch: 641786

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	ND		2280	2570	J	ug/Kg	☼	113	60 - 120
Acenaphthylene	920	J F2	2280	3370	J	ug/Kg	☼	107	58 - 121
Acetophenone	ND	F2	2280	1850	J	ug/Kg	☼	81	47 - 120
Anthracene	ND	F1 F2	2280	3150	J F1	ug/Kg	☼	138	62 - 120
Atrazine	ND	F2	4560	5900		ug/Kg	☼	129	60 - 150
Benzaldehyde	ND	F1	4560	ND	F1	ug/Kg	☼	0	10 - 150
Benzo[a]anthracene	1200	J F2	2280	3820	J	ug/Kg	☼	116	65 - 120
Benzo[a]pyrene	1900	J F2	2280	4480	J	ug/Kg	☼	114	64 - 120
Benzo[b]fluoranthene	1700	J F2	2280	4060	J	ug/Kg	☼	104	10 - 150
Benzo[g,h,i]perylene	1300	J	2280	3810	J	ug/Kg	☼	111	45 - 145
Benzo[k]fluoranthene	620	J F2	2280	3480	J	ug/Kg	☼	125	23 - 150
Biphenyl	ND	F2	2280	2330	J	ug/Kg	☼	102	58 - 120
bis (2-chloroisopropyl) ether	ND	F2	2280	1730	J	ug/Kg	☼	76	31 - 120
Bis(2-chloroethoxy)methane	ND	F2	2280	1970	J	ug/Kg	☼	86	52 - 120
Bis(2-chloroethyl)ether	ND	F1 F2	2280	1620	J	ug/Kg	☼	71	45 - 120
Bis(2-ethylhexyl) phthalate	ND	F1 F2	2280	3280	J F1	ug/Kg	☼	144	61 - 133
Butyl benzyl phthalate	ND	F1 F2	2280	3410	J F1	ug/Kg	☼	150	61 - 120
Caprolactam	ND	F2	4560	5470		ug/Kg	☼	120	37 - 133
Carbazole	ND	F1 F2	2280	2930	J F1	ug/Kg	☼	128	59 - 120
Chrysene	1200	J F2	2280	3950	J	ug/Kg	☼	120	64 - 120
Dibenz(a,h)anthracene	ND		2280	2860	J	ug/Kg	☼	125	54 - 132
Dibenzofuran	ND	F2	2280	2610	J	ug/Kg	☼	115	62 - 120
Diethyl phthalate	740	J B F1 F2	2280	3630	J F1	ug/Kg	☼	126	66 - 120
Dimethyl phthalate	ND	F2	2280	2780	J	ug/Kg	☼	122	65 - 124
Di-n-butyl phthalate	ND	F1 F2	2280	3050	J F1	ug/Kg	☼	134	58 - 130
Di-n-octyl phthalate	ND	F1 F2	2280	3310	J F1	ug/Kg	☼	145	57 - 133
Fluoranthene	1300	J F1 F2	2280	3830	J	ug/Kg	☼	109	62 - 120
Fluorene	ND	F2	2280	2720	J	ug/Kg	☼	119	63 - 120
Hexachlorobenzene	ND	F1 F2	2280	3000	J F1	ug/Kg	☼	131	60 - 120
Hexachlorobutadiene	ND		2280	1840	J	ug/Kg	☼	80	45 - 120
Hexachlorocyclopentadiene	ND		2280	1750	J	ug/Kg	☼	77	31 - 120
Hexachloroethane	ND	F2	2280	1340	J	ug/Kg	☼	59	21 - 120
Indeno[1,2,3-cd]pyrene	1100	J	2280	3810	J	ug/Kg	☼	119	56 - 134
Isophorone	ND	F2	2280	2210	J	ug/Kg	☼	97	56 - 120
Naphthalene	ND	F2	2280	2080	J	ug/Kg	☼	91	46 - 120
Nitrobenzene	ND	F1 F2	2280	1870	J	ug/Kg	☼	82	49 - 120
N-Nitrosodi-n-propylamine	ND	F2	2280	1980	J	ug/Kg	☼	87	46 - 120
N-Nitrosodiphenylamine	ND		2280	ND		ug/Kg	☼	NC	20 - 128
Pentachlorophenol	ND		4560	6110	J	ug/Kg	☼	NC	25 - 136
Phenanthrene	ND	F1 F2	2280	3190	J F1	ug/Kg	☼	140	60 - 122
Phenol	ND	F2	2280	2220	J	ug/Kg	☼	97	50 - 120
Pyrene	1900	J	2280	4390	J	ug/Kg	☼	111	61 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*146*	*S1+*	*54 - 120*
2-Fluorobiphenyl (Surr)	*101*		*60 - 120*
2-Fluorophenol (Surr)	*74*		*52 - 120*
Nitrobenzene-d5 (Surr)	*77*		*53 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-201615-1 MS
Matrix: Solid
Analysis Batch: 642158

Client Sample ID: SS2 (0-2)
Prep Type: Total/NA
Prep Batch: 641786

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Phenol-d5 (Surr)	*103*		*54 - 120*
p-Terphenyl-d14 (Surr)	*128*		*79 - 130*

Lab Sample ID: 480-201615-1 MSD
Matrix: Solid
Analysis Batch: 642158

Client Sample ID: SS2 (0-2)
Prep Type: Total/NA
Prep Batch: 641786

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4,5-Trichlorophenol	ND	F1	2290	2520	J	ug/Kg	☼	110	46 - 120	15	18
2,4,6-Trichlorophenol	ND	F1	2290	2430	J	ug/Kg	☼	106	41 - 123	17	19
2,4-Dichlorophenol	ND	F2	2290	2070	J F2	ug/Kg	☼	90	45 - 120	28	19
2,4-Dimethylphenol	ND		2290	1580	J	ug/Kg	☼	69	52 - 120	42	42
2,4-Dinitrophenol	ND		4580	ND		ug/Kg	☼	NC	41 - 146	NC	22
2,4-Dinitrotoluene	ND	F1 F2	2290	2620	J F2	ug/Kg	☼	114	63 - 125	25	20
2,6-Dinitrotoluene	ND	F1 F2	2290	2350	J F2	ug/Kg	☼	103	66 - 120	23	15
2-Chloronaphthalene	ND	F2	2290	1630	J F2	ug/Kg	☼	71	57 - 120	35	21
2-Chlorophenol	ND	F2	2290	1160	J F2	ug/Kg	☼	51	43 - 120	48	25
2-Methylnaphthalene	ND	F2	2290	1380	J F2	ug/Kg	☼	60	55 - 120	41	21
2-Methylphenol	ND	F2	2290	1490	J F2	ug/Kg	☼	65	48 - 120	36	27
2-Nitroaniline	ND	F1 F2	2290	2630	J F2	ug/Kg	☼	115	61 - 120	19	15
2-Nitrophenol	ND	F2	2290	1980	J F2	ug/Kg	☼	87	37 - 120	28	18
3,3'-Dichlorobenzidine	ND		4580	ND		ug/Kg	☼	NC	37 - 126	NC	25
3-Nitroaniline	ND	F1	2290	2470	J	ug/Kg	☼	108	48 - 120	19	19
4,6-Dinitro-2-methylphenol	ND		4580	6650	J	ug/Kg	☼	NC	23 - 149	14	15
4-Bromophenyl phenyl ether	ND	F1 F2	2290	2230	J F2	ug/Kg	☼	97	58 - 120	22	15
4-Chloro-3-methylphenol	ND	F1	2290	2370	J	ug/Kg	☼	103	49 - 125	23	27
4-Chloroaniline	ND	F2	2290	1520	J F2	ug/Kg	☼	66	38 - 120	29	22
4-Chlorophenyl phenyl ether	ND	F2	2290	2120	J F2	ug/Kg	☼	93	63 - 124	23	16
4-Methylphenol	ND	F2	2290	1870	J F2	ug/Kg	☼	82	50 - 120	30	24
4-Nitroaniline	ND		2290	ND		ug/Kg	☼	NC	47 - 120	NC	24
4-Nitrophenol	ND	F1	4580	6050	J	ug/Kg	☼	132	31 - 147	23	25
Acenaphthene	ND		2290	1910	J	ug/Kg	☼	83	60 - 120	29	35
Acenaphthylene	920	J F2	2290	2590	J F2	ug/Kg	☼	73	58 - 121	26	18
Acetophenone	ND	F2	2290	1100	J F2	ug/Kg	☼	48	47 - 120	51	20
Anthracene	ND	F1 F2	2290	2420	J F2	ug/Kg	☼	105	62 - 120	26	15
Atrazine	ND	F2	4580	4490	J F2	ug/Kg	☼	98	60 - 150	27	20
Benzaldehyde	ND	F1	4580	ND	F1	ug/Kg	☼	0	10 - 150	NC	20
Benzo[a]anthracene	1200	J F2	2290	2960	J F2	ug/Kg	☼	78	65 - 120	25	15
Benzo[a]pyrene	1900	J F2	2290	3470	J F2	ug/Kg	☼	70	64 - 120	25	15
Benzo[b]fluoranthene	1700	J F2	2290	3250	J F2	ug/Kg	☼	68	10 - 150	22	15
Benzo[g,h,i]perylene	1300	J	2290	3580	J	ug/Kg	☼	100	45 - 145	6	15
Benzo[k]fluoranthene	620	J F2	2290	2750	J F2	ug/Kg	☼	93	23 - 150	23	22
Biphenyl	ND	F2	2290	1660	J F2	ug/Kg	☼	72	58 - 120	33	20
bis (2-chloroisopropyl) ether	ND	F2	2290	1050	J F2	ug/Kg	☼	46	31 - 120	49	24
Bis(2-chloroethoxy)methane	ND	F2	2290	1220	J F2	ug/Kg	☼	53	52 - 120	46	17
Bis(2-chloroethyl)ether	ND	F1 F2	2290	912	J F1 F2	ug/Kg	☼	40	45 - 120	56	21
Bis(2-ethylhexyl) phthalate	ND	F1 F2	2290	2620	J F2	ug/Kg	☼	114	61 - 133	22	15
Butyl benzyl phthalate	ND	F1 F2	2290	2870	J F1 F2	ug/Kg	☼	125	61 - 120	17	16

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-201615-1 MSD
Matrix: Solid
Analysis Batch: 642158

Client Sample ID: SS2 (0-2)
Prep Type: Total/NA
Prep Batch: 641786

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Caprolactam	ND	F2	4580	4360	J F2	ug/Kg	☼	95	37 - 133	23	20
Carbazole	ND	F1 F2	2290	2280	J F2	ug/Kg	☼	99	59 - 120	25	20
Chrysene	1200	J F2	2290	2970	J F2	ug/Kg	☼	77	64 - 120	28	15
Dibenz(a,h)anthracene	ND		2290	2770	J	ug/Kg	☼	121	54 - 132	3	15
Dibenzofuran	ND	F2	2290	2020	J F2	ug/Kg	☼	88	62 - 120	26	15
Diethyl phthalate	740	J B F1 F2	2290	2570	J F2	ug/Kg	☼	80	66 - 120	34	15
Dimethyl phthalate	ND	F2	2290	2100	J F2	ug/Kg	☼	92	65 - 124	28	15
Di-n-butyl phthalate	ND	F1 F2	2290	2180	J F2	ug/Kg	☼	95	58 - 130	33	15
Di-n-octyl phthalate	ND	F1 F2	2290	2670	J F2	ug/Kg	☼	117	57 - 133	21	16
Fluoranthene	1300	J F1 F2	2290	2680	J F1 F2	ug/Kg	☼	59	62 - 120	35	15
Fluorene	ND	F2	2290	2180	J F2	ug/Kg	☼	95	63 - 120	22	15
Hexachlorobenzene	ND	F1 F2	2290	2320	J F2	ug/Kg	☼	101	60 - 120	26	15
Hexachlorobutadiene	ND		2290	1180	J	ug/Kg	☼	51	45 - 120	44	44
Hexachlorocyclopentadiene	ND		2290	1320	J	ug/Kg	☼	58	31 - 120	28	49
Hexachloroethane	ND	F2	2290	773	J F2	ug/Kg	☼	34	21 - 120	54	46
Indeno[1,2,3-cd]pyrene	1100	J	2290	3310	J	ug/Kg	☼	97	56 - 134	14	15
Isophorone	ND	F2	2290	1510	J F2	ug/Kg	☼	66	56 - 120	37	17
Naphthalene	ND	F2	2290	1250	J F2	ug/Kg	☼	54	46 - 120	50	29
Nitrobenzene	ND	F1 F2	2290	1030	J F1 F2	ug/Kg	☼	45	49 - 120	58	24
N-Nitrosodi-n-propylamine	ND	F2	2290	1290	J F2	ug/Kg	☼	56	46 - 120	42	31
N-Nitrosodiphenylamine	ND		2290	ND		ug/Kg	☼	NC	20 - 128	NC	15
Pentachlorophenol	ND		4580	5080	J	ug/Kg	☼	NC	25 - 136	18	35
Phenanthrene	ND	F1 F2	2290	2470	J F2	ug/Kg	☼	108	60 - 122	25	15
Phenol	ND	F2	2290	1370	J F2	ug/Kg	☼	60	50 - 120	47	35
Pyrene	1900	J	2290	3380	J	ug/Kg	☼	67	61 - 133	26	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*120*		*54 - 120*
2-Fluorobiphenyl (Surr)	*70*		*60 - 120*
2-Fluorophenol (Surr)	*44*	*S1-*	*52 - 120*
Nitrobenzene-d5 (Surr)	*44*	*S1-*	*53 - 120*
Phenol-d5 (Surr)	*70*		*54 - 120*
p-Terphenyl-d14 (Surr)	*97*		*79 - 130*

Lab Sample ID: 480-201615-3 MS
Matrix: Solid
Analysis Batch: 642158

Client Sample ID: SS2 (6-12)
Prep Type: Total/NA
Prep Batch: 641786

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	ND		1800	1760		ug/Kg	☼	98	46 - 120
2,4,6-Trichlorophenol	ND		1800	1670		ug/Kg	☼	93	41 - 123
2,4-Dichlorophenol	ND	F2	1800	1350		ug/Kg	☼	75	45 - 120
2,4-Dimethylphenol	ND		1800	1300		ug/Kg	☼	72	52 - 120
2,4-Dinitrophenol	ND		3610	ND		ug/Kg	☼	NC	41 - 146
2,4-Dinitrotoluene	ND		1800	1780		ug/Kg	☼	99	63 - 125
2,6-Dinitrotoluene	ND		1800	1680		ug/Kg	☼	93	66 - 120
2-Chloronaphthalene	ND		1800	1380		ug/Kg	☼	76	57 - 120
2-Chlorophenol	ND	F2	1800	1060	J	ug/Kg	☼	59	43 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-201615-3 MS
Matrix: Solid
Analysis Batch: 642158

Client Sample ID: SS2 (6-12)
Prep Type: Total/NA
Prep Batch: 641786

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2-Methylnaphthalene	ND	F2	1800	1190		ug/Kg	☼	66	55 - 120
2-Methylphenol	ND	F2	1800	1200		ug/Kg	☼	66	48 - 120
2-Nitroaniline	ND	F2	1800	1620	J	ug/Kg	☼	90	61 - 120
2-Nitrophenol	ND	F2	1800	1290		ug/Kg	☼	72	37 - 120
3,3'-Dichlorobenzidine	ND		3610	3510		ug/Kg	☼	97	37 - 126
3-Nitroaniline	ND		1800	1630	J	ug/Kg	☼	90	48 - 120
4,6-Dinitro-2-methylphenol	ND		3610	3690		ug/Kg	☼	102	23 - 149
4-Bromophenyl phenyl ether	ND		1800	1760		ug/Kg	☼	98	58 - 120
4-Chloro-3-methylphenol	ND		1800	1680		ug/Kg	☼	93	49 - 125
4-Chloroaniline	ND		1800	1130		ug/Kg	☼	62	38 - 120
4-Chlorophenyl phenyl ether	ND		1800	1670		ug/Kg	☼	93	63 - 124
4-Methylphenol	ND	F2	1800	1270	J	ug/Kg	☼	70	50 - 120
4-Nitroaniline	ND		1800	1810		ug/Kg	☼	100	47 - 120
4-Nitrophenol	ND		3610	3970		ug/Kg	☼	110	31 - 147
Acenaphthene	ND		1800	1510		ug/Kg	☼	84	60 - 120
Acenaphthylene	230	J	1800	1730		ug/Kg	☼	83	58 - 121
Acetophenone	ND	F2	1800	1080		ug/Kg	☼	60	47 - 120
Anthracene	ND		1800	1910		ug/Kg	☼	106	62 - 120
Atrazine	ND		3610	3760		ug/Kg	☼	104	60 - 150
Benzaldehyde	ND	F2	3610	1680		ug/Kg	☼	47	10 - 150
Benzo[a]anthracene	610	J	1800	2450		ug/Kg	☼	103	65 - 120
Benzo[a]pyrene	770	J	1800	2610		ug/Kg	☼	102	64 - 120
Benzo[b]fluoranthene	800	J	1800	2610		ug/Kg	☼	100	10 - 150
Benzo[g,h,i]perylene	550	J	1800	2310		ug/Kg	☼	97	45 - 145
Benzo[k]fluoranthene	290	J	1800	2090		ug/Kg	☼	100	23 - 150
Biphenyl	ND	F2	1800	1380		ug/Kg	☼	77	58 - 120
bis (2-chloroisopropyl) ether	ND	F2	1800	1010		ug/Kg	☼	56	31 - 120
Bis(2-chloroethoxy)methane	ND	F2	1800	1110		ug/Kg	☼	62	52 - 120
Bis(2-chloroethyl)ether	ND	F2	1800	1000		ug/Kg	☼	56	45 - 120
Bis(2-ethylhexyl) phthalate	ND		1800	1880		ug/Kg	☼	105	61 - 133
Butyl benzyl phthalate	ND		1800	2040		ug/Kg	☼	113	61 - 120
Caprolactam	ND		3610	3530		ug/Kg	☼	98	37 - 133
Carbazole	ND		1800	1890		ug/Kg	☼	105	59 - 120
Chrysene	650	J	1800	2400		ug/Kg	☼	97	64 - 120
Dibenz(a,h)anthracene	ND		1800	1750		ug/Kg	☼	97	54 - 132
Dibenzofuran	ND		1800	1620		ug/Kg	☼	90	62 - 120
Diethyl phthalate	760	J B F1 F2	1800	2440		ug/Kg	☼	93	66 - 120
Dimethyl phthalate	ND		1800	1650		ug/Kg	☼	91	65 - 124
Di-n-butyl phthalate	ND		1800	1940		ug/Kg	☼	107	58 - 130
Di-n-octyl phthalate	ND	F2	1800	1840		ug/Kg	☼	102	57 - 133
Fluoranthene	920		1800	2720		ug/Kg	☼	100	62 - 120
Fluorene	ND		1800	1700		ug/Kg	☼	94	63 - 120
Hexachlorobenzene	ND		1800	1840		ug/Kg	☼	102	60 - 120
Hexachlorobutadiene	ND		1800	1060		ug/Kg	☼	59	45 - 120
Hexachlorocyclopentadiene	ND		1800	847	J	ug/Kg	☼	47	31 - 120
Hexachloroethane	ND		1800	809	J	ug/Kg	☼	45	21 - 120
Indeno[1,2,3-cd]pyrene	550	J	1800	2360		ug/Kg	☼	101	56 - 134
Isophorone	ND	F2	1800	1210		ug/Kg	☼	67	56 - 120
Naphthalene	ND		1800	1150		ug/Kg	☼	64	46 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-201615-3 MS
Matrix: Solid
Analysis Batch: 642158

Client Sample ID: SS2 (6-12)
Prep Type: Total/NA
Prep Batch: 641786

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Nitrobenzene	ND	F2	1800	1040		ug/Kg	☼	58	49 - 120
N-Nitrosodi-n-propylamine	ND		1800	1120		ug/Kg	☼	62	46 - 120
N-Nitrosodiphenylamine	ND		1800	1770		ug/Kg	☼	98	20 - 128
Pentachlorophenol	ND		3610	3450		ug/Kg	☼	96	25 - 136
Phenanthrene	290	J	1800	2140		ug/Kg	☼	102	60 - 122
Phenol	ND		1800	1130		ug/Kg	☼	63	50 - 120
Pyrene	1000		1800	3030		ug/Kg	☼	111	61 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*105*		*54 - 120*
2-Fluorobiphenyl (Surr)	*73*		*60 - 120*
2-Fluorophenol (Surr)	*52*		*52 - 120*
Nitrobenzene-d5 (Surr)	*57*		*53 - 120*
Phenol-d5 (Surr)	*63*		*54 - 120*
p-Terphenyl-d14 (Surr)	*109*		*79 - 130*

Lab Sample ID: 480-201615-3 MSD
Matrix: Solid
Analysis Batch: 642158

Client Sample ID: SS2 (6-12)
Prep Type: Total/NA
Prep Batch: 641786

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4,5-Trichlorophenol	ND		1780	2030		ug/Kg	☼	114	46 - 120	14	18
2,4,6-Trichlorophenol	ND		1780	1960		ug/Kg	☼	110	41 - 123	16	19
2,4-Dichlorophenol	ND	F2	1780	1650	F2	ug/Kg	☼	92	45 - 120	20	19
2,4-Dimethylphenol	ND		1780	1630		ug/Kg	☼	92	52 - 120	23	42
2,4-Dinitrophenol	ND		3570	ND		ug/Kg	☼	NC	41 - 146	NC	22
2,4-Dinitrotoluene	ND		1780	1860		ug/Kg	☼	104	63 - 125	4	20
2,6-Dinitrotoluene	ND		1780	1760		ug/Kg	☼	99	66 - 120	5	15
2-Chloronaphthalene	ND		1780	1700		ug/Kg	☼	95	57 - 120	21	21
2-Chlorophenol	ND	F2	1780	1440	J F2	ug/Kg	☼	81	43 - 120	30	25
2-Methylnaphthalene	ND	F2	1780	1510	F2	ug/Kg	☼	85	55 - 120	24	21
2-Methylphenol	ND	F2	1780	1580	F2	ug/Kg	☼	89	48 - 120	28	27
2-Nitroaniline	ND	F2	1780	1910	F2	ug/Kg	☼	107	61 - 120	16	15
2-Nitrophenol	ND	F2	1780	1570	F2	ug/Kg	☼	88	37 - 120	19	18
3,3'-Dichlorobenzidine	ND		3570	3590		ug/Kg	☼	101	37 - 126	2	25
3-Nitroaniline	ND		1780	1650	J	ug/Kg	☼	93	48 - 120	1	19
4,6-Dinitro-2-methylphenol	ND		3570	3840		ug/Kg	☼	108	23 - 149	4	15
4-Bromophenyl phenyl ether	ND		1780	1810		ug/Kg	☼	101	58 - 120	3	15
4-Chloro-3-methylphenol	ND		1780	1880		ug/Kg	☼	106	49 - 125	11	27
4-Chloroaniline	ND		1780	1260		ug/Kg	☼	71	38 - 120	11	22
4-Chlorophenyl phenyl ether	ND		1780	1760		ug/Kg	☼	99	63 - 124	5	16
4-Methylphenol	ND	F2	1780	1670	J F2	ug/Kg	☼	94	50 - 120	27	24
4-Nitroaniline	ND		1780	1830		ug/Kg	☼	102	47 - 120	1	24
4-Nitrophenol	ND		3570	4110		ug/Kg	☼	115	31 - 147	4	25
Acenaphthene	ND		1780	1660		ug/Kg	☼	93	60 - 120	10	35
Acenaphthylene	230	J	1780	1980		ug/Kg	☼	98	58 - 121	13	18
Acetophenone	ND	F2	1780	1470	F2	ug/Kg	☼	82	47 - 120	30	20
Anthracene	ND		1780	1930		ug/Kg	☼	108	62 - 120	1	15

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-201615-3 MSD
Client Sample ID: SS2 (6-12)
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 642158
Prep Batch: 641786

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Atrazine	ND		3570	3860		ug/Kg	☼	108	60 - 150	3	20
Benzaldehyde	ND	F2	3570	2270	F2	ug/Kg	☼	64	10 - 150	30	20
Benzo[a]anthracene	610	J	1780	2710		ug/Kg	☼	118	65 - 120	10	15
Benzo[a]pyrene	770	J	1780	2870		ug/Kg	☼	118	64 - 120	10	15
Benzo[b]fluoranthene	800	J	1780	2810		ug/Kg	☼	113	10 - 150	7	15
Benzo[g,h,i]perylene	550	J	1780	2270		ug/Kg	☼	96	45 - 145	2	15
Benzo[k]fluoranthene	290	J	1780	2090		ug/Kg	☼	101	23 - 150	0	22
Biphenyl	ND	F2	1780	1730	F2	ug/Kg	☼	97	58 - 120	23	20
bis (2-chloroisopropyl) ether	ND	F2	1780	1420	F2	ug/Kg	☼	80	31 - 120	34	24
Bis(2-chloroethoxy)methane	ND	F2	1780	1450	F2	ug/Kg	☼	81	52 - 120	26	17
Bis(2-chloroethyl)ether	ND	F2	1780	1380	F2	ug/Kg	☼	77	45 - 120	31	21
Bis(2-ethylhexyl) phthalate	ND		1780	2000		ug/Kg	☼	112	61 - 133	6	15
Butyl benzyl phthalate	ND		1780	2080		ug/Kg	☼	117	61 - 120	2	16
Caprolactam	ND		3570	3680		ug/Kg	☼	103	37 - 133	4	20
Carbazole	ND		1780	1890		ug/Kg	☼	106	59 - 120	0	20
Chrysene	650	J	1780	2610		ug/Kg	☼	110	64 - 120	8	15
Dibenz(a,h)anthracene	ND		1780	1650		ug/Kg	☼	93	54 - 132	6	15
Dibenzofuran	ND		1780	1760		ug/Kg	☼	99	62 - 120	8	15
Diethyl phthalate	760	J B F1 F2	1780	1920	F1 F2	ug/Kg	☼	65	66 - 120	24	15
Dimethyl phthalate	ND		1780	1760		ug/Kg	☼	99	65 - 124	7	15
Di-n-butyl phthalate	ND		1780	2010		ug/Kg	☼	113	58 - 130	4	15
Di-n-octyl phthalate	ND	F2	1780	2190	F2	ug/Kg	☼	123	57 - 133	18	16
Fluoranthene	920		1780	2880		ug/Kg	☼	110	62 - 120	6	15
Fluorene	ND		1780	1820		ug/Kg	☼	102	63 - 120	7	15
Hexachlorobenzene	ND		1780	1810		ug/Kg	☼	102	60 - 120	1	15
Hexachlorobutadiene	ND		1780	1380		ug/Kg	☼	77	45 - 120	26	44
Hexachlorocyclopentadiene	ND		1780	1130		ug/Kg	☼	63	31 - 120	29	49
Hexachloroethane	ND		1780	1270		ug/Kg	☼	71	21 - 120	44	46
Indeno[1,2,3-cd]pyrene	550	J	1780	2260		ug/Kg	☼	96	56 - 134	4	15
Isophorone	ND	F2	1780	1530	F2	ug/Kg	☼	86	56 - 120	23	17
Naphthalene	ND		1780	1460		ug/Kg	☼	82	46 - 120	24	29
Nitrobenzene	ND	F2	1780	1380	F2	ug/Kg	☼	78	49 - 120	28	24
N-Nitrosodi-n-propylamine	ND		1780	1480		ug/Kg	☼	83	46 - 120	28	31
N-Nitrosodiphenylamine	ND		1780	1790		ug/Kg	☼	100	20 - 128	1	15
Pentachlorophenol	ND		3570	3440		ug/Kg	☼	97	25 - 136	0	35
Phenanthrene	290	J	1780	2190		ug/Kg	☼	106	60 - 122	2	15
Phenol	ND		1780	1490		ug/Kg	☼	83	50 - 120	27	35
Pyrene	1000		1780	3170		ug/Kg	☼	120	61 - 133	4	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*100*		*54 - 120*
2-Fluorobiphenyl (Surr)	*95*		*60 - 120*
2-Fluorophenol (Surr)	*72*		*52 - 120*
Nitrobenzene-d5 (Surr)	*75*		*53 - 120*
Phenol-d5 (Surr)	*84*		*54 - 120*
p-Terphenyl-d14 (Surr)	*106*		*79 - 130*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-642833/1-A
Matrix: Solid
Analysis Batch: 642901

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 642833

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		170	45	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
2,4,6-Trichlorophenol	ND		170	34	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
2,4-Dimethylphenol	ND		170	41	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
2,4-Dinitrophenol	ND		1600	780	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
2,4-Dinitrotoluene	ND		170	35	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
2-Chloronaphthalene	ND		170	28	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
2-Chlorophenol	ND		330	31	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
2-Methylnaphthalene	ND		170	34	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
2-Methylphenol	ND		170	20	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
2-Nitroaniline	ND		330	25	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
2-Nitrophenol	ND		170	47	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
3,3'-Dichlorobenzidine	ND		330	200	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
3-Nitroaniline	ND		330	46	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
4,6-Dinitro-2-methylphenol	ND		330	170	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
4-Bromophenyl phenyl ether	ND		170	24	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
4-Chloro-3-methylphenol	ND		170	42	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
4-Chloroaniline	ND		170	42	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
4-Chlorophenyl phenyl ether	ND		170	21	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
4-Methylphenol	ND		330	20	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
4-Nitroaniline	ND		330	88	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
4-Nitrophenol	ND		330	120	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Acenaphthene	ND		170	25	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Acenaphthylene	ND		170	22	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Acetophenone	ND		170	23	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Anthracene	ND		170	42	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Atrazine	ND		170	58	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Benzaldehyde	ND		170	130	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Benzo[a]anthracene	ND		170	17	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Benzo[a]pyrene	ND		170	25	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Biphenyl	ND		170	25	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
bis (2-chloroisopropyl) ether	ND		170	34	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Bis(2-chloroethoxy)methane	ND		170	36	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Bis(2-chloroethyl)ether	ND		170	22	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Bis(2-ethylhexyl) phthalate	ND		170	57	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Butyl benzyl phthalate	ND		170	28	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Caprolactam	ND		170	50	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Carbazole	ND		170	20	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Chrysene	ND		170	38	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Dibenz(a,h)anthracene	ND		170	30	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Dibenzofuran	ND		170	20	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Diethyl phthalate	123	J	170	22	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Dimethyl phthalate	ND		170	20	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Di-n-butyl phthalate	ND		170	29	ug/Kg		09/26/22 15:42	09/27/22 12:08	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-642833/1-A
Matrix: Solid
Analysis Batch: 642901

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 642833

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	ND		170	20	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Fluoranthene	ND		170	18	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Fluorene	ND		170	20	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Hexachlorobenzene	ND		170	23	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Hexachlorobutadiene	ND		170	25	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Hexachlorocyclopentadiene	ND		170	23	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Hexachloroethane	ND		170	22	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Isophorone	ND		170	36	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Naphthalene	ND		170	22	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Nitrobenzene	ND		170	19	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
N-Nitrosodi-n-propylamine	ND		170	29	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
N-Nitrosodiphenylamine	ND		170	140	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Pentachlorophenol	ND		330	170	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Phenanthrene	ND		170	25	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Phenol	ND		170	26	ug/Kg		09/26/22 15:42	09/27/22 12:08	1
Pyrene	ND		170	20	ug/Kg		09/26/22 15:42	09/27/22 12:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*104*		*54 - 120*	*09/26/22 15:42*	*09/27/22 12:08*	*1*
2-Fluorobiphenyl (Surr)	*105*		*60 - 120*	*09/26/22 15:42*	*09/27/22 12:08*	*1*
2-Fluorophenol (Surr)	*97*		*52 - 120*	*09/26/22 15:42*	*09/27/22 12:08*	*1*
Nitrobenzene-d5 (Surr)	*99*		*53 - 120*	*09/26/22 15:42*	*09/27/22 12:08*	*1*
Phenol-d5 (Surr)	*97*		*54 - 120*	*09/26/22 15:42*	*09/27/22 12:08*	*1*
p-Terphenyl-d14 (Surr)	*112*		*79 - 130*	*09/26/22 15:42*	*09/27/22 12:08*	*1*

Lab Sample ID: LCS 480-642833/2-A
Matrix: Solid
Analysis Batch: 643061

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 642833

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	1640	1150		ug/Kg		70	59 - 126
2,4,6-Trichlorophenol	1640	1170		ug/Kg		72	59 - 123
2,4-Dichlorophenol	1640	1060		ug/Kg		65	61 - 120
2,4-Dimethylphenol	1640	1020		ug/Kg		62	59 - 120
2,4-Dinitrophenol	3280	2680		ug/Kg		82	41 - 146
2,4-Dinitrotoluene	1640	1340		ug/Kg		82	63 - 120
2,6-Dinitrotoluene	1640	1310		ug/Kg		80	66 - 120
2-Chloronaphthalene	1640	1150		ug/Kg		70	57 - 120
2-Chlorophenol	1640	1020		ug/Kg		62	53 - 120
2-Methylnaphthalene	1640	985		ug/Kg		60	59 - 120
2-Methylphenol	1640	1000		ug/Kg		61	54 - 120
2-Nitroaniline	1640	1200		ug/Kg		73	61 - 120
2-Nitrophenol	1640	1020		ug/Kg		62	56 - 120
3,3'-Dichlorobenzidine	3280	2220		ug/Kg		68	54 - 120
3-Nitroaniline	1640	1150		ug/Kg		70	48 - 120
4,6-Dinitro-2-methylphenol	3280	2720		ug/Kg		83	49 - 122
4-Bromophenyl phenyl ether	1640	1240		ug/Kg		76	58 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-642833/2-A
Matrix: Solid
Analysis Batch: 643061

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 642833

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4-Chloro-3-methylphenol	1640	1090		ug/Kg		67	61 - 120
4-Chloroaniline	1640	951		ug/Kg		58	38 - 120
4-Chlorophenyl phenyl ether	1640	1180		ug/Kg		72	63 - 124
4-Methylphenol	1640	1020		ug/Kg		62	55 - 120
4-Nitroaniline	1640	1290		ug/Kg		79	56 - 120
4-Nitrophenol	3280	2440		ug/Kg		74	43 - 147
Acenaphthene	1640	1140		ug/Kg		69	62 - 120
Acenaphthylene	1640	1150		ug/Kg		70	58 - 121
Acetophenone	1640	982		ug/Kg		60	54 - 120
Anthracene	1640	1260		ug/Kg		77	62 - 120
Atrazine	3280	2510		ug/Kg		77	60 - 127
Benzaldehyde	3280	1950		ug/Kg		60	10 - 150
Benzo[a]anthracene	1640	1220		ug/Kg		74	65 - 120
Benzo[a]pyrene	1640	1280		ug/Kg		78	64 - 120
Benzo[b]fluoranthene	1640	1410		ug/Kg		86	64 - 120
Benzo[g,h,i]perylene	1640	1190		ug/Kg		72	45 - 145
Benzo[k]fluoranthene	1640	1290		ug/Kg		79	65 - 120
Biphenyl	1640	1130		ug/Kg		69	59 - 120
bis (2-chloroisopropyl) ether	1640	932		ug/Kg		57	44 - 120
Bis(2-chloroethoxy)methane	1640	985		ug/Kg		60	55 - 120
Bis(2-chloroethyl)ether	1640	989		ug/Kg		60	45 - 120
Bis(2-ethylhexyl) phthalate	1640	1180		ug/Kg		72	61 - 133
Butyl benzyl phthalate	1640	1200		ug/Kg		73	61 - 129
Caprolactam	3280	2370		ug/Kg		72	47 - 120
Carbazole	1640	1310		ug/Kg		80	65 - 120
Chrysene	1640	1300		ug/Kg		79	64 - 120
Dibenz(a,h)anthracene	1640	1230		ug/Kg		75	54 - 132
Dibenzofuran	1640	1150		ug/Kg		70	63 - 120
Diethyl phthalate	1640	1320		ug/Kg		81	66 - 120
Dimethyl phthalate	1640	1200		ug/Kg		73	65 - 124
Di-n-butyl phthalate	1640	1230		ug/Kg		75	58 - 130
Di-n-octyl phthalate	1640	1140		ug/Kg		69	57 - 133
Fluoranthene	1640	1300		ug/Kg		79	62 - 120
Fluorene	1640	1190		ug/Kg		73	63 - 120
Hexachlorobenzene	1640	1250		ug/Kg		76	60 - 120
Hexachlorobutadiene	1640	978		ug/Kg		60	45 - 120
Hexachlorocyclopentadiene	1640	845		ug/Kg		52	47 - 120
Hexachloroethane	1640	883		ug/Kg		54	41 - 120
Indeno[1,2,3-cd]pyrene	1640	1230		ug/Kg		75	56 - 134
Isophorone	1640	988		ug/Kg		60	56 - 120
Naphthalene	1640	1010		ug/Kg		61	55 - 120
Nitrobenzene	1640	1010		ug/Kg		62	54 - 120
N-Nitrosodi-n-propylamine	1640	992		ug/Kg		61	52 - 120
N-Nitrosodiphenylamine	1640	1270		ug/Kg		77	51 - 128
Pentachlorophenol	3280	2240		ug/Kg		68	51 - 120
Phenanthrene	1640	1270		ug/Kg		77	60 - 120
Phenol	1640	1010		ug/Kg		62	53 - 120
Pyrene	1640	1290		ug/Kg		79	61 - 133

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-642833/2-A
Matrix: Solid
Analysis Batch: 643061

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 642833

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*93*		*54 - 120*
2-Fluorobiphenyl (Surr)	*84*		*60 - 120*
2-Fluorophenol (Surr)	*69*		*52 - 120*
Nitrobenzene-d5 (Surr)	*77*		*53 - 120*
Phenol-d5 (Surr)	*77*		*54 - 120*
p-Terphenyl-d14 (Surr)	*98*		*79 - 130*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-641524/1-A
Matrix: Solid
Analysis Batch: 641879

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641524

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	13.39		9.8	4.3	mg/Kg		09/15/22 11:25	09/16/22 16:41	1
Antimony	ND		14.8	0.39	mg/Kg		09/15/22 11:25	09/16/22 16:41	1
Arsenic	ND		2.0	0.39	mg/Kg		09/15/22 11:25	09/16/22 16:41	1
Barium	0.118	J	0.49	0.11	mg/Kg		09/15/22 11:25	09/16/22 16:41	1
Beryllium	0.0345	J	0.20	0.028	mg/Kg		09/15/22 11:25	09/16/22 16:41	1
Cadmium	0.0394	J	0.20	0.030	mg/Kg		09/15/22 11:25	09/16/22 16:41	1
Calcium	7.25	J	49.2	3.2	mg/Kg		09/15/22 11:25	09/16/22 16:41	1
Chromium	ND		0.49	0.20	mg/Kg		09/15/22 11:25	09/16/22 16:41	1
Cobalt	ND		0.49	0.049	mg/Kg		09/15/22 11:25	09/16/22 16:41	1
Copper	ND		0.98	0.21	mg/Kg		09/15/22 11:25	09/16/22 16:41	1
Iron	15.62		9.8	3.4	mg/Kg		09/15/22 11:25	09/16/22 16:41	1
Lead	ND		0.98	0.24	mg/Kg		09/15/22 11:25	09/16/22 16:41	1
Magnesium	5.08	J	19.7	0.91	mg/Kg		09/15/22 11:25	09/16/22 16:41	1
Manganese	0.367		0.20	0.032	mg/Kg		09/15/22 11:25	09/16/22 16:41	1
Nickel	ND		4.9	0.23	mg/Kg		09/15/22 11:25	09/16/22 16:41	1
Potassium	ND		29.5	19.7	mg/Kg		09/15/22 11:25	09/16/22 16:41	1
Selenium	ND		3.9	0.39	mg/Kg		09/15/22 11:25	09/16/22 16:41	1
Silver	ND		0.59	0.20	mg/Kg		09/15/22 11:25	09/16/22 16:41	1
Sodium	ND		138	12.8	mg/Kg		09/15/22 11:25	09/16/22 16:41	1
Thallium	ND		5.9	0.30	mg/Kg		09/15/22 11:25	09/16/22 16:41	1
Vanadium	ND		0.49	0.11	mg/Kg		09/15/22 11:25	09/16/22 16:41	1
Zinc	ND		2.0	0.63	mg/Kg		09/15/22 11:25	09/16/22 16:41	1

Lab Sample ID: LCSSRM 480-641524/2-A
Matrix: Solid
Analysis Batch: 641879

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641524

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	8630	9942		mg/Kg		115.2	50.6 - 149.5
Antimony	129	81.19		mg/Kg		62.9	19.8 - 250.4
Arsenic	84.5	73.47		mg/Kg		87.0	70.1 - 130.2
Barium	249	224.9		mg/Kg		90.3	75.1 - 124.9

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-641524/2-A
Matrix: Solid
Analysis Batch: 641879

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641524

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	163	150.3		mg/Kg		92.2	74.8 - 125.2
Cadmium	99.0	87.25		mg/Kg		88.1	74.9 - 125.3
Calcium	4760	4285		mg/Kg		90.0	72.7 - 127.5
Chromium	122	107.2		mg/Kg		87.8	70.2 - 130.3
Cobalt	61.7	61.15		mg/Kg		99.1	75.0 - 125.1
Copper	61.5	53.43		mg/Kg		86.9	75.0 - 124.9
Iron	14500	13350		mg/Kg		92.0	35.8 - 164.1
Lead	123	121.0		mg/Kg		98.4	71.8 - 128.5
Magnesium	2360	2207		mg/Kg		93.5	62.7 - 137.7
Manganese	456	400.1		mg/Kg		87.7	76.8 - 123.5
Nickel	135	133.5		mg/Kg		98.9	70.1 - 130.4
Potassium	2090	2329		mg/Kg		111.4	59.3 - 140.7
Selenium	121	103.3		mg/Kg		85.4	66.4 - 133.9
Silver	33.6	36.67		mg/Kg		109.1	68.5 - 131.3
Sodium	136	155.1		mg/Kg		114.0	35.4 - 164.0
Thallium	144	149.8		mg/Kg		104.0	70.1 - 129.9
Vanadium	186	161.5		mg/Kg		86.8	74.2 - 126.3
Zinc	295	240.6		mg/Kg		81.6	70.2 - 130.2

Lab Sample ID: 480-201615-1 MS
Matrix: Solid
Analysis Batch: 641879

Client Sample ID: SS2 (0-2)
Prep Type: Total/NA
Prep Batch: 641524

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	11500	B	2880	21820	4	mg/Kg	☼	359	75 - 125
Antimony	2.0	J F1	57.4	42.16	F1	mg/Kg	☼	70	75 - 125
Arsenic	9.3		57.6	64.13		mg/Kg	☼	95	75 - 125
Barium	103	B F1	57.4	193.8	F1	mg/Kg	☼	159	75 - 125
Beryllium	0.54	B	57.4	55.42		mg/Kg	☼	96	75 - 125
Cadmium	0.33	B	57.4	53.19		mg/Kg	☼	92	75 - 125
Calcium	3870	B F1 F2	2880	7981	F1	mg/Kg	☼	143	75 - 125
Chromium	15.2		57.4	73.52		mg/Kg	☼	102	75 - 125
Cobalt	8.3		57.4	67.12		mg/Kg	☼	102	75 - 125
Copper	21.3		57.4	79.02		mg/Kg	☼	100	75 - 125
Iron	21900	B	2880	26180	4	mg/Kg	☼	147	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-201615-1 MS
Matrix: Solid
Analysis Batch: 641879

Client Sample ID: SS2 (0-2)
Prep Type: Total/NA
Prep Batch: 641524

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	116		57.6	179.6		mg/Kg	☼	111	75 - 125
Magnesium	2800	B F1	2870	6409	F1	mg/Kg	☼	126	75 - 125
Manganese	513	B	57.4	586.7	4	mg/Kg	☼	128	75 - 125
Nickel	19.2		57.4	77.61		mg/Kg	☼	102	75 - 125
Potassium	2200	F1	2880	7864	F1	mg/Kg	☼	197	75 - 125
Selenium	1.1	J	57.4	54.56		mg/Kg	☼	93	75 - 125
Silver	ND		14.4	13.04		mg/Kg	☼	91	75 - 125
Sodium	73.0	J	2880	2664		mg/Kg	☼	90	75 - 125
Thallium	ND		57.4	57.80		mg/Kg	☼	101	75 - 125
Vanadium	19.0		57.6	82.51		mg/Kg	☼	110	75 - 125
Zinc	98.9		57.4	154.7		mg/Kg	☼	97	75 - 125

Lab Sample ID: 480-201615-1 MSD
Matrix: Solid
Analysis Batch: 641879

Client Sample ID: SS2 (0-2)
Prep Type: Total/NA
Prep Batch: 641524

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	11500	B	2670	21520	4	mg/Kg	☼	375	75 - 125	1	20
Antimony	2.0	J F1	53.4	37.32	F1	mg/Kg	☼	66	75 - 125	12	20
Arsenic	9.3		53.5	58.84		mg/Kg	☼	93	75 - 125	9	20
Barium	103	B F1	53.4	188.1	F1	mg/Kg	☼	160	75 - 125	3	20
Beryllium	0.54	B	53.4	49.99		mg/Kg	☼	93	75 - 125	10	20
Cadmium	0.33	B	53.4	48.54		mg/Kg	☼	90	75 - 125	9	20
Calcium	3870	B F1 F2	2670	6141	F2	mg/Kg	☼	85	75 - 125	26	20
Chromium	15.2		53.4	69.16		mg/Kg	☼	101	75 - 125	6	20
Cobalt	8.3		53.4	62.88		mg/Kg	☼	102	75 - 125	7	20
Copper	21.3		53.4	73.16		mg/Kg	☼	97	75 - 125	8	20
Iron	21900	B	2670	26420	4	mg/Kg	☼	167	75 - 125	1	20
Lead	116		53.5	180.2		mg/Kg	☼	121	75 - 125	0	20
Magnesium	2800	B F1	2670	5444		mg/Kg	☼	99	75 - 125	16	20
Manganese	513	B	53.4	555.2	4	mg/Kg	☼	79	75 - 125	6	20
Nickel	19.2		53.4	73.07		mg/Kg	☼	101	75 - 125	6	20
Potassium	2200	F1	2670	7704	F1	mg/Kg	☼	206	75 - 125	2	20
Selenium	1.1	J	53.4	49.76		mg/Kg	☼	91	75 - 125	9	20
Silver	ND		13.3	11.86		mg/Kg	☼	89	75 - 125	9	20
Sodium	73.0	J	2670	2425		mg/Kg	☼	88	75 - 125	9	20
Thallium	ND		53.4	53.53		mg/Kg	☼	100	75 - 125	8	20
Vanadium	19.0		53.5	78.19		mg/Kg	☼	111	75 - 125	5	20
Zinc	98.9		53.4	144.2		mg/Kg	☼	85	75 - 125	7	20

Lab Sample ID: 480-201615-3 MS
Matrix: Solid
Analysis Batch: 641879

Client Sample ID: SS2 (6-12)
Prep Type: Total/NA
Prep Batch: 641524

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	12600	B	2270	23760	4	mg/Kg	☼	494	75 - 125
Antimony	1.5	J F1	45.3	22.75	F1	mg/Kg	☼	47	75 - 125
Arsenic	9.3		45.4	48.75		mg/Kg	☼	87	75 - 125
Barium	129	B F1	45.3	212.0	F1	mg/Kg	☼	184	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-201615-3 MS
Matrix: Solid
Analysis Batch: 641879

Client Sample ID: SS2 (6-12)
Prep Type: Total/NA
Prep Batch: 641524

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium	0.55	B	45.3	38.59		mg/Kg	☼	84	75 - 125
Cadmium	0.19	J B	45.3	37.25		mg/Kg	☼	82	75 - 125
Calcium	4060	B F1	2270	7263	F1	mg/Kg	☼	141	75 - 125
Chromium	15.0		45.3	59.07		mg/Kg	☼	97	75 - 125
Cobalt	11.0		45.3	55.15		mg/Kg	☼	97	75 - 125
Copper	31.8		45.3	72.20		mg/Kg	☼	89	75 - 125
Iron	26500	B	2270	30230	4	mg/Kg	☼	162	75 - 125
Lead	47.9	F1	45.4	86.35		mg/Kg	☼	85	75 - 125
Magnesium	3920	B F1 F2	2260	6194		mg/Kg	☼	100	75 - 125
Manganese	406	B	45.3	481.4	4	mg/Kg	☼	166	75 - 125
Nickel	26.2		45.3	69.96		mg/Kg	☼	97	75 - 125
Potassium	1700	F1	2270	6727	F1	mg/Kg	☼	222	75 - 125
Selenium	0.70	J	45.3	37.61		mg/Kg	☼	82	75 - 125
Silver	ND		11.3	9.59		mg/Kg	☼	85	75 - 125
Sodium	63.3	J	2270	2039		mg/Kg	☼	87	75 - 125
Thallium	ND		45.3	41.31		mg/Kg	☼	91	75 - 125
Vanadium	18.9		45.4	70.15		mg/Kg	☼	113	75 - 125
Zinc	76.7		45.3	122.0		mg/Kg	☼	100	75 - 125

Lab Sample ID: 480-201615-3 MSD
Matrix: Solid
Analysis Batch: 641879

Client Sample ID: SS2 (6-12)
Prep Type: Total/NA
Prep Batch: 641524

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	12600	B	2140	24000	4	mg/Kg	☼	535	75 - 125	1	20
Antimony	1.5	J F1	42.7	22.58	F1	mg/Kg	☼	49	75 - 125	1	20
Arsenic	9.3		42.8	50.07		mg/Kg	☼	95	75 - 125	3	20
Barium	129	B F1	42.7	212.3	F1	mg/Kg	☼	196	75 - 125	0	20
Beryllium	0.55	B	42.7	38.03		mg/Kg	☼	88	75 - 125	1	20
Cadmium	0.19	J B	42.7	37.58		mg/Kg	☼	88	75 - 125	1	20
Calcium	4060	B F1	2140	8103	F1	mg/Kg	☼	189	75 - 125	11	20
Chromium	15.0		42.7	58.17		mg/Kg	☼	101	75 - 125	2	20
Cobalt	11.0		42.7	54.83		mg/Kg	☼	103	75 - 125	1	20
Copper	31.8		42.7	71.83		mg/Kg	☼	94	75 - 125	1	20
Iron	26500	B	2140	30910	4	mg/Kg	☼	204	75 - 125	2	20
Lead	47.9	F1	42.8	105.1	F1	mg/Kg	☼	134	75 - 125	20	20
Magnesium	3920	B F1 F2	2130	7730	F1 F2	mg/Kg	☼	178	75 - 125	22	20
Manganese	406	B	42.7	463.4	4	mg/Kg	☼	134	75 - 125	4	20
Nickel	26.2		42.7	70.59		mg/Kg	☼	104	75 - 125	1	20
Potassium	1700	F1	2140	6919	F1	mg/Kg	☼	244	75 - 125	3	20
Selenium	0.70	J	42.7	38.51		mg/Kg	☼	89	75 - 125	2	20
Silver	ND		10.7	9.12		mg/Kg	☼	86	75 - 125	5	20
Sodium	63.3	J	2140	1941		mg/Kg	☼	88	75 - 125	5	20
Thallium	ND		42.7	41.39		mg/Kg	☼	97	75 - 125	0	20
Vanadium	18.9		42.8	68.92		mg/Kg	☼	117	75 - 125	2	20
Zinc	76.7		42.7	120.6		mg/Kg	☼	103	75 - 125	1	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 480-641783/1-A
Matrix: Water
Analysis Batch: 642007

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641783

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		09/19/22 09:28	09/19/22 16:00	1
Antimony	ND		0.020	0.0068	mg/L		09/19/22 09:28	09/19/22 16:00	1
Arsenic	ND		0.015	0.0056	mg/L		09/19/22 09:28	09/19/22 16:00	1
Barium	ND		0.0020	0.00070	mg/L		09/19/22 09:28	09/19/22 16:00	1
Beryllium	ND		0.0020	0.00030	mg/L		09/19/22 09:28	09/19/22 16:00	1
Cadmium	ND		0.0020	0.00050	mg/L		09/19/22 09:28	09/19/22 16:00	1
Calcium	ND		0.50	0.10	mg/L		09/19/22 09:28	09/19/22 16:00	1
Chromium	ND		0.0040	0.0010	mg/L		09/19/22 09:28	09/19/22 16:00	1
Cobalt	ND		0.0040	0.00063	mg/L		09/19/22 09:28	09/19/22 16:00	1
Copper	ND		0.010	0.0016	mg/L		09/19/22 09:28	09/19/22 16:00	1
Iron	ND		0.050	0.019	mg/L		09/19/22 09:28	09/19/22 16:00	1
Lead	ND		0.010	0.0030	mg/L		09/19/22 09:28	09/19/22 16:00	1
Magnesium	ND		0.20	0.043	mg/L		09/19/22 09:28	09/19/22 16:00	1
Manganese	ND		0.0030	0.00040	mg/L		09/19/22 09:28	09/19/22 16:00	1
Nickel	ND		0.010	0.0013	mg/L		09/19/22 09:28	09/19/22 16:00	1
Potassium	ND		0.50	0.10	mg/L		09/19/22 09:28	09/19/22 16:00	1
Selenium	ND		0.025	0.0087	mg/L		09/19/22 09:28	09/19/22 16:00	1
Silver	ND		0.0060	0.0017	mg/L		09/19/22 09:28	09/19/22 16:00	1
Sodium	ND		1.0	0.32	mg/L		09/19/22 09:28	09/19/22 16:00	1
Thallium	ND		0.020	0.010	mg/L		09/19/22 09:28	09/19/22 16:00	1
Vanadium	ND		0.0050	0.0015	mg/L		09/19/22 09:28	09/19/22 16:00	1
Zinc	ND		0.010	0.0015	mg/L		09/19/22 09:28	09/19/22 16:00	1

Lab Sample ID: LCS 480-641783/2-A
Matrix: Water
Analysis Batch: 642007

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641783

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	10.0	10.02		mg/L		100	80 - 120
Antimony	0.200	0.202		mg/L		101	80 - 120
Arsenic	0.201	0.200		mg/L		100	80 - 120
Barium	0.200	0.205		mg/L		102	80 - 120
Beryllium	0.200	0.210		mg/L		105	80 - 120
Cadmium	0.200	0.195		mg/L		97	80 - 120
Calcium	10.0	9.98		mg/L		100	80 - 120
Chromium	0.200	0.197		mg/L		99	80 - 120
Cobalt	0.200	0.194		mg/L		97	80 - 120
Copper	0.200	0.202		mg/L		101	80 - 120
Iron	10.0	10.22		mg/L		102	80 - 120
Lead	0.201	0.193		mg/L		96	80 - 120
Magnesium	10.0	9.79		mg/L		98	80 - 120
Manganese	0.200	0.208		mg/L		104	80 - 120
Nickel	0.200	0.193		mg/L		96	80 - 120
Potassium	10.0	9.71		mg/L		97	80 - 120
Selenium	0.200	0.195		mg/L		98	80 - 120
Silver	0.0500	0.0478		mg/L		96	80 - 120
Sodium	10.0	9.57		mg/L		96	80 - 120
Thallium	0.200	0.198		mg/L		99	80 - 120
Vanadium	0.201	0.195		mg/L		97	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-641783/2-A
Matrix: Water
Analysis Batch: 642007

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641783

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	0.200	0.200		mg/L		100	80 - 120

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-641565/1-A
Matrix: Water
Analysis Batch: 641649

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641565

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		09/15/22 12:03	09/15/22 15:37	1

Lab Sample ID: LCS 480-641565/2-A
Matrix: Water
Analysis Batch: 641649

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641565

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00667	0.00633		mg/L		95	80 - 120

Lab Sample ID: LCSD 480-641565/3-A
Matrix: Water
Analysis Batch: 641649

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 641565

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.00667	0.00643		mg/L		96	80 - 120	2	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-641437/1-A
Matrix: Solid
Analysis Batch: 641616

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641437

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0045	mg/Kg		09/15/22 10:09	09/15/22 14:13	1

Lab Sample ID: LCSSRM 480-641437/2-A ^10
Matrix: Solid
Analysis Batch: 641616

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641437

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	18.9	17.87		mg/Kg		94.6	59.8 - 139.7

Lab Sample ID: 480-201615-1 MS
Matrix: Solid
Analysis Batch: 641616

Client Sample ID: SS2 (0-2)
Prep Type: Total/NA
Prep Batch: 641437

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.055		0.469	0.498		mg/Kg	☼	94	80 - 120

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: 480-201615-1 MSD
Matrix: Solid
Analysis Batch: 641616

Client Sample ID: SS2 (0-2)
Prep Type: Total/NA
Prep Batch: 641437

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.055		0.457	0.475		mg/Kg	☼	92	80 - 120	5	20

Lab Sample ID: 480-201615-3 MS
Matrix: Solid
Analysis Batch: 641616

Client Sample ID: SS2 (6-12)
Prep Type: Total/NA
Prep Batch: 641437

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.026		0.347	0.371		mg/Kg	☼	99	80 - 120

Lab Sample ID: 480-201615-3 MSD
Matrix: Solid
Analysis Batch: 641616

Client Sample ID: SS2 (6-12)
Prep Type: Total/NA
Prep Batch: 641437

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.026		0.370	0.403		mg/Kg	☼	102	80 - 120	8	20

GC/MS VOA

Prep Batch: 641451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201615-2	SS2 (0-6)	Total/NA	Solid	5035A_L	
MB 480-641451/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-641451/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

Analysis Batch: 641452

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201615-2	SS2 (0-6)	Total/NA	Solid	8260C	641451
MB 480-641451/2-A	Method Blank	Total/NA	Solid	8260C	641451
LCS 480-641451/1-A	Lab Control Sample	Total/NA	Solid	8260C	641451

Analysis Batch: 641512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201615-14	FB_091322	Total/NA	Water	8260C	
480-201615-15	TB_091322	Total/NA	Water	8260C	
MB 480-641512/8	Method Blank	Total/NA	Water	8260C	
LCS 480-641512/6	Lab Control Sample	Total/NA	Water	8260C	

Prep Batch: 641652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201615-1	SS2 (0-2)	Total/NA	Solid	5035A_L	
480-201615-4	SS2 (12-24)	Total/NA	Solid	5035A_L	
MB 480-641652/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-641652/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	
480-201615-1 MS	SS2 (0-2)	Total/NA	Solid	5035A_L	
480-201615-1 MSD	SS2 (0-2)	Total/NA	Solid	5035A_L	

Analysis Batch: 641653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201615-1	SS2 (0-2)	Total/NA	Solid	8260C	641652
480-201615-4	SS2 (12-24)	Total/NA	Solid	8260C	641652
MB 480-641652/2-A	Method Blank	Total/NA	Solid	8260C	641652
LCS 480-641652/1-A	Lab Control Sample	Total/NA	Solid	8260C	641652
480-201615-1 MS	SS2 (0-2)	Total/NA	Solid	8260C	641652
480-201615-1 MSD	SS2 (0-2)	Total/NA	Solid	8260C	641652

Prep Batch: 641838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201615-3	SS2 (6-12)	Total/NA	Solid	5035A_L	
480-201615-5	SS3 (0-2)	Total/NA	Solid	5035A_L	
480-201615-6	SS3 (0-6)	Total/NA	Solid	5035A_L	
480-201615-7	SS3 (6-12)	Total/NA	Solid	5035A_L	
480-201615-8	SS3 (12-24)	Total/NA	Solid	5035A_L	
480-201615-9	FDUP2_091322	Total/NA	Solid	5035A_L	
480-201615-10	SS4 (0-2)	Total/NA	Solid	5035A_L	
480-201615-11	SS4 (0-6)	Total/NA	Solid	5035A_L	
480-201615-12	SS4 (6-12)	Total/NA	Solid	5035A_L	
480-201615-13	SS4 (12-24)	Total/NA	Solid	5035A_L	
MB 480-641838/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-641838/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	
480-201615-3 MS	SS2 (6-12)	Total/NA	Solid	5035A_L	
480-201615-3 MSD	SS2 (6-12)	Total/NA	Solid	5035A_L	

GC/MS VOA

Analysis Batch: 641839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201615-3	SS2 (6-12)	Total/NA	Solid	8260C	641838
480-201615-5	SS3 (0-2)	Total/NA	Solid	8260C	641838
480-201615-6	SS3 (0-6)	Total/NA	Solid	8260C	641838
480-201615-7	SS3 (6-12)	Total/NA	Solid	8260C	641838
480-201615-8	SS3 (12-24)	Total/NA	Solid	8260C	641838
480-201615-9	FDUP2_091322	Total/NA	Solid	8260C	641838
480-201615-10	SS4 (0-2)	Total/NA	Solid	8260C	641838
480-201615-11	SS4 (0-6)	Total/NA	Solid	8260C	641838
480-201615-12	SS4 (6-12)	Total/NA	Solid	8260C	641838
480-201615-13	SS4 (12-24)	Total/NA	Solid	8260C	641838
MB 480-641838/2-A	Method Blank	Total/NA	Solid	8260C	641838
LCS 480-641838/1-A	Lab Control Sample	Total/NA	Solid	8260C	641838
480-201615-3 MS	SS2 (6-12)	Total/NA	Solid	8260C	641838
480-201615-3 MSD	SS2 (6-12)	Total/NA	Solid	8260C	641838

GC/MS Semi VOA

Prep Batch: 641523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201615-14	FB_091322	Total/NA	Water	3510C	
MB 480-641523/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-641523/2-A	Lab Control Sample	Total/NA	Water	3510C	

Prep Batch: 641786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201615-1	SS2 (0-2)	Total/NA	Solid	3550C	
480-201615-2	SS2 (0-6)	Total/NA	Solid	3550C	
480-201615-3	SS2 (6-12)	Total/NA	Solid	3550C	
480-201615-5	SS3 (0-2)	Total/NA	Solid	3550C	
480-201615-6	SS3 (0-6)	Total/NA	Solid	3550C	
480-201615-7	SS3 (6-12)	Total/NA	Solid	3550C	
480-201615-8	SS3 (12-24)	Total/NA	Solid	3550C	
480-201615-9	FDUP2_091322	Total/NA	Solid	3550C	
480-201615-10	SS4 (0-2)	Total/NA	Solid	3550C	
480-201615-11	SS4 (0-6)	Total/NA	Solid	3550C	
480-201615-12	SS4 (6-12)	Total/NA	Solid	3550C	
480-201615-13	SS4 (12-24)	Total/NA	Solid	3550C	
MB 480-641786/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-641786/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-201615-1 MS	SS2 (0-2)	Total/NA	Solid	3550C	
480-201615-1 MSD	SS2 (0-2)	Total/NA	Solid	3550C	
480-201615-3 MS	SS2 (6-12)	Total/NA	Solid	3550C	
480-201615-3 MSD	SS2 (6-12)	Total/NA	Solid	3550C	

Analysis Batch: 642029

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201615-14	FB_091322	Total/NA	Water	8270D	641523
MB 480-641523/1-A	Method Blank	Total/NA	Water	8270D	641523
LCS 480-641523/2-A	Lab Control Sample	Total/NA	Water	8270D	641523

GC/MS Semi VOA

Analysis Batch: 642158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201615-1	SS2 (0-2)	Total/NA	Solid	8270D	641786
480-201615-2	SS2 (0-6)	Total/NA	Solid	8270D	641786
480-201615-3	SS2 (6-12)	Total/NA	Solid	8270D	641786
480-201615-5	SS3 (0-2)	Total/NA	Solid	8270D	641786
480-201615-6	SS3 (0-6)	Total/NA	Solid	8270D	641786
480-201615-7	SS3 (6-12)	Total/NA	Solid	8270D	641786
480-201615-8	SS3 (12-24)	Total/NA	Solid	8270D	641786
480-201615-9	FDUP2_091322	Total/NA	Solid	8270D	641786
480-201615-10	SS4 (0-2)	Total/NA	Solid	8270D	641786
480-201615-11	SS4 (0-6)	Total/NA	Solid	8270D	641786
480-201615-12	SS4 (6-12)	Total/NA	Solid	8270D	641786
480-201615-13	SS4 (12-24)	Total/NA	Solid	8270D	641786
MB 480-641786/1-A	Method Blank	Total/NA	Solid	8270D	641786
LCS 480-641786/2-A	Lab Control Sample	Total/NA	Solid	8270D	641786
480-201615-1 MS	SS2 (0-2)	Total/NA	Solid	8270D	641786
480-201615-1 MSD	SS2 (0-2)	Total/NA	Solid	8270D	641786
480-201615-3 MS	SS2 (6-12)	Total/NA	Solid	8270D	641786
480-201615-3 MSD	SS2 (6-12)	Total/NA	Solid	8270D	641786

Prep Batch: 642833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201615-4	SS2 (12-24)	Total/NA	Solid	3550C	
MB 480-642833/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-642833/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 642901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201615-4	SS2 (12-24)	Total/NA	Solid	8270D	642833
MB 480-642833/1-A	Method Blank	Total/NA	Solid	8270D	642833

Analysis Batch: 643061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-642833/2-A	Lab Control Sample	Total/NA	Solid	8270D	642833

Metals

Prep Batch: 641437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201615-1	SS2 (0-2)	Total/NA	Solid	7471B	
480-201615-2	SS2 (0-6)	Total/NA	Solid	7471B	
480-201615-3	SS2 (6-12)	Total/NA	Solid	7471B	
480-201615-4	SS2 (12-24)	Total/NA	Solid	7471B	
480-201615-5	SS3 (0-2)	Total/NA	Solid	7471B	
480-201615-6	SS3 (0-6)	Total/NA	Solid	7471B	
480-201615-7	SS3 (6-12)	Total/NA	Solid	7471B	
480-201615-8	SS3 (12-24)	Total/NA	Solid	7471B	
480-201615-9	FDUP2_091322	Total/NA	Solid	7471B	
480-201615-10	SS4 (0-2)	Total/NA	Solid	7471B	
480-201615-11	SS4 (0-6)	Total/NA	Solid	7471B	
480-201615-12	SS4 (6-12)	Total/NA	Solid	7471B	
480-201615-13	SS4 (12-24)	Total/NA	Solid	7471B	

Metals (Continued)

Prep Batch: 641437 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-641437/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-641437/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	
480-201615-1 MS	SS2 (0-2)	Total/NA	Solid	7471B	
480-201615-1 MSD	SS2 (0-2)	Total/NA	Solid	7471B	
480-201615-3 MS	SS2 (6-12)	Total/NA	Solid	7471B	
480-201615-3 MSD	SS2 (6-12)	Total/NA	Solid	7471B	

Prep Batch: 641524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201615-1	SS2 (0-2)	Total/NA	Solid	3050B	
480-201615-2	SS2 (0-6)	Total/NA	Solid	3050B	
480-201615-3	SS2 (6-12)	Total/NA	Solid	3050B	
480-201615-4	SS2 (12-24)	Total/NA	Solid	3050B	
480-201615-5	SS3 (0-2)	Total/NA	Solid	3050B	
480-201615-6	SS3 (0-6)	Total/NA	Solid	3050B	
480-201615-7	SS3 (6-12)	Total/NA	Solid	3050B	
480-201615-8	SS3 (12-24)	Total/NA	Solid	3050B	
480-201615-9	FDUP2_091322	Total/NA	Solid	3050B	
480-201615-10	SS4 (0-2)	Total/NA	Solid	3050B	
480-201615-11	SS4 (0-6)	Total/NA	Solid	3050B	
480-201615-12	SS4 (6-12)	Total/NA	Solid	3050B	
480-201615-13	SS4 (12-24)	Total/NA	Solid	3050B	
MB 480-641524/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-641524/2-A	Lab Control Sample	Total/NA	Solid	3050B	
480-201615-1 MS	SS2 (0-2)	Total/NA	Solid	3050B	
480-201615-1 MSD	SS2 (0-2)	Total/NA	Solid	3050B	
480-201615-3 MS	SS2 (6-12)	Total/NA	Solid	3050B	
480-201615-3 MSD	SS2 (6-12)	Total/NA	Solid	3050B	

Prep Batch: 641565

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201615-14	FB_091322	Total/NA	Water	7470A	
MB 480-641565/1-A	Method Blank	Total/NA	Water	7470A	
LCS 480-641565/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 480-641565/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	

Analysis Batch: 641616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201615-1	SS2 (0-2)	Total/NA	Solid	7471B	641437
480-201615-2	SS2 (0-6)	Total/NA	Solid	7471B	641437
480-201615-3	SS2 (6-12)	Total/NA	Solid	7471B	641437
480-201615-4	SS2 (12-24)	Total/NA	Solid	7471B	641437
480-201615-5	SS3 (0-2)	Total/NA	Solid	7471B	641437
480-201615-6	SS3 (0-6)	Total/NA	Solid	7471B	641437
480-201615-7	SS3 (6-12)	Total/NA	Solid	7471B	641437
480-201615-8	SS3 (12-24)	Total/NA	Solid	7471B	641437
480-201615-9	FDUP2_091322	Total/NA	Solid	7471B	641437
480-201615-10	SS4 (0-2)	Total/NA	Solid	7471B	641437
480-201615-11	SS4 (0-6)	Total/NA	Solid	7471B	641437
480-201615-12	SS4 (6-12)	Total/NA	Solid	7471B	641437
480-201615-13	SS4 (12-24)	Total/NA	Solid	7471B	641437

Metals (Continued)

Analysis Batch: 641616 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-641437/1-A	Method Blank	Total/NA	Solid	7471B	641437
LCSSRM 480-641437/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	641437
480-201615-1 MS	SS2 (0-2)	Total/NA	Solid	7471B	641437
480-201615-1 MSD	SS2 (0-2)	Total/NA	Solid	7471B	641437
480-201615-3 MS	SS2 (6-12)	Total/NA	Solid	7471B	641437
480-201615-3 MSD	SS2 (6-12)	Total/NA	Solid	7471B	641437

Analysis Batch: 641649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201615-14	FB_091322	Total/NA	Water	7470A	641565
MB 480-641565/1-A	Method Blank	Total/NA	Water	7470A	641565
LCS 480-641565/2-A	Lab Control Sample	Total/NA	Water	7470A	641565
LCSD 480-641565/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	641565

Prep Batch: 641783

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201615-14	FB_091322	Total/NA	Water	3005A	
MB 480-641783/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-641783/2-A	Lab Control Sample	Total/NA	Water	3005A	

Analysis Batch: 641879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201615-1	SS2 (0-2)	Total/NA	Solid	6010C	641524
480-201615-2	SS2 (0-6)	Total/NA	Solid	6010C	641524
480-201615-3	SS2 (6-12)	Total/NA	Solid	6010C	641524
480-201615-4	SS2 (12-24)	Total/NA	Solid	6010C	641524
480-201615-5	SS3 (0-2)	Total/NA	Solid	6010C	641524
480-201615-6	SS3 (0-6)	Total/NA	Solid	6010C	641524
480-201615-7	SS3 (6-12)	Total/NA	Solid	6010C	641524
480-201615-8	SS3 (12-24)	Total/NA	Solid	6010C	641524
480-201615-9	FDUP2_091322	Total/NA	Solid	6010C	641524
480-201615-10	SS4 (0-2)	Total/NA	Solid	6010C	641524
480-201615-11	SS4 (0-6)	Total/NA	Solid	6010C	641524
480-201615-12	SS4 (6-12)	Total/NA	Solid	6010C	641524
480-201615-13	SS4 (12-24)	Total/NA	Solid	6010C	641524
MB 480-641524/1-A	Method Blank	Total/NA	Solid	6010C	641524
LCSSRM 480-641524/2-A	Lab Control Sample	Total/NA	Solid	6010C	641524
480-201615-1 MS	SS2 (0-2)	Total/NA	Solid	6010C	641524
480-201615-1 MSD	SS2 (0-2)	Total/NA	Solid	6010C	641524
480-201615-3 MS	SS2 (6-12)	Total/NA	Solid	6010C	641524
480-201615-3 MSD	SS2 (6-12)	Total/NA	Solid	6010C	641524

Analysis Batch: 642007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201615-14	FB_091322	Total/NA	Water	6010C	641783
MB 480-641783/1-A	Method Blank	Total/NA	Water	6010C	641783
LCS 480-641783/2-A	Lab Control Sample	Total/NA	Water	6010C	641783

QC Association Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories - Shallow Soil

Job ID: 480-201615-1

General Chemistry

Analysis Batch: 641438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201615-1	SS2 (0-2)	Total/NA	Solid	Moisture	
480-201615-2	SS2 (0-6)	Total/NA	Solid	Moisture	
480-201615-3	SS2 (6-12)	Total/NA	Solid	Moisture	
480-201615-4	SS2 (12-24)	Total/NA	Solid	Moisture	
480-201615-5	SS3 (0-2)	Total/NA	Solid	Moisture	
480-201615-6	SS3 (0-6)	Total/NA	Solid	Moisture	
480-201615-7	SS3 (6-12)	Total/NA	Solid	Moisture	
480-201615-8	SS3 (12-24)	Total/NA	Solid	Moisture	
480-201615-9	FDUP2_091322	Total/NA	Solid	Moisture	
480-201615-10	SS4 (0-2)	Total/NA	Solid	Moisture	
480-201615-11	SS4 (0-6)	Total/NA	Solid	Moisture	
480-201615-12	SS4 (6-12)	Total/NA	Solid	Moisture	
480-201615-13	SS4 (12-24)	Total/NA	Solid	Moisture	
480-201615-1 MS	SS2 (0-2)	Total/NA	Solid	Moisture	
480-201615-1 MSD	SS2 (0-2)	Total/NA	Solid	Moisture	
480-201615-3 MS	SS2 (6-12)	Total/NA	Solid	Moisture	
480-201615-3 MSD	SS2 (6-12)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Integral Consulting Inc
Job ID: 480-201615-1
Project/Site: EF1017 - Refractories - Shallow Soil

Client Sample ID: SS2 (0-2)
Lab Sample ID: 480-201615-1
Date Collected: 09/13/22 11:30
Matrix: Solid
Date Received: 09/14/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	641438	JMM	EET BUF	09/14/22 15:42

Client Sample ID: SS2 (0-2)
Lab Sample ID: 480-201615-1
Date Collected: 09/13/22 11:30
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 71.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			641652	CDC	EET BUF	09/14/22 14:00
Total/NA	Analysis	8260C		1	641653	CDC	EET BUF	09/15/22 23:39
Total/NA	Prep	3550C			641786	SJM	EET BUF	09/16/22 15:42
Total/NA	Analysis	8270D		20	642158	JMM	EET BUF	09/21/22 12:35
Total/NA	Prep	3050B			641524	VAK	EET BUF	09/15/22 11:25
Total/NA	Analysis	6010C		1	641879	LMH	EET BUF	09/16/22 16:48
Total/NA	Prep	7471B			641437	NVK	EET BUF	09/15/22 10:09
Total/NA	Analysis	7471B		1	641616	NVK	EET BUF	09/15/22 14:25

Client Sample ID: SS2 (0-6)
Lab Sample ID: 480-201615-2
Date Collected: 09/13/22 10:30
Matrix: Solid
Date Received: 09/14/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	641438	JMM	EET BUF	09/14/22 15:42

Client Sample ID: SS2 (0-6)
Lab Sample ID: 480-201615-2
Date Collected: 09/13/22 10:30
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 80.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			641451	CDC	EET BUF	09/14/22 14:00
Total/NA	Analysis	8260C		1	641452	CDC	EET BUF	09/15/22 04:59
Total/NA	Prep	3550C			641786	SJM	EET BUF	09/16/22 15:42
Total/NA	Analysis	8270D		5	642158	JMM	EET BUF	09/21/22 13:10
Total/NA	Prep	3050B			641524	VAK	EET BUF	09/15/22 11:25
Total/NA	Analysis	6010C		1	641879	LMH	EET BUF	09/16/22 17:19
Total/NA	Prep	7471B			641437	NVK	EET BUF	09/15/22 10:09
Total/NA	Analysis	7471B		1	641616	NVK	EET BUF	09/15/22 14:30

Client Sample ID: SS2 (6-12)
Lab Sample ID: 480-201615-3
Date Collected: 09/13/22 10:35
Matrix: Solid
Date Received: 09/14/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	641438	JMM	EET BUF	09/14/22 15:42

Client Sample ID: SS2 (6-12)
Lab Sample ID: 480-201615-3
Date Collected: 09/13/22 10:35
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 91.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			641838	CDC	EET BUF	09/14/22 14:00
Total/NA	Analysis	8260C		1	641839	CDC	EET BUF	09/18/22 21:29
Total/NA	Prep	3550C			641786	SJM	EET BUF	09/16/22 15:42
Total/NA	Analysis	8270D		5	642158	JMM	EET BUF	09/21/22 12:53
Total/NA	Prep	3050B			641524	VAK	EET BUF	09/15/22 11:25
Total/NA	Analysis	6010C		1	641879	LMH	EET BUF	09/16/22 17:23
Total/NA	Prep	7471B			641437	NVK	EET BUF	09/15/22 10:09
Total/NA	Analysis	7471B		1	641616	NVK	EET BUF	09/15/22 14:31

Client Sample ID: SS2 (12-24)
Lab Sample ID: 480-201615-4
Date Collected: 09/13/22 10:40
Matrix: Solid
Date Received: 09/14/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	641438	JMM	EET BUF	09/14/22 15:42

Client Sample ID: SS2 (12-24)
Lab Sample ID: 480-201615-4
Date Collected: 09/13/22 10:40
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 90.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			641652	CDC	EET BUF	09/14/22 14:00
Total/NA	Analysis	8260C		1	641653	CDC	EET BUF	09/15/22 23:15
Total/NA	Prep	3550C			642833	SJM	EET BUF	09/26/22 15:42
Total/NA	Analysis	8270D		1	642901	JMM	EET BUF	09/27/22 15:49
Total/NA	Prep	3050B			641524	VAK	EET BUF	09/15/22 11:25
Total/NA	Analysis	6010C		1	641879	LMH	EET BUF	09/16/22 17:35
Total/NA	Prep	7471B			641437	NVK	EET BUF	09/15/22 10:09
Total/NA	Analysis	7471B		1	641616	NVK	EET BUF	09/15/22 14:39

Client Sample ID: SS3 (0-2)
Lab Sample ID: 480-201615-5
Date Collected: 09/13/22 11:20
Matrix: Solid
Date Received: 09/14/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	641438	JMM	EET BUF	09/14/22 15:42

Client Sample ID: SS3 (0-2)
Lab Sample ID: 480-201615-5
Date Collected: 09/13/22 11:20
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 76.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			641838	CDC	EET BUF	09/14/22 14:00
Total/NA	Analysis	8260C		1	641839	CDC	EET BUF	09/18/22 21:53
Total/NA	Prep	3550C			641786	SJM	EET BUF	09/16/22 15:42
Total/NA	Analysis	8270D		5	642158	JMM	EET BUF	09/21/22 13:44

Lab Chronicle

Client: Integral Consulting Inc
Job ID: 480-201615-1
Project/Site: EF1017 - Refractories - Shallow Soil

Client Sample ID: SS3 (0-2)
Lab Sample ID: 480-201615-5
Date Collected: 09/13/22 11:20
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 76.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			641524	VAK	EET BUF	09/15/22 11:25
Total/NA	Analysis	6010C		1	641879	LMH	EET BUF	09/16/22 17:38
Total/NA	Prep	7471B			641437	NVK	EET BUF	09/15/22 10:09
Total/NA	Analysis	7471B		1	641616	NVK	EET BUF	09/15/22 14:40

Client Sample ID: SS3 (0-6)
Lab Sample ID: 480-201615-6
Date Collected: 09/13/22 09:50
Matrix: Solid
Date Received: 09/14/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	641438	JMM	EET BUF	09/14/22 15:42

Client Sample ID: SS3 (0-6)
Lab Sample ID: 480-201615-6
Date Collected: 09/13/22 09:50
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 78.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			641838	CDC	EET BUF	09/14/22 14:00
Total/NA	Analysis	8260C		1	641839	CDC	EET BUF	09/18/22 22:17
Total/NA	Prep	3550C			641786	SJM	EET BUF	09/16/22 15:42
Total/NA	Analysis	8270D		5	642158	JMM	EET BUF	09/21/22 14:01
Total/NA	Prep	3050B			641524	VAK	EET BUF	09/15/22 11:25
Total/NA	Analysis	6010C		1	641879	LMH	EET BUF	09/16/22 17:42
Total/NA	Prep	7471B			641437	NVK	EET BUF	09/15/22 10:09
Total/NA	Analysis	7471B		1	641616	NVK	EET BUF	09/15/22 14:42

Client Sample ID: SS3 (6-12)
Lab Sample ID: 480-201615-7
Date Collected: 09/13/22 09:55
Matrix: Solid
Date Received: 09/14/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	641438	JMM	EET BUF	09/14/22 15:42

Client Sample ID: SS3 (6-12)
Lab Sample ID: 480-201615-7
Date Collected: 09/13/22 09:55
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 91.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			641838	CDC	EET BUF	09/14/22 14:00
Total/NA	Analysis	8260C		1	641839	CDC	EET BUF	09/18/22 22:41
Total/NA	Prep	3550C			641786	SJM	EET BUF	09/16/22 15:42
Total/NA	Analysis	8270D		5	642158	JMM	EET BUF	09/21/22 14:18
Total/NA	Prep	3050B			641524	VAK	EET BUF	09/15/22 11:25
Total/NA	Analysis	6010C		1	641879	LMH	EET BUF	09/16/22 17:46
Total/NA	Prep	7471B			641437	NVK	EET BUF	09/15/22 10:09
Total/NA	Analysis	7471B		1	641616	NVK	EET BUF	09/15/22 14:43

Lab Chronicle

Client: Integral Consulting Inc
Job ID: 480-201615-1
Project/Site: EF1017 - Refractories - Shallow Soil

Client Sample ID: SS3 (12-24)
Lab Sample ID: 480-201615-8
Date Collected: 09/13/22 10:00
Matrix: Solid
Date Received: 09/14/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	641438	JMM	EET BUF	09/14/22 15:42

Client Sample ID: SS3 (12-24)
Lab Sample ID: 480-201615-8
Date Collected: 09/13/22 10:00
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 89.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			641838	CDC	EET BUF	09/14/22 14:00
Total/NA	Analysis	8260C		1	641839	CDC	EET BUF	09/18/22 23:05
Total/NA	Prep	3550C			641786	SJM	EET BUF	09/16/22 15:42
Total/NA	Analysis	8270D		10	642158	JMM	EET BUF	09/21/22 14:35
Total/NA	Prep	3050B			641524	VAK	EET BUF	09/15/22 11:25
Total/NA	Analysis	6010C		1	641879	LMH	EET BUF	09/16/22 17:50
Total/NA	Prep	7471B			641437	NVK	EET BUF	09/15/22 10:09
Total/NA	Analysis	7471B		1	641616	NVK	EET BUF	09/15/22 14:44

Client Sample ID: FDUP2_091322
Lab Sample ID: 480-201615-9
Date Collected: 09/13/22 00:00
Matrix: Solid
Date Received: 09/14/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	641438	JMM	EET BUF	09/14/22 15:42

Client Sample ID: FDUP2_091322
Lab Sample ID: 480-201615-9
Date Collected: 09/13/22 00:00
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 87.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			641838	CDC	EET BUF	09/14/22 14:00
Total/NA	Analysis	8260C		1	641839	CDC	EET BUF	09/18/22 23:29
Total/NA	Prep	3550C			641786	SJM	EET BUF	09/16/22 15:42
Total/NA	Analysis	8270D		10	642158	JMM	EET BUF	09/21/22 14:52
Total/NA	Prep	3050B			641524	VAK	EET BUF	09/15/22 11:25
Total/NA	Analysis	6010C		1	641879	LMH	EET BUF	09/16/22 18:05
Total/NA	Prep	7471B			641437	NVK	EET BUF	09/15/22 10:09
Total/NA	Analysis	7471B		1	641616	NVK	EET BUF	09/15/22 14:45

Client Sample ID: SS4 (0-2)
Lab Sample ID: 480-201615-10
Date Collected: 09/13/22 11:15
Matrix: Solid
Date Received: 09/14/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	641438	JMM	EET BUF	09/14/22 15:42

Client Sample ID: SS4 (0-2)
Lab Sample ID: 480-201615-10
Date Collected: 09/13/22 11:15
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 79.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			641838	CDC	EET BUF	09/14/22 14:00
Total/NA	Analysis	8260C		1	641839	CDC	EET BUF	09/18/22 23:54
Total/NA	Prep	3550C			641786	SJM	EET BUF	09/16/22 15:42
Total/NA	Analysis	8270D		5	642158	JMM	EET BUF	09/21/22 15:09
Total/NA	Prep	3050B			641524	VAK	EET BUF	09/15/22 11:25
Total/NA	Analysis	6010C		1	641879	LMH	EET BUF	09/16/22 18:09
Total/NA	Prep	7471B			641437	NVK	EET BUF	09/15/22 10:09
Total/NA	Analysis	7471B		1	641616	NVK	EET BUF	09/15/22 14:47

Client Sample ID: SS4 (0-6)
Lab Sample ID: 480-201615-11
Date Collected: 09/13/22 09:10
Matrix: Solid
Date Received: 09/14/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	641438	JMM	EET BUF	09/14/22 15:42

Client Sample ID: SS4 (0-6)
Lab Sample ID: 480-201615-11
Date Collected: 09/13/22 09:10
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 82.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			641838	CDC	EET BUF	09/14/22 14:00
Total/NA	Analysis	8260C		1	641839	CDC	EET BUF	09/19/22 00:17
Total/NA	Prep	3550C			641786	SJM	EET BUF	09/16/22 15:42
Total/NA	Analysis	8270D		5	642158	JMM	EET BUF	09/21/22 15:26
Total/NA	Prep	3050B			641524	VAK	EET BUF	09/15/22 11:25
Total/NA	Analysis	6010C		1	641879	LMH	EET BUF	09/16/22 18:13
Total/NA	Prep	7471B			641437	NVK	EET BUF	09/15/22 10:09
Total/NA	Analysis	7471B		1	641616	NVK	EET BUF	09/15/22 14:48

Client Sample ID: SS4 (6-12)
Lab Sample ID: 480-201615-12
Date Collected: 09/13/22 09:15
Matrix: Solid
Date Received: 09/14/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	641438	JMM	EET BUF	09/14/22 15:42

Client Sample ID: SS4 (6-12)
Lab Sample ID: 480-201615-12
Date Collected: 09/13/22 09:15
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 86.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			641838	CDC	EET BUF	09/14/22 14:00
Total/NA	Analysis	8260C		1	641839	CDC	EET BUF	09/19/22 00:42
Total/NA	Prep	3550C			641786	SJM	EET BUF	09/16/22 15:42
Total/NA	Analysis	8270D		5	642158	JMM	EET BUF	09/21/22 15:43

Lab Chronicle

Client: Integral Consulting Inc
Job ID: 480-201615-1
Project/Site: EF1017 - Refractories - Shallow Soil

Client Sample ID: SS4 (6-12)
Lab Sample ID: 480-201615-12
Date Collected: 09/13/22 09:15
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 86.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			641524	VAK	EET BUF	09/15/22 11:25
Total/NA	Analysis	6010C		1	641879	LMH	EET BUF	09/16/22 18:17
Total/NA	Prep	7471B			641437	NVK	EET BUF	09/15/22 10:09
Total/NA	Analysis	7471B		1	641616	NVK	EET BUF	09/15/22 14:49

Client Sample ID: SS4 (12-24)
Lab Sample ID: 480-201615-13
Date Collected: 09/13/22 09:20
Matrix: Solid
Date Received: 09/14/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	641438	JMM	EET BUF	09/14/22 15:42

Client Sample ID: SS4 (12-24)
Lab Sample ID: 480-201615-13
Date Collected: 09/13/22 09:20
Matrix: Solid
Date Received: 09/14/22 10:00
Percent Solids: 85.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			641838	CDC	EET BUF	09/14/22 14:00
Total/NA	Analysis	8260C		1	641839	CDC	EET BUF	09/19/22 01:05
Total/NA	Prep	3550C			641786	SJM	EET BUF	09/16/22 15:42
Total/NA	Analysis	8270D		5	642158	JMM	EET BUF	09/21/22 16:00
Total/NA	Prep	3050B			641524	VAK	EET BUF	09/15/22 11:25
Total/NA	Analysis	6010C		1	641879	LMH	EET BUF	09/16/22 18:21
Total/NA	Prep	7471B			641437	NVK	EET BUF	09/15/22 10:09
Total/NA	Analysis	7471B		1	641616	NVK	EET BUF	09/15/22 14:53

Client Sample ID: FB_091322
Lab Sample ID: 480-201615-14
Date Collected: 09/13/22 08:00
Matrix: Water
Date Received: 09/14/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	641512	CR	EET BUF	09/15/22 19:46
Total/NA	Prep	3510C			641523	JMP	EET BUF	09/15/22 09:21
Total/NA	Analysis	8270D		5	642029	JMM	EET BUF	09/20/22 17:09
Total/NA	Prep	3005A			641783	VAK	EET BUF	09/19/22 09:28
Total/NA	Analysis	6010C		1	642007	LMH	EET BUF	09/19/22 16:07
Total/NA	Prep	7470A			641565	VAK	EET BUF	09/15/22 12:03
Total/NA	Analysis	7470A		1	641649	NVK	EET BUF	09/15/22 15:59

Client Sample ID: TB_091322
Lab Sample ID: 480-201615-15
Date Collected: 09/13/22 00:00
Matrix: Water
Date Received: 09/14/22 10:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	641512	CR	EET BUF	09/15/22 20:09

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories - Shallow Soil

Job ID: 480-201615-1

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Integral Consulting Inc
Job ID: 480-201615-1
Project/Site: EF1017 - Refractories - Shallow Soil

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	1,2,3-Trimethylbenzene
8260C	5035A_L	Solid	1,2,3-Trimethylbenzene
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: Integral Consulting Inc
Job ID: 480-201615-1
Project/Site: EF1017 - Refractories - Shallow Soil

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	EET BUF
6010C	Metals (ICP)	SW846	EET BUF
7470A	Mercury (CVAA)	SW846	EET BUF
7471B	Mercury (CVAA)	SW846	EET BUF
Moisture	Percent Moisture	EPA	EET BUF
3005A	Preparation, Total Metals	SW846	EET BUF
3050B	Preparation, Metals	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
3550C	Ultrasonic Extraction	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF
5035A_L	Closed System Purge and Trap	SW846	EET BUF
7470A	Preparation, Mercury	SW846	EET BUF
7471B	Preparation, Mercury	SW846	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories - Shallow Soil

Job ID: 480-201615-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-201615-1	SS2 (0-2)	Solid	09/13/22 11:30	09/14/22 10:00
480-201615-2	SS2 (0-6)	Solid	09/13/22 10:30	09/14/22 10:00
480-201615-3	SS2 (6-12)	Solid	09/13/22 10:35	09/14/22 10:00
480-201615-4	SS2 (12-24)	Solid	09/13/22 10:40	09/14/22 10:00
480-201615-5	SS3 (0-2)	Solid	09/13/22 11:20	09/14/22 10:00
480-201615-6	SS3 (0-6)	Solid	09/13/22 09:50	09/14/22 10:00
480-201615-7	SS3 (6-12)	Solid	09/13/22 09:55	09/14/22 10:00
480-201615-8	SS3 (12-24)	Solid	09/13/22 10:00	09/14/22 10:00
480-201615-9	FDUP2_091322	Solid	09/13/22 00:00	09/14/22 10:00
480-201615-10	SS4 (0-2)	Solid	09/13/22 11:15	09/14/22 10:00
480-201615-11	SS4 (0-6)	Solid	09/13/22 09:10	09/14/22 10:00
480-201615-12	SS4 (6-12)	Solid	09/13/22 09:15	09/14/22 10:00
480-201615-13	SS4 (12-24)	Solid	09/13/22 09:20	09/14/22 10:00
480-201615-14	FB_091322	Water	09/13/22 08:00	09/14/22 10:00
480-201615-15	TB_091322	Water	09/13/22 00:00	09/14/22 10:00

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Integral	Lab PM: Beninati, John	Carrier Tracking No(s): FedEX	COC No: 480-175096-37695.2
Client Contact: Mr. Glenn Esler	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Integral Consulting Inc	PWSID:			Job #:

Address: 319 SW Washington Ave Suite 1150	Due Date Requested: Per Quote	Analysis Requested	Preservation Codes:
City: Portland	TAT Requested (days): Per Quote		A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA; M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
State, Zip: OR, 97204	Compliance Project: Δ Yes Δ No		
Phone: 503-943-3617(Tel)	PO #: Purchase Order not required		Other:
Email: gesler@integral-corp.com	WO #:		
Project Name: EF1017 - Refractories - Shallow Soil	Project #: 48025298		
Site:	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs (LL)	6010C, 7471B	8270D - TCL SVOCs - to include 1,4 Dioxane	PFC_IDA - PFAS - NY 21 Analytes	8270D - TCL SVOCs	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N			
SS2(0-2)	9/13/22	11:30	G	Solid	N	N	X	X			X		
SS2(0-6)		10:30	G	Solid	N	N	X	X			X		
SS2(6-12)		10:35	G	Solid	N	N	X	X			X		
SS2(12-24)		10:40	G	Solid	N	N	X	X			X		
SS2(0-2)MS		11:30	G	Solid	N	Y	X	X			X		
SS2(0-2)MSD		11:30	G	Solid	N	Y	X	X			X		
SS2(6-12)MS		10:35	G	Solid	N	Y	X	X			X		
SS2(6-12)MSD		10:35	G	Solid	N	Y	X	X			X		
SS3(0-2)		11:20	G	Solid	N	N	X	X			X		
SS3(0-6)		9:50	G	Solid	N	N	X	X			X		
SS3(6-12)		9:55	G	Solid	N	N	X	X			X		

480-201615 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) Per Quote

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Cynthia Zatwarnicki	9/13/22 16:15	Integral	[illegible]	9/14/22 1000	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.9 2.7 2.4 #1 ICE

Ver: 06/08/2021

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Integral	Lab PM: Beninati, John	Carrier Tracking No(s): Fed Ex	COC No: 480-175096-37695.3
Client Contact: Mr. Glenn Esler	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Integral Consulting Inc	PWSID:	Analysis Requested		Job #:
Address: 319 SW Washington Ave Suite 1150	Due Date Requested: Per Quote			Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
City: Portland	TAT Requested (days): Per Quote			
State, Zip: OR, 97204	Compliance Project: Δ Yes Δ No			
Phone: 503-943-3617(Tel)	PO #: Purchase Order not required			
Email: gesler@integral-corp.com	WO #:			
Project Name: EF1017 - Refractories - Shallow Soil	Project #: 48025298			
Site:	SSOW#:			Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs (LL)	6010C, 7471B	8270D - TCL SVOCs - to include 1,4 Dioxane	PFC_IDA - PFAS - NY 21 Analytes	8270D - TCL SVOCs												Total Number of containers	Special Instructions/Note:
			Preservation Code:		N	N	N	N	N	N														
SS3(12-24)	9/13/22	10:00	G	Solid	N	N	X	X			X													
FDUP2-091322		—	G	Solid	N	N	X	X			X													
SS4(0-2)		11:15	G	Solid	N	N	X	X			X													
SS4(0-6)		9:10	G	Solid	N	N	X	X			X													
SS4(6-12)		9:15	G	Solid	N	N	X	X			X													
SS4(12-24)		9:20	G	Solid	N	N	X	X			X													
FB-091322		8:00	G	W ~~Solid~~	N	N	X	X			X													
TB-091322		—	G	W ~~Solid~~	N	N	X				X													VOCs
				Solid																				
				Solid																				

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) Per Quote

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	9/13/22 1615	Integral	[signature]	9/14/22 1000	[signature]
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Integral Consulting Inc

Job Number: 480-201615-1

Login Number: 201615
List Number: 1
Creator: Yeager, Brian A

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	FREEZE TIME 9-13-22 14:00
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	INTEGRAL
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-201707-1
Laboratory Sample Delivery Group: 201707
Client Project/Site: EF1017 - Refractories

For:
Integral Consulting Inc
319 SW Washington Ave
Suite 1150
Portland, Oregon 97204

Attn: Mr. Glenn Esler

Authorized for release by:
9/28/2022 6:32:06 PM
Rebecca Jones, Project Management Assistant I
(716)504-9884
Rebecca.Jones@et.eurofinsus.com

Designee for

John Beninati, Project Manager
(716)504-9874
John.Beninati@et.eurofinsus.com

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 5
Detection Summary 7
Client Sample Results 14
Surrogate Summary 68
Isotope Dilution Summary 70
QC Sample Results 72
QC Association Summary 104
Lab Chronicle 110
Certification Summary 116
Method Summary 117
Sample Summary 118
Chain of Custody 119
Receipt Checklists 123

Definitions/Glossary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*3	ISTD response or retention time outside acceptable limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
B	Compound was found in the blank and sample.
E	Result exceeded calibration range.
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

LCMS

Qualifier	Qualifier Description
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-201707-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-201707-1

Comments
No additional comments.

Receipt
The samples were received on 9/16/2022 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.6º C, 2.4º C and 2.4º C.

Receipt Exceptions

Volume for PFC method received. However, method was not selected on the COC. The method was assigned: FB_091422 (480-201707-4), ERB1_091422 (480-201707-7) and ERB2_091422 (480-201707-8).

GC/MS VOA
Method 8260C: Internal standard and/or surrogate responses for the following sample was outside control limits: SB2 (0-0.5) (480-201707-1). The sample(s) were re-analyzed and responses were outside control limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270D: The following compound has been spiked at a level above the upper range of the initial calibration: Benzaldehyde. The laboratory control sample (LCS) associated with preparation batch 480-641854 and analytical batch 480-642351 recovered within acceptable limits for this analyte and has been qualified with an "E" flag.

Method 8270D: The following samples were diluted due to color, appearance, and viscosity: SB4 (0-0.5) (480-201707-10), SB4 (0.5-1) (480-201707-11) and SB4 (1-2) (480-201712-1). Elevated reporting limits (RL) are provided.

Method 8270D: The method blank for preparation batch 480-641854 contained Diethyl phthalate above the reporting limit (RL). None of the samples associated with this method blank contained the target compound above the RL; therefore, re-extraction and/or re-analysis of samples were not performed: SB2 (0-0.5) (480-201707-1), SB2 (0.5-1) (480-201707-2), SB2 (1-2) (480-201707-3), FDUP_091422 (480-201707-5), SB2 (13.5-15.5) (480-201707-6), SB4 (0-0.5) (480-201707-10), SB4 (0.5-1) (480-201707-11) and SB4 (1-2) (480-201712-1).

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: SB2 (0-0.5) (480-201707-1), SB2 (13.5-15.5) (480-201707-6) and SB4 (1-2) (480-201712-1). These results have been reported and qualified.

Method 8270D: Surrogate recovery for the following sample was outside control limits: FDUP_091422 (480-201707-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 480-641992 and analytical batch 480-642153 recovered outside control limits for the following analytes: Diethyl phthalate: FB_091422 (480-201707-4), ERB1_091422 (480-201707-7), ERB2_091422 (480-201707-8) and FB_091522 (480-201707-9).

Method 8270D: The laboratory control sample (LCS) for preparation batch 480-641992 and analytical batch 480-642153 recovered outside control limits for the following analytes: Diethyl phthalate. The associated sample(s) was re-prepared and/or re-analyzed outside holding time. Both sets of data have been reported: FB_091422 (480-201707-4), ERB1_091422 (480-201707-7), ERB2_091422 (480-201707-8) and FB_091522 (480-201707-9).

Method 8270D: The method blank (MB) for preparation batch 480-641992 and analytical batch 480-642153 recovered above the reporting limit (RL) for the following analytes: Diethyl phthalate. The associated sample(s) was re-prepared and/or re-analyzed outside holding time. Both sets of data have been reported: FB_091422 (480-201707-4), ERB1_091422 (480-201707-7), ERB2_091422 (480-201707-8)

Job ID: 480-201707-1 (Continued)

Laboratory: Eurofins Buffalo (Continued)

and FB_091522 (480-201707-9).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

LCMS
Method 537 (modified): The method blank for preparation batch 200-183718 and analytical batch 200-183779 contained Perfluorododecanoic acid (PFDoA) and Perfluorodecanesulfonic acid (PFDS) above the method detection limit. This target analyte concentration was less than half the reporting limit (1/2RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 537 (modified): Method 537 (modified): The “I” qualifier associated with samples SB2 (1-2) (480-201707-3), FDUP_091422 (480-201707-5) and (MB 200-183718/1-A) is applied because the transition mass ratio for the indicated analyte(s) was outside of the established ratio limits. The qualitative identification has some degree of uncertainty, however analyst judgment was used to positively identify the analyte(s).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-641992.

Method 3510C: The following samples were re-prepared outside of preparation holding time due to high diethyl phthalate recovery in the MB, LCS, and samples: FB_091422 (480-201707-4), ERB1_091422 (480-201707-7), ERB2_091422 (480-201707-8) and FB_091522 (480-201707-9).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Client Sample ID: SB2 (0-0.5) — Lab Sample ID: 480-201707-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	15	J	39	6.5	ug/Kg	1	☼	8260C	Total/NA
Acenaphthylene	44	J	220	29	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	200	J	220	22	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	230		220	33	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	340		220	35	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	160	J	220	24	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	110	J	220	29	ug/Kg	1	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	120	J	220	76	ug/Kg	1	☼	8270D	Total/NA
Butyl benzyl phthalate	65	J	220	37	ug/Kg	1	☼	8270D	Total/NA
Caprolactam	140	J	220	67	ug/Kg	1	☼	8270D	Total/NA
Carbazole	31	J	220	26	ug/Kg	1	☼	8270D	Total/NA
Chrysene	390		220	50	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	46	J	220	39	ug/Kg	1	☼	8270D	Total/NA
Diethyl phthalate	94	J B	220	29	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	400		220	24	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	180	J	220	28	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	380		220	33	ug/Kg	1	☼	8270D	Total/NA
Pyrene	360		220	26	ug/Kg	1	☼	8270D	Total/NA
Aluminum	5090		12.5	5.5	mg/Kg	1	☼	6010C	Total/NA
Antimony	1.2	J	18.8	0.50	mg/Kg	1	☼	6010C	Total/NA
Arsenic	14.5		2.5	0.50	mg/Kg	1	☼	6010C	Total/NA
Barium	76.7		0.63	0.14	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.89		0.25	0.035	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.55		0.25	0.038	mg/Kg	1	☼	6010C	Total/NA
Calcium	7690		62.6	4.1	mg/Kg	1	☼	6010C	Total/NA
Chromium	16.5		0.63	0.25	mg/Kg	1	☼	6010C	Total/NA
Cobalt	5.9		0.63	0.063	mg/Kg	1	☼	6010C	Total/NA
Copper	50.9		1.3	0.26	mg/Kg	1	☼	6010C	Total/NA
Iron	31000		12.5	4.4	mg/Kg	1	☼	6010C	Total/NA
Lead	146		1.3	0.30	mg/Kg	1	☼	6010C	Total/NA
Magnesium	1050	B	25.0	1.2	mg/Kg	1	☼	6010C	Total/NA
Manganese	182		0.25	0.040	mg/Kg	1	☼	6010C	Total/NA
Nickel	14.2		6.3	0.29	mg/Kg	1	☼	6010C	Total/NA
Potassium	1220		37.6	25.0	mg/Kg	1	☼	6010C	Total/NA
Selenium	1.8	J	5.0	0.50	mg/Kg	1	☼	6010C	Total/NA
Sodium	472		175	16.3	mg/Kg	1	☼	6010C	Total/NA
Thallium	1.3	J	7.5	0.38	mg/Kg	1	☼	6010C	Total/NA
Vanadium	24.9		0.63	0.14	mg/Kg	1	☼	6010C	Total/NA
Zinc	34.0		2.5	0.80	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.066	F1	0.027	0.0062	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB2 (0.5-1) — Lab Sample ID: 480-201707-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	69	J	210	21	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	82	J	210	31	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	120	J	210	33	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	72	J	210	22	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	37	J	210	27	ug/Kg	1	☼	8270D	Total/NA
Chrysene	170	J	210	47	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	120	J	210	22	ug/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample ID: SB2 (0.5-1) (Continued)

Lab Sample ID: 480-201707-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Indeno[1,2,3-cd]pyrene	65	J	210	26	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	120	J	210	31	ug/Kg	1	☼	8270D	Total/NA
Pyrene	110	J	210	25	ug/Kg	1	☼	8270D	Total/NA
Aluminum	5000		12.8	5.7	mg/Kg	1	☼	6010C	Total/NA
Antimony	0.53	J	19.3	0.51	mg/Kg	1	☼	6010C	Total/NA
Arsenic	8.3		2.6	0.51	mg/Kg	1	☼	6010C	Total/NA
Barium	54.7		0.64	0.14	mg/Kg	1	☼	6010C	Total/NA
Beryllium	1.1		0.26	0.036	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.094	J	0.26	0.039	mg/Kg	1	☼	6010C	Total/NA
Calcium	1290		64.2	4.2	mg/Kg	1	☼	6010C	Total/NA
Chromium	14.8		0.64	0.26	mg/Kg	1	☼	6010C	Total/NA
Cobalt	5.5		0.64	0.064	mg/Kg	1	☼	6010C	Total/NA
Copper	47.0		1.3	0.27	mg/Kg	1	☼	6010C	Total/NA
Iron	17000		12.8	4.5	mg/Kg	1	☼	6010C	Total/NA
Lead	49.2		1.3	0.31	mg/Kg	1	☼	6010C	Total/NA
Magnesium	571	B	25.7	1.2	mg/Kg	1	☼	6010C	Total/NA
Manganese	161		0.26	0.041	mg/Kg	1	☼	6010C	Total/NA
Nickel	20.4		6.4	0.30	mg/Kg	1	☼	6010C	Total/NA
Potassium	839		38.5	25.7	mg/Kg	1	☼	6010C	Total/NA
Selenium	1.1	J	5.1	0.51	mg/Kg	1	☼	6010C	Total/NA
Sodium	169	J	180	16.7	mg/Kg	1	☼	6010C	Total/NA
Thallium	1.4	J	7.7	0.39	mg/Kg	1	☼	6010C	Total/NA
Vanadium	29.0		0.64	0.14	mg/Kg	1	☼	6010C	Total/NA
Zinc	20.3		2.6	0.82	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.037		0.024	0.0056	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB2 (1-2)

Lab Sample ID: 480-201707-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	92		33	2.4	ug/Kg	1	☼	8260C	Total/NA
Acetone	540		33	5.6	ug/Kg	1	☼	8260C	Total/NA
Ethylbenzene	0.75	J	6.7	0.46	ug/Kg	1	☼	8260C	Total/NA
n-Butylbenzene	0.68	J	6.7	0.58	ug/Kg	1	☼	8260C	Total/NA
N-Propylbenzene	1.1	J	6.7	0.53	ug/Kg	1	☼	8260C	Total/NA
Toluene	0.87	J	6.7	0.50	ug/Kg	1	☼	8260C	Total/NA
Benzo[a]anthracene	100	J	200	20	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	120	J	200	30	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	180	J	200	32	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	86	J	200	21	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	56	J	200	26	ug/Kg	1	☼	8270D	Total/NA
Chrysene	180	J	200	45	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	180	J	200	21	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	91	J	200	25	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	150	J	200	30	ug/Kg	1	☼	8270D	Total/NA
Pyrene	160	J	200	24	ug/Kg	1	☼	8270D	Total/NA
Perfluorooctanoic acid (PFOA)	0.16	J I	0.23	0.067	ug/Kg	1	☼	537 IDA	Total/NA
Aluminum	9150		12.4	5.5	mg/Kg	1	☼	6010C	Total/NA
Antimony	0.96	J	18.6	0.50	mg/Kg	1	☼	6010C	Total/NA
Arsenic	9.6		2.5	0.50	mg/Kg	1	☼	6010C	Total/NA
Barium	94.9		0.62	0.14	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.95		0.25	0.035	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB2 (1-2) (Continued) — Lab Sample ID: 480-201707-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.28		0.25	0.037	mg/Kg	1	☼	6010C	Total/NA
Calcium	1970		62.1	4.1	mg/Kg	1	☼	6010C	Total/NA
Chromium	17.5		0.62	0.25	mg/Kg	1	☼	6010C	Total/NA
Cobalt	8.2		0.62	0.062	mg/Kg	1	☼	6010C	Total/NA
Copper	46.6		1.2	0.26	mg/Kg	1	☼	6010C	Total/NA
Iron	32000		12.4	4.3	mg/Kg	1	☼	6010C	Total/NA
Lead	70.3		1.2	0.30	mg/Kg	1	☼	6010C	Total/NA
Magnesium	1470	B	24.8	1.2	mg/Kg	1	☼	6010C	Total/NA
Manganese	377		0.25	0.040	mg/Kg	1	☼	6010C	Total/NA
Nickel	50.4		6.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Potassium	1650		37.2	24.8	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.62	J	5.0	0.50	mg/Kg	1	☼	6010C	Total/NA
Silver	0.25	J	0.74	0.25	mg/Kg	1	☼	6010C	Total/NA
Sodium	181		174	16.1	mg/Kg	1	☼	6010C	Total/NA
Thallium	0.91	J	7.4	0.37	mg/Kg	1	☼	6010C	Total/NA
Vanadium	27.7		0.62	0.14	mg/Kg	1	☼	6010C	Total/NA
Zinc	68.6		2.5	0.79	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.050		0.024	0.0056	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: FB_091422 — Lab Sample ID: 480-201707-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloromethane	0.54	J	1.0	0.35	ug/L	1		8260C	Total/NA
1,4-Dioxane	0.40		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA
Diethyl phthalate	44	B *+ *1	5.0	0.22	ug/L	1		8270D	Total/NA
Diethyl phthalate - RE	21	H	5.4	0.24	ug/L	1		8270D	Total/NA
Lead	0.0034	J	0.010	0.0030	mg/L	1		6010C	Total/NA
Potassium	0.13	J	0.50	0.10	mg/L	1		6010C	Total/NA

Client Sample ID: FDUP_091422 — Lab Sample ID: 480-201707-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	17	J	31	2.2	ug/Kg	1	☼	8260C	Total/NA
Acetone	28	J	31	5.2	ug/Kg	1	☼	8260C	Total/NA
Carbon disulfide	3.4	J	6.1	3.1	ug/Kg	1	☼	8260C	Total/NA
Ethylbenzene	1.0	J	6.1	0.42	ug/Kg	1	☼	8260C	Total/NA
Methylcyclohexane	1.6	J	6.1	0.93	ug/Kg	1	☼	8260C	Total/NA
N-Propylbenzene	0.87	J	6.1	0.49	ug/Kg	1	☼	8260C	Total/NA
Toluene	1.2	J	6.1	0.46	ug/Kg	1	☼	8260C	Total/NA
Benzo[a]anthracene	190	J	200	20	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	240		200	29	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	300		200	31	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	150	J	200	21	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	120	J	200	25	ug/Kg	1	☼	8270D	Total/NA
Butyl benzyl phthalate	32	J	200	32	ug/Kg	1	☼	8270D	Total/NA
Carbazole	30	J	200	23	ug/Kg	1	☼	8270D	Total/NA
Chrysene	280		200	44	ug/Kg	1	☼	8270D	Total/NA
Dibenz(a,h)anthracene	40	J	200	35	ug/Kg	1	☼	8270D	Total/NA
Diethyl phthalate	190	J B	200	25	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	410		200	21	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	180	J	200	24	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	280		200	29	ug/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FDUP_091422 (Continued) — Lab Sample ID: 480-201707-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Pyrene	350		200	23	ug/Kg	1	☼	8270D	Total/NA
Perfluorooctanoic acid (PFOA)	0.098	J I	0.23	0.067	ug/Kg	1	☼	537 IDA	Total/NA
Aluminum	8530		11.6	5.1	mg/Kg	1	☼	6010C	Total/NA
Antimony	0.79	J	17.4	0.47	mg/Kg	1	☼	6010C	Total/NA
Arsenic	9.1		2.3	0.47	mg/Kg	1	☼	6010C	Total/NA
Barium	115		0.58	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.76		0.23	0.033	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.25		0.23	0.035	mg/Kg	1	☼	6010C	Total/NA
Calcium	3900		58.1	3.8	mg/Kg	1	☼	6010C	Total/NA
Chromium	17.0		0.58	0.23	mg/Kg	1	☼	6010C	Total/NA
Cobalt	7.9		0.58	0.058	mg/Kg	1	☼	6010C	Total/NA
Copper	43.4		1.2	0.24	mg/Kg	1	☼	6010C	Total/NA
Iron	29100		11.6	4.1	mg/Kg	1	☼	6010C	Total/NA
Lead	78.0		1.2	0.28	mg/Kg	1	☼	6010C	Total/NA
Magnesium	1530	B	23.3	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	344		0.23	0.037	mg/Kg	1	☼	6010C	Total/NA
Nickel	42.1		5.8	0.27	mg/Kg	1	☼	6010C	Total/NA
Potassium	1580		34.9	23.3	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.56	J	4.7	0.47	mg/Kg	1	☼	6010C	Total/NA
Sodium	156	J	163	15.1	mg/Kg	1	☼	6010C	Total/NA
Thallium	0.94	J	7.0	0.35	mg/Kg	1	☼	6010C	Total/NA
Vanadium	26.5		0.58	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	61.9		2.3	0.74	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.065		0.023	0.0054	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB2 (13.5-15.5) — Lab Sample ID: 480-201707-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	4.3	J	27	2.0	ug/Kg	1	☼	8260C	Total/NA
Acetone	9.5	J	27	4.6	ug/Kg	1	☼	8260C	Total/NA
Diethyl phthalate	51	J B	190	24	ug/Kg	1	☼	8270D	Total/NA
Aluminum	8030		11.9	5.2	mg/Kg	1	☼	6010C	Total/NA
Antimony	0.52	J	17.8	0.48	mg/Kg	1	☼	6010C	Total/NA
Arsenic	5.3		2.4	0.48	mg/Kg	1	☼	6010C	Total/NA
Barium	66.4		0.59	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.42		0.24	0.033	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.14	J	0.24	0.036	mg/Kg	1	☼	6010C	Total/NA
Calcium	929		59.4	3.9	mg/Kg	1	☼	6010C	Total/NA
Chromium	11.3		0.59	0.24	mg/Kg	1	☼	6010C	Total/NA
Cobalt	6.4		0.59	0.059	mg/Kg	1	☼	6010C	Total/NA
Copper	14.8		1.2	0.25	mg/Kg	1	☼	6010C	Total/NA
Iron	20900		11.9	4.2	mg/Kg	1	☼	6010C	Total/NA
Lead	18.4		1.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Magnesium	1800	B	23.8	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	359		0.24	0.038	mg/Kg	1	☼	6010C	Total/NA
Nickel	39.6		5.9	0.27	mg/Kg	1	☼	6010C	Total/NA
Potassium	1480		35.6	23.8	mg/Kg	1	☼	6010C	Total/NA
Sodium	53.1	J	166	15.4	mg/Kg	1	☼	6010C	Total/NA
Vanadium	17.3		0.59	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	37.6		2.4	0.76	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.026		0.021	0.0049	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Client Sample ID: ERB1_091422 — Lab Sample ID: 480-201707-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.51		0.20	0.10	ug/L	1		8270D SIM ID	Total/NA
Diethyl phthalate	19	B *+ *1	5.2	0.23	ug/L	1		8270D	Total/NA
Diethyl phthalate - RE	18	H	5.0	0.22	ug/L	1		8270D	Total/NA

Client Sample ID: ERB2_091422 — Lab Sample ID: 480-201707-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl phthalate	28	B *+ *1	5.2	0.23	ug/L	1		8270D	Total/NA
Diethyl phthalate - RE	19	H	5.0	0.22	ug/L	1		8270D	Total/NA

Client Sample ID: FB_091522 — Lab Sample ID: 480-201707-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl phthalate	30	B *+ *1	5.0	0.22	ug/L	1		8270D	Total/NA
Diethyl phthalate - RE	39	H	5.4	0.24	ug/L	1		8270D	Total/NA

Client Sample ID: SB4 (0-0.5) — Lab Sample ID: 480-201707-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	380	J	900	120	ug/Kg	5	☼	8270D	Total/NA
Anthracene	270	J	900	220	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	2800		900	90	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	3700		900	130	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	5200		900	140	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	2200		900	95	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	2400		900	120	ug/Kg	5	☼	8270D	Total/NA
Carbazole	130	J	900	110	ug/Kg	5	☼	8270D	Total/NA
Chrysene	2500		900	200	ug/Kg	5	☼	8270D	Total/NA
Dibenz(a,h)anthracene	670	J	900	160	ug/Kg	5	☼	8270D	Total/NA
Dibenzofuran	130	J	900	110	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	3000		900	95	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	3400		900	110	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	1200		900	130	ug/Kg	5	☼	8270D	Total/NA
Pyrene	2100		900	110	ug/Kg	5	☼	8270D	Total/NA
Aluminum	6350		10.7	4.7	mg/Kg	1	☼	6010C	Total/NA
Antimony	3.5	J	16.1	0.43	mg/Kg	1	☼	6010C	Total/NA
Arsenic	22.1		2.1	0.43	mg/Kg	1	☼	6010C	Total/NA
Barium	62.4		0.54	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.38		0.21	0.030	mg/Kg	1	☼	6010C	Total/NA
Cadmium	2.5		0.21	0.032	mg/Kg	1	☼	6010C	Total/NA
Calcium	5960		53.7	3.5	mg/Kg	1	☼	6010C	Total/NA
Chromium	13.8		0.54	0.21	mg/Kg	1	☼	6010C	Total/NA
Cobalt	8.2		0.54	0.054	mg/Kg	1	☼	6010C	Total/NA
Copper	43.0		1.1	0.23	mg/Kg	1	☼	6010C	Total/NA
Iron	34100		10.7	3.8	mg/Kg	1	☼	6010C	Total/NA
Lead	697		1.1	0.26	mg/Kg	1	☼	6010C	Total/NA
Magnesium	1550	B	21.5	0.99	mg/Kg	1	☼	6010C	Total/NA
Manganese	349		0.21	0.034	mg/Kg	1	☼	6010C	Total/NA
Nickel	17.7		5.4	0.25	mg/Kg	1	☼	6010C	Total/NA
Potassium	1470		32.2	21.5	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.84	J	4.3	0.43	mg/Kg	1	☼	6010C	Total/NA
Sodium	345		150	14.0	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample ID: SB4 (0-0.5) (Continued) — Lab Sample ID: 480-201707-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Thallium	0.68	J	6.4	0.32	mg/Kg	1	☼	6010C	Total/NA
Vanadium	18.4		0.54	0.12	mg/Kg	1	☼	6010C	Total/NA
Zinc	135		2.1	0.69	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.12		0.021	0.0049	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB4 (0.5-1) — Lab Sample ID: 480-201707-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	230	J	940	120	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	1800		940	94	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	2400		940	140	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	3500		940	150	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	1400		940	99	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	1400		940	120	ug/Kg	5	☼	8270D	Total/NA
Chrysene	1700		940	210	ug/Kg	5	☼	8270D	Total/NA
Dibenz(a,h)anthracene	350	J	940	170	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	2700		940	99	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	2100		940	120	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	700	J	940	140	ug/Kg	5	☼	8270D	Total/NA
Pyrene	1800		940	110	ug/Kg	5	☼	8270D	Total/NA
Aluminum	8880		10.7	4.7	mg/Kg	1	☼	6010C	Total/NA
Antimony	1.3	J	16.1	0.43	mg/Kg	1	☼	6010C	Total/NA
Arsenic	12.9		2.1	0.43	mg/Kg	1	☼	6010C	Total/NA
Barium	65.6		0.54	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.41		0.21	0.030	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.59		0.21	0.032	mg/Kg	1	☼	6010C	Total/NA
Calcium	2190		53.5	3.5	mg/Kg	1	☼	6010C	Total/NA
Chromium	12.7		0.54	0.21	mg/Kg	1	☼	6010C	Total/NA
Cobalt	7.0		0.54	0.054	mg/Kg	1	☼	6010C	Total/NA
Copper	22.3		1.1	0.22	mg/Kg	1	☼	6010C	Total/NA
Iron	27300		10.7	3.7	mg/Kg	1	☼	6010C	Total/NA
Lead	318		1.1	0.26	mg/Kg	1	☼	6010C	Total/NA
Magnesium	1830	B	21.4	0.99	mg/Kg	1	☼	6010C	Total/NA
Manganese	468		0.21	0.034	mg/Kg	1	☼	6010C	Total/NA
Nickel	15.0		5.4	0.25	mg/Kg	1	☼	6010C	Total/NA
Potassium	1760		32.1	21.4	mg/Kg	1	☼	6010C	Total/NA
Sodium	245		150	13.9	mg/Kg	1	☼	6010C	Total/NA
Thallium	0.72	J	6.4	0.32	mg/Kg	1	☼	6010C	Total/NA
Vanadium	18.4		0.54	0.12	mg/Kg	1	☼	6010C	Total/NA
Zinc	66.4		2.1	0.68	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.19		0.022	0.0051	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB4 (1-2) — Lab Sample ID: 480-201712-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	250	J	920	120	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	2200		920	92	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	3600		920	140	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	4700		920	150	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	1800		920	98	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	2000		920	120	ug/Kg	5	☼	8270D	Total/NA
Chrysene	2000		920	210	ug/Kg	5	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB4 (1-2) (Continued)

Lab Sample ID: 480-201712-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dibenz(a,h)anthracene	470	J	920	160	ug/Kg	5	☼	8270D	Total/NA
Diethyl phthalate	130	J B	920	120	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	2200		920	98	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	2900		920	110	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	470	J	920	140	ug/Kg	5	☼	8270D	Total/NA
Pyrene	2800		920	110	ug/Kg	5	☼	8270D	Total/NA
Aluminum	8180		11.1	4.9	mg/Kg	1	☼	6010C	Total/NA
Antimony	4.2	J	16.7	0.45	mg/Kg	1	☼	6010C	Total/NA
Arsenic	21.7		2.2	0.45	mg/Kg	1	☼	6010C	Total/NA
Barium	172		0.56	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.42		0.22	0.031	mg/Kg	1	☼	6010C	Total/NA
Cadmium	4.3		0.22	0.033	mg/Kg	1	☼	6010C	Total/NA
Calcium	10400		55.6	3.7	mg/Kg	1	☼	6010C	Total/NA
Chromium	18.6		0.56	0.22	mg/Kg	1	☼	6010C	Total/NA
Cobalt	4.6		0.56	0.056	mg/Kg	1	☼	6010C	Total/NA
Copper	70.6		1.1	0.23	mg/Kg	1	☼	6010C	Total/NA
Iron	21700		11.1	3.9	mg/Kg	1	☼	6010C	Total/NA
Lead	9670		1.1	0.27	mg/Kg	1	☼	6010C	Total/NA
Magnesium	1900	B	22.3	1.0	mg/Kg	1	☼	6010C	Total/NA
Manganese	301		0.22	0.036	mg/Kg	1	☼	6010C	Total/NA
Nickel	13.6		5.6	0.26	mg/Kg	1	☼	6010C	Total/NA
Potassium	1420		33.4	22.3	mg/Kg	1	☼	6010C	Total/NA
Silver	0.28	J	0.67	0.22	mg/Kg	1	☼	6010C	Total/NA
Sodium	491		156	14.5	mg/Kg	1	☼	6010C	Total/NA
Thallium	1.1	J	6.7	0.33	mg/Kg	1	☼	6010C	Total/NA
Vanadium	17.1		0.56	0.12	mg/Kg	1	☼	6010C	Total/NA
Zinc	223		2.2	0.71	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.79		0.021	0.0048	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB2 (0-0.5)

Date Collected: 09/14/22 17:05
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-1

Matrix: Solid
Percent Solids: 75.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		7.8	0.78	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
1,1,1-Trichloroethane	ND		7.8	0.56	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
1,1,2,2-Tetrachloroethane	ND	*3	7.8	1.3	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		7.8	1.8	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
1,1,2-Trichloroethane	ND		7.8	1.0	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
1,1-Dichloroethane	ND		7.8	0.95	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
1,1-Dichloroethene	ND		7.8	0.95	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
1,2,3-Trimethylbenzene	ND	*3	7.8	1.6	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
1,2,4-Trichlorobenzene	ND	*3	7.8	0.47	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
1,2,4-Trimethylbenzene	ND	*3	7.8	1.5	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
1,2-Dibromo-3-Chloropropane	ND	*3	7.8	3.9	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
1,2-Dibromoethane	ND		7.8	1.0	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
1,2-Dichlorobenzene	ND	*3	7.8	0.61	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
1,2-Dichloroethane	ND		7.8	0.39	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
1,2-Dichloropropane	ND		7.8	3.9	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
1,3,5-Trimethylbenzene	ND	*3	7.8	0.50	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
1,3-Dichlorobenzene	ND	*3	7.8	0.40	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
1,4-Dichlorobenzene	ND	*3	7.8	1.1	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
2-Butanone (MEK)	ND		39	2.8	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
2-Hexanone	ND		39	3.9	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
4-Methyl-2-pentanone (MIBK)	ND		39	2.5	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
Acetone	**15**	**J**	39	6.5	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
Benzene	ND		7.8	0.38	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
Bromodichloromethane	ND		7.8	1.0	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
Bromoform	ND		7.8	3.9	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
Bromomethane	ND		7.8	0.70	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
Carbon disulfide	ND		7.8	3.9	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
Carbon tetrachloride	ND		7.8	0.75	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
Chlorobenzene	ND		7.8	1.0	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
Chloroethane	ND		7.8	1.8	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
Chloroform	ND		7.8	0.48	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
Chloromethane	ND		7.8	0.47	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
cis-1,2-Dichloroethene	ND		7.8	0.99	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
cis-1,3-Dichloropropene	ND		7.8	1.1	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
Cyclohexane	ND		7.8	1.1	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
Dibromochloromethane	ND		7.8	0.99	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
Dichlorodifluoromethane	ND		7.8	0.64	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
Ethylbenzene	ND		7.8	0.54	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
Isopropylbenzene	ND	*3	7.8	1.2	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
m,p-Xylene	ND		16	1.3	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
Methyl acetate	ND		39	4.7	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
Methyl tert-butyl ether	ND		7.8	0.76	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
Methylcyclohexane	ND		7.8	1.2	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
Methylene Chloride	ND		7.8	3.6	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
n-Butylbenzene	ND	*3	7.8	0.68	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
N-Propylbenzene	ND	*3	7.8	0.62	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
o-Xylene	ND		7.8	1.0	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
sec-Butylbenzene	ND	*3	7.8	0.68	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
Styrene	ND		7.8	0.39	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1

Client Sample ID: SB2 (0-0.5)

Date Collected: 09/14/22 17:05
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-1

Matrix: Solid
Percent Solids: 75.4

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND	*3	7.8	0.81	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
Tetrachloroethene	ND		7.8	1.0	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
Toluene	ND		7.8	0.59	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
trans-1,2-Dichloroethene	ND		7.8	0.80	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
trans-1,3-Dichloropropene	ND		7.8	3.4	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
Trichloroethene	ND		7.8	1.7	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
Trichlorofluoromethane	ND		7.8	0.74	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
Vinyl chloride	ND		7.8	0.95	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1
Xylenes, Total	ND		16	1.3	ug/Kg	☼	09/16/22 16:00	09/20/22 23:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*64 - 126*	*09/16/22 16:00*	*09/20/22 23:34*	*1*
4-Bromofluorobenzene (Surr)	*69*	*S1-*	*72 - 126*	*09/16/22 16:00*	*09/20/22 23:34*	*1*
Dibromofluoromethane (Surr)	*106*		*60 - 140*	*09/16/22 16:00*	*09/20/22 23:34*	*1*
Toluene-d8 (Surr)	*137*	*S1+*	*71 - 125*	*09/16/22 16:00*	*09/20/22 23:34*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		220	60	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
2,4,6-Trichlorophenol	ND		220	45	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
2,4-Dichlorophenol	ND		220	24	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
2,4-Dimethylphenol	ND		220	54	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
2,4-Dinitrophenol	ND		2200	1000	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
2,4-Dinitrotoluene	ND		220	46	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
2,6-Dinitrotoluene	ND		220	26	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
2-Chloronaphthalene	ND		220	37	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
2-Chlorophenol	ND		430	41	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
2-Methylnaphthalene	ND		220	45	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
2-Methylphenol	ND		220	26	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
2-Nitroaniline	ND		430	33	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
2-Nitrophenol	ND		220	63	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
3,3'-Dichlorobenzidine	ND		430	260	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
3-Nitroaniline	ND		430	62	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
4,6-Dinitro-2-methylphenol	ND		430	220	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
4-Bromophenyl phenyl ether	ND		220	32	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
4-Chloro-3-methylphenol	ND		220	55	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
4-Chloroaniline	ND		220	55	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
4-Chlorophenyl phenyl ether	ND		220	28	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
4-Methylphenol	ND		430	26	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
4-Nitroaniline	ND		430	120	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
4-Nitrophenol	ND		430	160	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Acenaphthene	ND		220	33	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Acenaphthylene	**44**	**J**	220	29	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Acetophenone	ND		220	30	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Anthracene	ND		220	55	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Atrazine	ND		220	78	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Benzaldehyde	ND		220	180	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Benzo[a]anthracene	**200**	**J**	220	22	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Benzo[a]pyrene	**230**		220	33	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Benzo[b]fluoranthene	**340**		220	35	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1

Client Sample ID: SB2 (0-0.5)
Date Collected: 09/14/22 17:05
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-1
Matrix: Solid
Percent Solids: 75.4

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	**160**	**J**	220	24	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Benzo[k]fluoranthene	**110**	**J**	220	29	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Biphenyl	ND		220	33	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
bis (2-chloroisopropyl) ether	ND		220	45	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Bis(2-chloroethoxy)methane	ND		220	47	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Bis(2-chloroethyl)ether	ND		220	29	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Bis(2-ethylhexyl) phthalate	**120**	**J**	220	76	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Butyl benzyl phthalate	**65**	**J**	220	37	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Caprolactam	**140**	**J**	220	67	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Carbazole	**31**	**J**	220	26	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Chrysene	**390**		220	50	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Dibenz(a,h)anthracene	**46**	**J**	220	39	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Dibenzofuran	ND		220	26	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Diethyl phthalate	**94**	**J B**	220	29	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Dimethyl phthalate	ND		220	26	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Di-n-butyl phthalate	ND		220	38	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Di-n-octyl phthalate	ND		220	26	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Fluoranthene	**400**		220	24	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Fluorene	ND		220	26	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Hexachlorobenzene	ND		220	30	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Hexachlorobutadiene	ND		220	33	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Hexachlorocyclopentadiene	ND		220	30	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Hexachloroethane	ND		220	29	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Indeno[1,2,3-cd]pyrene	**180**	**J**	220	28	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Isophorone	ND		220	47	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Naphthalene	ND		220	29	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Nitrobenzene	ND		220	25	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
N-Nitrosodi-n-propylamine	ND		220	38	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
N-Nitrosodiphenylamine	ND		220	180	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Pentachlorophenol	ND		430	220	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Phenanthrene	**380**		220	33	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Phenol	ND		220	34	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1
Pyrene	**360**		220	26	ug/Kg	☼	09/19/22 08:19	09/21/22 18:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*74*		*54 - 120*	*09/19/22 08:19*	*09/21/22 18:34*	*1*
2-Fluorobiphenyl (Surr)	*69*		*60 - 120*	*09/19/22 08:19*	*09/21/22 18:34*	*1*
2-Fluorophenol (Surr)	*62*		*52 - 120*	*09/19/22 08:19*	*09/21/22 18:34*	*1*
Nitrobenzene-d5 (Surr)	*62*		*53 - 120*	*09/19/22 08:19*	*09/21/22 18:34*	*1*
Phenol-d5 (Surr)	*62*		*54 - 120*	*09/19/22 08:19*	*09/21/22 18:34*	*1*
p-Terphenyl-d14 (Surr)	*76*	*S1-*	*79 - 130*	*09/19/22 08:19*	*09/21/22 18:34*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5090**		12.5	5.5	mg/Kg	☼	09/20/22 14:15	09/21/22 16:19	1
Antimony	**1.2**	**J**	18.8	0.50	mg/Kg	☼	09/20/22 14:15	09/21/22 16:19	1
Arsenic	**14.5**		2.5	0.50	mg/Kg	☼	09/20/22 14:15	09/21/22 16:19	1
Barium	**76.7**		0.63	0.14	mg/Kg	☼	09/20/22 14:15	09/21/22 16:19	1
Beryllium	**0.89**		0.25	0.035	mg/Kg	☼	09/20/22 14:15	09/21/22 16:19	1
Cadmium	**0.55**		0.25	0.038	mg/Kg	☼	09/20/22 14:15	09/21/22 16:19	1

Client Sample ID: SB2 (0-0.5)

Date Collected: 09/14/22 17:05
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-1

Matrix: Solid
Percent Solids: 75.4

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	7690		62.6	4.1	mg/Kg	☼	09/20/22 14:15	09/21/22 16:19	1
Chromium	16.5		0.63	0.25	mg/Kg	☼	09/20/22 14:15	09/21/22 16:19	1
Cobalt	5.9		0.63	0.063	mg/Kg	☼	09/20/22 14:15	09/21/22 16:19	1
Copper	50.9		1.3	0.26	mg/Kg	☼	09/20/22 14:15	09/21/22 16:19	1
Iron	31000		12.5	4.4	mg/Kg	☼	09/20/22 14:15	09/21/22 16:19	1
Lead	146		1.3	0.30	mg/Kg	☼	09/20/22 14:15	09/21/22 16:19	1
Magnesium	1050	B	25.0	1.2	mg/Kg	☼	09/20/22 14:15	09/21/22 16:19	1
Manganese	182		0.25	0.040	mg/Kg	☼	09/20/22 14:15	09/21/22 16:19	1
Nickel	14.2		6.3	0.29	mg/Kg	☼	09/20/22 14:15	09/21/22 16:19	1
Potassium	1220		37.6	25.0	mg/Kg	☼	09/20/22 14:15	09/21/22 16:19	1
Selenium	1.8	J	5.0	0.50	mg/Kg	☼	09/20/22 14:15	09/21/22 16:19	1
Silver	ND		0.75	0.25	mg/Kg	☼	09/20/22 14:15	09/21/22 16:19	1
Sodium	472		175	16.3	mg/Kg	☼	09/20/22 14:15	09/21/22 16:19	1
Thallium	1.3	J	7.5	0.38	mg/Kg	☼	09/20/22 14:15	09/21/22 16:19	1
Vanadium	24.9		0.63	0.14	mg/Kg	☼	09/20/22 14:15	09/21/22 16:19	1
Zinc	34.0		2.5	0.80	mg/Kg	☼	09/20/22 14:15	09/21/22 16:19	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.066	F1	0.027	0.0062	mg/Kg	☼	09/21/22 10:43	09/21/22 13:51	1

Client Sample ID: SB2 (0.5-1)

Date Collected: 09/14/22 17:10
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-2

Matrix: Solid
Percent Solids: 79.8

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		14	1.4	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
1,1,1-Trichloroethane	ND		14	0.98	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
1,1,2,2-Tetrachloroethane	ND		14	2.2	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		14	3.1	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
1,1,2-Trichloroethane	ND		14	1.8	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
1,1-Dichloroethane	ND		14	1.7	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
1,1-Dichloroethene	ND		14	1.7	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
1,2,3-Trimethylbenzene	ND		14	2.8	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
1,2,4-Trichlorobenzene	ND		14	0.82	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
1,2,4-Trimethylbenzene	ND		14	2.6	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
1,2-Dibromo-3-Chloropropane	ND		14	6.8	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
1,2-Dibromoethane	ND		14	1.7	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
1,2-Dichlorobenzene	ND		14	1.1	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
1,2-Dichloroethane	ND		14	0.68	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
1,2-Dichloropropane	ND		14	6.8	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
1,3,5-Trimethylbenzene	ND		14	0.87	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
1,3-Dichlorobenzene	ND		14	0.70	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
1,4-Dichlorobenzene	ND		14	1.9	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
2-Butanone (MEK)	ND		68	5.0	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
2-Hexanone	ND		68	6.8	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
4-Methyl-2-pentanone (MIBK)	ND		68	4.4	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
Acetone	ND		68	11	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
Benzene	ND		14	0.66	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1

Client Sample ID: SB2 (0.5-1)
Date Collected: 09/14/22 17:10
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-2
Matrix: Solid
Percent Solids: 79.8

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		14	1.8	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
Bromoform	ND		14	6.8	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
Bromomethane	ND		14	1.2	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
Carbon disulfide	ND		14	6.8	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
Carbon tetrachloride	ND		14	1.3	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
Chlorobenzene	ND		14	1.8	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
Chloroethane	ND		14	3.1	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
Chloroform	ND		14	0.84	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
Chloromethane	ND		14	0.82	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
cis-1,2-Dichloroethene	ND		14	1.7	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
cis-1,3-Dichloropropene	ND		14	1.9	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
Cyclohexane	ND		14	1.9	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
Dibromochloromethane	ND		14	1.7	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
Dichlorodifluoromethane	ND		14	1.1	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
Ethylbenzene	ND		14	0.93	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
Isopropylbenzene	ND		14	2.0	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
m,p-Xylene	ND		27	2.3	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
Methyl acetate	ND		68	8.2	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
Methyl tert-butyl ether	ND		14	1.3	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
Methylcyclohexane	ND		14	2.1	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
Methylene Chloride	ND		14	6.2	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
n-Butylbenzene	ND		14	1.2	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
N-Propylbenzene	ND		14	1.1	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
o-Xylene	ND		14	1.8	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
sec-Butylbenzene	ND		14	1.2	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
Styrene	ND		14	0.68	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
tert-Butylbenzene	ND		14	1.4	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
Tetrachloroethene	ND		14	1.8	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
Toluene	ND		14	1.0	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
trans-1,2-Dichloroethene	ND		14	1.4	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
trans-1,3-Dichloropropene	ND		14	6.0	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
Trichloroethene	ND		14	3.0	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
Trichlorofluoromethane	ND		14	1.3	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
Vinyl chloride	ND		14	1.7	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1
Xylenes, Total	ND		27	2.3	ug/Kg	☼	09/16/22 16:00	09/19/22 12:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*64 - 126*	*09/16/22 16:00*	*09/19/22 12:55*	*1*
4-Bromofluorobenzene (Surr)	*79*		*72 - 126*	*09/16/22 16:00*	*09/19/22 12:55*	*1*
Dibromofluoromethane (Surr)	*97*		*60 - 140*	*09/16/22 16:00*	*09/19/22 12:55*	*1*
Toluene-d8 (Surr)	*123*		*71 - 125*	*09/16/22 16:00*	*09/19/22 12:55*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		210	57	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
2,4,6-Trichlorophenol	ND		210	42	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
2,4-Dichlorophenol	ND		210	22	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
2,4-Dimethylphenol	ND		210	51	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
2,4-Dinitrophenol	ND		2100	970	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
2,4-Dinitrotoluene	ND		210	43	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1

Client Sample ID: SB2 (0.5-1)

Date Collected: 09/14/22 17:10
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-2

Matrix: Solid
Percent Solids: 79.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		210	25	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
2-Chloronaphthalene	ND		210	35	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
2-Chlorophenol	ND		410	38	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
2-Methylnaphthalene	ND		210	42	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
2-Methylphenol	ND		210	25	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
2-Nitroaniline	ND		410	31	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
2-Nitrophenol	ND		210	59	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
3,3'-Dichlorobenzidine	ND		410	250	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
3-Nitroaniline	ND		410	58	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
4,6-Dinitro-2-methylphenol	ND		410	210	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
4-Bromophenyl phenyl ether	ND		210	30	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
4-Chloro-3-methylphenol	ND		210	52	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
4-Chloroaniline	ND		210	52	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
4-Chlorophenyl phenyl ether	ND		210	26	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
4-Methylphenol	ND		410	25	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
4-Nitroaniline	ND		410	110	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
4-Nitrophenol	ND		410	150	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Acenaphthene	ND		210	31	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Acenaphthylene	ND		210	27	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Acetophenone	ND		210	28	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Anthracene	ND		210	52	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Atrazine	ND		210	73	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Benzaldehyde	ND		210	170	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Benzo[a]anthracene	**69**	**J**	210	21	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Benzo[a]pyrene	**82**	**J**	210	31	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Benzo[b]fluoranthene	**120**	**J**	210	33	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Benzo[g,h,i]perylene	**72**	**J**	210	22	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Benzo[k]fluoranthene	**37**	**J**	210	27	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Biphenyl	ND		210	31	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
bis (2-chloroisopropyl) ether	ND		210	42	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Bis(2-chloroethoxy)methane	ND		210	45	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Bis(2-chloroethyl)ether	ND		210	27	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Bis(2-ethylhexyl) phthalate	ND		210	72	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Butyl benzyl phthalate	ND		210	35	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Caprolactam	ND		210	63	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Carbazole	ND		210	25	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Chrysene	**170**	**J**	210	47	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Dibenz(a,h)anthracene	ND		210	37	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Dibenzofuran	ND		210	25	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Diethyl phthalate	ND		210	27	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Dimethyl phthalate	ND		210	25	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Di-n-butyl phthalate	ND		210	36	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Di-n-octyl phthalate	ND		210	25	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Fluoranthene	**120**	**J**	210	22	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Fluorene	ND		210	25	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Hexachlorobenzene	ND		210	28	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Hexachlorobutadiene	ND		210	31	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Hexachlorocyclopentadiene	ND		210	28	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Hexachloroethane	ND		210	27	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1

Client Sample ID: SB2 (0.5-1)

Date Collected: 09/14/22 17:10
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-2

Matrix: Solid
Percent Solids: 79.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	**65**	**J**	210	26	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Isophorone	ND		210	45	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Naphthalene	ND		210	27	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Nitrobenzene	ND		210	24	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
N-Nitrosodi-n-propylamine	ND		210	36	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
N-Nitrosodiphenylamine	ND		210	170	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Pentachlorophenol	ND		410	210	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Phenanthrene	**120**	**J**	210	31	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Phenol	ND		210	32	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1
Pyrene	**110**	**J**	210	25	ug/Kg	☼	09/19/22 08:19	09/21/22 18:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*111*		*54 - 120*	*09/19/22 08:19*	*09/21/22 18:51*	*1*
2-Fluorobiphenyl (Surr)	*97*		*60 - 120*	*09/19/22 08:19*	*09/21/22 18:51*	*1*
2-Fluorophenol (Surr)	*83*		*52 - 120*	*09/19/22 08:19*	*09/21/22 18:51*	*1*
Nitrobenzene-d5 (Surr)	*91*		*53 - 120*	*09/19/22 08:19*	*09/21/22 18:51*	*1*
Phenol-d5 (Surr)	*86*		*54 - 120*	*09/19/22 08:19*	*09/21/22 18:51*	*1*
p-Terphenyl-d14 (Surr)	*108*		*79 - 130*	*09/19/22 08:19*	*09/21/22 18:51*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**5000**		12.8	5.7	mg/Kg	☼	09/20/22 14:15	09/21/22 16:23	1
Antimony	**0.53**	**J**	19.3	0.51	mg/Kg	☼	09/20/22 14:15	09/21/22 16:23	1
Arsenic	**8.3**		2.6	0.51	mg/Kg	☼	09/20/22 14:15	09/21/22 16:23	1
Barium	**54.7**		0.64	0.14	mg/Kg	☼	09/20/22 14:15	09/21/22 16:23	1
Beryllium	**1.1**		0.26	0.036	mg/Kg	☼	09/20/22 14:15	09/21/22 16:23	1
Cadmium	**0.094**	**J**	0.26	0.039	mg/Kg	☼	09/20/22 14:15	09/21/22 16:23	1
Calcium	**1290**		64.2	4.2	mg/Kg	☼	09/20/22 14:15	09/21/22 16:23	1
Chromium	**14.8**		0.64	0.26	mg/Kg	☼	09/20/22 14:15	09/21/22 16:23	1
Cobalt	**5.5**		0.64	0.064	mg/Kg	☼	09/20/22 14:15	09/21/22 16:23	1
Copper	**47.0**		1.3	0.27	mg/Kg	☼	09/20/22 14:15	09/21/22 16:23	1
Iron	**17000**		12.8	4.5	mg/Kg	☼	09/20/22 14:15	09/21/22 16:23	1
Lead	**49.2**		1.3	0.31	mg/Kg	☼	09/20/22 14:15	09/21/22 16:23	1
Magnesium	**571**	**B**	25.7	1.2	mg/Kg	☼	09/20/22 14:15	09/21/22 16:23	1
Manganese	**161**		0.26	0.041	mg/Kg	☼	09/20/22 14:15	09/21/22 16:23	1
Nickel	**20.4**		6.4	0.30	mg/Kg	☼	09/20/22 14:15	09/21/22 16:23	1
Potassium	**839**		38.5	25.7	mg/Kg	☼	09/20/22 14:15	09/21/22 16:23	1
Selenium	**1.1**	**J**	5.1	0.51	mg/Kg	☼	09/20/22 14:15	09/21/22 16:23	1
Silver	ND		0.77	0.26	mg/Kg	☼	09/20/22 14:15	09/21/22 16:23	1
Sodium	**169**	**J**	180	16.7	mg/Kg	☼	09/20/22 14:15	09/21/22 16:23	1
Thallium	**1.4**	**J**	7.7	0.39	mg/Kg	☼	09/20/22 14:15	09/21/22 16:23	1
Vanadium	**29.0**		0.64	0.14	mg/Kg	☼	09/20/22 14:15	09/21/22 16:23	1
Zinc	**20.3**		2.6	0.82	mg/Kg	☼	09/20/22 14:15	09/21/22 16:23	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.037**		0.024	0.0056	mg/Kg	☼	09/21/22 10:43	09/21/22 14:49	1

Client Sample ID: SB2 (1-2)
Date Collected: 09/14/22 17:15
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-3
Matrix: Solid
Percent Solids: 83.8

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		6.7	0.67	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
1,1,1-Trichloroethane	ND		6.7	0.48	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
1,1,2,2-Tetrachloroethane	ND		6.7	1.1	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.7	1.5	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
1,1,2-Trichloroethane	ND		6.7	0.87	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
1,1-Dichloroethane	ND		6.7	0.81	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
1,1-Dichloroethene	ND		6.7	0.82	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
1,2,3-Trimethylbenzene	ND		6.7	1.4	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
1,2,4-Trichlorobenzene	ND		6.7	0.41	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
1,2,4-Trimethylbenzene	ND		6.7	1.3	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
1,2-Dibromo-3-Chloropropane	ND		6.7	3.3	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
1,2-Dibromoethane	ND		6.7	0.86	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
1,2-Dichlorobenzene	ND		6.7	0.52	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
1,2-Dichloroethane	ND		6.7	0.33	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
1,2-Dichloropropane	ND		6.7	3.3	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
1,3,5-Trimethylbenzene	ND		6.7	0.43	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
1,3-Dichlorobenzene	ND		6.7	0.34	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
1,4-Dichlorobenzene	ND		6.7	0.93	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
2-Butanone (MEK)	**92**		33	2.4	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
2-Hexanone	ND		33	3.3	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
4-Methyl-2-pentanone (MIBK)	ND		33	2.2	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
Acetone	**540**		33	5.6	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
Benzene	ND		6.7	0.33	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
Bromodichloromethane	ND		6.7	0.89	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
Bromoform	ND		6.7	3.3	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
Bromomethane	ND		6.7	0.60	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
Carbon disulfide	ND		6.7	3.3	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
Carbon tetrachloride	ND		6.7	0.65	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
Chlorobenzene	ND		6.7	0.88	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
Chloroethane	ND		6.7	1.5	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
Chloroform	ND		6.7	0.41	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
Chloromethane	ND		6.7	0.40	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
cis-1,2-Dichloroethene	ND		6.7	0.85	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
cis-1,3-Dichloropropene	ND		6.7	0.96	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
Cyclohexane	ND		6.7	0.93	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
Dibromochloromethane	ND		6.7	0.85	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
Dichlorodifluoromethane	ND		6.7	0.55	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
Ethylbenzene	**0.75**	**J**	6.7	0.46	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
Isopropylbenzene	ND		6.7	1.0	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
m,p-Xylene	ND		13	1.1	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
Methyl acetate	ND		33	4.0	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
Methyl tert-butyl ether	ND		6.7	0.66	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
Methylcyclohexane	ND		6.7	1.0	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
Methylene Chloride	ND		6.7	3.1	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
n-Butylbenzene	**0.68**	**J**	6.7	0.58	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
N-Propylbenzene	**1.1**	**J**	6.7	0.53	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
o-Xylene	ND		6.7	0.87	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
sec-Butylbenzene	ND		6.7	0.58	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
Styrene	ND		6.7	0.33	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1

Client Sample ID: SB2 (1-2)

Date Collected: 09/14/22 17:15
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-3

Matrix: Solid
Percent Solids: 83.8

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		6.7	0.69	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
Tetrachloroethene	ND		6.7	0.90	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
Toluene	**0.87**	**J**	6.7	0.50	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
trans-1,2-Dichloroethene	ND		6.7	0.69	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
trans-1,3-Dichloropropene	ND		6.7	2.9	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
Trichloroethene	ND		6.7	1.5	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
Trichlorofluoromethane	ND		6.7	0.63	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
Vinyl chloride	ND		6.7	0.81	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1
Xylenes, Total	ND		13	1.1	ug/Kg	☼	09/16/22 16:00	09/19/22 13:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*64 - 126*	*09/16/22 16:00*	*09/19/22 13:22*	*1*
4-Bromofluorobenzene (Surr)	*86*		*72 - 126*	*09/16/22 16:00*	*09/19/22 13:22*	*1*
Dibromofluoromethane (Surr)	*108*		*60 - 140*	*09/16/22 16:00*	*09/19/22 13:22*	*1*
Toluene-d8 (Surr)	*114*		*71 - 125*	*09/16/22 16:00*	*09/19/22 13:22*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		120	65	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
2,4,5-Trichlorophenol	ND		200	54	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
2,4,6-Trichlorophenol	ND		200	40	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
2,4-Dichlorophenol	ND		200	21	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
2,4-Dimethylphenol	ND		200	48	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
2,4-Dinitrophenol	ND		2000	930	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
2,4-Dinitrotoluene	ND		200	41	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
2,6-Dinitrotoluene	ND		200	24	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
2-Chloronaphthalene	ND		200	33	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
2-Chlorophenol	ND		390	37	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
2-Methylnaphthalene	ND		200	40	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
2-Methylphenol	ND		200	24	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
2-Nitroaniline	ND		390	30	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
2-Nitrophenol	ND		200	57	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
3,3'-Dichlorobenzidine	ND		390	240	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
3-Nitroaniline	ND		390	56	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
4,6-Dinitro-2-methylphenol	ND		390	200	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
4-Bromophenyl phenyl ether	ND		200	28	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
4-Chloro-3-methylphenol	ND		200	50	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
4-Chloroaniline	ND		200	50	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
4-Chlorophenyl phenyl ether	ND		200	25	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
4-Methylphenol	ND		390	24	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
4-Nitroaniline	ND		390	110	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
4-Nitrophenol	ND		390	140	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Acenaphthene	ND		200	30	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Acenaphthylene	ND		200	26	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Acetophenone	ND		200	27	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Anthracene	ND		200	50	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Atrazine	ND		200	70	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Benzaldehyde	ND		200	160	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Benzo[a]anthracene	**100**	**J**	200	20	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Benzo[a]pyrene	**120**	**J**	200	30	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1

Client Sample ID: SB2 (1-2)
Date Collected: 09/14/22 17:15
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-3
Matrix: Solid
Percent Solids: 83.8

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	**180**	**J**	200	32	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Benzo[g,h,i]perylene	**86**	**J**	200	21	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Benzo[k]fluoranthene	**56**	**J**	200	26	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Biphenyl	ND		200	30	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
bis (2-chloroisopropyl) ether	ND		200	40	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Bis(2-chloroethoxy)methane	ND		200	43	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Bis(2-chloroethyl)ether	ND		200	26	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Bis(2-ethylhexyl) phthalate	ND		200	69	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Butyl benzyl phthalate	ND		200	33	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Caprolactam	ND		200	60	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Carbazole	ND		200	24	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Chrysene	**180**	**J**	200	45	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Dibenz(a,h)anthracene	ND		200	35	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Dibenzofuran	ND		200	24	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Diethyl phthalate	ND		200	26	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Dimethyl phthalate	ND		200	24	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Di-n-butyl phthalate	ND		200	34	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Di-n-octyl phthalate	ND		200	24	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Fluoranthene	**180**	**J**	200	21	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Fluorene	ND		200	24	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Hexachlorobenzene	ND		200	27	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Hexachlorobutadiene	ND		200	30	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Hexachlorocyclopentadiene	ND		200	27	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Hexachloroethane	ND		200	26	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Indeno[1,2,3-cd]pyrene	**91**	**J**	200	25	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Isophorone	ND		200	43	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Naphthalene	ND		200	26	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Nitrobenzene	ND		200	22	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
N-Nitrosodi-n-propylamine	ND		200	34	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
N-Nitrosodiphenylamine	ND		200	160	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Pentachlorophenol	ND		390	200	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Phenanthrene	**150**	**J**	200	30	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Phenol	ND		200	31	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1
Pyrene	**160**	**J**	200	24	ug/Kg	☼	09/19/22 08:19	09/21/22 19:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*108*		*54 - 120*	*09/19/22 08:19*	*09/21/22 19:08*	*1*
2-Fluorobiphenyl (Surr)	*105*		*60 - 120*	*09/19/22 08:19*	*09/21/22 19:08*	*1*
2-Fluorophenol (Surr)	*89*		*52 - 120*	*09/19/22 08:19*	*09/21/22 19:08*	*1*
Nitrobenzene-d5 (Surr)	*100*		*53 - 120*	*09/19/22 08:19*	*09/21/22 19:08*	*1*
Phenol-d5 (Surr)	*91*		*54 - 120*	*09/19/22 08:19*	*09/21/22 19:08*	*1*
p-Terphenyl-d14 (Surr)	*113*		*79 - 130*	*09/19/22 08:19*	*09/21/22 19:08*	*1*

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.58	0.38	ug/Kg	☼	09/20/22 08:32	09/21/22 18:41	1
Perfluoropentanoic acid (PFPeA)	ND		0.23	0.064	ug/Kg	☼	09/20/22 08:32	09/21/22 18:41	1
Perfluorohexanoic acid (PFHxA)	ND		0.23	0.054	ug/Kg	☼	09/20/22 08:32	09/21/22 18:41	1
Perfluoroheptanoic acid (PFHpA)	ND		0.23	0.045	ug/Kg	☼	09/20/22 08:32	09/21/22 18:41	1
Perfluorooctanoic acid (PFOA)	**0.16**	**J I**	0.23	0.067	ug/Kg	☼	09/20/22 08:32	09/21/22 18:41	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Client Sample ID: SB2 (1-2)
Date Collected: 09/14/22 17:15
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-3
Matrix: Solid
Percent Solids: 83.8

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	ND		0.23	0.040	ug/Kg	☼	09/20/22 08:32	09/21/22 18:41	1
Perfluorodecanoic acid (PFDA)	ND		0.23	0.033	ug/Kg	☼	09/20/22 08:32	09/21/22 18:41	1
Perfluoroundecanoic acid (PFUnA)	ND		0.23	0.031	ug/Kg	☼	09/20/22 08:32	09/21/22 18:41	1
Perfluorododecanoic acid (PFDoA)	ND		0.23	0.029	ug/Kg	☼	09/20/22 08:32	09/21/22 18:41	1
Perfluorotridecanoic acid (PFTriA)	ND		0.23	0.029	ug/Kg	☼	09/20/22 08:32	09/21/22 18:41	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.23	0.030	ug/Kg	☼	09/20/22 08:32	09/21/22 18:41	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.23	0.038	ug/Kg	☼	09/20/22 08:32	09/21/22 18:41	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.23	0.048	ug/Kg	☼	09/20/22 08:32	09/21/22 18:41	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.23	0.027	ug/Kg	☼	09/20/22 08:32	09/21/22 18:41	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.23	0.13	ug/Kg	☼	09/20/22 08:32	09/21/22 18:41	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.23	0.022	ug/Kg	☼	09/20/22 08:32	09/21/22 18:41	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.23	0.040	ug/Kg	☼	09/20/22 08:32	09/21/22 18:41	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.3	0.13	ug/Kg	☼	09/20/22 08:32	09/21/22 18:41	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.3	0.097	ug/Kg	☼	09/20/22 08:32	09/21/22 18:41	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.3	0.066	ug/Kg	☼	09/20/22 08:32	09/21/22 18:41	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.3	0.043	ug/Kg	☼	09/20/22 08:32	09/21/22 18:41	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*83*		*50 - 150*	*09/20/22 08:32*	*09/21/22 18:41*	*1*
13C4 PFHpA	*87*		*50 - 150*	*09/20/22 08:32*	*09/21/22 18:41*	*1*
13C4 PFOA	*95*		*50 - 150*	*09/20/22 08:32*	*09/21/22 18:41*	*1*
13C4 PFOS	*83*		*50 - 150*	*09/20/22 08:32*	*09/21/22 18:41*	*1*
13C5 PFNA	*80*		*50 - 150*	*09/20/22 08:32*	*09/21/22 18:41*	*1*
13C4 PFBA	*85*		*50 - 150*	*09/20/22 08:32*	*09/21/22 18:41*	*1*
13C2 PFHxA	*83*		*50 - 150*	*09/20/22 08:32*	*09/21/22 18:41*	*1*
13C2 PFDA	*86*		*50 - 150*	*09/20/22 08:32*	*09/21/22 18:41*	*1*
13C2 PFUnA	*80*		*50 - 150*	*09/20/22 08:32*	*09/21/22 18:41*	*1*
13C2 PFDoA	*84*		*50 - 150*	*09/20/22 08:32*	*09/21/22 18:41*	*1*
13C8 FOSA	*67*		*50 - 150*	*09/20/22 08:32*	*09/21/22 18:41*	*1*
13C5 PFPeA	*90*		*50 - 150*	*09/20/22 08:32*	*09/21/22 18:41*	*1*
13C2 PFTeDA	*85*		*50 - 150*	*09/20/22 08:32*	*09/21/22 18:41*	*1*
d3-NMeFOSAA	*85*		*50 - 150*	*09/20/22 08:32*	*09/21/22 18:41*	*1*
d5-NEtFOSAA	*91*		*50 - 150*	*09/20/22 08:32*	*09/21/22 18:41*	*1*
M2-6:2 FTS	*111*		*50 - 150*	*09/20/22 08:32*	*09/21/22 18:41*	*1*
M2-8:2 FTS	*114*		*50 - 150*	*09/20/22 08:32*	*09/21/22 18:41*	*1*
13C3 PFBS	*87*		*50 - 150*	*09/20/22 08:32*	*09/21/22 18:41*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**9150**		12.4	5.5	mg/Kg	☼	09/20/22 14:15	09/21/22 16:27	1
Antimony	**0.96**	**J**	18.6	0.50	mg/Kg	☼	09/20/22 14:15	09/21/22 16:27	1
Arsenic	**9.6**		2.5	0.50	mg/Kg	☼	09/20/22 14:15	09/21/22 16:27	1
Barium	**94.9**		0.62	0.14	mg/Kg	☼	09/20/22 14:15	09/21/22 16:27	1
Beryllium	**0.95**		0.25	0.035	mg/Kg	☼	09/20/22 14:15	09/21/22 16:27	1
Cadmium	**0.28**		0.25	0.037	mg/Kg	☼	09/20/22 14:15	09/21/22 16:27	1
Calcium	**1970**		62.1	4.1	mg/Kg	☼	09/20/22 14:15	09/21/22 16:27	1
Chromium	**17.5**		0.62	0.25	mg/Kg	☼	09/20/22 14:15	09/21/22 16:27	1

Client Sample ID: SB2 (1-2)

Date Collected: 09/14/22 17:15
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-3

Matrix: Solid
Percent Solids: 83.8

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	8.2		0.62	0.062	mg/Kg	☼	09/20/22 14:15	09/21/22 16:27	1
Copper	46.6		1.2	0.26	mg/Kg	☼	09/20/22 14:15	09/21/22 16:27	1
Iron	32000		12.4	4.3	mg/Kg	☼	09/20/22 14:15	09/21/22 16:27	1
Lead	70.3		1.2	0.30	mg/Kg	☼	09/20/22 14:15	09/21/22 16:27	1
Magnesium	1470	B	24.8	1.2	mg/Kg	☼	09/20/22 14:15	09/21/22 16:27	1
Manganese	377		0.25	0.040	mg/Kg	☼	09/20/22 14:15	09/21/22 16:27	1
Nickel	50.4		6.2	0.29	mg/Kg	☼	09/20/22 14:15	09/21/22 16:27	1
Potassium	1650		37.2	24.8	mg/Kg	☼	09/20/22 14:15	09/21/22 16:27	1
Selenium	0.62	J	5.0	0.50	mg/Kg	☼	09/20/22 14:15	09/21/22 16:27	1
Silver	0.25	J	0.74	0.25	mg/Kg	☼	09/20/22 14:15	09/21/22 16:27	1
Sodium	181		174	16.1	mg/Kg	☼	09/20/22 14:15	09/21/22 16:27	1
Thallium	0.91	J	7.4	0.37	mg/Kg	☼	09/20/22 14:15	09/21/22 16:27	1
Vanadium	27.7		0.62	0.14	mg/Kg	☼	09/20/22 14:15	09/21/22 16:27	1
Zinc	68.6		2.5	0.79	mg/Kg	☼	09/20/22 14:15	09/21/22 16:27	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.050		0.024	0.0056	mg/Kg	☼	09/21/22 10:43	09/21/22 14:50	1

Client Sample ID: FB_091422

Date Collected: 09/14/22 18:05
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/19/22 13:24	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/19/22 13:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/19/22 13:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/19/22 13:24	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/19/22 13:24	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/19/22 13:24	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/19/22 13:24	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			09/19/22 13:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/19/22 13:24	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/19/22 13:24	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/19/22 13:24	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/19/22 13:24	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/19/22 13:24	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/19/22 13:24	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/19/22 13:24	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/19/22 13:24	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/19/22 13:24	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/19/22 13:24	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/19/22 13:24	1
2-Hexanone	ND		5.0	1.2	ug/L			09/19/22 13:24	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/19/22 13:24	1
Acetone	ND		10	3.0	ug/L			09/19/22 13:24	1
Benzene	ND		1.0	0.41	ug/L			09/19/22 13:24	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/19/22 13:24	1
Bromoform	ND		1.0	0.26	ug/L			09/19/22 13:24	1

Client Sample ID: FB_091422
Date Collected: 09/14/22 18:05
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		1.0	0.69	ug/L			09/19/22 13:24	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/19/22 13:24	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/19/22 13:24	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/19/22 13:24	1
Chloroethane	ND		1.0	0.32	ug/L			09/19/22 13:24	1
Chloroform	ND		1.0	0.34	ug/L			09/19/22 13:24	1
Chloromethane	**0.54**	**J**	1.0	0.35	ug/L			09/19/22 13:24	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/19/22 13:24	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/19/22 13:24	1
Cyclohexane	ND		1.0	0.18	ug/L			09/19/22 13:24	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/19/22 13:24	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/19/22 13:24	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/19/22 13:24	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/19/22 13:24	1
m,p-Xylene	ND		2.0	0.66	ug/L			09/19/22 13:24	1
Methyl acetate	ND		2.5	1.3	ug/L			09/19/22 13:24	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/19/22 13:24	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/19/22 13:24	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/19/22 13:24	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/19/22 13:24	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/19/22 13:24	1
o-Xylene	ND		1.0	0.76	ug/L			09/19/22 13:24	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/19/22 13:24	1
Styrene	ND		1.0	0.73	ug/L			09/19/22 13:24	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/19/22 13:24	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/19/22 13:24	1
Toluene	ND		1.0	0.51	ug/L			09/19/22 13:24	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/19/22 13:24	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/19/22 13:24	1
Trichloroethene	ND		1.0	0.46	ug/L			09/19/22 13:24	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/19/22 13:24	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/19/22 13:24	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/19/22 13:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*77 - 120*		*09/19/22 13:24*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*09/19/22 13:24*	*1*
Dibromofluoromethane (Surr)	*92*		*75 - 123*		*09/19/22 13:24*	*1*
Toluene-d8 (Surr)	*85*		*80 - 120*		*09/19/22 13:24*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.40**		0.20	0.10	ug/L		09/19/22 16:25	09/27/22 00:36	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*45*		*15 - 110*	*09/19/22 16:25*	*09/27/22 00:36*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		09/20/22 08:49	09/21/22 16:40	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		09/20/22 08:49	09/21/22 16:40	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Client Sample ID: FB_091422
Date Collected: 09/14/22 18:05
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-4
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		09/20/22 08:49	09/21/22 16:40	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		09/20/22 08:49	09/21/22 16:40	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		09/20/22 08:49	09/21/22 16:40	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		09/20/22 08:49	09/21/22 16:40	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		09/20/22 08:49	09/21/22 16:40	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		09/20/22 08:49	09/21/22 16:40	1
2-Chlorophenol	ND		5.0	0.53	ug/L		09/20/22 08:49	09/21/22 16:40	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		09/20/22 08:49	09/21/22 16:40	1
2-Methylphenol	ND		5.0	0.40	ug/L		09/20/22 08:49	09/21/22 16:40	1
2-Nitroaniline	ND		10	0.42	ug/L		09/20/22 08:49	09/21/22 16:40	1
2-Nitrophenol	ND		5.0	0.48	ug/L		09/20/22 08:49	09/21/22 16:40	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		09/20/22 08:49	09/21/22 16:40	1
3-Nitroaniline	ND		10	0.48	ug/L		09/20/22 08:49	09/21/22 16:40	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		09/20/22 08:49	09/21/22 16:40	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		09/20/22 08:49	09/21/22 16:40	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		09/20/22 08:49	09/21/22 16:40	1
4-Chloroaniline	ND		5.0	0.59	ug/L		09/20/22 08:49	09/21/22 16:40	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		09/20/22 08:49	09/21/22 16:40	1
4-Methylphenol	ND		10	0.36	ug/L		09/20/22 08:49	09/21/22 16:40	1
4-Nitroaniline	ND		10	0.25	ug/L		09/20/22 08:49	09/21/22 16:40	1
4-Nitrophenol	ND		10	1.5	ug/L		09/20/22 08:49	09/21/22 16:40	1
Acenaphthene	ND		5.0	0.41	ug/L		09/20/22 08:49	09/21/22 16:40	1
Acenaphthylene	ND		5.0	0.38	ug/L		09/20/22 08:49	09/21/22 16:40	1
Acetophenone	ND		5.0	0.54	ug/L		09/20/22 08:49	09/21/22 16:40	1
Anthracene	ND		5.0	0.28	ug/L		09/20/22 08:49	09/21/22 16:40	1
Atrazine	ND		5.0	0.46	ug/L		09/20/22 08:49	09/21/22 16:40	1
Benzaldehyde	ND		5.0	0.27	ug/L		09/20/22 08:49	09/21/22 16:40	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		09/20/22 08:49	09/21/22 16:40	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		09/20/22 08:49	09/21/22 16:40	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		09/20/22 08:49	09/21/22 16:40	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		09/20/22 08:49	09/21/22 16:40	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		09/20/22 08:49	09/21/22 16:40	1
Biphenyl	ND		5.0	0.65	ug/L		09/20/22 08:49	09/21/22 16:40	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		09/20/22 08:49	09/21/22 16:40	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		09/20/22 08:49	09/21/22 16:40	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		09/20/22 08:49	09/21/22 16:40	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		09/20/22 08:49	09/21/22 16:40	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		09/20/22 08:49	09/21/22 16:40	1
Caprolactam	ND		5.0	2.2	ug/L		09/20/22 08:49	09/21/22 16:40	1
Carbazole	ND		5.0	0.30	ug/L		09/20/22 08:49	09/21/22 16:40	1
Chrysene	ND		5.0	0.33	ug/L		09/20/22 08:49	09/21/22 16:40	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		09/20/22 08:49	09/21/22 16:40	1
Dibenzofuran	ND		10	0.51	ug/L		09/20/22 08:49	09/21/22 16:40	1
Diethyl phthalate	**44**	**B *+ *1**	5.0	0.22	ug/L		09/20/22 08:49	09/21/22 16:40	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		09/20/22 08:49	09/21/22 16:40	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		09/20/22 08:49	09/21/22 16:40	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		09/20/22 08:49	09/21/22 16:40	1
Fluoranthene	ND		5.0	0.40	ug/L		09/20/22 08:49	09/21/22 16:40	1
Fluorene	ND		5.0	0.36	ug/L		09/20/22 08:49	09/21/22 16:40	1

Client Sample ID: FB_091422

Date Collected: 09/14/22 18:05
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-4

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND		5.0	0.51	ug/L		09/20/22 08:49	09/21/22 16:40	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		09/20/22 08:49	09/21/22 16:40	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		09/20/22 08:49	09/21/22 16:40	1
Hexachloroethane	ND		5.0	0.59	ug/L		09/20/22 08:49	09/21/22 16:40	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		09/20/22 08:49	09/21/22 16:40	1
Isophorone	ND		5.0	0.43	ug/L		09/20/22 08:49	09/21/22 16:40	1
Naphthalene	ND		5.0	0.76	ug/L		09/20/22 08:49	09/21/22 16:40	1
Nitrobenzene	ND		5.0	0.29	ug/L		09/20/22 08:49	09/21/22 16:40	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		09/20/22 08:49	09/21/22 16:40	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		09/20/22 08:49	09/21/22 16:40	1
Pentachlorophenol	ND		10	2.2	ug/L		09/20/22 08:49	09/21/22 16:40	1
Phenanthrene	ND		5.0	0.44	ug/L		09/20/22 08:49	09/21/22 16:40	1
Phenol	ND		5.0	0.39	ug/L		09/20/22 08:49	09/21/22 16:40	1
Pyrene	ND		5.0	0.34	ug/L		09/20/22 08:49	09/21/22 16:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*80*		*41 - 120*	*09/20/22 08:49*	*09/21/22 16:40*	*1*
2-Fluorobiphenyl (Surr)	*89*		*48 - 120*	*09/20/22 08:49*	*09/21/22 16:40*	*1*
2-Fluorophenol (Surr)	*56*		*35 - 120*	*09/20/22 08:49*	*09/21/22 16:40*	*1*
Nitrobenzene-d5 (Surr)	*69*		*46 - 120*	*09/20/22 08:49*	*09/21/22 16:40*	*1*
Phenol-d5 (Surr)	*41*		*22 - 120*	*09/20/22 08:49*	*09/21/22 16:40*	*1*
p-Terphenyl-d14 (Surr)	*99*		*60 - 148*	*09/20/22 08:49*	*09/21/22 16:40*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND	H	5.4	0.52	ug/L		09/24/22 09:45	09/26/22 20:42	1
2,4,6-Trichlorophenol	ND	H	5.4	0.66	ug/L		09/24/22 09:45	09/26/22 20:42	1
2,4-Dichlorophenol	ND	H	5.4	0.55	ug/L		09/24/22 09:45	09/26/22 20:42	1
2,4-Dimethylphenol	ND	H	5.4	0.54	ug/L		09/24/22 09:45	09/26/22 20:42	1
2,4-Dinitrophenol	ND	H	11	2.4	ug/L		09/24/22 09:45	09/26/22 20:42	1
2,4-Dinitrotoluene	ND	H	5.4	0.49	ug/L		09/24/22 09:45	09/26/22 20:42	1
2,6-Dinitrotoluene	ND	H	5.4	0.43	ug/L		09/24/22 09:45	09/26/22 20:42	1
2-Chloronaphthalene	ND	H	5.4	0.50	ug/L		09/24/22 09:45	09/26/22 20:42	1
2-Chlorophenol	ND	H	5.4	0.58	ug/L		09/24/22 09:45	09/26/22 20:42	1
2-Methylnaphthalene	ND	H	5.4	0.65	ug/L		09/24/22 09:45	09/26/22 20:42	1
2-Methylphenol	ND	H	5.4	0.43	ug/L		09/24/22 09:45	09/26/22 20:42	1
2-Nitroaniline	ND	H	11	0.46	ug/L		09/24/22 09:45	09/26/22 20:42	1
2-Nitrophenol	ND	H	5.4	0.52	ug/L		09/24/22 09:45	09/26/22 20:42	1
3,3'-Dichlorobenzidine	ND	H	5.4	0.43	ug/L		09/24/22 09:45	09/26/22 20:42	1
3-Nitroaniline	ND	H	11	0.52	ug/L		09/24/22 09:45	09/26/22 20:42	1
4,6-Dinitro-2-methylphenol	ND	H	11	2.4	ug/L		09/24/22 09:45	09/26/22 20:42	1
4-Bromophenyl phenyl ether	ND	H	5.4	0.49	ug/L		09/24/22 09:45	09/26/22 20:42	1
4-Chloro-3-methylphenol	ND	H	5.4	0.49	ug/L		09/24/22 09:45	09/26/22 20:42	1
4-Chloroaniline	ND	H	5.4	0.64	ug/L		09/24/22 09:45	09/26/22 20:42	1
4-Chlorophenyl phenyl ether	ND	H	5.4	0.38	ug/L		09/24/22 09:45	09/26/22 20:42	1
4-Methylphenol	ND	H	11	0.39	ug/L		09/24/22 09:45	09/26/22 20:42	1
4-Nitroaniline	ND	H	11	0.27	ug/L		09/24/22 09:45	09/26/22 20:42	1
4-Nitrophenol	ND	H	11	1.7	ug/L		09/24/22 09:45	09/26/22 20:42	1
Acenaphthene	ND	H	5.4	0.45	ug/L		09/24/22 09:45	09/26/22 20:42	1
Acenaphthylene	ND	H	5.4	0.41	ug/L		09/24/22 09:45	09/26/22 20:42	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Client Sample ID: FB_091422
Date Collected: 09/14/22 18:05
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-4
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetophenone	ND	H	5.4	0.59	ug/L		09/24/22 09:45	09/26/22 20:42	1
Anthracene	ND	H	5.4	0.30	ug/L		09/24/22 09:45	09/26/22 20:42	1
Atrazine	ND	H	5.4	0.50	ug/L		09/24/22 09:45	09/26/22 20:42	1
Benzaldehyde	ND	H	5.4	0.29	ug/L		09/24/22 09:45	09/26/22 20:42	1
Benzo[a]anthracene	ND	H	5.4	0.39	ug/L		09/24/22 09:45	09/26/22 20:42	1
Benzo[a]pyrene	ND	H	5.4	0.51	ug/L		09/24/22 09:45	09/26/22 20:42	1
Benzo[b]fluoranthene	ND	H	5.4	0.37	ug/L		09/24/22 09:45	09/26/22 20:42	1
Benzo[g,h,i]perylene	ND	H	5.4	0.38	ug/L		09/24/22 09:45	09/26/22 20:42	1
Benzo[k]fluoranthene	ND	H	5.4	0.79	ug/L		09/24/22 09:45	09/26/22 20:42	1
Biphenyl	ND	H	5.4	0.71	ug/L		09/24/22 09:45	09/26/22 20:42	1
bis (2-chloroisopropyl) ether	ND	H	5.4	0.57	ug/L		09/24/22 09:45	09/26/22 20:42	1
Bis(2-chloroethoxy)methane	ND	H	5.4	0.38	ug/L		09/24/22 09:45	09/26/22 20:42	1
Bis(2-chloroethyl)ether	ND	H	5.4	0.43	ug/L		09/24/22 09:45	09/26/22 20:42	1
Bis(2-ethylhexyl) phthalate	ND	H	5.4	2.4	ug/L		09/24/22 09:45	09/26/22 20:42	1
Butyl benzyl phthalate	ND	H	5.4	1.1	ug/L		09/24/22 09:45	09/26/22 20:42	1
Caprolactam	ND	H	5.4	2.4	ug/L		09/24/22 09:45	09/26/22 20:42	1
Carbazole	ND	H	5.4	0.33	ug/L		09/24/22 09:45	09/26/22 20:42	1
Chrysene	ND	H	5.4	0.36	ug/L		09/24/22 09:45	09/26/22 20:42	1
Dibenz(a,h)anthracene	ND	H	5.4	0.46	ug/L		09/24/22 09:45	09/26/22 20:42	1
Dibenzofuran	ND	H	11	0.55	ug/L		09/24/22 09:45	09/26/22 20:42	1
Diethyl phthalate	**21**	**H**	5.4	0.24	ug/L		09/24/22 09:45	09/26/22 20:42	1
Dimethyl phthalate	ND	H	5.4	0.39	ug/L		09/24/22 09:45	09/26/22 20:42	1
Di-n-butyl phthalate	ND	H	5.4	0.34	ug/L		09/24/22 09:45	09/26/22 20:42	1
Di-n-octyl phthalate	ND	H	5.4	0.51	ug/L		09/24/22 09:45	09/26/22 20:42	1
Fluoranthene	ND	H	5.4	0.43	ug/L		09/24/22 09:45	09/26/22 20:42	1
Fluorene	ND	H	5.4	0.39	ug/L		09/24/22 09:45	09/26/22 20:42	1
Hexachlorobenzene	ND	H	5.4	0.55	ug/L		09/24/22 09:45	09/26/22 20:42	1
Hexachlorobutadiene	ND	H	5.4	0.74	ug/L		09/24/22 09:45	09/26/22 20:42	1
Hexachlorocyclopentadiene	ND	H	5.4	0.64	ug/L		09/24/22 09:45	09/26/22 20:42	1
Hexachloroethane	ND	H	5.4	0.64	ug/L		09/24/22 09:45	09/26/22 20:42	1
Indeno[1,2,3-cd]pyrene	ND	H	5.4	0.51	ug/L		09/24/22 09:45	09/26/22 20:42	1
Isophorone	ND	H	5.4	0.47	ug/L		09/24/22 09:45	09/26/22 20:42	1
Naphthalene	ND	H	5.4	0.83	ug/L		09/24/22 09:45	09/26/22 20:42	1
Nitrobenzene	ND	H	5.4	0.32	ug/L		09/24/22 09:45	09/26/22 20:42	1
N-Nitrosodi-n-propylamine	ND	H	5.4	0.59	ug/L		09/24/22 09:45	09/26/22 20:42	1
N-Nitrosodiphenylamine	ND	H	5.4	0.55	ug/L		09/24/22 09:45	09/26/22 20:42	1
Pentachlorophenol	ND	H	11	2.4	ug/L		09/24/22 09:45	09/26/22 20:42	1
Phenanthrene	ND	H	5.4	0.48	ug/L		09/24/22 09:45	09/26/22 20:42	1
Phenol	ND	H	5.4	0.42	ug/L		09/24/22 09:45	09/26/22 20:42	1
Pyrene	ND	H	5.4	0.37	ug/L		09/24/22 09:45	09/26/22 20:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*82*		*41 - 120*	*09/24/22 09:45*	*09/26/22 20:42*	*1*
2-Fluorobiphenyl (Surr)	*99*		*48 - 120*	*09/24/22 09:45*	*09/26/22 20:42*	*1*
2-Fluorophenol (Surr)	*64*		*35 - 120*	*09/24/22 09:45*	*09/26/22 20:42*	*1*
Nitrobenzene-d5 (Surr)	*77*		*46 - 120*	*09/24/22 09:45*	*09/26/22 20:42*	*1*
Phenol-d5 (Surr)	*47*		*22 - 120*	*09/24/22 09:45*	*09/26/22 20:42*	*1*
p-Terphenyl-d14 (Surr)	*97*		*60 - 148*	*09/24/22 09:45*	*09/26/22 20:42*	*1*

Client Sample ID: FB_091422

Date Collected: 09/14/22 18:05
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-4

Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.4	1.0	ng/L		09/19/22 11:42	09/19/22 19:32	1
Perfluoropentanoic acid (PFPeA)	ND		1.7	0.59	ng/L		09/19/22 11:42	09/19/22 19:32	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	0.57	ng/L		09/19/22 11:42	09/19/22 19:32	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7	0.47	ng/L		09/19/22 11:42	09/19/22 19:32	1
Perfluorooctanoic acid (PFOA)	ND		1.7	0.66	ng/L		09/19/22 11:42	09/19/22 19:32	1
Perfluorononanoic acid (PFNA)	ND		1.7	0.43	ng/L		09/19/22 11:42	09/19/22 19:32	1
Perfluorodecanoic acid (PFDA)	ND		1.7	0.40	ng/L		09/19/22 11:42	09/19/22 19:32	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.48	ng/L		09/19/22 11:42	09/19/22 19:32	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.43	ng/L		09/19/22 11:42	09/19/22 19:32	1
Perfluorotridecanoic acid (PFTriA)	ND		1.7	0.42	ng/L		09/19/22 11:42	09/19/22 19:32	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.56	ng/L		09/19/22 11:42	09/19/22 19:32	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	0.54	ng/L		09/19/22 11:42	09/19/22 19:32	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	0.48	ng/L		09/19/22 11:42	09/19/22 19:32	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.7	0.36	ng/L		09/19/22 11:42	09/19/22 19:32	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7	0.74	ng/L		09/19/22 11:42	09/19/22 19:32	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.35	ng/L		09/19/22 11:42	09/19/22 19:32	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.7	0.80	ng/L		09/19/22 11:42	09/19/22 19:32	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.4	1.7	ng/L		09/19/22 11:42	09/19/22 19:32	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.4	1.4	ng/L		09/19/22 11:42	09/19/22 19:32	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		4.4	1.1	ng/L		09/19/22 11:42	09/19/22 19:32	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		1.7	0.67	ng/L		09/19/22 11:42	09/19/22 19:32	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*88*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:32*	*1*
13C4 PFHpA	*93*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:32*	*1*
13C4 PFOA	*98*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:32*	*1*
13C4 PFOS	*89*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:32*	*1*
13C5 PFNA	*93*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:32*	*1*
13C4 PFBA	*85*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:32*	*1*
13C2 PFHxA	*91*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:32*	*1*
13C2 PFDA	*96*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:32*	*1*
13C2 PFUnA	*88*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:32*	*1*
13C2 PFDoA	*88*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:32*	*1*
13C8 FOSA	*82*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:32*	*1*
13C5 PFPeA	*88*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:32*	*1*
13C2 PFTeDA	*88*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:32*	*1*
d3-NMeFOSAA	*93*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:32*	*1*
d5-NEtFOSAA	*85*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:32*	*1*
M2-6:2 FTS	*89*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:32*	*1*
M2-8:2 FTS	*95*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:32*	*1*
13C3 PFBS	*84*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:32*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		09/20/22 09:22	09/20/22 16:56	1
Antimony	ND		0.020	0.0068	mg/L		09/20/22 09:22	09/20/22 16:56	1
Arsenic	ND		0.015	0.0056	mg/L		09/20/22 09:22	09/20/22 16:56	1

Client Sample ID: FB_091422

Date Collected: 09/14/22 18:05
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-4

Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		0.0020	0.00070	mg/L		09/20/22 09:22	09/20/22 16:56	1
Beryllium	ND		0.0020	0.00030	mg/L		09/20/22 09:22	09/20/22 16:56	1
Cadmium	ND		0.0020	0.00050	mg/L		09/20/22 09:22	09/20/22 16:56	1
Calcium	ND		0.50	0.10	mg/L		09/20/22 09:22	09/20/22 16:56	1
Chromium	ND		0.0040	0.0010	mg/L		09/20/22 09:22	09/20/22 16:56	1
Cobalt	ND		0.0040	0.00063	mg/L		09/20/22 09:22	09/20/22 16:56	1
Copper	ND		0.010	0.0016	mg/L		09/20/22 09:22	09/20/22 16:56	1
Iron	ND		0.050	0.019	mg/L		09/20/22 09:22	09/20/22 16:56	1
Lead	**0.0034**	**J**	0.010	0.0030	mg/L		09/20/22 09:22	09/20/22 16:56	1
Magnesium	ND		0.20	0.043	mg/L		09/20/22 09:22	09/20/22 16:56	1
Manganese	ND		0.0030	0.00040	mg/L		09/20/22 09:22	09/20/22 16:56	1
Nickel	ND		0.010	0.0013	mg/L		09/20/22 09:22	09/20/22 16:56	1
Potassium	**0.13**	**J**	0.50	0.10	mg/L		09/20/22 09:22	09/20/22 16:56	1
Selenium	ND		0.025	0.0087	mg/L		09/20/22 09:22	09/20/22 16:56	1
Silver	ND		0.0060	0.0017	mg/L		09/20/22 09:22	09/20/22 16:56	1
Sodium	ND		1.0	0.32	mg/L		09/20/22 09:22	09/20/22 16:56	1
Thallium	ND		0.020	0.010	mg/L		09/20/22 09:22	09/20/22 16:56	1
Vanadium	ND		0.0050	0.0015	mg/L		09/20/22 09:22	09/20/22 16:56	1
Zinc	ND		0.010	0.0015	mg/L		09/20/22 09:22	09/20/22 16:56	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		09/19/22 11:06	09/19/22 15:38	1

Client Sample ID: FDUP_091422

Date Collected: 09/14/22 00:00
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-5

Matrix: Solid
Percent Solids: 85.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		6.1	0.61	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
1,1,1-Trichloroethane	ND		6.1	0.44	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
1,1,2,2-Tetrachloroethane	ND		6.1	0.99	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.1	1.4	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
1,1,2-Trichloroethane	ND		6.1	0.80	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
1,1-Dichloroethane	ND		6.1	0.75	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
1,1-Dichloroethene	ND		6.1	0.75	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
1,2,3-Trimethylbenzene	ND		6.1	1.2	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
1,2,4-Trichlorobenzene	ND		6.1	0.37	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
1,2,4-Trimethylbenzene	ND		6.1	1.2	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
1,2-Dibromo-3-Chloropropane	ND		6.1	3.1	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
1,2-Dibromoethane	ND		6.1	0.79	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
1,2-Dichlorobenzene	ND		6.1	0.48	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
1,2-Dichloroethane	ND		6.1	0.31	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
1,2-Dichloropropane	ND		6.1	3.1	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
1,3,5-Trimethylbenzene	ND		6.1	0.39	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
1,3-Dichlorobenzene	ND		6.1	0.31	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
1,4-Dichlorobenzene	ND		6.1	0.86	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
2-Butanone (MEK)	**17**	**J**	31	2.2	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
2-Hexanone	ND		31	3.1	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1

Client Sample ID: FDUP_091422

Date Collected: 09/14/22 00:00
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-5

Matrix: Solid
Percent Solids: 85.2

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		31	2.0	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
Acetone	**28**	**J**	31	5.2	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
Benzene	ND		6.1	0.30	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
Bromodichloromethane	ND		6.1	0.82	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
Bromoform	ND		6.1	3.1	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
Bromomethane	ND		6.1	0.55	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
Carbon disulfide	**3.4**	**J**	6.1	3.1	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
Carbon tetrachloride	ND		6.1	0.59	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
Chlorobenzene	ND		6.1	0.81	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
Chloroethane	ND		6.1	1.4	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
Chloroform	ND		6.1	0.38	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
Chloromethane	ND		6.1	0.37	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
cis-1,2-Dichloroethene	ND		6.1	0.78	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
cis-1,3-Dichloropropene	ND		6.1	0.88	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
Cyclohexane	ND		6.1	0.86	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
Dibromochloromethane	ND		6.1	0.78	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
Dichlorodifluoromethane	ND		6.1	0.51	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
Ethylbenzene	**1.0**	**J**	6.1	0.42	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
Isopropylbenzene	ND		6.1	0.92	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
m,p-Xylene	ND		12	1.0	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
Methyl acetate	ND		31	3.7	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
Methyl tert-butyl ether	ND		6.1	0.60	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
Methylcyclohexane	**1.6**	**J**	6.1	0.93	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
Methylene Chloride	ND		6.1	2.8	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
n-Butylbenzene	ND		6.1	0.53	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
N-Propylbenzene	**0.87**	**J**	6.1	0.49	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
o-Xylene	ND		6.1	0.80	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
sec-Butylbenzene	ND		6.1	0.53	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
Styrene	ND		6.1	0.31	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
tert-Butylbenzene	ND		6.1	0.64	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
Tetrachloroethene	ND		6.1	0.82	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
Toluene	**1.2**	**J**	6.1	0.46	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
trans-1,2-Dichloroethene	ND		6.1	0.63	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
trans-1,3-Dichloropropene	ND		6.1	2.7	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
Trichloroethene	ND		6.1	1.3	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
Trichlorofluoromethane	ND		6.1	0.58	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
Vinyl chloride	ND		6.1	0.75	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1
Xylenes, Total	ND		12	1.0	ug/Kg	☼	09/16/22 16:00	09/19/22 13:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*64 - 126*	*09/16/22 16:00*	*09/19/22 13:46*	*1*
4-Bromofluorobenzene (Surr)	*80*		*72 - 126*	*09/16/22 16:00*	*09/19/22 13:46*	*1*
Dibromofluoromethane (Surr)	*101*		*60 - 140*	*09/16/22 16:00*	*09/19/22 13:46*	*1*
Toluene-d8 (Surr)	*122*		*71 - 125*	*09/16/22 16:00*	*09/19/22 13:46*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		120	64	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
2,4,5-Trichlorophenol	ND		200	53	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
2,4,6-Trichlorophenol	ND		200	39	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1

Client Sample ID: FDUP_091422
Date Collected: 09/14/22 00:00
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-5
Matrix: Solid
Percent Solids: 85.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dichlorophenol	ND		200	21	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
2,4-Dimethylphenol	ND		200	47	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
2,4-Dinitrophenol	ND		1900	910	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
2,4-Dinitrotoluene	ND		200	41	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
2,6-Dinitrotoluene	ND		200	23	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
2-Chloronaphthalene	ND		200	32	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
2-Chlorophenol	ND		380	36	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
2-Methylnaphthalene	ND		200	39	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
2-Methylphenol	ND		200	23	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
2-Nitroaniline	ND		380	29	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
2-Nitrophenol	ND		200	56	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
3,3'-Dichlorobenzidine	ND		380	230	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
3-Nitroaniline	ND		380	54	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
4,6-Dinitro-2-methylphenol	ND		380	200	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
4-Bromophenyl phenyl ether	ND		200	28	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
4-Chloro-3-methylphenol	ND		200	49	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
4-Chloroaniline	ND		200	49	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
4-Chlorophenyl phenyl ether	ND		200	24	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
4-Methylphenol	ND		380	23	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
4-Nitroaniline	ND		380	100	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
4-Nitrophenol	ND		380	140	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Acenaphthene	ND		200	29	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Acenaphthylene	ND		200	25	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Acetophenone	ND		200	27	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Anthracene	ND		200	49	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Atrazine	ND		200	68	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Benzaldehyde	ND		200	160	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Benzo[a]anthracene	**190**	**J**	200	20	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Benzo[a]pyrene	**240**		200	29	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Benzo[b]fluoranthene	**300**		200	31	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Benzo[g,h,i]perylene	**150**	**J**	200	21	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Benzo[k]fluoranthene	**120**	**J**	200	25	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Biphenyl	ND		200	29	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
bis (2-chloroisopropyl) ether	ND		200	39	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Bis(2-chloroethoxy)methane	ND		200	42	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Bis(2-chloroethyl)ether	ND		200	25	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Bis(2-ethylhexyl) phthalate	ND		200	67	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Butyl benzyl phthalate	**32**	**J**	200	32	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Caprolactam	ND		200	59	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Carbazole	**30**	**J**	200	23	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Chrysene	**280**		200	44	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Dibenz(a,h)anthracene	**40**	**J**	200	35	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Dibenzofuran	ND		200	23	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Diethyl phthalate	**190**	**J B**	200	25	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Dimethyl phthalate	ND		200	23	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Di-n-butyl phthalate	ND		200	34	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Di-n-octyl phthalate	ND		200	23	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Fluoranthene	**410**		200	21	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Fluorene	ND		200	23	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1

Client Sample ID: FDUP_091422

Date Collected: 09/14/22 00:00
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-5

Matrix: Solid
Percent Solids: 85.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobenzene	ND		200	27	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Hexachlorobutadiene	ND		200	29	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Hexachlorocyclopentadiene	ND		200	27	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Hexachloroethane	ND		200	25	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Indeno[1,2,3-cd]pyrene	**180**	**J**	200	24	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Isophorone	ND		200	42	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Naphthalene	ND		200	25	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Nitrobenzene	ND		200	22	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
N-Nitrosodi-n-propylamine	ND		200	34	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
N-Nitrosodiphenylamine	ND		200	160	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Pentachlorophenol	ND		380	200	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Phenanthrene	**280**		200	29	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Phenol	ND		200	30	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1
Pyrene	**350**		200	23	ug/Kg	☼	09/19/22 08:19	09/21/22 19:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*134*	*S1+*	*54 - 120*	*09/19/22 08:19*	*09/21/22 19:25*	*1*
2-Fluorobiphenyl (Surr)	*121*	*S1+*	*60 - 120*	*09/19/22 08:19*	*09/21/22 19:25*	*1*
2-Fluorophenol (Surr)	*110*		*52 - 120*	*09/19/22 08:19*	*09/21/22 19:25*	*1*
Nitrobenzene-d5 (Surr)	*116*		*53 - 120*	*09/19/22 08:19*	*09/21/22 19:25*	*1*
Phenol-d5 (Surr)	*112*		*54 - 120*	*09/19/22 08:19*	*09/21/22 19:25*	*1*
p-Terphenyl-d14 (Surr)	*134*	*S1+*	*79 - 130*	*09/19/22 08:19*	*09/21/22 19:25*	*1*

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.58	0.38	ug/Kg	☼	09/20/22 08:32	09/21/22 18:49	1
Perfluoropentanoic acid (PFPeA)	ND		0.23	0.064	ug/Kg	☼	09/20/22 08:32	09/21/22 18:49	1
Perfluorohexanoic acid (PFHxA)	ND		0.23	0.053	ug/Kg	☼	09/20/22 08:32	09/21/22 18:49	1
Perfluoroheptanoic acid (PFHpA)	ND		0.23	0.045	ug/Kg	☼	09/20/22 08:32	09/21/22 18:49	1
Perfluorooctanoic acid (PFOA)	**0.098**	**J I**	0.23	0.067	ug/Kg	☼	09/20/22 08:32	09/21/22 18:49	1
Perfluorononanoic acid (PFNA)	ND		0.23	0.040	ug/Kg	☼	09/20/22 08:32	09/21/22 18:49	1
Perfluorodecanoic acid (PFDA)	ND		0.23	0.033	ug/Kg	☼	09/20/22 08:32	09/21/22 18:49	1
Perfluoroundecanoic acid (PFUnA)	ND		0.23	0.031	ug/Kg	☼	09/20/22 08:32	09/21/22 18:49	1
Perfluorododecanoic acid (PFDoA)	ND		0.23	0.029	ug/Kg	☼	09/20/22 08:32	09/21/22 18:49	1
Perfluorotridecanoic acid (PFTriA)	ND		0.23	0.029	ug/Kg	☼	09/20/22 08:32	09/21/22 18:49	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.23	0.030	ug/Kg	☼	09/20/22 08:32	09/21/22 18:49	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.23	0.038	ug/Kg	☼	09/20/22 08:32	09/21/22 18:49	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.23	0.048	ug/Kg	☼	09/20/22 08:32	09/21/22 18:49	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.23	0.027	ug/Kg	☼	09/20/22 08:32	09/21/22 18:49	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.23	0.13	ug/Kg	☼	09/20/22 08:32	09/21/22 18:49	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.23	0.022	ug/Kg	☼	09/20/22 08:32	09/21/22 18:49	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.23	0.040	ug/Kg	☼	09/20/22 08:32	09/21/22 18:49	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.3	0.13	ug/Kg	☼	09/20/22 08:32	09/21/22 18:49	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.3	0.096	ug/Kg	☼	09/20/22 08:32	09/21/22 18:49	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.3	0.066	ug/Kg	☼	09/20/22 08:32	09/21/22 18:49	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.3	0.043	ug/Kg	☼	09/20/22 08:32	09/21/22 18:49	1

Client Sample ID: FDUP_091422

Date Collected: 09/14/22 00:00
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-5

Matrix: Solid
Percent Solids: 85.2

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	86		50 - 150	09/20/22 08:32	09/21/22 18:49	1
13C4 PFHpA	92		50 - 150	09/20/22 08:32	09/21/22 18:49	1
13C4 PFOA	92		50 - 150	09/20/22 08:32	09/21/22 18:49	1
13C4 PFOS	81		50 - 150	09/20/22 08:32	09/21/22 18:49	1
13C5 PFNA	88		50 - 150	09/20/22 08:32	09/21/22 18:49	1
13C4 PFBA	94		50 - 150	09/20/22 08:32	09/21/22 18:49	1
13C2 PFHxA	93		50 - 150	09/20/22 08:32	09/21/22 18:49	1
13C2 PFDA	88		50 - 150	09/20/22 08:32	09/21/22 18:49	1
13C2 PFUnA	77		50 - 150	09/20/22 08:32	09/21/22 18:49	1
13C2 PFDoA	88		50 - 150	09/20/22 08:32	09/21/22 18:49	1
13C8 FOSA	74		50 - 150	09/20/22 08:32	09/21/22 18:49	1
13C5 PFPeA	94		50 - 150	09/20/22 08:32	09/21/22 18:49	1
13C2 PFTeDA	85		50 - 150	09/20/22 08:32	09/21/22 18:49	1
d3-NMeFOSAA	85		50 - 150	09/20/22 08:32	09/21/22 18:49	1
d5-NEtFOSAA	88		50 - 150	09/20/22 08:32	09/21/22 18:49	1
M2-6:2 FTS	102		50 - 150	09/20/22 08:32	09/21/22 18:49	1
M2-8:2 FTS	98		50 - 150	09/20/22 08:32	09/21/22 18:49	1
13C3 PFBS	91		50 - 150	09/20/22 08:32	09/21/22 18:49	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8530		11.6	5.1	mg/Kg	☼	09/20/22 14:15	09/21/22 16:31	1
Antimony	0.79	J	17.4	0.47	mg/Kg	☼	09/20/22 14:15	09/21/22 16:31	1
Arsenic	9.1		2.3	0.47	mg/Kg	☼	09/20/22 14:15	09/21/22 16:31	1
Barium	115		0.58	0.13	mg/Kg	☼	09/20/22 14:15	09/21/22 16:31	1
Beryllium	0.76		0.23	0.033	mg/Kg	☼	09/20/22 14:15	09/21/22 16:31	1
Cadmium	0.25		0.23	0.035	mg/Kg	☼	09/20/22 14:15	09/21/22 16:31	1
Calcium	3900		58.1	3.8	mg/Kg	☼	09/20/22 14:15	09/21/22 16:31	1
Chromium	17.0		0.58	0.23	mg/Kg	☼	09/20/22 14:15	09/21/22 16:31	1
Cobalt	7.9		0.58	0.058	mg/Kg	☼	09/20/22 14:15	09/21/22 16:31	1
Copper	43.4		1.2	0.24	mg/Kg	☼	09/20/22 14:15	09/21/22 16:31	1
Iron	29100		11.6	4.1	mg/Kg	☼	09/20/22 14:15	09/21/22 16:31	1
Lead	78.0		1.2	0.28	mg/Kg	☼	09/20/22 14:15	09/21/22 16:31	1
Magnesium	1530	B	23.3	1.1	mg/Kg	☼	09/20/22 14:15	09/21/22 16:31	1
Manganese	344		0.23	0.037	mg/Kg	☼	09/20/22 14:15	09/21/22 16:31	1
Nickel	42.1		5.8	0.27	mg/Kg	☼	09/20/22 14:15	09/21/22 16:31	1
Potassium	1580		34.9	23.3	mg/Kg	☼	09/20/22 14:15	09/21/22 16:31	1
Selenium	0.56	J	4.7	0.47	mg/Kg	☼	09/20/22 14:15	09/21/22 16:31	1
Silver	ND		0.70	0.23	mg/Kg	☼	09/20/22 14:15	09/21/22 16:31	1
Sodium	156	J	163	15.1	mg/Kg	☼	09/20/22 14:15	09/21/22 16:31	1
Thallium	0.94	J	7.0	0.35	mg/Kg	☼	09/20/22 14:15	09/21/22 16:31	1
Vanadium	26.5		0.58	0.13	mg/Kg	☼	09/20/22 14:15	09/21/22 16:31	1
Zinc	61.9		2.3	0.74	mg/Kg	☼	09/20/22 14:15	09/21/22 16:31	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.065		0.023	0.0054	mg/Kg	☼	09/21/22 10:43	09/21/22 14:51	1

Client Sample ID: SB2 (13.5-15.5)
Date Collected: 09/14/22 17:35
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-6
Matrix: Solid
Percent Solids: 89.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.4	0.54	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
1,1,1-Trichloroethane	ND		5.4	0.39	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
1,1,2,2-Tetrachloroethane	ND		5.4	0.88	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.4	1.2	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
1,1,2-Trichloroethane	ND		5.4	0.70	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
1,1-Dichloroethane	ND		5.4	0.66	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
1,1-Dichloroethene	ND		5.4	0.66	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
1,2,3-Trimethylbenzene	ND		5.4	1.1	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
1,2,4-Trichlorobenzene	ND		5.4	0.33	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
1,2,4-Trimethylbenzene	ND		5.4	1.0	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
1,2-Dibromo-3-Chloropropane	ND		5.4	2.7	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
1,2-Dibromoethane	ND		5.4	0.69	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
1,2-Dichlorobenzene	ND		5.4	0.42	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
1,2-Dichloroethane	ND		5.4	0.27	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
1,2-Dichloropropane	ND		5.4	2.7	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
1,3,5-Trimethylbenzene	ND		5.4	0.35	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
1,3-Dichlorobenzene	ND		5.4	0.28	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
1,4-Dichlorobenzene	ND		5.4	0.76	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
2-Butanone (MEK)	**4.3**	**J**	27	2.0	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
2-Hexanone	ND		27	2.7	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
4-Methyl-2-pentanone (MIBK)	ND		27	1.8	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
Acetone	**9.5**	**J**	27	4.6	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
Benzene	ND		5.4	0.26	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
Bromodichloromethane	ND		5.4	0.72	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
Bromoform	ND		5.4	2.7	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
Bromomethane	ND		5.4	0.49	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
Carbon disulfide	ND		5.4	2.7	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
Carbon tetrachloride	ND		5.4	0.52	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
Chlorobenzene	ND		5.4	0.71	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
Chloroethane	ND		5.4	1.2	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
Chloroform	ND		5.4	0.33	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
Chloromethane	ND		5.4	0.33	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
cis-1,2-Dichloroethene	ND		5.4	0.69	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
cis-1,3-Dichloropropene	ND		5.4	0.78	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
Cyclohexane	ND		5.4	0.76	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
Dibromochloromethane	ND		5.4	0.69	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
Dichlorodifluoromethane	ND		5.4	0.45	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
Ethylbenzene	ND		5.4	0.37	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
Isopropylbenzene	ND		5.4	0.82	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
m,p-Xylene	ND		11	0.91	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
Methyl acetate	ND		27	3.3	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
Methyl tert-butyl ether	ND		5.4	0.53	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
Methylcyclohexane	ND		5.4	0.82	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
Methylene Chloride	ND		5.4	2.5	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
n-Butylbenzene	ND		5.4	0.47	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
N-Propylbenzene	ND		5.4	0.43	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
o-Xylene	ND		5.4	0.71	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
sec-Butylbenzene	ND		5.4	0.47	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
Styrene	ND		5.4	0.27	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Client Sample ID: SB2 (13.5-15.5)
Date Collected: 09/14/22 17:35
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-6
Matrix: Solid
Percent Solids: 89.2

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		5.4	0.56	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
Tetrachloroethene	ND		5.4	0.73	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
Toluene	ND		5.4	0.41	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
trans-1,2-Dichloroethene	ND		5.4	0.56	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
trans-1,3-Dichloropropene	ND		5.4	2.4	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
Trichloroethene	ND		5.4	1.2	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
Trichlorofluoromethane	ND		5.4	0.51	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
Vinyl chloride	ND		5.4	0.66	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1
Xylenes, Total	ND		11	0.91	ug/Kg	☼	09/16/22 16:00	09/19/22 14:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*64 - 126*	*09/16/22 16:00*	*09/19/22 14:10*	*1*
4-Bromofluorobenzene (Surr)	*94*		*72 - 126*	*09/16/22 16:00*	*09/19/22 14:10*	*1*
Dibromofluoromethane (Surr)	*98*		*60 - 140*	*09/16/22 16:00*	*09/19/22 14:10*	*1*
Toluene-d8 (Surr)	*106*		*71 - 125*	*09/16/22 16:00*	*09/19/22 14:10*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		190	50	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
2,4,6-Trichlorophenol	ND		190	37	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
2,4-Dichlorophenol	ND		190	20	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
2,4-Dimethylphenol	ND		190	45	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
2,4-Dinitrophenol	ND		1800	860	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
2,4-Dinitrotoluene	ND		190	38	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
2,6-Dinitrotoluene	ND		190	22	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
2-Chloronaphthalene	ND		190	31	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
2-Chlorophenol	ND		360	34	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
2-Methylnaphthalene	ND		190	37	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
2-Methylphenol	ND		190	22	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
2-Nitroaniline	ND		360	27	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
2-Nitrophenol	ND		190	53	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
3,3'-Dichlorobenzidine	ND		360	220	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
3-Nitroaniline	ND		360	51	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
4,6-Dinitro-2-methylphenol	ND		360	190	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
4-Bromophenyl phenyl ether	ND		190	26	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
4-Chloro-3-methylphenol	ND		190	46	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
4-Chloroaniline	ND		190	46	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
4-Chlorophenyl phenyl ether	ND		190	23	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
4-Methylphenol	ND		360	22	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
4-Nitroaniline	ND		360	97	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
4-Nitrophenol	ND		360	130	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Acenaphthene	ND		190	27	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Acenaphthylene	ND		190	24	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Acetophenone	ND		190	25	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Anthracene	ND		190	46	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Atrazine	ND		190	65	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Benzaldehyde	ND		190	150	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Benzo[a]anthracene	ND		190	19	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Benzo[a]pyrene	ND		190	27	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Benzo[b]fluoranthene	ND		190	30	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1

Client Sample ID: SB2 (13.5-15.5)

Date Collected: 09/14/22 17:35
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-6

Matrix: Solid
Percent Solids: 89.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		190	20	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Benzo[k]fluoranthene	ND		190	24	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Biphenyl	ND		190	27	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
bis (2-chloroisopropyl) ether	ND		190	37	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Bis(2-chloroethoxy)methane	ND		190	39	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Bis(2-chloroethyl)ether	ND		190	24	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Bis(2-ethylhexyl) phthalate	ND		190	63	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Butyl benzyl phthalate	ND		190	31	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Caprolactam	ND		190	56	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Carbazole	ND		190	22	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Chrysene	ND		190	42	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Dibenz(a,h)anthracene	ND		190	33	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Dibenzofuran	ND		190	22	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Diethyl phthalate	**51**	**J B**	190	24	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Dimethyl phthalate	ND		190	22	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Di-n-butyl phthalate	ND		190	32	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Di-n-octyl phthalate	ND		190	22	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Fluoranthene	ND		190	20	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Fluorene	ND		190	22	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Hexachlorobenzene	ND		190	25	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Hexachlorobutadiene	ND		190	27	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Hexachlorocyclopentadiene	ND		190	25	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Hexachloroethane	ND		190	24	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Indeno[1,2,3-cd]pyrene	ND		190	23	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Isophorone	ND		190	39	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Naphthalene	ND		190	24	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Nitrobenzene	ND		190	21	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
N-Nitrosodi-n-propylamine	ND		190	32	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
N-Nitrosodiphenylamine	ND		190	150	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Pentachlorophenol	ND		360	190	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Phenanthrene	ND		190	27	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Phenol	ND		190	28	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1
Pyrene	ND		190	22	ug/Kg	☼	09/19/22 08:19	09/21/22 19:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*126*	*S1+*	*54 - 120*	*09/19/22 08:19*	*09/21/22 19:42*	*1*
2-Fluorobiphenyl (Surr)	*106*		*60 - 120*	*09/19/22 08:19*	*09/21/22 19:42*	*1*
2-Fluorophenol (Surr)	*100*		*52 - 120*	*09/19/22 08:19*	*09/21/22 19:42*	*1*
Nitrobenzene-d5 (Surr)	*106*		*53 - 120*	*09/19/22 08:19*	*09/21/22 19:42*	*1*
Phenol-d5 (Surr)	*100*		*54 - 120*	*09/19/22 08:19*	*09/21/22 19:42*	*1*
p-Terphenyl-d14 (Surr)	*118*		*79 - 130*	*09/19/22 08:19*	*09/21/22 19:42*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8030**		11.9	5.2	mg/Kg	☼	09/20/22 14:15	09/21/22 16:35	1
Antimony	**0.52**	**J**	17.8	0.48	mg/Kg	☼	09/20/22 14:15	09/21/22 16:35	1
Arsenic	**5.3**		2.4	0.48	mg/Kg	☼	09/20/22 14:15	09/21/22 16:35	1
Barium	**66.4**		0.59	0.13	mg/Kg	☼	09/20/22 14:15	09/21/22 16:35	1
Beryllium	**0.42**		0.24	0.033	mg/Kg	☼	09/20/22 14:15	09/21/22 16:35	1
Cadmium	**0.14**	**J**	0.24	0.036	mg/Kg	☼	09/20/22 14:15	09/21/22 16:35	1

Client Sample ID: SB2 (13.5-15.5)

Date Collected: 09/14/22 17:35
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-6

Matrix: Solid
Percent Solids: 89.2

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	929		59.4	3.9	mg/Kg	☼	09/20/22 14:15	09/21/22 16:35	1
Chromium	11.3		0.59	0.24	mg/Kg	☼	09/20/22 14:15	09/21/22 16:35	1
Cobalt	6.4		0.59	0.059	mg/Kg	☼	09/20/22 14:15	09/21/22 16:35	1
Copper	14.8		1.2	0.25	mg/Kg	☼	09/20/22 14:15	09/21/22 16:35	1
Iron	20900		11.9	4.2	mg/Kg	☼	09/20/22 14:15	09/21/22 16:35	1
Lead	18.4		1.2	0.29	mg/Kg	☼	09/20/22 14:15	09/21/22 16:35	1
Magnesium	1800	B	23.8	1.1	mg/Kg	☼	09/20/22 14:15	09/21/22 16:35	1
Manganese	359		0.24	0.038	mg/Kg	☼	09/20/22 14:15	09/21/22 16:35	1
Nickel	39.6		5.9	0.27	mg/Kg	☼	09/20/22 14:15	09/21/22 16:35	1
Potassium	1480		35.6	23.8	mg/Kg	☼	09/20/22 14:15	09/21/22 16:35	1
Selenium	ND		4.8	0.48	mg/Kg	☼	09/20/22 14:15	09/21/22 16:35	1
Silver	ND		0.71	0.24	mg/Kg	☼	09/20/22 14:15	09/21/22 16:35	1
Sodium	53.1	J	166	15.4	mg/Kg	☼	09/20/22 14:15	09/21/22 16:35	1
Thallium	ND		7.1	0.36	mg/Kg	☼	09/20/22 14:15	09/21/22 16:35	1
Vanadium	17.3		0.59	0.13	mg/Kg	☼	09/20/22 14:15	09/21/22 16:35	1
Zinc	37.6		2.4	0.76	mg/Kg	☼	09/20/22 14:15	09/21/22 16:35	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.026		0.021	0.0049	mg/Kg	☼	09/21/22 10:43	09/21/22 14:53	1

Client Sample ID: ERB1_091422

Date Collected: 09/14/22 18:30
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/19/22 13:47	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/19/22 13:47	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/19/22 13:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/19/22 13:47	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/19/22 13:47	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/19/22 13:47	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/19/22 13:47	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			09/19/22 13:47	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/19/22 13:47	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/19/22 13:47	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/19/22 13:47	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/19/22 13:47	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/19/22 13:47	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/19/22 13:47	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/19/22 13:47	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/19/22 13:47	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/19/22 13:47	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/19/22 13:47	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/19/22 13:47	1
2-Hexanone	ND		5.0	1.2	ug/L			09/19/22 13:47	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/19/22 13:47	1
Acetone	ND		10	3.0	ug/L			09/19/22 13:47	1
Benzene	ND		1.0	0.41	ug/L			09/19/22 13:47	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Client Sample ID: ERB1_091422
Date Collected: 09/14/22 18:30
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-7
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		1.0	0.39	ug/L			09/19/22 13:47	1
Bromoform	ND		1.0	0.26	ug/L			09/19/22 13:47	1
Bromomethane	ND		1.0	0.69	ug/L			09/19/22 13:47	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/19/22 13:47	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/19/22 13:47	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/19/22 13:47	1
Chloroethane	ND		1.0	0.32	ug/L			09/19/22 13:47	1
Chloroform	ND		1.0	0.34	ug/L			09/19/22 13:47	1
Chloromethane	ND		1.0	0.35	ug/L			09/19/22 13:47	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/19/22 13:47	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/19/22 13:47	1
Cyclohexane	ND		1.0	0.18	ug/L			09/19/22 13:47	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/19/22 13:47	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/19/22 13:47	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/19/22 13:47	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/19/22 13:47	1
m,p-Xylene	ND		2.0	0.66	ug/L			09/19/22 13:47	1
Methyl acetate	ND		2.5	1.3	ug/L			09/19/22 13:47	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/19/22 13:47	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/19/22 13:47	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/19/22 13:47	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/19/22 13:47	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/19/22 13:47	1
o-Xylene	ND		1.0	0.76	ug/L			09/19/22 13:47	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/19/22 13:47	1
Styrene	ND		1.0	0.73	ug/L			09/19/22 13:47	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/19/22 13:47	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/19/22 13:47	1
Toluene	ND		1.0	0.51	ug/L			09/19/22 13:47	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/19/22 13:47	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/19/22 13:47	1
Trichloroethene	ND		1.0	0.46	ug/L			09/19/22 13:47	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/19/22 13:47	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/19/22 13:47	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/19/22 13:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*77 - 120*		*09/19/22 13:47*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*09/19/22 13:47*	*1*
Dibromofluoromethane (Surr)	*83*		*75 - 123*		*09/19/22 13:47*	*1*
Toluene-d8 (Surr)	*86*		*80 - 120*		*09/19/22 13:47*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.51**		0.20	0.10	ug/L		09/19/22 16:25	09/27/22 00:58	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*51*		*15 - 110*	*09/19/22 16:25*	*09/27/22 00:58*	*1*

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Client Sample ID: ERB1_091422

Date Collected: 09/14/22 18:30
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-7

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.2	0.50	ug/L		09/20/22 08:49	09/21/22 17:08	1
2,4,6-Trichlorophenol	ND		5.2	0.64	ug/L		09/20/22 08:49	09/21/22 17:08	1
2,4-Dichlorophenol	ND		5.2	0.53	ug/L		09/20/22 08:49	09/21/22 17:08	1
2,4-Dimethylphenol	ND		5.2	0.52	ug/L		09/20/22 08:49	09/21/22 17:08	1
2,4-Dinitrophenol	ND		10	2.3	ug/L		09/20/22 08:49	09/21/22 17:08	1
2,4-Dinitrotoluene	ND		5.2	0.47	ug/L		09/20/22 08:49	09/21/22 17:08	1
2,6-Dinitrotoluene	ND		5.2	0.42	ug/L		09/20/22 08:49	09/21/22 17:08	1
2-Chloronaphthalene	ND		5.2	0.48	ug/L		09/20/22 08:49	09/21/22 17:08	1
2-Chlorophenol	ND		5.2	0.55	ug/L		09/20/22 08:49	09/21/22 17:08	1
2-Methylnaphthalene	ND		5.2	0.63	ug/L		09/20/22 08:49	09/21/22 17:08	1
2-Methylphenol	ND		5.2	0.42	ug/L		09/20/22 08:49	09/21/22 17:08	1
2-Nitroaniline	ND		10	0.44	ug/L		09/20/22 08:49	09/21/22 17:08	1
2-Nitrophenol	ND		5.2	0.50	ug/L		09/20/22 08:49	09/21/22 17:08	1
3,3'-Dichlorobenzidine	ND		5.2	0.42	ug/L		09/20/22 08:49	09/21/22 17:08	1
3-Nitroaniline	ND		10	0.50	ug/L		09/20/22 08:49	09/21/22 17:08	1
4,6-Dinitro-2-methylphenol	ND		10	2.3	ug/L		09/20/22 08:49	09/21/22 17:08	1
4-Bromophenyl phenyl ether	ND		5.2	0.47	ug/L		09/20/22 08:49	09/21/22 17:08	1
4-Chloro-3-methylphenol	ND		5.2	0.47	ug/L		09/20/22 08:49	09/21/22 17:08	1
4-Chloroaniline	ND		5.2	0.61	ug/L		09/20/22 08:49	09/21/22 17:08	1
4-Chlorophenyl phenyl ether	ND		5.2	0.36	ug/L		09/20/22 08:49	09/21/22 17:08	1
4-Methylphenol	ND		10	0.38	ug/L		09/20/22 08:49	09/21/22 17:08	1
4-Nitroaniline	ND		10	0.26	ug/L		09/20/22 08:49	09/21/22 17:08	1
4-Nitrophenol	ND		10	1.6	ug/L		09/20/22 08:49	09/21/22 17:08	1
Acenaphthene	ND		5.2	0.43	ug/L		09/20/22 08:49	09/21/22 17:08	1
Acenaphthylene	ND		5.2	0.40	ug/L		09/20/22 08:49	09/21/22 17:08	1
Acetophenone	ND		5.2	0.56	ug/L		09/20/22 08:49	09/21/22 17:08	1
Anthracene	ND		5.2	0.29	ug/L		09/20/22 08:49	09/21/22 17:08	1
Atrazine	ND		5.2	0.48	ug/L		09/20/22 08:49	09/21/22 17:08	1
Benzaldehyde	ND		5.2	0.28	ug/L		09/20/22 08:49	09/21/22 17:08	1
Benzo[a]anthracene	ND		5.2	0.38	ug/L		09/20/22 08:49	09/21/22 17:08	1
Benzo[a]pyrene	ND		5.2	0.49	ug/L		09/20/22 08:49	09/21/22 17:08	1
Benzo[b]fluoranthene	ND		5.2	0.35	ug/L		09/20/22 08:49	09/21/22 17:08	1
Benzo[g,h,i]perylene	ND		5.2	0.36	ug/L		09/20/22 08:49	09/21/22 17:08	1
Benzo[k]fluoranthene	ND		5.2	0.76	ug/L		09/20/22 08:49	09/21/22 17:08	1
Biphenyl	ND		5.2	0.68	ug/L		09/20/22 08:49	09/21/22 17:08	1
bis (2-chloroisopropyl) ether	ND		5.2	0.54	ug/L		09/20/22 08:49	09/21/22 17:08	1
Bis(2-chloroethoxy)methane	ND		5.2	0.36	ug/L		09/20/22 08:49	09/21/22 17:08	1
Bis(2-chloroethyl)ether	ND		5.2	0.42	ug/L		09/20/22 08:49	09/21/22 17:08	1
Bis(2-ethylhexyl) phthalate	ND		5.2	2.3	ug/L		09/20/22 08:49	09/21/22 17:08	1
Butyl benzyl phthalate	ND		5.2	1.0	ug/L		09/20/22 08:49	09/21/22 17:08	1
Caprolactam	ND		5.2	2.3	ug/L		09/20/22 08:49	09/21/22 17:08	1
Carbazole	ND		5.2	0.31	ug/L		09/20/22 08:49	09/21/22 17:08	1
Chrysene	ND		5.2	0.34	ug/L		09/20/22 08:49	09/21/22 17:08	1
Dibenz(a,h)anthracene	ND		5.2	0.44	ug/L		09/20/22 08:49	09/21/22 17:08	1
Dibenzofuran	ND		10	0.53	ug/L		09/20/22 08:49	09/21/22 17:08	1
Diethyl phthalate	**19**	**B *+ *1**	5.2	0.23	ug/L		09/20/22 08:49	09/21/22 17:08	1
Dimethyl phthalate	ND		5.2	0.38	ug/L		09/20/22 08:49	09/21/22 17:08	1
Di-n-butyl phthalate	ND		5.2	0.32	ug/L		09/20/22 08:49	09/21/22 17:08	1
Di-n-octyl phthalate	ND		5.2	0.49	ug/L		09/20/22 08:49	09/21/22 17:08	1

Client Sample ID: ERB1_091422

Date Collected: 09/14/22 18:30
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-7

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		5.2	0.42	ug/L		09/20/22 08:49	09/21/22 17:08	1
Fluorene	ND		5.2	0.38	ug/L		09/20/22 08:49	09/21/22 17:08	1
Hexachlorobenzene	ND		5.2	0.53	ug/L		09/20/22 08:49	09/21/22 17:08	1
Hexachlorobutadiene	ND		5.2	0.71	ug/L		09/20/22 08:49	09/21/22 17:08	1
Hexachlorocyclopentadiene	ND		5.2	0.61	ug/L		09/20/22 08:49	09/21/22 17:08	1
Hexachloroethane	ND		5.2	0.61	ug/L		09/20/22 08:49	09/21/22 17:08	1
Indeno[1,2,3-cd]pyrene	ND		5.2	0.49	ug/L		09/20/22 08:49	09/21/22 17:08	1
Isophorone	ND		5.2	0.45	ug/L		09/20/22 08:49	09/21/22 17:08	1
Naphthalene	ND		5.2	0.79	ug/L		09/20/22 08:49	09/21/22 17:08	1
Nitrobenzene	ND		5.2	0.30	ug/L		09/20/22 08:49	09/21/22 17:08	1
N-Nitrosodi-n-propylamine	ND		5.2	0.56	ug/L		09/20/22 08:49	09/21/22 17:08	1
N-Nitrosodiphenylamine	ND		5.2	0.53	ug/L		09/20/22 08:49	09/21/22 17:08	1
Pentachlorophenol	ND		10	2.3	ug/L		09/20/22 08:49	09/21/22 17:08	1
Phenanthrene	ND		5.2	0.46	ug/L		09/20/22 08:49	09/21/22 17:08	1
Phenol	ND		5.2	0.41	ug/L		09/20/22 08:49	09/21/22 17:08	1
Pyrene	ND		5.2	0.35	ug/L		09/20/22 08:49	09/21/22 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*71*		*41 - 120*	*09/20/22 08:49*	*09/21/22 17:08*	*1*
2-Fluorobiphenyl (Surr)	*84*		*48 - 120*	*09/20/22 08:49*	*09/21/22 17:08*	*1*
2-Fluorophenol (Surr)	*54*		*35 - 120*	*09/20/22 08:49*	*09/21/22 17:08*	*1*
Nitrobenzene-d5 (Surr)	*65*		*46 - 120*	*09/20/22 08:49*	*09/21/22 17:08*	*1*
Phenol-d5 (Surr)	*41*		*22 - 120*	*09/20/22 08:49*	*09/21/22 17:08*	*1*
p-Terphenyl-d14 (Surr)	*97*		*60 - 148*	*09/20/22 08:49*	*09/21/22 17:08*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND	H	5.0	0.48	ug/L		09/24/22 09:45	09/26/22 21:09	1
2,4,6-Trichlorophenol	ND	H	5.0	0.61	ug/L		09/24/22 09:45	09/26/22 21:09	1
2,4-Dichlorophenol	ND	H	5.0	0.51	ug/L		09/24/22 09:45	09/26/22 21:09	1
2,4-Dimethylphenol	ND	H	5.0	0.50	ug/L		09/24/22 09:45	09/26/22 21:09	1
2,4-Dinitrophenol	ND	H	10	2.2	ug/L		09/24/22 09:45	09/26/22 21:09	1
2,4-Dinitrotoluene	ND	H	5.0	0.45	ug/L		09/24/22 09:45	09/26/22 21:09	1
2,6-Dinitrotoluene	ND	H	5.0	0.40	ug/L		09/24/22 09:45	09/26/22 21:09	1
2-Chloronaphthalene	ND	H	5.0	0.46	ug/L		09/24/22 09:45	09/26/22 21:09	1
2-Chlorophenol	ND	H	5.0	0.53	ug/L		09/24/22 09:45	09/26/22 21:09	1
2-Methylnaphthalene	ND	H	5.0	0.60	ug/L		09/24/22 09:45	09/26/22 21:09	1
2-Methylphenol	ND	H	5.0	0.40	ug/L		09/24/22 09:45	09/26/22 21:09	1
2-Nitroaniline	ND	H	10	0.42	ug/L		09/24/22 09:45	09/26/22 21:09	1
2-Nitrophenol	ND	H	5.0	0.48	ug/L		09/24/22 09:45	09/26/22 21:09	1
3,3'-Dichlorobenzidine	ND	H	5.0	0.40	ug/L		09/24/22 09:45	09/26/22 21:09	1
3-Nitroaniline	ND	H	10	0.48	ug/L		09/24/22 09:45	09/26/22 21:09	1
4,6-Dinitro-2-methylphenol	ND	H	10	2.2	ug/L		09/24/22 09:45	09/26/22 21:09	1
4-Bromophenyl phenyl ether	ND	H	5.0	0.45	ug/L		09/24/22 09:45	09/26/22 21:09	1
4-Chloro-3-methylphenol	ND	H	5.0	0.45	ug/L		09/24/22 09:45	09/26/22 21:09	1
4-Chloroaniline	ND	H	5.0	0.59	ug/L		09/24/22 09:45	09/26/22 21:09	1
4-Chlorophenyl phenyl ether	ND	H	5.0	0.35	ug/L		09/24/22 09:45	09/26/22 21:09	1
4-Methylphenol	ND	H	10	0.36	ug/L		09/24/22 09:45	09/26/22 21:09	1
4-Nitroaniline	ND	H	10	0.25	ug/L		09/24/22 09:45	09/26/22 21:09	1
4-Nitrophenol	ND	H	10	1.5	ug/L		09/24/22 09:45	09/26/22 21:09	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Client Sample ID: ERB1_091422
Date Collected: 09/14/22 18:30
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-7
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	5.0	0.41	ug/L		09/24/22 09:45	09/26/22 21:09	1
Acenaphthylene	ND	H	5.0	0.38	ug/L		09/24/22 09:45	09/26/22 21:09	1
Acetophenone	ND	H	5.0	0.54	ug/L		09/24/22 09:45	09/26/22 21:09	1
Anthracene	ND	H	5.0	0.28	ug/L		09/24/22 09:45	09/26/22 21:09	1
Atrazine	ND	H	5.0	0.46	ug/L		09/24/22 09:45	09/26/22 21:09	1
Benzaldehyde	ND	H	5.0	0.27	ug/L		09/24/22 09:45	09/26/22 21:09	1
Benzo[a]anthracene	ND	H	5.0	0.36	ug/L		09/24/22 09:45	09/26/22 21:09	1
Benzo[a]pyrene	ND	H	5.0	0.47	ug/L		09/24/22 09:45	09/26/22 21:09	1
Benzo[b]fluoranthene	ND	H	5.0	0.34	ug/L		09/24/22 09:45	09/26/22 21:09	1
Benzo[g,h,i]perylene	ND	H	5.0	0.35	ug/L		09/24/22 09:45	09/26/22 21:09	1
Benzo[k]fluoranthene	ND	H	5.0	0.73	ug/L		09/24/22 09:45	09/26/22 21:09	1
Biphenyl	ND	H	5.0	0.65	ug/L		09/24/22 09:45	09/26/22 21:09	1
bis (2-chloroisopropyl) ether	ND	H	5.0	0.52	ug/L		09/24/22 09:45	09/26/22 21:09	1
Bis(2-chloroethoxy)methane	ND	H	5.0	0.35	ug/L		09/24/22 09:45	09/26/22 21:09	1
Bis(2-chloroethyl)ether	ND	H	5.0	0.40	ug/L		09/24/22 09:45	09/26/22 21:09	1
Bis(2-ethylhexyl) phthalate	ND	H	5.0	2.2	ug/L		09/24/22 09:45	09/26/22 21:09	1
Butyl benzyl phthalate	ND	H	5.0	1.0	ug/L		09/24/22 09:45	09/26/22 21:09	1
Caprolactam	ND	H	5.0	2.2	ug/L		09/24/22 09:45	09/26/22 21:09	1
Carbazole	ND	H	5.0	0.30	ug/L		09/24/22 09:45	09/26/22 21:09	1
Chrysene	ND	H	5.0	0.33	ug/L		09/24/22 09:45	09/26/22 21:09	1
Dibenz(a,h)anthracene	ND	H	5.0	0.42	ug/L		09/24/22 09:45	09/26/22 21:09	1
Dibenzofuran	ND	H	10	0.51	ug/L		09/24/22 09:45	09/26/22 21:09	1
Diethyl phthalate	**18**	**H**	5.0	0.22	ug/L		09/24/22 09:45	09/26/22 21:09	1
Dimethyl phthalate	ND	H	5.0	0.36	ug/L		09/24/22 09:45	09/26/22 21:09	1
Di-n-butyl phthalate	ND	H	5.0	0.31	ug/L		09/24/22 09:45	09/26/22 21:09	1
Di-n-octyl phthalate	ND	H	5.0	0.47	ug/L		09/24/22 09:45	09/26/22 21:09	1
Fluoranthene	ND	H	5.0	0.40	ug/L		09/24/22 09:45	09/26/22 21:09	1
Fluorene	ND	H	5.0	0.36	ug/L		09/24/22 09:45	09/26/22 21:09	1
Hexachlorobenzene	ND	H	5.0	0.51	ug/L		09/24/22 09:45	09/26/22 21:09	1
Hexachlorobutadiene	ND	H	5.0	0.68	ug/L		09/24/22 09:45	09/26/22 21:09	1
Hexachlorocyclopentadiene	ND	H	5.0	0.59	ug/L		09/24/22 09:45	09/26/22 21:09	1
Hexachloroethane	ND	H	5.0	0.59	ug/L		09/24/22 09:45	09/26/22 21:09	1
Indeno[1,2,3-cd]pyrene	ND	H	5.0	0.47	ug/L		09/24/22 09:45	09/26/22 21:09	1
Isophorone	ND	H	5.0	0.43	ug/L		09/24/22 09:45	09/26/22 21:09	1
Naphthalene	ND	H	5.0	0.76	ug/L		09/24/22 09:45	09/26/22 21:09	1
Nitrobenzene	ND	H	5.0	0.29	ug/L		09/24/22 09:45	09/26/22 21:09	1
N-Nitrosodi-n-propylamine	ND	H	5.0	0.54	ug/L		09/24/22 09:45	09/26/22 21:09	1
N-Nitrosodiphenylamine	ND	H	5.0	0.51	ug/L		09/24/22 09:45	09/26/22 21:09	1
Pentachlorophenol	ND	H	10	2.2	ug/L		09/24/22 09:45	09/26/22 21:09	1
Phenanthrene	ND	H	5.0	0.44	ug/L		09/24/22 09:45	09/26/22 21:09	1
Phenol	ND	H	5.0	0.39	ug/L		09/24/22 09:45	09/26/22 21:09	1
Pyrene	ND	H	5.0	0.34	ug/L		09/24/22 09:45	09/26/22 21:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*81*		*41 - 120*	*09/24/22 09:45*	*09/26/22 21:09*	*1*
2-Fluorobiphenyl (Surr)	*97*		*48 - 120*	*09/24/22 09:45*	*09/26/22 21:09*	*1*
2-Fluorophenol (Surr)	*63*		*35 - 120*	*09/24/22 09:45*	*09/26/22 21:09*	*1*
Nitrobenzene-d5 (Surr)	*80*		*46 - 120*	*09/24/22 09:45*	*09/26/22 21:09*	*1*
Phenol-d5 (Surr)	*48*		*22 - 120*	*09/24/22 09:45*	*09/26/22 21:09*	*1*
p-Terphenyl-d14 (Surr)	*107*		*60 - 148*	*09/24/22 09:45*	*09/26/22 21:09*	*1*

Client Sample ID: ERB1_091422
Date Collected: 09/14/22 18:30
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-7
Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.3	1.0	ng/L		09/19/22 11:42	09/19/22 19:40	1
Perfluoropentanoic acid (PFPeA)	ND		1.7	0.59	ng/L		09/19/22 11:42	09/19/22 19:40	1
Perfluorohexanoic acid (PFHxA)	ND		1.7	0.56	ng/L		09/19/22 11:42	09/19/22 19:40	1
Perfluoroheptanoic acid (PFHpA)	ND		1.7	0.47	ng/L		09/19/22 11:42	09/19/22 19:40	1
Perfluorooctanoic acid (PFOA)	ND		1.7	0.65	ng/L		09/19/22 11:42	09/19/22 19:40	1
Perfluorononanoic acid (PFNA)	ND		1.7	0.42	ng/L		09/19/22 11:42	09/19/22 19:40	1
Perfluorodecanoic acid (PFDA)	ND		1.7	0.40	ng/L		09/19/22 11:42	09/19/22 19:40	1
Perfluoroundecanoic acid (PFUnA)	ND		1.7	0.47	ng/L		09/19/22 11:42	09/19/22 19:40	1
Perfluorododecanoic acid (PFDoA)	ND		1.7	0.42	ng/L		09/19/22 11:42	09/19/22 19:40	1
Perfluorotridecanoic acid (PFTriA)	ND		1.7	0.41	ng/L		09/19/22 11:42	09/19/22 19:40	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.7	0.55	ng/L		09/19/22 11:42	09/19/22 19:40	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.7	0.53	ng/L		09/19/22 11:42	09/19/22 19:40	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.7	0.47	ng/L		09/19/22 11:42	09/19/22 19:40	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.7	0.35	ng/L		09/19/22 11:42	09/19/22 19:40	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.7	0.73	ng/L		09/19/22 11:42	09/19/22 19:40	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.7	0.34	ng/L		09/19/22 11:42	09/19/22 19:40	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.7	0.79	ng/L		09/19/22 11:42	09/19/22 19:40	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.3	1.6	ng/L		09/19/22 11:42	09/19/22 19:40	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.3	1.4	ng/L		09/19/22 11:42	09/19/22 19:40	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		4.3	1.1	ng/L		09/19/22 11:42	09/19/22 19:40	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		1.7	0.66	ng/L		09/19/22 11:42	09/19/22 19:40	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*98*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:40*	*1*
13C4 PFHpA	*103*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:40*	*1*
13C4 PFOA	*102*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:40*	*1*
13C4 PFOS	*91*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:40*	*1*
13C5 PFNA	*98*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:40*	*1*
13C4 PFBA	*96*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:40*	*1*
13C2 PFHxA	*102*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:40*	*1*
13C2 PFDA	*91*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:40*	*1*
13C2 PFUnA	*97*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:40*	*1*
13C2 PFDoA	*87*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:40*	*1*
13C8 FOSA	*78*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:40*	*1*
13C5 PFPeA	*97*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:40*	*1*
13C2 PFTeDA	*84*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:40*	*1*
d3-NMeFOSAA	*83*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:40*	*1*
d5-NEtFOSAA	*87*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:40*	*1*
M2-6:2 FTS	*99*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:40*	*1*
M2-8:2 FTS	*98*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:40*	*1*
13C3 PFBS	*94*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:40*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		09/20/22 09:22	09/20/22 17:00	1
Antimony	ND		0.020	0.0068	mg/L		09/20/22 09:22	09/20/22 17:00	1
Arsenic	ND		0.015	0.0056	mg/L		09/20/22 09:22	09/20/22 17:00	1

Client Sample ID: ERB1_091422

Lab Sample ID: 480-201707-7

Date Collected: 09/14/22 18:30

Matrix: Water

Date Received: 09/16/22 10:00

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		0.0020	0.00070	mg/L		09/20/22 09:22	09/20/22 17:00	1
Beryllium	ND		0.0020	0.00030	mg/L		09/20/22 09:22	09/20/22 17:00	1
Cadmium	ND		0.0020	0.00050	mg/L		09/20/22 09:22	09/20/22 17:00	1
Calcium	ND		0.50	0.10	mg/L		09/20/22 09:22	09/20/22 17:00	1
Chromium	ND		0.0040	0.0010	mg/L		09/20/22 09:22	09/20/22 17:00	1
Cobalt	ND		0.0040	0.00063	mg/L		09/20/22 09:22	09/20/22 17:00	1
Copper	ND		0.010	0.0016	mg/L		09/20/22 09:22	09/20/22 17:00	1
Iron	ND		0.050	0.019	mg/L		09/20/22 09:22	09/20/22 17:00	1
Lead	ND		0.010	0.0030	mg/L		09/20/22 09:22	09/20/22 17:00	1
Magnesium	ND		0.20	0.043	mg/L		09/20/22 09:22	09/20/22 17:00	1
Manganese	ND		0.0030	0.00040	mg/L		09/20/22 09:22	09/20/22 17:00	1
Nickel	ND		0.010	0.0013	mg/L		09/20/22 09:22	09/20/22 17:00	1
Potassium	ND		0.50	0.10	mg/L		09/20/22 09:22	09/20/22 17:00	1
Selenium	ND		0.025	0.0087	mg/L		09/20/22 09:22	09/20/22 17:00	1
Silver	ND		0.0060	0.0017	mg/L		09/20/22 09:22	09/20/22 17:00	1
Sodium	ND		1.0	0.32	mg/L		09/20/22 09:22	09/20/22 17:00	1
Thallium	ND		0.020	0.010	mg/L		09/20/22 09:22	09/20/22 17:00	1
Vanadium	ND		0.0050	0.0015	mg/L		09/20/22 09:22	09/20/22 17:00	1
Zinc	ND		0.010	0.0015	mg/L		09/20/22 09:22	09/20/22 17:00	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		09/19/22 11:06	09/19/22 15:42	1

Client Sample ID: ERB2_091422

Lab Sample ID: 480-201707-8

Date Collected: 09/14/22 18:45

Matrix: Water

Date Received: 09/16/22 10:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/19/22 14:10	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/19/22 14:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/19/22 14:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/19/22 14:10	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/19/22 14:10	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/19/22 14:10	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/19/22 14:10	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			09/19/22 14:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/19/22 14:10	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/19/22 14:10	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/19/22 14:10	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/19/22 14:10	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/19/22 14:10	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/19/22 14:10	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/19/22 14:10	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/19/22 14:10	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/19/22 14:10	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/19/22 14:10	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/19/22 14:10	1
2-Hexanone	ND		5.0	1.2	ug/L			09/19/22 14:10	1

Client Sample ID: ERB2_091422

Date Collected: 09/14/22 18:45
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-8

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/19/22 14:10	1
Acetone	ND		10	3.0	ug/L			09/19/22 14:10	1
Benzene	ND		1.0	0.41	ug/L			09/19/22 14:10	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/19/22 14:10	1
Bromoform	ND		1.0	0.26	ug/L			09/19/22 14:10	1
Bromomethane	ND		1.0	0.69	ug/L			09/19/22 14:10	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/19/22 14:10	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/19/22 14:10	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/19/22 14:10	1
Chloroethane	ND		1.0	0.32	ug/L			09/19/22 14:10	1
Chloroform	ND		1.0	0.34	ug/L			09/19/22 14:10	1
Chloromethane	ND		1.0	0.35	ug/L			09/19/22 14:10	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/19/22 14:10	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/19/22 14:10	1
Cyclohexane	ND		1.0	0.18	ug/L			09/19/22 14:10	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/19/22 14:10	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/19/22 14:10	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/19/22 14:10	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/19/22 14:10	1
m,p-Xylene	ND		2.0	0.66	ug/L			09/19/22 14:10	1
Methyl acetate	ND		2.5	1.3	ug/L			09/19/22 14:10	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/19/22 14:10	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/19/22 14:10	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/19/22 14:10	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/19/22 14:10	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/19/22 14:10	1
o-Xylene	ND		1.0	0.76	ug/L			09/19/22 14:10	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/19/22 14:10	1
Styrene	ND		1.0	0.73	ug/L			09/19/22 14:10	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/19/22 14:10	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/19/22 14:10	1
Toluene	ND		1.0	0.51	ug/L			09/19/22 14:10	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/19/22 14:10	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/19/22 14:10	1
Trichloroethene	ND		1.0	0.46	ug/L			09/19/22 14:10	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/19/22 14:10	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/19/22 14:10	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/19/22 14:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*09/19/22 14:10*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*09/19/22 14:10*	*1*
Dibromofluoromethane (Surr)	*92*		*75 - 123*		*09/19/22 14:10*	*1*
Toluene-d8 (Surr)	*86*		*80 - 120*		*09/19/22 14:10*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.24	0.12	ug/L		09/19/22 16:25	09/27/22 01:19	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*52*		*15 - 110*	*09/19/22 16:25*	*09/27/22 01:19*	*1*

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Client Sample ID: ERB2_091422

Date Collected: 09/14/22 18:45
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-8

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.2	0.50	ug/L		09/20/22 08:49	09/21/22 17:35	1
2,4,6-Trichlorophenol	ND		5.2	0.64	ug/L		09/20/22 08:49	09/21/22 17:35	1
2,4-Dichlorophenol	ND		5.2	0.53	ug/L		09/20/22 08:49	09/21/22 17:35	1
2,4-Dimethylphenol	ND		5.2	0.52	ug/L		09/20/22 08:49	09/21/22 17:35	1
2,4-Dinitrophenol	ND		10	2.3	ug/L		09/20/22 08:49	09/21/22 17:35	1
2,4-Dinitrotoluene	ND		5.2	0.47	ug/L		09/20/22 08:49	09/21/22 17:35	1
2,6-Dinitrotoluene	ND		5.2	0.42	ug/L		09/20/22 08:49	09/21/22 17:35	1
2-Chloronaphthalene	ND		5.2	0.48	ug/L		09/20/22 08:49	09/21/22 17:35	1
2-Chlorophenol	ND		5.2	0.55	ug/L		09/20/22 08:49	09/21/22 17:35	1
2-Methylnaphthalene	ND		5.2	0.63	ug/L		09/20/22 08:49	09/21/22 17:35	1
2-Methylphenol	ND		5.2	0.42	ug/L		09/20/22 08:49	09/21/22 17:35	1
2-Nitroaniline	ND		10	0.44	ug/L		09/20/22 08:49	09/21/22 17:35	1
2-Nitrophenol	ND		5.2	0.50	ug/L		09/20/22 08:49	09/21/22 17:35	1
3,3'-Dichlorobenzidine	ND		5.2	0.42	ug/L		09/20/22 08:49	09/21/22 17:35	1
3-Nitroaniline	ND		10	0.50	ug/L		09/20/22 08:49	09/21/22 17:35	1
4,6-Dinitro-2-methylphenol	ND		10	2.3	ug/L		09/20/22 08:49	09/21/22 17:35	1
4-Bromophenyl phenyl ether	ND		5.2	0.47	ug/L		09/20/22 08:49	09/21/22 17:35	1
4-Chloro-3-methylphenol	ND		5.2	0.47	ug/L		09/20/22 08:49	09/21/22 17:35	1
4-Chloroaniline	ND		5.2	0.61	ug/L		09/20/22 08:49	09/21/22 17:35	1
4-Chlorophenyl phenyl ether	ND		5.2	0.36	ug/L		09/20/22 08:49	09/21/22 17:35	1
4-Methylphenol	ND		10	0.38	ug/L		09/20/22 08:49	09/21/22 17:35	1
4-Nitroaniline	ND		10	0.26	ug/L		09/20/22 08:49	09/21/22 17:35	1
4-Nitrophenol	ND		10	1.6	ug/L		09/20/22 08:49	09/21/22 17:35	1
Acenaphthene	ND		5.2	0.43	ug/L		09/20/22 08:49	09/21/22 17:35	1
Acenaphthylene	ND		5.2	0.40	ug/L		09/20/22 08:49	09/21/22 17:35	1
Acetophenone	ND		5.2	0.56	ug/L		09/20/22 08:49	09/21/22 17:35	1
Anthracene	ND		5.2	0.29	ug/L		09/20/22 08:49	09/21/22 17:35	1
Atrazine	ND		5.2	0.48	ug/L		09/20/22 08:49	09/21/22 17:35	1
Benzaldehyde	ND		5.2	0.28	ug/L		09/20/22 08:49	09/21/22 17:35	1
Benzo[a]anthracene	ND		5.2	0.38	ug/L		09/20/22 08:49	09/21/22 17:35	1
Benzo[a]pyrene	ND		5.2	0.49	ug/L		09/20/22 08:49	09/21/22 17:35	1
Benzo[b]fluoranthene	ND		5.2	0.35	ug/L		09/20/22 08:49	09/21/22 17:35	1
Benzo[g,h,i]perylene	ND		5.2	0.36	ug/L		09/20/22 08:49	09/21/22 17:35	1
Benzo[k]fluoranthene	ND		5.2	0.76	ug/L		09/20/22 08:49	09/21/22 17:35	1
Biphenyl	ND		5.2	0.68	ug/L		09/20/22 08:49	09/21/22 17:35	1
bis (2-chloroisopropyl) ether	ND		5.2	0.54	ug/L		09/20/22 08:49	09/21/22 17:35	1
Bis(2-chloroethoxy)methane	ND		5.2	0.36	ug/L		09/20/22 08:49	09/21/22 17:35	1
Bis(2-chloroethyl)ether	ND		5.2	0.42	ug/L		09/20/22 08:49	09/21/22 17:35	1
Bis(2-ethylhexyl) phthalate	ND		5.2	2.3	ug/L		09/20/22 08:49	09/21/22 17:35	1
Butyl benzyl phthalate	ND		5.2	1.0	ug/L		09/20/22 08:49	09/21/22 17:35	1
Caprolactam	ND		5.2	2.3	ug/L		09/20/22 08:49	09/21/22 17:35	1
Carbazole	ND		5.2	0.31	ug/L		09/20/22 08:49	09/21/22 17:35	1
Chrysene	ND		5.2	0.34	ug/L		09/20/22 08:49	09/21/22 17:35	1
Dibenz(a,h)anthracene	ND		5.2	0.44	ug/L		09/20/22 08:49	09/21/22 17:35	1
Dibenzofuran	ND		10	0.53	ug/L		09/20/22 08:49	09/21/22 17:35	1
Diethyl phthalate	**28**	**B *+ *1**	5.2	0.23	ug/L		09/20/22 08:49	09/21/22 17:35	1
Dimethyl phthalate	ND		5.2	0.38	ug/L		09/20/22 08:49	09/21/22 17:35	1
Di-n-butyl phthalate	ND		5.2	0.32	ug/L		09/20/22 08:49	09/21/22 17:35	1
Di-n-octyl phthalate	ND		5.2	0.49	ug/L		09/20/22 08:49	09/21/22 17:35	1

Client Sample ID: ERB2_091422

Date Collected: 09/14/22 18:45
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-8

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		5.2	0.42	ug/L		09/20/22 08:49	09/21/22 17:35	1
Fluorene	ND		5.2	0.38	ug/L		09/20/22 08:49	09/21/22 17:35	1
Hexachlorobenzene	ND		5.2	0.53	ug/L		09/20/22 08:49	09/21/22 17:35	1
Hexachlorobutadiene	ND		5.2	0.71	ug/L		09/20/22 08:49	09/21/22 17:35	1
Hexachlorocyclopentadiene	ND		5.2	0.61	ug/L		09/20/22 08:49	09/21/22 17:35	1
Hexachloroethane	ND		5.2	0.61	ug/L		09/20/22 08:49	09/21/22 17:35	1
Indeno[1,2,3-cd]pyrene	ND		5.2	0.49	ug/L		09/20/22 08:49	09/21/22 17:35	1
Isophorone	ND		5.2	0.45	ug/L		09/20/22 08:49	09/21/22 17:35	1
Naphthalene	ND		5.2	0.79	ug/L		09/20/22 08:49	09/21/22 17:35	1
Nitrobenzene	ND		5.2	0.30	ug/L		09/20/22 08:49	09/21/22 17:35	1
N-Nitrosodi-n-propylamine	ND		5.2	0.56	ug/L		09/20/22 08:49	09/21/22 17:35	1
N-Nitrosodiphenylamine	ND		5.2	0.53	ug/L		09/20/22 08:49	09/21/22 17:35	1
Pentachlorophenol	ND		10	2.3	ug/L		09/20/22 08:49	09/21/22 17:35	1
Phenanthrene	ND		5.2	0.46	ug/L		09/20/22 08:49	09/21/22 17:35	1
Phenol	ND		5.2	0.41	ug/L		09/20/22 08:49	09/21/22 17:35	1
Pyrene	ND		5.2	0.35	ug/L		09/20/22 08:49	09/21/22 17:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*84*		*41 - 120*	*09/20/22 08:49*	*09/21/22 17:35*	*1*
2-Fluorobiphenyl (Surr)	*99*		*48 - 120*	*09/20/22 08:49*	*09/21/22 17:35*	*1*
2-Fluorophenol (Surr)	*62*		*35 - 120*	*09/20/22 08:49*	*09/21/22 17:35*	*1*
Nitrobenzene-d5 (Surr)	*75*		*46 - 120*	*09/20/22 08:49*	*09/21/22 17:35*	*1*
Phenol-d5 (Surr)	*48*		*22 - 120*	*09/20/22 08:49*	*09/21/22 17:35*	*1*
p-Terphenyl-d14 (Surr)	*108*		*60 - 148*	*09/20/22 08:49*	*09/21/22 17:35*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND	H	5.0	0.48	ug/L		09/24/22 09:45	09/26/22 21:37	1
2,4,6-Trichlorophenol	ND	H	5.0	0.61	ug/L		09/24/22 09:45	09/26/22 21:37	1
2,4-Dichlorophenol	ND	H	5.0	0.51	ug/L		09/24/22 09:45	09/26/22 21:37	1
2,4-Dimethylphenol	ND	H	5.0	0.50	ug/L		09/24/22 09:45	09/26/22 21:37	1
2,4-Dinitrophenol	ND	H	10	2.2	ug/L		09/24/22 09:45	09/26/22 21:37	1
2,4-Dinitrotoluene	ND	H	5.0	0.45	ug/L		09/24/22 09:45	09/26/22 21:37	1
2,6-Dinitrotoluene	ND	H	5.0	0.40	ug/L		09/24/22 09:45	09/26/22 21:37	1
2-Chloronaphthalene	ND	H	5.0	0.46	ug/L		09/24/22 09:45	09/26/22 21:37	1
2-Chlorophenol	ND	H	5.0	0.53	ug/L		09/24/22 09:45	09/26/22 21:37	1
2-Methylnaphthalene	ND	H	5.0	0.60	ug/L		09/24/22 09:45	09/26/22 21:37	1
2-Methylphenol	ND	H	5.0	0.40	ug/L		09/24/22 09:45	09/26/22 21:37	1
2-Nitroaniline	ND	H	10	0.42	ug/L		09/24/22 09:45	09/26/22 21:37	1
2-Nitrophenol	ND	H	5.0	0.48	ug/L		09/24/22 09:45	09/26/22 21:37	1
3,3'-Dichlorobenzidine	ND	H	5.0	0.40	ug/L		09/24/22 09:45	09/26/22 21:37	1
3-Nitroaniline	ND	H	10	0.48	ug/L		09/24/22 09:45	09/26/22 21:37	1
4,6-Dinitro-2-methylphenol	ND	H	10	2.2	ug/L		09/24/22 09:45	09/26/22 21:37	1
4-Bromophenyl phenyl ether	ND	H	5.0	0.45	ug/L		09/24/22 09:45	09/26/22 21:37	1
4-Chloro-3-methylphenol	ND	H	5.0	0.45	ug/L		09/24/22 09:45	09/26/22 21:37	1
4-Chloroaniline	ND	H	5.0	0.59	ug/L		09/24/22 09:45	09/26/22 21:37	1
4-Chlorophenyl phenyl ether	ND	H	5.0	0.35	ug/L		09/24/22 09:45	09/26/22 21:37	1
4-Methylphenol	ND	H	10	0.36	ug/L		09/24/22 09:45	09/26/22 21:37	1
4-Nitroaniline	ND	H	10	0.25	ug/L		09/24/22 09:45	09/26/22 21:37	1
4-Nitrophenol	ND	H	10	1.5	ug/L		09/24/22 09:45	09/26/22 21:37	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Client Sample ID: ERB2_091422
Date Collected: 09/14/22 18:45
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-8
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND	H	5.0	0.41	ug/L		09/24/22 09:45	09/26/22 21:37	1
Acenaphthylene	ND	H	5.0	0.38	ug/L		09/24/22 09:45	09/26/22 21:37	1
Acetophenone	ND	H	5.0	0.54	ug/L		09/24/22 09:45	09/26/22 21:37	1
Anthracene	ND	H	5.0	0.28	ug/L		09/24/22 09:45	09/26/22 21:37	1
Atrazine	ND	H	5.0	0.46	ug/L		09/24/22 09:45	09/26/22 21:37	1
Benzaldehyde	ND	H	5.0	0.27	ug/L		09/24/22 09:45	09/26/22 21:37	1
Benzo[a]anthracene	ND	H	5.0	0.36	ug/L		09/24/22 09:45	09/26/22 21:37	1
Benzo[a]pyrene	ND	H	5.0	0.47	ug/L		09/24/22 09:45	09/26/22 21:37	1
Benzo[b]fluoranthene	ND	H	5.0	0.34	ug/L		09/24/22 09:45	09/26/22 21:37	1
Benzo[g,h,i]perylene	ND	H	5.0	0.35	ug/L		09/24/22 09:45	09/26/22 21:37	1
Benzo[k]fluoranthene	ND	H	5.0	0.73	ug/L		09/24/22 09:45	09/26/22 21:37	1
Biphenyl	ND	H	5.0	0.65	ug/L		09/24/22 09:45	09/26/22 21:37	1
bis (2-chloroisopropyl) ether	ND	H	5.0	0.52	ug/L		09/24/22 09:45	09/26/22 21:37	1
Bis(2-chloroethoxy)methane	ND	H	5.0	0.35	ug/L		09/24/22 09:45	09/26/22 21:37	1
Bis(2-chloroethyl)ether	ND	H	5.0	0.40	ug/L		09/24/22 09:45	09/26/22 21:37	1
Bis(2-ethylhexyl) phthalate	ND	H	5.0	2.2	ug/L		09/24/22 09:45	09/26/22 21:37	1
Butyl benzyl phthalate	ND	H	5.0	1.0	ug/L		09/24/22 09:45	09/26/22 21:37	1
Caprolactam	ND	H	5.0	2.2	ug/L		09/24/22 09:45	09/26/22 21:37	1
Carbazole	ND	H	5.0	0.30	ug/L		09/24/22 09:45	09/26/22 21:37	1
Chrysene	ND	H	5.0	0.33	ug/L		09/24/22 09:45	09/26/22 21:37	1
Dibenz(a,h)anthracene	ND	H	5.0	0.42	ug/L		09/24/22 09:45	09/26/22 21:37	1
Dibenzofuran	ND	H	10	0.51	ug/L		09/24/22 09:45	09/26/22 21:37	1
Diethyl phthalate	**19**	**H**	5.0	0.22	ug/L		09/24/22 09:45	09/26/22 21:37	1
Dimethyl phthalate	ND	H	5.0	0.36	ug/L		09/24/22 09:45	09/26/22 21:37	1
Di-n-butyl phthalate	ND	H	5.0	0.31	ug/L		09/24/22 09:45	09/26/22 21:37	1
Di-n-octyl phthalate	ND	H	5.0	0.47	ug/L		09/24/22 09:45	09/26/22 21:37	1
Fluoranthene	ND	H	5.0	0.40	ug/L		09/24/22 09:45	09/26/22 21:37	1
Fluorene	ND	H	5.0	0.36	ug/L		09/24/22 09:45	09/26/22 21:37	1
Hexachlorobenzene	ND	H	5.0	0.51	ug/L		09/24/22 09:45	09/26/22 21:37	1
Hexachlorobutadiene	ND	H	5.0	0.68	ug/L		09/24/22 09:45	09/26/22 21:37	1
Hexachlorocyclopentadiene	ND	H	5.0	0.59	ug/L		09/24/22 09:45	09/26/22 21:37	1
Hexachloroethane	ND	H	5.0	0.59	ug/L		09/24/22 09:45	09/26/22 21:37	1
Indeno[1,2,3-cd]pyrene	ND	H	5.0	0.47	ug/L		09/24/22 09:45	09/26/22 21:37	1
Isophorone	ND	H	5.0	0.43	ug/L		09/24/22 09:45	09/26/22 21:37	1
Naphthalene	ND	H	5.0	0.76	ug/L		09/24/22 09:45	09/26/22 21:37	1
Nitrobenzene	ND	H	5.0	0.29	ug/L		09/24/22 09:45	09/26/22 21:37	1
N-Nitrosodi-n-propylamine	ND	H	5.0	0.54	ug/L		09/24/22 09:45	09/26/22 21:37	1
N-Nitrosodiphenylamine	ND	H	5.0	0.51	ug/L		09/24/22 09:45	09/26/22 21:37	1
Pentachlorophenol	ND	H	10	2.2	ug/L		09/24/22 09:45	09/26/22 21:37	1
Phenanthrene	ND	H	5.0	0.44	ug/L		09/24/22 09:45	09/26/22 21:37	1
Phenol	ND	H	5.0	0.39	ug/L		09/24/22 09:45	09/26/22 21:37	1
Pyrene	ND	H	5.0	0.34	ug/L		09/24/22 09:45	09/26/22 21:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*74*		*41 - 120*	*09/24/22 09:45*	*09/26/22 21:37*	*1*
2-Fluorobiphenyl (Surr)	*93*		*48 - 120*	*09/24/22 09:45*	*09/26/22 21:37*	*1*
2-Fluorophenol (Surr)	*58*		*35 - 120*	*09/24/22 09:45*	*09/26/22 21:37*	*1*
Nitrobenzene-d5 (Surr)	*76*		*46 - 120*	*09/24/22 09:45*	*09/26/22 21:37*	*1*
Phenol-d5 (Surr)	*43*		*22 - 120*	*09/24/22 09:45*	*09/26/22 21:37*	*1*
p-Terphenyl-d14 (Surr)	*104*		*60 - 148*	*09/24/22 09:45*	*09/26/22 21:37*	*1*

Client Sample ID: ERB2_091422
Date Collected: 09/14/22 18:45
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-8
Matrix: Water

Method: 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.8	1.1	ng/L		09/19/22 11:42	09/19/22 19:49	1
Perfluoropentanoic acid (PFPeA)	ND		1.9	0.65	ng/L		09/19/22 11:42	09/19/22 19:49	1
Perfluorohexanoic acid (PFHxA)	ND		1.9	0.62	ng/L		09/19/22 11:42	09/19/22 19:49	1
Perfluoroheptanoic acid (PFHpA)	ND		1.9	0.52	ng/L		09/19/22 11:42	09/19/22 19:49	1
Perfluorooctanoic acid (PFOA)	ND		1.9	0.72	ng/L		09/19/22 11:42	09/19/22 19:49	1
Perfluorononanoic acid (PFNA)	ND		1.9	0.47	ng/L		09/19/22 11:42	09/19/22 19:49	1
Perfluorodecanoic acid (PFDA)	ND		1.9	0.44	ng/L		09/19/22 11:42	09/19/22 19:49	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	0.52	ng/L		09/19/22 11:42	09/19/22 19:49	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.47	ng/L		09/19/22 11:42	09/19/22 19:49	1
Perfluorotridecanoic acid (PFTriA)	ND		1.9	0.46	ng/L		09/19/22 11:42	09/19/22 19:49	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.61	ng/L		09/19/22 11:42	09/19/22 19:49	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	0.59	ng/L		09/19/22 11:42	09/19/22 19:49	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	0.52	ng/L		09/19/22 11:42	09/19/22 19:49	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.9	0.39	ng/L		09/19/22 11:42	09/19/22 19:49	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	0.81	ng/L		09/19/22 11:42	09/19/22 19:49	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.38	ng/L		09/19/22 11:42	09/19/22 19:49	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.9	0.88	ng/L		09/19/22 11:42	09/19/22 19:49	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.8	1.8	ng/L		09/19/22 11:42	09/19/22 19:49	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.8	1.5	ng/L		09/19/22 11:42	09/19/22 19:49	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		4.8	1.2	ng/L		09/19/22 11:42	09/19/22 19:49	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		1.9	0.73	ng/L		09/19/22 11:42	09/19/22 19:49	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*94*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:49*	*1*
13C4 PFHpA	*101*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:49*	*1*
13C4 PFOA	*101*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:49*	*1*
13C4 PFOS	*94*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:49*	*1*
13C5 PFNA	*98*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:49*	*1*
13C4 PFBA	*95*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:49*	*1*
13C2 PFHxA	*100*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:49*	*1*
13C2 PFDA	*100*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:49*	*1*
13C2 PFUnA	*104*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:49*	*1*
13C2 PFDoA	*109*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:49*	*1*
13C8 FOSA	*88*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:49*	*1*
13C5 PFPeA	*100*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:49*	*1*
13C2 PFTeDA	*88*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:49*	*1*
d3-NMeFOSAA	*95*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:49*	*1*
d5-NEtFOSAA	*95*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:49*	*1*
M2-6:2 FTS	*105*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:49*	*1*
M2-8:2 FTS	*101*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:49*	*1*
13C3 PFBS	*92*		*50 - 150*	*09/19/22 11:42*	*09/19/22 19:49*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		09/20/22 09:22	09/20/22 17:03	1
Antimony	ND		0.020	0.0068	mg/L		09/20/22 09:22	09/20/22 17:03	1
Arsenic	ND		0.015	0.0056	mg/L		09/20/22 09:22	09/20/22 17:03	1

Client Sample ID: ERB2_091422

Lab Sample ID: 480-201707-8

Date Collected: 09/14/22 18:45
Matrix: Water
Date Received: 09/16/22 10:00

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		0.0020	0.00070	mg/L		09/20/22 09:22	09/20/22 17:03	1
Beryllium	ND		0.0020	0.00030	mg/L		09/20/22 09:22	09/20/22 17:03	1
Cadmium	ND		0.0020	0.00050	mg/L		09/20/22 09:22	09/20/22 17:03	1
Calcium	ND		0.50	0.10	mg/L		09/20/22 09:22	09/20/22 17:03	1
Chromium	ND		0.0040	0.0010	mg/L		09/20/22 09:22	09/20/22 17:03	1
Cobalt	ND		0.0040	0.00063	mg/L		09/20/22 09:22	09/20/22 17:03	1
Copper	ND		0.010	0.0016	mg/L		09/20/22 09:22	09/20/22 17:03	1
Iron	ND		0.050	0.019	mg/L		09/20/22 09:22	09/20/22 17:03	1
Lead	ND		0.010	0.0030	mg/L		09/20/22 09:22	09/20/22 17:03	1
Magnesium	ND		0.20	0.043	mg/L		09/20/22 09:22	09/20/22 17:03	1
Manganese	ND		0.0030	0.00040	mg/L		09/20/22 09:22	09/20/22 17:03	1
Nickel	ND		0.010	0.0013	mg/L		09/20/22 09:22	09/20/22 17:03	1
Potassium	ND		0.50	0.10	mg/L		09/20/22 09:22	09/20/22 17:03	1
Selenium	ND		0.025	0.0087	mg/L		09/20/22 09:22	09/20/22 17:03	1
Silver	ND		0.0060	0.0017	mg/L		09/20/22 09:22	09/20/22 17:03	1
Sodium	ND		1.0	0.32	mg/L		09/20/22 09:22	09/20/22 17:03	1
Thallium	ND		0.020	0.010	mg/L		09/20/22 09:22	09/20/22 17:03	1
Vanadium	ND		0.0050	0.0015	mg/L		09/20/22 09:22	09/20/22 17:03	1
Zinc	ND		0.010	0.0015	mg/L		09/20/22 09:22	09/20/22 17:03	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		09/19/22 11:06	09/19/22 15:44	1

Client Sample ID: FB_091522

Lab Sample ID: 480-201707-9

Date Collected: 09/15/22 07:20
Matrix: Water
Date Received: 09/16/22 10:00

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/19/22 14:33	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/19/22 14:33	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/19/22 14:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/19/22 14:33	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/19/22 14:33	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/19/22 14:33	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/19/22 14:33	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			09/19/22 14:33	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/19/22 14:33	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/19/22 14:33	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/19/22 14:33	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/19/22 14:33	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/19/22 14:33	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/19/22 14:33	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/19/22 14:33	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/19/22 14:33	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/19/22 14:33	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/19/22 14:33	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/19/22 14:33	1
2-Hexanone	ND		5.0	1.2	ug/L			09/19/22 14:33	1

Client Sample ID: FB_091522

Date Collected: 09/15/22 07:20
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-9

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/19/22 14:33	1
Acetone	ND		10	3.0	ug/L			09/19/22 14:33	1
Benzene	ND		1.0	0.41	ug/L			09/19/22 14:33	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/19/22 14:33	1
Bromoform	ND		1.0	0.26	ug/L			09/19/22 14:33	1
Bromomethane	ND		1.0	0.69	ug/L			09/19/22 14:33	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/19/22 14:33	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/19/22 14:33	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/19/22 14:33	1
Chloroethane	ND		1.0	0.32	ug/L			09/19/22 14:33	1
Chloroform	ND		1.0	0.34	ug/L			09/19/22 14:33	1
Chloromethane	ND		1.0	0.35	ug/L			09/19/22 14:33	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/19/22 14:33	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/19/22 14:33	1
Cyclohexane	ND		1.0	0.18	ug/L			09/19/22 14:33	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/19/22 14:33	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/19/22 14:33	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/19/22 14:33	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/19/22 14:33	1
m,p-Xylene	ND		2.0	0.66	ug/L			09/19/22 14:33	1
Methyl acetate	ND		2.5	1.3	ug/L			09/19/22 14:33	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/19/22 14:33	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/19/22 14:33	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/19/22 14:33	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/19/22 14:33	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/19/22 14:33	1
o-Xylene	ND		1.0	0.76	ug/L			09/19/22 14:33	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/19/22 14:33	1
Styrene	ND		1.0	0.73	ug/L			09/19/22 14:33	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/19/22 14:33	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/19/22 14:33	1
Toluene	ND		1.0	0.51	ug/L			09/19/22 14:33	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/19/22 14:33	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/19/22 14:33	1
Trichloroethene	ND		1.0	0.46	ug/L			09/19/22 14:33	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/19/22 14:33	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/19/22 14:33	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/19/22 14:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*86*		*77 - 120*		*09/19/22 14:33*	*1*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*		*09/19/22 14:33*	*1*
Dibromofluoromethane (Surr)	*88*		*75 - 123*		*09/19/22 14:33*	*1*
Toluene-d8 (Surr)	*86*		*80 - 120*		*09/19/22 14:33*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		09/20/22 08:49	09/21/22 18:03	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		09/20/22 08:49	09/21/22 18:03	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		09/20/22 08:49	09/21/22 18:03	1

Client Sample ID: FB_091522
Date Collected: 09/15/22 07:20
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-9
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		09/20/22 08:49	09/21/22 18:03	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		09/20/22 08:49	09/21/22 18:03	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		09/20/22 08:49	09/21/22 18:03	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		09/20/22 08:49	09/21/22 18:03	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		09/20/22 08:49	09/21/22 18:03	1
2-Chlorophenol	ND		5.0	0.53	ug/L		09/20/22 08:49	09/21/22 18:03	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		09/20/22 08:49	09/21/22 18:03	1
2-Methylphenol	ND		5.0	0.40	ug/L		09/20/22 08:49	09/21/22 18:03	1
2-Nitroaniline	ND		10	0.42	ug/L		09/20/22 08:49	09/21/22 18:03	1
2-Nitrophenol	ND		5.0	0.48	ug/L		09/20/22 08:49	09/21/22 18:03	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		09/20/22 08:49	09/21/22 18:03	1
3-Nitroaniline	ND		10	0.48	ug/L		09/20/22 08:49	09/21/22 18:03	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		09/20/22 08:49	09/21/22 18:03	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		09/20/22 08:49	09/21/22 18:03	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		09/20/22 08:49	09/21/22 18:03	1
4-Chloroaniline	ND		5.0	0.59	ug/L		09/20/22 08:49	09/21/22 18:03	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		09/20/22 08:49	09/21/22 18:03	1
4-Methylphenol	ND		10	0.36	ug/L		09/20/22 08:49	09/21/22 18:03	1
4-Nitroaniline	ND		10	0.25	ug/L		09/20/22 08:49	09/21/22 18:03	1
4-Nitrophenol	ND		10	1.5	ug/L		09/20/22 08:49	09/21/22 18:03	1
Acenaphthene	ND		5.0	0.41	ug/L		09/20/22 08:49	09/21/22 18:03	1
Acenaphthylene	ND		5.0	0.38	ug/L		09/20/22 08:49	09/21/22 18:03	1
Acetophenone	ND		5.0	0.54	ug/L		09/20/22 08:49	09/21/22 18:03	1
Anthracene	ND		5.0	0.28	ug/L		09/20/22 08:49	09/21/22 18:03	1
Atrazine	ND		5.0	0.46	ug/L		09/20/22 08:49	09/21/22 18:03	1
Benzaldehyde	ND		5.0	0.27	ug/L		09/20/22 08:49	09/21/22 18:03	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		09/20/22 08:49	09/21/22 18:03	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		09/20/22 08:49	09/21/22 18:03	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		09/20/22 08:49	09/21/22 18:03	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		09/20/22 08:49	09/21/22 18:03	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		09/20/22 08:49	09/21/22 18:03	1
Biphenyl	ND		5.0	0.65	ug/L		09/20/22 08:49	09/21/22 18:03	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		09/20/22 08:49	09/21/22 18:03	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		09/20/22 08:49	09/21/22 18:03	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		09/20/22 08:49	09/21/22 18:03	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		09/20/22 08:49	09/21/22 18:03	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		09/20/22 08:49	09/21/22 18:03	1
Caprolactam	ND		5.0	2.2	ug/L		09/20/22 08:49	09/21/22 18:03	1
Carbazole	ND		5.0	0.30	ug/L		09/20/22 08:49	09/21/22 18:03	1
Chrysene	ND		5.0	0.33	ug/L		09/20/22 08:49	09/21/22 18:03	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		09/20/22 08:49	09/21/22 18:03	1
Dibenzofuran	ND		10	0.51	ug/L		09/20/22 08:49	09/21/22 18:03	1
Diethyl phthalate	**30**	**B *+ *1**	5.0	0.22	ug/L		09/20/22 08:49	09/21/22 18:03	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		09/20/22 08:49	09/21/22 18:03	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		09/20/22 08:49	09/21/22 18:03	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		09/20/22 08:49	09/21/22 18:03	1
Fluoranthene	ND		5.0	0.40	ug/L		09/20/22 08:49	09/21/22 18:03	1
Fluorene	ND		5.0	0.36	ug/L		09/20/22 08:49	09/21/22 18:03	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		09/20/22 08:49	09/21/22 18:03	1

Client Sample ID: FB_091522
Date Collected: 09/15/22 07:20
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-9
Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		5.0	0.68	ug/L		09/20/22 08:49	09/21/22 18:03	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		09/20/22 08:49	09/21/22 18:03	1
Hexachloroethane	ND		5.0	0.59	ug/L		09/20/22 08:49	09/21/22 18:03	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		09/20/22 08:49	09/21/22 18:03	1
Isophorone	ND		5.0	0.43	ug/L		09/20/22 08:49	09/21/22 18:03	1
Naphthalene	ND		5.0	0.76	ug/L		09/20/22 08:49	09/21/22 18:03	1
Nitrobenzene	ND		5.0	0.29	ug/L		09/20/22 08:49	09/21/22 18:03	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		09/20/22 08:49	09/21/22 18:03	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		09/20/22 08:49	09/21/22 18:03	1
Pentachlorophenol	ND		10	2.2	ug/L		09/20/22 08:49	09/21/22 18:03	1
Phenanthrene	ND		5.0	0.44	ug/L		09/20/22 08:49	09/21/22 18:03	1
Phenol	ND		5.0	0.39	ug/L		09/20/22 08:49	09/21/22 18:03	1
Pyrene	ND		5.0	0.34	ug/L		09/20/22 08:49	09/21/22 18:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*71*		*41 - 120*	*09/20/22 08:49*	*09/21/22 18:03*	*1*
2-Fluorobiphenyl (Surr)	*85*		*48 - 120*	*09/20/22 08:49*	*09/21/22 18:03*	*1*
2-Fluorophenol (Surr)	*53*		*35 - 120*	*09/20/22 08:49*	*09/21/22 18:03*	*1*
Nitrobenzene-d5 (Surr)	*65*		*46 - 120*	*09/20/22 08:49*	*09/21/22 18:03*	*1*
Phenol-d5 (Surr)	*40*		*22 - 120*	*09/20/22 08:49*	*09/21/22 18:03*	*1*
p-Terphenyl-d14 (Surr)	*108*		*60 - 148*	*09/20/22 08:49*	*09/21/22 18:03*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND	H	5.4	0.52	ug/L		09/24/22 09:45	09/26/22 22:04	1
2,4,6-Trichlorophenol	ND	H	5.4	0.66	ug/L		09/24/22 09:45	09/26/22 22:04	1
2,4-Dichlorophenol	ND	H	5.4	0.55	ug/L		09/24/22 09:45	09/26/22 22:04	1
2,4-Dimethylphenol	ND	H	5.4	0.54	ug/L		09/24/22 09:45	09/26/22 22:04	1
2,4-Dinitrophenol	ND	H	11	2.4	ug/L		09/24/22 09:45	09/26/22 22:04	1
2,4-Dinitrotoluene	ND	H	5.4	0.49	ug/L		09/24/22 09:45	09/26/22 22:04	1
2,6-Dinitrotoluene	ND	H	5.4	0.43	ug/L		09/24/22 09:45	09/26/22 22:04	1
2-Chloronaphthalene	ND	H	5.4	0.50	ug/L		09/24/22 09:45	09/26/22 22:04	1
2-Chlorophenol	ND	H	5.4	0.58	ug/L		09/24/22 09:45	09/26/22 22:04	1
2-Methylnaphthalene	ND	H	5.4	0.65	ug/L		09/24/22 09:45	09/26/22 22:04	1
2-Methylphenol	ND	H	5.4	0.43	ug/L		09/24/22 09:45	09/26/22 22:04	1
2-Nitroaniline	ND	H	11	0.46	ug/L		09/24/22 09:45	09/26/22 22:04	1
2-Nitrophenol	ND	H	5.4	0.52	ug/L		09/24/22 09:45	09/26/22 22:04	1
3,3'-Dichlorobenzidine	ND	H	5.4	0.43	ug/L		09/24/22 09:45	09/26/22 22:04	1
3-Nitroaniline	ND	H	11	0.52	ug/L		09/24/22 09:45	09/26/22 22:04	1
4,6-Dinitro-2-methylphenol	ND	H	11	2.4	ug/L		09/24/22 09:45	09/26/22 22:04	1
4-Bromophenyl phenyl ether	ND	H	5.4	0.49	ug/L		09/24/22 09:45	09/26/22 22:04	1
4-Chloro-3-methylphenol	ND	H	5.4	0.49	ug/L		09/24/22 09:45	09/26/22 22:04	1
4-Chloroaniline	ND	H	5.4	0.64	ug/L		09/24/22 09:45	09/26/22 22:04	1
4-Chlorophenyl phenyl ether	ND	H	5.4	0.38	ug/L		09/24/22 09:45	09/26/22 22:04	1
4-Methylphenol	ND	H	11	0.39	ug/L		09/24/22 09:45	09/26/22 22:04	1
4-Nitroaniline	ND	H	11	0.27	ug/L		09/24/22 09:45	09/26/22 22:04	1
4-Nitrophenol	ND	H	11	1.7	ug/L		09/24/22 09:45	09/26/22 22:04	1
Acenaphthene	ND	H	5.4	0.45	ug/L		09/24/22 09:45	09/26/22 22:04	1
Acenaphthylene	ND	H	5.4	0.41	ug/L		09/24/22 09:45	09/26/22 22:04	1
Acetophenone	ND	H	5.4	0.59	ug/L		09/24/22 09:45	09/26/22 22:04	1

Client Sample ID: FB_091522

Date Collected: 09/15/22 07:20
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-9

Matrix: Water

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND	H	5.4	0.30	ug/L		09/24/22 09:45	09/26/22 22:04	1
Atrazine	ND	H	5.4	0.50	ug/L		09/24/22 09:45	09/26/22 22:04	1
Benzaldehyde	ND	H	5.4	0.29	ug/L		09/24/22 09:45	09/26/22 22:04	1
Benzo[a]anthracene	ND	H	5.4	0.39	ug/L		09/24/22 09:45	09/26/22 22:04	1
Benzo[a]pyrene	ND	H	5.4	0.51	ug/L		09/24/22 09:45	09/26/22 22:04	1
Benzo[b]fluoranthene	ND	H	5.4	0.37	ug/L		09/24/22 09:45	09/26/22 22:04	1
Benzo[g,h,i]perylene	ND	H	5.4	0.38	ug/L		09/24/22 09:45	09/26/22 22:04	1
Benzo[k]fluoranthene	ND	H	5.4	0.79	ug/L		09/24/22 09:45	09/26/22 22:04	1
Biphenyl	ND	H	5.4	0.71	ug/L		09/24/22 09:45	09/26/22 22:04	1
bis (2-chloroisopropyl) ether	ND	H	5.4	0.57	ug/L		09/24/22 09:45	09/26/22 22:04	1
Bis(2-chloroethoxy)methane	ND	H	5.4	0.38	ug/L		09/24/22 09:45	09/26/22 22:04	1
Bis(2-chloroethyl)ether	ND	H	5.4	0.43	ug/L		09/24/22 09:45	09/26/22 22:04	1
Bis(2-ethylhexyl) phthalate	ND	H	5.4	2.4	ug/L		09/24/22 09:45	09/26/22 22:04	1
Butyl benzyl phthalate	ND	H	5.4	1.1	ug/L		09/24/22 09:45	09/26/22 22:04	1
Caprolactam	ND	H	5.4	2.4	ug/L		09/24/22 09:45	09/26/22 22:04	1
Carbazole	ND	H	5.4	0.33	ug/L		09/24/22 09:45	09/26/22 22:04	1
Chrysene	ND	H	5.4	0.36	ug/L		09/24/22 09:45	09/26/22 22:04	1
Dibenz(a,h)anthracene	ND	H	5.4	0.46	ug/L		09/24/22 09:45	09/26/22 22:04	1
Dibenzofuran	ND	H	11	0.55	ug/L		09/24/22 09:45	09/26/22 22:04	1
Diethyl phthalate	**39**	**H**	5.4	0.24	ug/L		09/24/22 09:45	09/26/22 22:04	1
Dimethyl phthalate	ND	H	5.4	0.39	ug/L		09/24/22 09:45	09/26/22 22:04	1
Di-n-butyl phthalate	ND	H	5.4	0.34	ug/L		09/24/22 09:45	09/26/22 22:04	1
Di-n-octyl phthalate	ND	H	5.4	0.51	ug/L		09/24/22 09:45	09/26/22 22:04	1
Fluoranthene	ND	H	5.4	0.43	ug/L		09/24/22 09:45	09/26/22 22:04	1
Fluorene	ND	H	5.4	0.39	ug/L		09/24/22 09:45	09/26/22 22:04	1
Hexachlorobenzene	ND	H	5.4	0.55	ug/L		09/24/22 09:45	09/26/22 22:04	1
Hexachlorobutadiene	ND	H	5.4	0.74	ug/L		09/24/22 09:45	09/26/22 22:04	1
Hexachlorocyclopentadiene	ND	H	5.4	0.64	ug/L		09/24/22 09:45	09/26/22 22:04	1
Hexachloroethane	ND	H	5.4	0.64	ug/L		09/24/22 09:45	09/26/22 22:04	1
Indeno[1,2,3-cd]pyrene	ND	H	5.4	0.51	ug/L		09/24/22 09:45	09/26/22 22:04	1
Isophorone	ND	H	5.4	0.47	ug/L		09/24/22 09:45	09/26/22 22:04	1
Naphthalene	ND	H	5.4	0.83	ug/L		09/24/22 09:45	09/26/22 22:04	1
Nitrobenzene	ND	H	5.4	0.32	ug/L		09/24/22 09:45	09/26/22 22:04	1
N-Nitrosodi-n-propylamine	ND	H	5.4	0.59	ug/L		09/24/22 09:45	09/26/22 22:04	1
N-Nitrosodiphenylamine	ND	H	5.4	0.55	ug/L		09/24/22 09:45	09/26/22 22:04	1
Pentachlorophenol	ND	H	11	2.4	ug/L		09/24/22 09:45	09/26/22 22:04	1
Phenanthrene	ND	H	5.4	0.48	ug/L		09/24/22 09:45	09/26/22 22:04	1
Phenol	ND	H	5.4	0.42	ug/L		09/24/22 09:45	09/26/22 22:04	1
Pyrene	ND	H	5.4	0.37	ug/L		09/24/22 09:45	09/26/22 22:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*69*		*41 - 120*	*09/24/22 09:45*	*09/26/22 22:04*	*1*
2-Fluorobiphenyl (Surr)	*85*		*48 - 120*	*09/24/22 09:45*	*09/26/22 22:04*	*1*
2-Fluorophenol (Surr)	*56*		*35 - 120*	*09/24/22 09:45*	*09/26/22 22:04*	*1*
Nitrobenzene-d5 (Surr)	*68*		*46 - 120*	*09/24/22 09:45*	*09/26/22 22:04*	*1*
Phenol-d5 (Surr)	*42*		*22 - 120*	*09/24/22 09:45*	*09/26/22 22:04*	*1*
p-Terphenyl-d14 (Surr)	*107*		*60 - 148*	*09/24/22 09:45*	*09/26/22 22:04*	*1*

Client Sample ID: FB_091522

Date Collected: 09/15/22 07:20
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-9

Matrix: Water

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		09/20/22 09:22	09/20/22 17:19	1
Antimony	ND		0.020	0.0068	mg/L		09/20/22 09:22	09/20/22 17:19	1
Arsenic	ND		0.015	0.0056	mg/L		09/20/22 09:22	09/20/22 17:19	1
Barium	ND		0.0020	0.00070	mg/L		09/20/22 09:22	09/20/22 17:19	1
Beryllium	ND		0.0020	0.00030	mg/L		09/20/22 09:22	09/20/22 17:19	1
Cadmium	ND		0.0020	0.00050	mg/L		09/20/22 09:22	09/20/22 17:19	1
Calcium	ND		0.50	0.10	mg/L		09/20/22 09:22	09/20/22 17:19	1
Chromium	ND		0.0040	0.0010	mg/L		09/20/22 09:22	09/20/22 17:19	1
Cobalt	ND		0.0040	0.00063	mg/L		09/20/22 09:22	09/20/22 17:19	1
Copper	ND		0.010	0.0016	mg/L		09/20/22 09:22	09/20/22 17:19	1
Iron	ND		0.050	0.019	mg/L		09/20/22 09:22	09/20/22 17:19	1
Lead	ND		0.010	0.0030	mg/L		09/20/22 09:22	09/20/22 17:19	1
Magnesium	ND		0.20	0.043	mg/L		09/20/22 09:22	09/20/22 17:19	1
Manganese	ND		0.0030	0.00040	mg/L		09/20/22 09:22	09/20/22 17:19	1
Nickel	ND		0.010	0.0013	mg/L		09/20/22 09:22	09/20/22 17:19	1
Potassium	ND		0.50	0.10	mg/L		09/20/22 09:22	09/20/22 17:19	1
Selenium	ND		0.025	0.0087	mg/L		09/20/22 09:22	09/20/22 17:19	1
Silver	ND		0.0060	0.0017	mg/L		09/20/22 09:22	09/20/22 17:19	1
Sodium	ND		1.0	0.32	mg/L		09/20/22 09:22	09/20/22 17:19	1
Thallium	ND		0.020	0.010	mg/L		09/20/22 09:22	09/20/22 17:19	1
Vanadium	ND		0.0050	0.0015	mg/L		09/20/22 09:22	09/20/22 17:19	1
Zinc	ND		0.010	0.0015	mg/L		09/20/22 09:22	09/20/22 17:19	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		09/19/22 11:06	09/19/22 15:45	1

Client Sample ID: SB4 (0-0.5)

Date Collected: 09/15/22 09:00
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-10

Matrix: Solid
Percent Solids: 93.5

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		8.9	0.89	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
1,1,1-Trichloroethane	ND		8.9	0.64	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
1,1,2,2-Tetrachloroethane	ND		8.9	1.4	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		8.9	2.0	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
1,1,2-Trichloroethane	ND		8.9	1.2	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
1,1-Dichloroethane	ND		8.9	1.1	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
1,1-Dichloroethene	ND		8.9	1.1	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
1,2,3-Trimethylbenzene	ND		8.9	1.8	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
1,2,4-Trichlorobenzene	ND		8.9	0.54	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
1,2,4-Trimethylbenzene	ND		8.9	1.7	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
1,2-Dibromo-3-Chloropropane	ND		8.9	4.4	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
1,2-Dibromoethane	ND		8.9	1.1	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
1,2-Dichlorobenzene	ND		8.9	0.69	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
1,2-Dichloroethane	ND		8.9	0.45	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
1,2-Dichloropropane	ND		8.9	4.4	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
1,3,5-Trimethylbenzene	ND		8.9	0.57	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
1,3-Dichlorobenzene	ND		8.9	0.46	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Client Sample ID: SB4 (0-0.5)
Date Collected: 09/15/22 09:00
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-10
Matrix: Solid
Percent Solids: 93.5

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		8.9	1.2	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
2-Butanone (MEK)	ND		44	3.2	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
2-Hexanone	ND		44	4.4	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
4-Methyl-2-pentanone (MIBK)	ND		44	2.9	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
Acetone	ND		44	7.5	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
Benzene	ND		8.9	0.43	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
Bromodichloromethane	ND		8.9	1.2	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
Bromoform	ND		8.9	4.4	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
Bromomethane	ND		8.9	0.80	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
Carbon disulfide	ND		8.9	4.4	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
Carbon tetrachloride	ND		8.9	0.86	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
Chlorobenzene	ND		8.9	1.2	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
Chloroethane	ND		8.9	2.0	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
Chloroform	ND		8.9	0.55	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
Chloromethane	ND		8.9	0.54	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
cis-1,2-Dichloroethene	ND		8.9	1.1	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
cis-1,3-Dichloropropene	ND		8.9	1.3	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
Cyclohexane	ND		8.9	1.2	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
Dibromochloromethane	ND		8.9	1.1	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
Dichlorodifluoromethane	ND		8.9	0.73	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
Ethylbenzene	ND		8.9	0.61	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
Isopropylbenzene	ND		8.9	1.3	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
m,p-Xylene	ND		18	1.5	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
Methyl acetate	ND		44	5.4	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
Methyl tert-butyl ether	ND		8.9	0.87	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
Methylcyclohexane	ND		8.9	1.3	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
Methylene Chloride	ND		8.9	4.1	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
n-Butylbenzene	ND		8.9	0.77	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
N-Propylbenzene	ND		8.9	0.71	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
o-Xylene	ND		8.9	1.2	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
sec-Butylbenzene	ND		8.9	0.77	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
Styrene	ND		8.9	0.44	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
tert-Butylbenzene	ND		8.9	0.92	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
Tetrachloroethene	ND		8.9	1.2	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
Toluene	ND		8.9	0.67	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
trans-1,2-Dichloroethene	ND		8.9	0.92	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
trans-1,3-Dichloropropene	ND		8.9	3.9	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
Trichloroethene	ND		8.9	2.0	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
Trichlorofluoromethane	ND		8.9	0.84	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
Vinyl chloride	ND		8.9	1.1	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1
Xylenes, Total	ND		18	1.5	ug/Kg	☼	09/16/22 16:00	09/19/22 14:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*64 - 126*	*09/16/22 16:00*	*09/19/22 14:34*	*1*
4-Bromofluorobenzene (Surr)	*83*		*72 - 126*	*09/16/22 16:00*	*09/19/22 14:34*	*1*
Dibromofluoromethane (Surr)	*101*		*60 - 140*	*09/16/22 16:00*	*09/19/22 14:34*	*1*
Toluene-d8 (Surr)	*117*		*71 - 125*	*09/16/22 16:00*	*09/19/22 14:34*	*1*

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Client Sample ID: SB4 (0-0.5)
Date Collected: 09/15/22 09:00
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-10
Matrix: Solid
Percent Solids: 93.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		900	240	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
2,4,6-Trichlorophenol	ND		900	180	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
2,4-Dichlorophenol	ND		900	95	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
2,4-Dimethylphenol	ND		900	220	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
2,4-Dinitrophenol	ND		8800	4100	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
2,4-Dinitrotoluene	ND		900	180	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
2,6-Dinitrotoluene	ND		900	110	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
2-Chloronaphthalene	ND		900	150	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
2-Chlorophenol	ND		1700	160	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
2-Methylnaphthalene	ND		900	180	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
2-Methylphenol	ND		900	110	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
2-Nitroaniline	ND		1700	130	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
2-Nitrophenol	ND		900	250	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
3,3'-Dichlorobenzidine	ND		1700	1100	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
3-Nitroaniline	ND		1700	250	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
4,6-Dinitro-2-methylphenol	ND		1700	900	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
4-Bromophenyl phenyl ether	ND		900	130	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
4-Chloro-3-methylphenol	ND		900	220	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
4-Chloroaniline	ND		900	220	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
4-Chlorophenyl phenyl ether	ND		900	110	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
4-Methylphenol	ND		1700	110	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
4-Nitroaniline	ND		1700	470	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
4-Nitrophenol	ND		1700	630	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Acenaphthene	ND		900	130	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Acenaphthylene	**380**	**J**	900	120	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Acetophenone	ND		900	120	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Anthracene	**270**	**J**	900	220	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Atrazine	ND		900	310	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Benzaldehyde	ND		900	710	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Benzo[a]anthracene	**2800**		900	90	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Benzo[a]pyrene	**3700**		900	130	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Benzo[b]fluoranthene	**5200**		900	140	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Benzo[g,h,i]perylene	**2200**		900	95	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Benzo[k]fluoranthene	**2400**		900	120	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Biphenyl	ND		900	130	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
bis (2-chloroisopropyl) ether	ND		900	180	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Bis(2-chloroethoxy)methane	ND		900	190	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Bis(2-chloroethyl)ether	ND		900	120	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Bis(2-ethylhexyl) phthalate	ND		900	310	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Butyl benzyl phthalate	ND		900	150	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Caprolactam	ND		900	270	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Carbazole	**130**	**J**	900	110	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Chrysene	**2500**		900	200	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Dibenz(a,h)anthracene	**670**	**J**	900	160	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Dibenzofuran	**130**	**J**	900	110	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Diethyl phthalate	ND		900	120	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Dimethyl phthalate	ND		900	110	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Di-n-butyl phthalate	ND		900	150	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Di-n-octyl phthalate	ND		900	110	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5

Client Sample ID: SB4 (0-0.5)
Date Collected: 09/15/22 09:00
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-10
Matrix: Solid
Percent Solids: 93.5

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	**3000**		900	95	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Fluorene	ND		900	110	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Hexachlorobenzene	ND		900	120	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Hexachlorobutadiene	ND		900	130	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Hexachlorocyclopentadiene	ND		900	120	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Hexachloroethane	ND		900	120	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Indeno[1,2,3-cd]pyrene	**3400**		900	110	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Isophorone	ND		900	190	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Naphthalene	ND		900	120	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Nitrobenzene	ND		900	100	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
N-Nitrosodi-n-propylamine	ND		900	150	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
N-Nitrosodiphenylamine	ND		900	730	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Pentachlorophenol	ND		1700	900	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Phenanthrene	**1200**		900	130	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Phenol	ND		900	140	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5
Pyrene	**2100**		900	110	ug/Kg	☼	09/19/22 08:19	09/21/22 19:59	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*110*		*54 - 120*	*09/19/22 08:19*	*09/21/22 19:59*	*5*
2-Fluorobiphenyl (Surr)	*102*		*60 - 120*	*09/19/22 08:19*	*09/21/22 19:59*	*5*
2-Fluorophenol (Surr)	*93*		*52 - 120*	*09/19/22 08:19*	*09/21/22 19:59*	*5*
Nitrobenzene-d5 (Surr)	*93*		*53 - 120*	*09/19/22 08:19*	*09/21/22 19:59*	*5*
Phenol-d5 (Surr)	*96*		*54 - 120*	*09/19/22 08:19*	*09/21/22 19:59*	*5*
p-Terphenyl-d14 (Surr)	*112*		*79 - 130*	*09/19/22 08:19*	*09/21/22 19:59*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**6350**		10.7	4.7	mg/Kg	☼	09/20/22 14:15	09/21/22 16:39	1
Antimony	**3.5**	**J**	16.1	0.43	mg/Kg	☼	09/20/22 14:15	09/21/22 16:39	1
Arsenic	**22.1**		2.1	0.43	mg/Kg	☼	09/20/22 14:15	09/21/22 16:39	1
Barium	**62.4**		0.54	0.12	mg/Kg	☼	09/20/22 14:15	09/21/22 16:39	1
Beryllium	**0.38**		0.21	0.030	mg/Kg	☼	09/20/22 14:15	09/21/22 16:39	1
Cadmium	**2.5**		0.21	0.032	mg/Kg	☼	09/20/22 14:15	09/21/22 16:39	1
Calcium	**5960**		53.7	3.5	mg/Kg	☼	09/20/22 14:15	09/21/22 16:39	1
Chromium	**13.8**		0.54	0.21	mg/Kg	☼	09/20/22 14:15	09/21/22 16:39	1
Cobalt	**8.2**		0.54	0.054	mg/Kg	☼	09/20/22 14:15	09/21/22 16:39	1
Copper	**43.0**		1.1	0.23	mg/Kg	☼	09/20/22 14:15	09/21/22 16:39	1
Iron	**34100**		10.7	3.8	mg/Kg	☼	09/20/22 14:15	09/21/22 16:39	1
Lead	**697**		1.1	0.26	mg/Kg	☼	09/20/22 14:15	09/21/22 16:39	1
Magnesium	**1550**	**B**	21.5	0.99	mg/Kg	☼	09/20/22 14:15	09/21/22 16:39	1
Manganese	**349**		0.21	0.034	mg/Kg	☼	09/20/22 14:15	09/21/22 16:39	1
Nickel	**17.7**		5.4	0.25	mg/Kg	☼	09/20/22 14:15	09/21/22 16:39	1
Potassium	**1470**		32.2	21.5	mg/Kg	☼	09/20/22 14:15	09/21/22 16:39	1
Selenium	**0.84**	**J**	4.3	0.43	mg/Kg	☼	09/20/22 14:15	09/21/22 16:39	1
Silver	ND		0.64	0.21	mg/Kg	☼	09/20/22 14:15	09/21/22 16:39	1
Sodium	**345**		150	14.0	mg/Kg	☼	09/20/22 14:15	09/21/22 16:39	1
Thallium	**0.68**	**J**	6.4	0.32	mg/Kg	☼	09/20/22 14:15	09/21/22 16:39	1
Vanadium	**18.4**		0.54	0.12	mg/Kg	☼	09/20/22 14:15	09/21/22 16:39	1
Zinc	**135**		2.1	0.69	mg/Kg	☼	09/20/22 14:15	09/21/22 16:39	1

Client Sample ID: SB4 (0-0.5)

Date Collected: 09/15/22 09:00
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-10

Matrix: Solid
Percent Solids: 93.5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12		0.021	0.0049	mg/Kg	☼	09/21/22 10:43	09/21/22 14:54	1

Client Sample ID: SB4 (0.5-1)

Date Collected: 09/15/22 09:05
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-11

Matrix: Solid
Percent Solids: 89.6

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.3	0.53	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
1,1,1-Trichloroethane	ND		5.3	0.39	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
1,1,2,2-Tetrachloroethane	ND		5.3	0.86	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.3	1.2	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
1,1,2-Trichloroethane	ND		5.3	0.69	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
1,1-Dichloroethane	ND		5.3	0.65	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
1,1-Dichloroethene	ND		5.3	0.65	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
1,2,3-Trimethylbenzene	ND		5.3	1.1	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
1,2,4-Trichlorobenzene	ND		5.3	0.32	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
1,2,4-Trimethylbenzene	ND		5.3	1.0	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
1,2-Dibromo-3-Chloropropane	ND		5.3	2.7	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
1,2-Dibromoethane	ND		5.3	0.68	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
1,2-Dichlorobenzene	ND		5.3	0.41	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
1,2-Dichloroethane	ND		5.3	0.27	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
1,2-Dichloropropane	ND		5.3	2.7	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
1,3,5-Trimethylbenzene	ND		5.3	0.34	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
1,3-Dichlorobenzene	ND		5.3	0.27	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
1,4-Dichlorobenzene	ND		5.3	0.74	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
2-Butanone (MEK)	ND		27	1.9	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
2-Hexanone	ND		27	2.7	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
4-Methyl-2-pentanone (MIBK)	ND		27	1.7	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
Acetone	ND		27	4.5	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
Benzene	ND		5.3	0.26	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
Bromodichloromethane	ND		5.3	0.71	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
Bromoform	ND		5.3	2.7	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
Bromomethane	ND		5.3	0.48	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
Carbon disulfide	ND		5.3	2.7	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
Carbon tetrachloride	ND		5.3	0.51	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
Chlorobenzene	ND		5.3	0.70	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
Chloroethane	ND		5.3	1.2	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
Chloroform	ND		5.3	0.33	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
Chloromethane	ND		5.3	0.32	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
cis-1,2-Dichloroethene	ND		5.3	0.68	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
cis-1,3-Dichloropropene	ND		5.3	0.76	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
Cyclohexane	ND		5.3	0.74	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
Dibromochloromethane	ND		5.3	0.68	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
Dichlorodifluoromethane	ND		5.3	0.44	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
Ethylbenzene	ND		5.3	0.37	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
Isopropylbenzene	ND		5.3	0.80	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
m,p-Xylene	ND		11	0.89	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
Methyl acetate	ND		27	3.2	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
Methyl tert-butyl ether	ND		5.3	0.52	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1

Client Sample ID: SB4 (0.5-1)

Date Collected: 09/15/22 09:05
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-11

Matrix: Solid
Percent Solids: 89.6

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylcyclohexane	ND		5.3	0.81	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
Methylene Chloride	ND		5.3	2.4	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
n-Butylbenzene	ND		5.3	0.46	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
N-Propylbenzene	ND		5.3	0.42	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
o-Xylene	ND		5.3	0.69	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
sec-Butylbenzene	ND		5.3	0.46	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
Styrene	ND		5.3	0.27	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
tert-Butylbenzene	ND		5.3	0.55	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
Tetrachloroethene	ND		5.3	0.71	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
Toluene	ND		5.3	0.40	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
trans-1,2-Dichloroethene	ND		5.3	0.55	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
trans-1,3-Dichloropropene	ND		5.3	2.3	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
Trichloroethene	ND		5.3	1.2	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
Trichlorofluoromethane	ND		5.3	0.50	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
Vinyl chloride	ND		5.3	0.65	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1
Xylenes, Total	ND		11	0.89	ug/Kg	☼	09/16/22 16:00	09/19/22 14:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*64 - 126*	*09/16/22 16:00*	*09/19/22 14:59*	*1*
4-Bromofluorobenzene (Surr)	*83*		*72 - 126*	*09/16/22 16:00*	*09/19/22 14:59*	*1*
Dibromofluoromethane (Surr)	*99*		*60 - 140*	*09/16/22 16:00*	*09/19/22 14:59*	*1*
Toluene-d8 (Surr)	*119*		*71 - 125*	*09/16/22 16:00*	*09/19/22 14:59*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		940	250	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
2,4,6-Trichlorophenol	ND		940	190	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
2,4-Dichlorophenol	ND		940	99	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
2,4-Dimethylphenol	ND		940	230	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
2,4-Dinitrophenol	ND		9100	4300	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
2,4-Dinitrotoluene	ND		940	190	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
2,6-Dinitrotoluene	ND		940	110	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
2-Chloronaphthalene	ND		940	150	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
2-Chlorophenol	ND		1800	170	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
2-Methylnaphthalene	ND		940	190	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
2-Methylphenol	ND		940	110	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
2-Nitroaniline	ND		1800	140	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
2-Nitrophenol	ND		940	260	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
3,3'-Dichlorobenzidine	ND		1800	1100	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
3-Nitroaniline	ND		1800	260	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
4,6-Dinitro-2-methylphenol	ND		1800	940	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
4-Bromophenyl phenyl ether	ND		940	130	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
4-Chloro-3-methylphenol	ND		940	230	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
4-Chloroaniline	ND		940	230	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
4-Chlorophenyl phenyl ether	ND		940	120	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
4-Methylphenol	ND		1800	110	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
4-Nitroaniline	ND		1800	490	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
4-Nitrophenol	ND		1800	660	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Acenaphthene	ND		940	140	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Acenaphthylene	**230**	**J**	940	120	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5

Client Sample ID: SB4 (0.5-1)
Date Collected: 09/15/22 09:05
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-11
Matrix: Solid
Percent Solids: 89.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetophenone	ND		940	130	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Anthracene	ND		940	230	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Atrazine	ND		940	320	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Benzaldehyde	ND		940	740	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Benzo[a]anthracene	**1800**		940	94	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Benzo[a]pyrene	**2400**		940	140	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Benzo[b]fluoranthene	**3500**		940	150	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Benzo[g,h,i]perylene	**1400**		940	99	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Benzo[k]fluoranthene	**1400**		940	120	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Biphenyl	ND		940	140	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
bis (2-chloroisopropyl) ether	ND		940	190	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Bis(2-chloroethoxy)methane	ND		940	200	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Bis(2-chloroethyl)ether	ND		940	120	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Bis(2-ethylhexyl) phthalate	ND		940	320	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Butyl benzyl phthalate	ND		940	150	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Caprolactam	ND		940	280	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Carbazole	ND		940	110	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Chrysene	**1700**		940	210	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Dibenz(a,h)anthracene	**350**	**J**	940	170	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Dibenzofuran	ND		940	110	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Diethyl phthalate	ND		940	120	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Dimethyl phthalate	ND		940	110	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Di-n-butyl phthalate	ND		940	160	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Di-n-octyl phthalate	ND		940	110	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Fluoranthene	**2700**		940	99	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Fluorene	ND		940	110	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Hexachlorobenzene	ND		940	130	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Hexachlorobutadiene	ND		940	140	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Hexachlorocyclopentadiene	ND		940	130	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Hexachloroethane	ND		940	120	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Indeno[1,2,3-cd]pyrene	**2100**		940	120	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Isophorone	ND		940	200	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Naphthalene	ND		940	120	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Nitrobenzene	ND		940	100	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
N-Nitrosodi-n-propylamine	ND		940	160	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
N-Nitrosodiphenylamine	ND		940	760	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Pentachlorophenol	ND		1800	940	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Phenanthrene	**700**	**J**	940	140	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Phenol	ND		940	140	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5
Pyrene	**1800**		940	110	ug/Kg	☼	09/19/22 08:19	09/21/22 20:16	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*97*		*54 - 120*	*09/19/22 08:19*	*09/21/22 20:16*	*5*
2-Fluorobiphenyl (Surr)	*96*		*60 - 120*	*09/19/22 08:19*	*09/21/22 20:16*	*5*
2-Fluorophenol (Surr)	*89*		*52 - 120*	*09/19/22 08:19*	*09/21/22 20:16*	*5*
Nitrobenzene-d5 (Surr)	*97*		*53 - 120*	*09/19/22 08:19*	*09/21/22 20:16*	*5*
Phenol-d5 (Surr)	*87*		*54 - 120*	*09/19/22 08:19*	*09/21/22 20:16*	*5*
p-Terphenyl-d14 (Surr)	*107*		*79 - 130*	*09/19/22 08:19*	*09/21/22 20:16*	*5*

Client Sample ID: SB4 (0.5-1)

Date Collected: 09/15/22 09:05
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-11

Matrix: Solid
Percent Solids: 89.6

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	8880		10.7	4.7	mg/Kg	☼	09/20/22 14:15	09/21/22 16:42	1
Antimony	1.3	J	16.1	0.43	mg/Kg	☼	09/20/22 14:15	09/21/22 16:42	1
Arsenic	12.9		2.1	0.43	mg/Kg	☼	09/20/22 14:15	09/21/22 16:42	1
Barium	65.6		0.54	0.12	mg/Kg	☼	09/20/22 14:15	09/21/22 16:42	1
Beryllium	0.41		0.21	0.030	mg/Kg	☼	09/20/22 14:15	09/21/22 16:42	1
Cadmium	0.59		0.21	0.032	mg/Kg	☼	09/20/22 14:15	09/21/22 16:42	1
Calcium	2190		53.5	3.5	mg/Kg	☼	09/20/22 14:15	09/21/22 16:42	1
Chromium	12.7		0.54	0.21	mg/Kg	☼	09/20/22 14:15	09/21/22 16:42	1
Cobalt	7.0		0.54	0.054	mg/Kg	☼	09/20/22 14:15	09/21/22 16:42	1
Copper	22.3		1.1	0.22	mg/Kg	☼	09/20/22 14:15	09/21/22 16:42	1
Iron	27300		10.7	3.7	mg/Kg	☼	09/20/22 14:15	09/21/22 16:42	1
Lead	318		1.1	0.26	mg/Kg	☼	09/20/22 14:15	09/21/22 16:42	1
Magnesium	1830	B	21.4	0.99	mg/Kg	☼	09/20/22 14:15	09/21/22 16:42	1
Manganese	468		0.21	0.034	mg/Kg	☼	09/20/22 14:15	09/21/22 16:42	1
Nickel	15.0		5.4	0.25	mg/Kg	☼	09/20/22 14:15	09/21/22 16:42	1
Potassium	1760		32.1	21.4	mg/Kg	☼	09/20/22 14:15	09/21/22 16:42	1
Selenium	ND		4.3	0.43	mg/Kg	☼	09/20/22 14:15	09/21/22 16:42	1
Silver	ND		0.64	0.21	mg/Kg	☼	09/20/22 14:15	09/21/22 16:42	1
Sodium	245		150	13.9	mg/Kg	☼	09/20/22 14:15	09/21/22 16:42	1
Thallium	0.72	J	6.4	0.32	mg/Kg	☼	09/20/22 14:15	09/21/22 16:42	1
Vanadium	18.4		0.54	0.12	mg/Kg	☼	09/20/22 14:15	09/21/22 16:42	1
Zinc	66.4		2.1	0.68	mg/Kg	☼	09/20/22 14:15	09/21/22 16:42	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.19		0.022	0.0051	mg/Kg	☼	09/21/22 10:43	09/21/22 14:55	1

Client Sample ID: SB4 (1-2)

Date Collected: 09/15/22 09:10
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201712-1

Matrix: Solid
Percent Solids: 91.3

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.3	0.53	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
1,1,1-Trichloroethane	ND		5.3	0.38	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
1,1,2,2-Tetrachloroethane	ND		5.3	0.85	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.3	1.2	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
1,1,2-Trichloroethane	ND		5.3	0.68	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
1,1-Dichloroethane	ND		5.3	0.64	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
1,1-Dichloroethene	ND		5.3	0.64	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
1,2,3-Trimethylbenzene	ND		5.3	1.1	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
1,2,4-Trichlorobenzene	ND		5.3	0.32	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
1,2,4-Trimethylbenzene	ND		5.3	1.0	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
1,2-Dibromo-3-Chloropropane	ND		5.3	2.6	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
1,2-Dibromoethane	ND		5.3	0.67	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
1,2-Dichlorobenzene	ND		5.3	0.41	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
1,2-Dichloroethane	ND		5.3	0.26	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
1,2-Dichloropropane	ND		5.3	2.6	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
1,3,5-Trimethylbenzene	ND		5.3	0.34	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
1,3-Dichlorobenzene	ND		5.3	0.27	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Client Sample ID: SB4 (1-2)
Date Collected: 09/15/22 09:10
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201712-1
Matrix: Solid
Percent Solids: 91.3

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		5.3	0.74	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
2-Butanone (MEK)	ND		26	1.9	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
2-Hexanone	ND		26	2.6	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
4-Methyl-2-pentanone (MIBK)	ND		26	1.7	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
Acetone	ND		26	4.4	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
Benzene	ND		5.3	0.26	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
Bromodichloromethane	ND		5.3	0.70	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
Bromoform	ND		5.3	2.6	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
Bromomethane	ND		5.3	0.47	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
Carbon disulfide	ND		5.3	2.6	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
Carbon tetrachloride	ND		5.3	0.51	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
Chlorobenzene	ND		5.3	0.69	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
Chloroethane	ND		5.3	1.2	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
Chloroform	ND		5.3	0.32	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
Chloromethane	ND		5.3	0.32	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
cis-1,2-Dichloroethene	ND		5.3	0.67	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
cis-1,3-Dichloropropene	ND		5.3	0.76	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
Cyclohexane	ND		5.3	0.74	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
Dibromochloromethane	ND		5.3	0.67	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
Dichlorodifluoromethane	ND		5.3	0.43	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
Ethylbenzene	ND		5.3	0.36	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
Isopropylbenzene	ND		5.3	0.79	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
m,p-Xylene	ND		11	0.88	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
Methyl acetate	ND		26	3.2	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
Methyl tert-butyl ether	ND		5.3	0.52	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
Methylcyclohexane	ND		5.3	0.80	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
Methylene Chloride	ND		5.3	2.4	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
n-Butylbenzene	ND		5.3	0.46	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
N-Propylbenzene	ND		5.3	0.42	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
o-Xylene	ND		5.3	0.69	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
sec-Butylbenzene	ND		5.3	0.46	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
Styrene	ND		5.3	0.26	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
tert-Butylbenzene	ND		5.3	0.55	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
Tetrachloroethene	ND		5.3	0.70	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
Toluene	ND		5.3	0.40	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
trans-1,2-Dichloroethene	ND		5.3	0.54	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
trans-1,3-Dichloropropene	ND		5.3	2.3	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
Trichloroethene	ND		5.3	1.2	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
Trichlorofluoromethane	ND		5.3	0.50	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
Vinyl chloride	ND		5.3	0.64	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1
Xylenes, Total	ND		11	0.88	ug/Kg	☼	09/16/22 14:30	09/19/22 15:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*110*		*64 - 126*	*09/16/22 14:30*	*09/19/22 15:23*	*1*
4-Bromofluorobenzene (Surr)	*82*		*72 - 126*	*09/16/22 14:30*	*09/19/22 15:23*	*1*
Dibromofluoromethane (Surr)	*102*		*60 - 140*	*09/16/22 14:30*	*09/19/22 15:23*	*1*
Toluene-d8 (Surr)	*121*		*71 - 125*	*09/16/22 14:30*	*09/19/22 15:23*	*1*

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Client Sample ID: SB4 (1-2)
Date Collected: 09/15/22 09:10
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201712-1
Matrix: Solid
Percent Solids: 91.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		920	250	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
2,4,6-Trichlorophenol	ND		920	180	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
2,4-Dichlorophenol	ND		920	98	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
2,4-Dimethylphenol	ND		920	220	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
2,4-Dinitrophenol	ND		9000	4300	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
2,4-Dinitrotoluene	ND		920	190	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
2,6-Dinitrotoluene	ND		920	110	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
2-Chloronaphthalene	ND		920	150	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
2-Chlorophenol	ND		1800	170	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
2-Methylnaphthalene	ND		920	180	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
2-Methylphenol	ND		920	110	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
2-Nitroaniline	ND		1800	140	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
2-Nitrophenol	ND		920	260	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
3,3'-Dichlorobenzidine	ND		1800	1100	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
3-Nitroaniline	ND		1800	260	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
4,6-Dinitro-2-methylphenol	ND		1800	920	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
4-Bromophenyl phenyl ether	ND		920	130	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
4-Chloro-3-methylphenol	ND		920	230	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
4-Chloroaniline	ND		920	230	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
4-Chlorophenyl phenyl ether	ND		920	110	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
4-Methylphenol	ND		1800	110	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
4-Nitroaniline	ND		1800	480	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
4-Nitrophenol	ND		1800	650	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Acenaphthene	ND		920	140	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Acenaphthylene	**250**	**J**	920	120	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Acetophenone	ND		920	120	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Anthracene	ND		920	230	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Atrazine	ND		920	320	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Benzaldehyde	ND		920	730	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Benzo[a]anthracene	**2200**		920	92	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Benzo[a]pyrene	**3600**		920	140	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Benzo[b]fluoranthene	**4700**		920	150	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Benzo[g,h,i]perylene	**1800**		920	98	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Benzo[k]fluoranthene	**2000**		920	120	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Biphenyl	ND		920	140	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
bis (2-chloroisopropyl) ether	ND		920	180	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Bis(2-chloroethoxy)methane	ND		920	200	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Bis(2-chloroethyl)ether	ND		920	120	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Bis(2-ethylhexyl) phthalate	ND		920	310	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Butyl benzyl phthalate	ND		920	150	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Caprolactam	ND		920	280	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Carbazole	ND		920	110	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Chrysene	**2000**		920	210	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Dibenz(a,h)anthracene	**470**	**J**	920	160	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Dibenzofuran	ND		920	110	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Diethyl phthalate	**130**	**J B**	920	120	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Dimethyl phthalate	ND		920	110	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Di-n-butyl phthalate	ND		920	160	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Di-n-octyl phthalate	ND		920	110	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5

Client Sample ID: SB4 (1-2)

Date Collected: 09/15/22 09:10
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201712-1

Matrix: Solid
Percent Solids: 91.3

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	**2200**		920	98	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Fluorene	ND		920	110	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Hexachlorobenzene	ND		920	120	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Hexachlorobutadiene	ND		920	140	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Hexachlorocyclopentadiene	ND		920	120	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Hexachloroethane	ND		920	120	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Indeno[1,2,3-cd]pyrene	**2900**		920	110	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Isophorone	ND		920	200	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Naphthalene	ND		920	120	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Nitrobenzene	ND		920	100	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
N-Nitrosodi-n-propylamine	ND		920	160	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
N-Nitrosodiphenylamine	ND		920	750	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Pentachlorophenol	ND		1800	920	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Phenanthrene	**470**	**J**	920	140	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Phenol	ND		920	140	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5
Pyrene	**2800**		920	110	ug/Kg	☼	09/19/22 08:19	09/21/22 20:33	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*113*		*54 - 120*	*09/19/22 08:19*	*09/21/22 20:33*	*5*
2-Fluorobiphenyl (Surr)	*110*		*60 - 120*	*09/19/22 08:19*	*09/21/22 20:33*	*5*
2-Fluorophenol (Surr)	*93*		*52 - 120*	*09/19/22 08:19*	*09/21/22 20:33*	*5*
Nitrobenzene-d5 (Surr)	*98*		*53 - 120*	*09/19/22 08:19*	*09/21/22 20:33*	*5*
Phenol-d5 (Surr)	*97*		*54 - 120*	*09/19/22 08:19*	*09/21/22 20:33*	*5*
p-Terphenyl-d14 (Surr)	*134*	*S1+*	*79 - 130*	*09/19/22 08:19*	*09/21/22 20:33*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8180**		11.1	4.9	mg/Kg	☼	09/20/22 14:15	09/21/22 16:46	1
Antimony	**4.2**	**J**	16.7	0.45	mg/Kg	☼	09/20/22 14:15	09/21/22 16:46	1
Arsenic	**21.7**		2.2	0.45	mg/Kg	☼	09/20/22 14:15	09/21/22 16:46	1
Barium	**172**		0.56	0.12	mg/Kg	☼	09/20/22 14:15	09/21/22 16:46	1
Beryllium	**0.42**		0.22	0.031	mg/Kg	☼	09/20/22 14:15	09/21/22 16:46	1
Cadmium	**4.3**		0.22	0.033	mg/Kg	☼	09/20/22 14:15	09/21/22 16:46	1
Calcium	**10400**		55.6	3.7	mg/Kg	☼	09/20/22 14:15	09/21/22 16:46	1
Chromium	**18.6**		0.56	0.22	mg/Kg	☼	09/20/22 14:15	09/21/22 16:46	1
Cobalt	**4.6**		0.56	0.056	mg/Kg	☼	09/20/22 14:15	09/21/22 16:46	1
Copper	**70.6**		1.1	0.23	mg/Kg	☼	09/20/22 14:15	09/21/22 16:46	1
Iron	**21700**		11.1	3.9	mg/Kg	☼	09/20/22 14:15	09/21/22 16:46	1
Lead	**9670**		1.1	0.27	mg/Kg	☼	09/20/22 14:15	09/21/22 16:46	1
Magnesium	**1900**	**B**	22.3	1.0	mg/Kg	☼	09/20/22 14:15	09/21/22 16:46	1
Manganese	**301**		0.22	0.036	mg/Kg	☼	09/20/22 14:15	09/21/22 16:46	1
Nickel	**13.6**		5.6	0.26	mg/Kg	☼	09/20/22 14:15	09/21/22 16:46	1
Potassium	**1420**		33.4	22.3	mg/Kg	☼	09/20/22 14:15	09/21/22 16:46	1
Selenium	ND		4.5	0.45	mg/Kg	☼	09/20/22 14:15	09/21/22 16:46	1
Silver	**0.28**	**J**	0.67	0.22	mg/Kg	☼	09/20/22 14:15	09/21/22 16:46	1
Sodium	**491**		156	14.5	mg/Kg	☼	09/20/22 14:15	09/21/22 16:46	1
Thallium	**1.1**	**J**	6.7	0.33	mg/Kg	☼	09/20/22 14:15	09/21/22 16:46	1
Vanadium	**17.1**		0.56	0.12	mg/Kg	☼	09/20/22 14:15	09/21/22 16:46	1
Zinc	**223**		2.2	0.71	mg/Kg	☼	09/20/22 14:15	09/21/22 16:46	1

Client Sample Results

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Client Sample ID: SB4 (1-2)
Date Collected: 09/15/22 09:10
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201712-1
Matrix: Solid
Percent Solids: 91.3

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.79		0.021	0.0048	mg/Kg	☼	09/21/22 10:43	09/21/22 14:57	1

Surrogate Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(64-126)	(72-126)	(60-140)	(71-125)
480-201707-1	SB2 (0-0.5)	110	69 S1-	106	137 S1+
480-201707-2	SB2 (0.5-1)	104	79	97	123
480-201707-3	SB2 (1-2)	115	86	108	114
480-201707-5	FDUP_091422	111	80	101	122
480-201707-6	SB2 (13.5-15.5)	107	94	98	106
480-201707-10	SB4 (0-0.5)	108	83	101	117
480-201707-11	SB4 (0.5-1)	105	83	99	119
480-201712-1	SB4 (1-2)	110	82	102	121
LCS 480-641842/1-A	Lab Control Sample	102	95	98	108
LCS 480-642124/1-A	Lab Control Sample	100	91	96	104
MB 480-641842/2-A	Method Blank	105	97	101	105
MB 480-642124/2-A	Method Blank	103	96	97	106

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-201707-4	FB_091422	92	98	92	85
480-201707-7	ERB1_091422	86	101	83	86
480-201707-8	ERB2_091422	96	101	92	86
480-201707-9	FB_091522	86	101	88	86
LCS 480-641871/6	Lab Control Sample	90	101	92	87
MB 480-641871/8	Method Blank	89	102	91	86

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(54-120)	(60-120)	(52-120)	(53-120)	(54-120)	(79-130)
480-201707-1	SB2 (0-0.5)	74	69	62	62	62	76 S1-
480-201707-2	SB2 (0.5-1)	111	97	83	91	86	108
480-201707-3	SB2 (1-2)	108	105	89	100	91	113
480-201707-5	FDUP_091422	134 S1+	121 S1+	110	116	112	134 S1+
480-201707-6	SB2 (13.5-15.5)	126 S1+	106	100	106	100	118
480-201707-10	SB4 (0-0.5)	110	102	93	93	96	112
480-201707-11	SB4 (0.5-1)	97	96	89	97	87	107

Surrogate Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(54-120)	(60-120)	(52-120)	(53-120)	(54-120)	(79-130)
480-201712-1	SB4 (1-2)	113	110	93	98	97	134 S1+
LCS 480-641854/2-A	Lab Control Sample	85	74	64	68	70	81
MB 480-641854/1-A	Method Blank	63	66	57	63	60	79

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(41-120)	(48-120)	(35-120)	(46-120)	(22-120)	(60-148)
480-201707-4	FB_091422	80	89	56	69	41	99
480-201707-4 - RE	FB_091422	82	99	64	77	47	97
480-201707-7	ERB1_091422	71	84	54	65	41	97
480-201707-7 - RE	ERB1_091422	81	97	63	80	48	107
480-201707-8	ERB2_091422	84	99	62	75	48	108
480-201707-8 - RE	ERB2_091422	74	93	58	76	43	104
480-201707-9	FB_091522	71	85	53	65	40	108
480-201707-9 - RE	FB_091522	69	85	56	68	42	107
LCS 480-641992/2-A	Lab Control Sample	112	92	55	74	47	108
LCS 480-642659/2-A	Lab Control Sample	105	90	61	78	50	94
LCSD 480-641992/3-A	Lab Control Sample Dup	97	89	60	75	48	92
MB 480-641992/1-A	Method Blank	76	93	60	72	44	99
MB 480-642659/1-A	Method Blank	71	94	62	76	44	100

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Isotope Dilution Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	DXE (15-110)
480-201707-4	FB_091422	45
480-201707-7	ERB1_091422	51
480-201707-8	ERB2_091422	52
LCS 480-641960/2-A	Lab Control Sample	46
MB 480-641960/1-A	Method Blank	40

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 537 IDA - EPA 537 Isotope Dilution

Matrix: Solid **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFHxS (50-150)	C4PFHA (50-150)	PFOA (50-150)	PFOS (50-150)	PFNA (50-150)	PFBA (50-150)	PFHxA (50-150)	PFDA (50-150)
480-201707-3	SB2 (1-2)	83	87	95	83	80	85	83	86
480-201707-5	FDUP_091422	86	92	92	81	88	94	93	88
LCS 200-183718/2-A	Lab Control Sample	85	86	87	80	83	85	87	84
MB 200-183718/1-A	Method Blank	84	87	88	79	84	85	93	87

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFUnA (50-150)	PFDoA (50-150)	PFOSA (50-150)	PFPeA (50-150)	PFTDA (50-150)	d3NMFOS (50-150)	d5NEFOS (50-150)	M262FTS (50-150)
480-201707-3	SB2 (1-2)	80	84	67	90	85	85	91	111
480-201707-5	FDUP_091422	77	88	74	94	85	85	88	102
LCS 200-183718/2-A	Lab Control Sample	77	73	70	87	73	86	84	95
MB 200-183718/1-A	Method Blank	76	77	64	83	80	84	79	92

		Percent Isotope Dilution Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	M282FTS (50-150)	C3PFBS (50-150)
480-201707-3	SB2 (1-2)	114	87
480-201707-5	FDUP_091422	98	91
LCS 200-183718/2-A	Lab Control Sample	91	86
MB 200-183718/1-A	Method Blank	88	82

Surrogate Legend

PFHxS = 18O2 PFHxS
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFOS = 13C4 PFOS
PFNA = 13C5 PFNA
PFBA = 13C4 PFBA
PFHxA = 13C2 PFHxA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFOSA = 13C8 FOSA
PFPeA = 13C5 PFPeA
PFTDA = 13C2 PFTeDA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA

M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
C3PFBS = 13C3 PFBS

Method: 537 IDA - EPA 537 Isotope Dilution

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFHxS (50-150)	C4PFHA (50-150)	PFOA (50-150)	PFOS (50-150)	PFNA (50-150)	PFBA (50-150)	PFHxA (50-150)	PFDA (50-150)
480-201707-4	FB_091422	88	93	98	89	93	85	91	96
480-201707-7	ERB1_091422	98	103	102	91	98	96	102	91
480-201707-8	ERB2_091422	94	101	101	94	98	95	100	100
LCS 200-183671/2-A	Lab Control Sample	98	99	101	97	98	96	100	99
LCSD 200-183671/3-A	Lab Control Sample Dup	88	94	100	95	96	92	96	93
MB 200-183671/1-A	Method Blank	96	101	103	94	100	90	101	98

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFUnA (50-150)	PFDoA (50-150)	PFOSA (50-150)	PFPeA (50-150)	PFTDA (50-150)	d3NMFOS (50-150)	d5NEFOS (50-150)	M262FTS (50-150)
480-201707-4	FB_091422	88	88	82	88	88	93	85	89
480-201707-7	ERB1_091422	97	87	78	97	84	83	87	99
480-201707-8	ERB2_091422	104	109	88	100	88	95	95	105
LCS 200-183671/2-A	Lab Control Sample	94	86	78	93	87	91	93	102
LCSD 200-183671/3-A	Lab Control Sample Dup	89	85	73	93	80	96	85	95
MB 200-183671/1-A	Method Blank	99	92	84	96	94	93	95	96

		Percent Isotope Dilution Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	M282FTS (50-150)	C3PFBS (50-150)
480-201707-4	FB_091422	95	84
480-201707-7	ERB1_091422	98	94
480-201707-8	ERB2_091422	101	92
LCS 200-183671/2-A	Lab Control Sample	101	96
LCSD 200-183671/3-A	Lab Control Sample Dup	95	91
MB 200-183671/1-A	Method Blank	104	91

Surrogate Legend

PFHxS = 18O2 PFHxS
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFOS = 13C4 PFOS
PFNA = 13C5 PFNA
PFBA = 13C4 PFBA
PFHxA = 13C2 PFHxA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFOSA = 13C8 FOSA
PFPeA = 13C5 PFPeA
PFTDA = 13C2 PFTeDA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
C3PFBS = 13C3 PFBS

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-641842/2-A
Matrix: Solid
Analysis Batch: 641850

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641842

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.50	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
1,2,3-Trimethylbenzene	ND		5.0	1.0	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
2-Hexanone	ND		25	2.5	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
Acetone	ND		25	4.2	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
Benzene	ND		5.0	0.25	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
Bromoform	ND		5.0	2.5	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
Bromomethane	ND		5.0	0.45	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
Chloroethane	ND		5.0	1.1	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
Chloroform	0.442	J	5.0	0.31	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
Chloromethane	ND		5.0	0.30	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
Cyclohexane	ND		5.0	0.70	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
m,p-Xylene	ND		10	0.84	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
Methyl acetate	ND		25	3.0	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
o-Xylene	ND		5.0	0.65	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		09/18/22 19:38	09/19/22 10:15	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-641842/2-A
Matrix: Solid
Analysis Batch: 641850

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641842

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		5.0	0.25	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
Toluene	ND		5.0	0.38	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
Trichloroethene	ND		5.0	1.1	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		09/18/22 19:38	09/19/22 10:15	1
Xylenes, Total	ND		10	0.84	ug/Kg		09/18/22 19:38	09/19/22 10:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*64 - 126*	*09/18/22 19:38*	*09/19/22 10:15*	*1*
4-Bromofluorobenzene (Surr)	*97*		*72 - 126*	*09/18/22 19:38*	*09/19/22 10:15*	*1*
Dibromofluoromethane (Surr)	*101*		*60 - 140*	*09/18/22 19:38*	*09/19/22 10:15*	*1*
Toluene-d8 (Surr)	*105*		*71 - 125*	*09/18/22 19:38*	*09/19/22 10:15*	*1*

Lab Sample ID: LCS 480-641842/1-A
Matrix: Solid
Analysis Batch: 641850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641842

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	46.7		ug/Kg		93	74 - 127
1,1,1-Trichloroethane	50.0	43.9		ug/Kg		88	77 - 121
1,1,2,2-Tetrachloroethane	50.0	50.1		ug/Kg		100	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	46.2		ug/Kg		92	60 - 140
1,1,2-Trichloroethane	50.0	47.8		ug/Kg		96	78 - 122
1,1-Dichloroethane	50.0	47.1		ug/Kg		94	73 - 126
1,1-Dichloroethene	50.0	44.5		ug/Kg		89	59 - 125
1,2,4-Trichlorobenzene	50.0	47.6		ug/Kg		95	64 - 120
1,2,4-Trimethylbenzene	50.0	50.7		ug/Kg		101	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	48.2		ug/Kg		96	63 - 124
1,2-Dibromoethane	50.0	45.2		ug/Kg		90	78 - 120
1,2-Dichlorobenzene	50.0	48.0		ug/Kg		96	75 - 120
1,2-Dichloroethane	50.0	45.0		ug/Kg		90	77 - 122
1,2-Dichloropropane	50.0	46.5		ug/Kg		93	75 - 124
1,3,5-Trimethylbenzene	50.0	50.6		ug/Kg		101	74 - 120
1,3-Dichlorobenzene	50.0	49.0		ug/Kg		98	74 - 120
1,4-Dichlorobenzene	50.0	48.2		ug/Kg		96	73 - 120
2-Butanone (MEK)	250	248		ug/Kg		99	70 - 134
2-Hexanone	250	258		ug/Kg		103	59 - 130
4-Methyl-2-pentanone (MIBK)	250	255		ug/Kg		102	65 - 133
Acetone	250	249		ug/Kg		100	61 - 137
Benzene	50.0	46.0		ug/Kg		92	79 - 127
Bromodichloromethane	50.0	45.9		ug/Kg		92	80 - 122
Bromoform	50.0	46.1		ug/Kg		92	68 - 126
Bromomethane	50.0	48.1		ug/Kg		96	37 - 149
Carbon disulfide	50.0	42.9		ug/Kg		86	64 - 131

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-641842/1-A
Matrix: Solid
Analysis Batch: 641850

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641842

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon tetrachloride	50.0	44.6		ug/Kg		89	75 - 135
Chlorobenzene	50.0	46.1		ug/Kg		92	76 - 124
Chloroethane	50.0	50.4		ug/Kg		101	69 - 135
Chloroform	50.0	44.1		ug/Kg		88	80 - 120
Chloromethane	50.0	50.2		ug/Kg		100	63 - 127
cis-1,2-Dichloroethene	50.0	45.6		ug/Kg		91	81 - 120
cis-1,3-Dichloropropene	50.0	44.7		ug/Kg		89	80 - 120
Cyclohexane	50.0	48.5		ug/Kg		97	65 - 120
Dibromochloromethane	50.0	47.0		ug/Kg		94	76 - 125
Dichlorodifluoromethane	50.0	43.3		ug/Kg		87	57 - 142
Ethylbenzene	50.0	47.4		ug/Kg		95	80 - 120
Isopropylbenzene	50.0	51.3		ug/Kg		103	72 - 120
m,p-Xylene	50.0	45.8		ug/Kg		92	70 - 130
Methyl acetate	100	97.0		ug/Kg		97	55 - 136
Methyl tert-butyl ether	50.0	45.2		ug/Kg		90	63 - 125
Methylcyclohexane	50.0	45.8		ug/Kg		92	60 - 140
Methylene Chloride	50.0	48.0		ug/Kg		96	61 - 127
n-Butylbenzene	50.0	51.2		ug/Kg		102	70 - 120
N-Propylbenzene	50.0	50.5		ug/Kg		101	70 - 130
o-Xylene	50.0	46.4		ug/Kg		93	70 - 130
sec-Butylbenzene	50.0	51.0		ug/Kg		102	74 - 120
Styrene	50.0	45.7		ug/Kg		91	80 - 120
tert-Butylbenzene	50.0	50.1		ug/Kg		100	73 - 120
Tetrachloroethene	50.0	45.1		ug/Kg		90	74 - 122
Toluene	50.0	47.0		ug/Kg		94	74 - 128
trans-1,2-Dichloroethene	50.0	44.9		ug/Kg		90	78 - 126
trans-1,3-Dichloropropene	50.0	46.1		ug/Kg		92	73 - 123
Trichloroethene	50.0	45.1		ug/Kg		90	77 - 129
Trichlorofluoromethane	50.0	47.5		ug/Kg		95	65 - 146
Vinyl chloride	50.0	48.4		ug/Kg		97	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*64 - 126*
4-Bromofluorobenzene (Surr)	*95*		*72 - 126*
Dibromofluoromethane (Surr)	*98*		*60 - 140*
Toluene-d8 (Surr)	*108*		*71 - 125*

Lab Sample ID: MB 480-641871/8
Matrix: Water
Analysis Batch: 641871

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			09/19/22 12:24	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			09/19/22 12:24	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			09/19/22 12:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			09/19/22 12:24	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			09/19/22 12:24	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			09/19/22 12:24	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-641871/8
Matrix: Water
Analysis Batch: 641871

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.0	0.29	ug/L			09/19/22 12:24	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			09/19/22 12:24	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			09/19/22 12:24	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			09/19/22 12:24	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			09/19/22 12:24	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			09/19/22 12:24	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			09/19/22 12:24	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			09/19/22 12:24	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			09/19/22 12:24	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			09/19/22 12:24	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			09/19/22 12:24	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			09/19/22 12:24	1
2-Butanone (MEK)	ND		10	1.3	ug/L			09/19/22 12:24	1
2-Hexanone	ND		5.0	1.2	ug/L			09/19/22 12:24	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			09/19/22 12:24	1
Acetone	ND		10	3.0	ug/L			09/19/22 12:24	1
Benzene	ND		1.0	0.41	ug/L			09/19/22 12:24	1
Bromodichloromethane	ND		1.0	0.39	ug/L			09/19/22 12:24	1
Bromoform	ND		1.0	0.26	ug/L			09/19/22 12:24	1
Bromomethane	ND		1.0	0.69	ug/L			09/19/22 12:24	1
Carbon disulfide	ND		1.0	0.19	ug/L			09/19/22 12:24	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			09/19/22 12:24	1
Chlorobenzene	ND		1.0	0.75	ug/L			09/19/22 12:24	1
Chloroethane	ND		1.0	0.32	ug/L			09/19/22 12:24	1
Chloroform	ND		1.0	0.34	ug/L			09/19/22 12:24	1
Chloromethane	ND		1.0	0.35	ug/L			09/19/22 12:24	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			09/19/22 12:24	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			09/19/22 12:24	1
Cyclohexane	ND		1.0	0.18	ug/L			09/19/22 12:24	1
Dibromochloromethane	ND		1.0	0.32	ug/L			09/19/22 12:24	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			09/19/22 12:24	1
Ethylbenzene	ND		1.0	0.74	ug/L			09/19/22 12:24	1
Isopropylbenzene	ND		1.0	0.79	ug/L			09/19/22 12:24	1
m,p-Xylene	ND		2.0	0.66	ug/L			09/19/22 12:24	1
Methyl acetate	ND		2.5	1.3	ug/L			09/19/22 12:24	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			09/19/22 12:24	1
Methylcyclohexane	ND		1.0	0.16	ug/L			09/19/22 12:24	1
Methylene Chloride	ND		1.0	0.44	ug/L			09/19/22 12:24	1
n-Butylbenzene	ND		1.0	0.64	ug/L			09/19/22 12:24	1
N-Propylbenzene	ND		1.0	0.69	ug/L			09/19/22 12:24	1
o-Xylene	ND		1.0	0.76	ug/L			09/19/22 12:24	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			09/19/22 12:24	1
Styrene	ND		1.0	0.73	ug/L			09/19/22 12:24	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			09/19/22 12:24	1
Tetrachloroethene	ND		1.0	0.36	ug/L			09/19/22 12:24	1
Toluene	ND		1.0	0.51	ug/L			09/19/22 12:24	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			09/19/22 12:24	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			09/19/22 12:24	1
Trichloroethene	ND		1.0	0.46	ug/L			09/19/22 12:24	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-641871/8
Matrix: Water
Analysis Batch: 641871

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		1.0	0.88	ug/L			09/19/22 12:24	1
Vinyl chloride	ND		1.0	0.90	ug/L			09/19/22 12:24	1
Xylenes, Total	ND		2.0	0.66	ug/L			09/19/22 12:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*77 - 120*		*09/19/22 12:24*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*09/19/22 12:24*	*1*
Dibromofluoromethane (Surr)	*91*		*75 - 123*		*09/19/22 12:24*	*1*
Toluene-d8 (Surr)	*86*		*80 - 120*		*09/19/22 12:24*	*1*

Lab Sample ID: LCS 480-641871/6
Matrix: Water
Analysis Batch: 641871

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	25.0	27.3		ug/L		109	80 - 120
1,1,1-Trichloroethane	25.0	27.3		ug/L		109	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.6		ug/L		94	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.6		ug/L		110	61 - 148
1,1,2-Trichloroethane	25.0	24.1		ug/L		97	76 - 122
1,1-Dichloroethane	25.0	26.4		ug/L		106	77 - 120
1,1-Dichloroethene	25.0	27.1		ug/L		108	66 - 127
1,2,4-Trichlorobenzene	25.0	24.5		ug/L		98	79 - 122
1,2,4-Trimethylbenzene	25.0	25.2		ug/L		101	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	24.6		ug/L		98	56 - 134
1,2-Dibromoethane	25.0	23.1		ug/L		92	77 - 120
1,2-Dichlorobenzene	25.0	24.5		ug/L		98	80 - 124
1,2-Dichloroethane	25.0	24.4		ug/L		98	75 - 120
1,2-Dichloropropane	25.0	26.1		ug/L		105	76 - 120
1,3,5-Trimethylbenzene	25.0	24.8		ug/L		99	77 - 121
1,3-Dichlorobenzene	25.0	23.9		ug/L		96	77 - 120
1,4-Dichlorobenzene	25.0	23.5		ug/L		94	80 - 120
2-Butanone (MEK)	125	128		ug/L		102	57 - 140
2-Hexanone	125	122		ug/L		97	65 - 127
4-Methyl-2-pentanone (MIBK)	125	122		ug/L		97	71 - 125
Acetone	125	134		ug/L		107	56 - 142
Benzene	25.0	26.6		ug/L		106	71 - 124
Bromodichloromethane	25.0	25.7		ug/L		103	80 - 122
Bromoform	25.0	28.4		ug/L		114	61 - 132
Bromomethane	25.0	27.2		ug/L		109	55 - 144
Carbon disulfide	25.0	28.3		ug/L		113	59 - 134
Carbon tetrachloride	25.0	30.3		ug/L		121	72 - 134
Chlorobenzene	25.0	22.6		ug/L		90	80 - 120
Chloroethane	25.0	27.6		ug/L		110	69 - 136
Chloroform	25.0	24.5		ug/L		98	73 - 127
Chloromethane	25.0	28.1		ug/L		113	68 - 124
cis-1,2-Dichloroethene	25.0	24.6		ug/L		98	74 - 124
cis-1,3-Dichloropropene	25.0	26.5		ug/L		106	74 - 124

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-641871/6
Matrix: Water
Analysis Batch: 641871

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyclohexane	25.0	29.0		ug/L		116	59 - 135
Dibromochloromethane	25.0	26.9		ug/L		108	75 - 125
Dichlorodifluoromethane	25.0	27.7		ug/L		111	59 - 135
Ethylbenzene	25.0	23.4		ug/L		94	77 - 123
Isopropylbenzene	25.0	25.7		ug/L		103	77 - 122
m,p-Xylene	25.0	25.3		ug/L		101	76 - 122
Methyl acetate	50.0	47.5		ug/L		95	74 - 133
Methyl tert-butyl ether	25.0	24.8		ug/L		99	77 - 120
Methylcyclohexane	25.0	27.2		ug/L		109	68 - 134
Methylene Chloride	25.0	27.9		ug/L		111	75 - 124
n-Butylbenzene	25.0	23.9		ug/L		96	71 - 128
N-Propylbenzene	25.0	24.6		ug/L		98	75 - 127
o-Xylene	25.0	24.8		ug/L		99	76 - 122
sec-Butylbenzene	25.0	25.4		ug/L		101	74 - 127
Styrene	25.0	24.1		ug/L		97	80 - 120
tert-Butylbenzene	25.0	25.3		ug/L		101	75 - 123
Tetrachloroethene	25.0	24.1		ug/L		97	74 - 122
Toluene	25.0	23.3		ug/L		93	80 - 122
trans-1,2-Dichloroethene	25.0	25.9		ug/L		103	73 - 127
trans-1,3-Dichloropropene	25.0	24.6		ug/L		98	80 - 120
Trichloroethene	25.0	25.4		ug/L		102	74 - 123
Trichlorofluoromethane	25.0	29.4		ug/L		118	62 - 150
Vinyl chloride	25.0	30.0		ug/L		120	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*77 - 120*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*
Dibromofluoromethane (Surr)	*92*		*75 - 123*
Toluene-d8 (Surr)	*87*		*80 - 120*

Lab Sample ID: MB 480-642124/2-A
Matrix: Solid
Analysis Batch: 642126

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 642124

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.50	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
1,2,3-Trimethylbenzene	ND		5.0	1.0	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		09/20/22 19:32	09/20/22 22:45	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-642124/2-A
Matrix: Solid
Analysis Batch: 642126

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 642124

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
2-Hexanone	ND		25	2.5	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
Acetone	ND		25	4.2	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
Benzene	ND		5.0	0.25	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
Bromoform	ND		5.0	2.5	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
Bromomethane	ND		5.0	0.45	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
Chloroethane	ND		5.0	1.1	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
Chloroform	0.422	J	5.0	0.31	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
Chloromethane	ND		5.0	0.30	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
Cyclohexane	ND		5.0	0.70	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
m,p-Xylene	ND		10	0.84	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
Methyl acetate	ND		25	3.0	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
Methylene Chloride	2.53	J	5.0	2.3	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
o-Xylene	ND		5.0	0.65	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
Styrene	ND		5.0	0.25	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
Toluene	ND		5.0	0.38	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
Trichloroethene	ND		5.0	1.1	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		09/20/22 19:32	09/20/22 22:45	1
Xylenes, Total	ND		10	0.84	ug/Kg		09/20/22 19:32	09/20/22 22:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*64 - 126*	*09/20/22 19:32*	*09/20/22 22:45*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-642124/2-A
Matrix: Solid
Analysis Batch: 642126

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 642124

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*96*		*72 - 126*	*09/20/22 19:32*	*09/20/22 22:45*	*1*
Dibromofluoromethane (Surr)	*97*		*60 - 140*	*09/20/22 19:32*	*09/20/22 22:45*	*1*
Toluene-d8 (Surr)	*106*		*71 - 125*	*09/20/22 19:32*	*09/20/22 22:45*	*1*

Lab Sample ID: LCS 480-642124/1-A
Matrix: Solid
Analysis Batch: 642126

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 642124

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	43.6		ug/Kg		87	74 - 127
1,1,1-Trichloroethane	50.0	41.1		ug/Kg		82	77 - 121
1,1,2,2-Tetrachloroethane	50.0	47.6		ug/Kg		95	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	37.1		ug/Kg		74	60 - 140
1,1,2-Trichloroethane	50.0	44.8		ug/Kg		90	78 - 122
1,1-Dichloroethane	50.0	44.2		ug/Kg		88	73 - 126
1,1-Dichloroethene	50.0	40.3		ug/Kg		81	59 - 125
1,2,4-Trichlorobenzene	50.0	44.5		ug/Kg		89	64 - 120
1,2,4-Trimethylbenzene	50.0	47.7		ug/Kg		95	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	47.1		ug/Kg		94	63 - 124
1,2-Dibromoethane	50.0	42.6		ug/Kg		85	78 - 120
1,2-Dichlorobenzene	50.0	45.2		ug/Kg		90	75 - 120
1,2-Dichloroethane	50.0	43.0		ug/Kg		86	77 - 122
1,2-Dichloropropane	50.0	44.0		ug/Kg		88	75 - 124
1,3,5-Trimethylbenzene	50.0	47.4		ug/Kg		95	74 - 120
1,3-Dichlorobenzene	50.0	45.7		ug/Kg		91	74 - 120
1,4-Dichlorobenzene	50.0	45.3		ug/Kg		91	73 - 120
2-Butanone (MEK)	250	231		ug/Kg		92	70 - 134
2-Hexanone	250	241		ug/Kg		96	59 - 130
4-Methyl-2-pentanone (MIBK)	250	241		ug/Kg		97	65 - 133
Acetone	250	214		ug/Kg		86	61 - 137
Benzene	50.0	43.0		ug/Kg		86	79 - 127
Bromodichloromethane	50.0	43.0		ug/Kg		86	80 - 122
Bromoform	50.0	43.0		ug/Kg		86	68 - 126
Bromomethane	50.0	46.2		ug/Kg		92	37 - 149
Carbon disulfide	50.0	39.6		ug/Kg		79	64 - 131
Carbon tetrachloride	50.0	41.1		ug/Kg		82	75 - 135
Chlorobenzene	50.0	43.2		ug/Kg		86	76 - 124
Chloroethane	50.0	48.5		ug/Kg		97	69 - 135
Chloroform	50.0	41.5		ug/Kg		83	80 - 120
Chloromethane	50.0	46.3		ug/Kg		93	63 - 127
cis-1,2-Dichloroethene	50.0	42.5		ug/Kg		85	81 - 120
cis-1,3-Dichloropropene	50.0	42.9		ug/Kg		86	80 - 120
Cyclohexane	50.0	44.8		ug/Kg		90	65 - 120
Dibromochloromethane	50.0	44.3		ug/Kg		89	76 - 125
Dichlorodifluoromethane	50.0	38.9		ug/Kg		78	57 - 142
Ethylbenzene	50.0	43.8		ug/Kg		88	80 - 120
Isopropylbenzene	50.0	47.8		ug/Kg		96	72 - 120
m,p-Xylene	50.0	42.7		ug/Kg		85	70 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-642124/1-A
Matrix: Solid
Analysis Batch: 642126

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 642124

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methyl acetate	100	86.0		ug/Kg		86	55 - 136
Methyl tert-butyl ether	50.0	42.8		ug/Kg		86	63 - 125
Methylcyclohexane	50.0	42.2		ug/Kg		84	60 - 140
Methylene Chloride	50.0	46.3		ug/Kg		93	61 - 127
n-Butylbenzene	50.0	46.7		ug/Kg		93	70 - 120
N-Propylbenzene	50.0	47.6		ug/Kg		95	70 - 130
o-Xylene	50.0	43.1		ug/Kg		86	70 - 130
sec-Butylbenzene	50.0	47.5		ug/Kg		95	74 - 120
Styrene	50.0	42.7		ug/Kg		85	80 - 120
tert-Butylbenzene	50.0	47.5		ug/Kg		95	73 - 120
Tetrachloroethene	50.0	41.5		ug/Kg		83	74 - 122
Toluene	50.0	43.9		ug/Kg		88	74 - 128
trans-1,2-Dichloroethene	50.0	41.8		ug/Kg		84	78 - 126
trans-1,3-Dichloropropene	50.0	44.8		ug/Kg		90	73 - 123
Trichloroethene	50.0	41.9		ug/Kg		84	77 - 129
Trichlorofluoromethane	50.0	43.3		ug/Kg		87	65 - 146
Vinyl chloride	50.0	45.0		ug/Kg		90	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*64 - 126*
4-Bromofluorobenzene (Surr)	*91*		*72 - 126*
Dibromofluoromethane (Surr)	*96*		*60 - 140*
Toluene-d8 (Surr)	*104*		*71 - 125*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-641854/1-A
Matrix: Solid
Analysis Batch: 642351

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641854

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		170	46	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
2,4,6-Trichlorophenol	ND		170	34	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
2,4-Dimethylphenol	ND		170	41	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
2,4-Dinitrophenol	ND		1600	780	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
2,4-Dinitrotoluene	ND		170	35	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
2-Chloronaphthalene	ND		170	28	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
2-Chlorophenol	ND		330	31	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
2-Methylnaphthalene	ND		170	34	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
2-Methylphenol	ND		170	20	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
2-Nitroaniline	ND		330	25	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
2-Nitrophenol	ND		170	48	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
3,3'-Dichlorobenzidine	ND		330	200	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
3-Nitroaniline	ND		330	47	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
4,6-Dinitro-2-methylphenol	ND		330	170	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
4-Bromophenyl phenyl ether	ND		170	24	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
4-Chloro-3-methylphenol	ND		170	42	ug/Kg		09/19/22 08:19	09/22/22 14:09	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-641854/1-A
Matrix: Solid
Analysis Batch: 642351

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641854

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND		170	42	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
4-Chlorophenyl phenyl ether	ND		170	21	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
4-Methylphenol	ND		330	20	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
4-Nitroaniline	ND		330	88	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
4-Nitrophenol	ND		330	120	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Acenaphthene	ND		170	25	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Acenaphthylene	ND		170	22	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Acetophenone	ND		170	23	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Anthracene	ND		170	42	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Atrazine	ND		170	59	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Benzaldehyde	ND		170	130	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Benzo[a]anthracene	ND		170	17	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Benzo[a]pyrene	ND		170	25	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Biphenyl	ND		170	25	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
bis (2-chloroisopropyl) ether	ND		170	34	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Bis(2-chloroethoxy)methane	ND		170	36	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Bis(2-chloroethyl)ether	ND		170	22	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Bis(2-ethylhexyl) phthalate	ND		170	58	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Butyl benzyl phthalate	ND		170	28	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Caprolactam	ND		170	51	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Carbazole	ND		170	20	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Chrysene	ND		170	38	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Dibenz(a,h)anthracene	ND		170	30	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Dibenzofuran	ND		170	20	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Diethyl phthalate	186		170	22	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Dimethyl phthalate	ND		170	20	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Di-n-butyl phthalate	ND		170	29	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Di-n-octyl phthalate	ND		170	20	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Fluoranthene	ND		170	18	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Fluorene	ND		170	20	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Hexachlorobenzene	ND		170	23	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Hexachlorobutadiene	ND		170	25	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Hexachlorocyclopentadiene	ND		170	23	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Hexachloroethane	ND		170	22	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Isophorone	ND		170	36	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Naphthalene	ND		170	22	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Nitrobenzene	ND		170	19	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
N-Nitrosodi-n-propylamine	ND		170	29	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
N-Nitrosodiphenylamine	ND		170	140	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Pentachlorophenol	ND		330	170	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Phenanthrene	ND		170	25	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Phenol	ND		170	26	ug/Kg		09/19/22 08:19	09/22/22 14:09	1
Pyrene	ND		170	20	ug/Kg		09/19/22 08:19	09/22/22 14:09	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-641854/1-A
Matrix: Solid
Analysis Batch: 642351

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641854

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	63		54 - 120	09/19/22 08:19	09/22/22 14:09	1
2-Fluorobiphenyl (Surr)	66		60 - 120	09/19/22 08:19	09/22/22 14:09	1
2-Fluorophenol (Surr)	57		52 - 120	09/19/22 08:19	09/22/22 14:09	1
Nitrobenzene-d5 (Surr)	63		53 - 120	09/19/22 08:19	09/22/22 14:09	1
Phenol-d5 (Surr)	60		54 - 120	09/19/22 08:19	09/22/22 14:09	1
p-Terphenyl-d14 (Surr)	79		79 - 130	09/19/22 08:19	09/22/22 14:09	1

Lab Sample ID: LCS 480-641854/2-A
Matrix: Solid
Analysis Batch: 642351

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641854

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	1640	1300		ug/Kg		79	59 - 126
2,4,6-Trichlorophenol	1640	1330		ug/Kg		81	59 - 123
2,4-Dichlorophenol	1640	1240		ug/Kg		76	61 - 120
2,4-Dimethylphenol	1640	1260		ug/Kg		76	59 - 120
2,4-Dinitrophenol	3290	3060		ug/Kg		93	41 - 146
2,4-Dinitrotoluene	1640	1350		ug/Kg		82	63 - 120
2,6-Dinitrotoluene	1640	1300		ug/Kg		79	66 - 120
2-Chloronaphthalene	1640	1220		ug/Kg		74	57 - 120
2-Chlorophenol	1640	1110		ug/Kg		68	53 - 120
2-Methylnaphthalene	1640	1130		ug/Kg		69	59 - 120
2-Methylphenol	1640	1200		ug/Kg		73	54 - 120
2-Nitroaniline	1640	1250		ug/Kg		76	61 - 120
2-Nitrophenol	1640	1330		ug/Kg		81	56 - 120
3,3'-Dichlorobenzidine	3290	2560		ug/Kg		78	54 - 120
3-Nitroaniline	1640	1180		ug/Kg		72	48 - 120
4,6-Dinitro-2-methylphenol	3290	3090		ug/Kg		94	49 - 122
4-Bromophenyl phenyl ether	1640	1300		ug/Kg		79	58 - 120
4-Chloro-3-methylphenol	1640	1260		ug/Kg		77	61 - 120
4-Chloroaniline	1640	1050		ug/Kg		64	38 - 120
4-Chlorophenyl phenyl ether	1640	1250		ug/Kg		76	63 - 124
4-Methylphenol	1640	1190		ug/Kg		72	55 - 120
4-Nitroaniline	1640	1240		ug/Kg		76	56 - 120
4-Nitrophenol	3290	2630		ug/Kg		80	43 - 147
Acenaphthene	1640	1220		ug/Kg		74	62 - 120
Acenaphthylene	1640	1270		ug/Kg		77	58 - 121
Acetophenone	1640	1100		ug/Kg		67	54 - 120
Anthracene	1640	1280		ug/Kg		78	62 - 120
Atrazine	3290	2800		ug/Kg		85	60 - 127
Benzaldehyde	3290	1900	E	ug/Kg		58	10 - 150
Benzo[a]anthracene	1640	1330		ug/Kg		81	65 - 120
Benzo[a]pyrene	1640	1340		ug/Kg		81	64 - 120
Benzo[b]fluoranthene	1640	1320		ug/Kg		81	64 - 120
Benzo[g,h,i]perylene	1640	1350		ug/Kg		82	45 - 145
Benzo[k]fluoranthene	1640	1350		ug/Kg		82	65 - 120
Biphenyl	1640	1220		ug/Kg		74	59 - 120
bis (2-chloroisopropyl) ether	1640	969		ug/Kg		59	44 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-641854/2-A
Matrix: Solid
Analysis Batch: 642351

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641854

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bis(2-chloroethoxy)methane	1640	1130		ug/Kg		69	55 - 120
Bis(2-chloroethyl)ether	1640	1000		ug/Kg		61	45 - 120
Bis(2-ethylhexyl) phthalate	1640	1370		ug/Kg		83	61 - 133
Butyl benzyl phthalate	1640	1410		ug/Kg		86	61 - 129
Caprolactam	3290	2670		ug/Kg		81	47 - 120
Carbazole	1640	1280		ug/Kg		78	65 - 120
Chrysene	1640	1290		ug/Kg		78	64 - 120
Dibenz(a,h)anthracene	1640	1410		ug/Kg		86	54 - 132
Dibenzofuran	1640	1240		ug/Kg		75	63 - 120
Diethyl phthalate	1640	1520		ug/Kg		93	66 - 120
Dimethyl phthalate	1640	1260		ug/Kg		77	65 - 124
Di-n-butyl phthalate	1640	1390		ug/Kg		85	58 - 130
Di-n-octyl phthalate	1640	1410		ug/Kg		86	57 - 133
Fluoranthene	1640	1290		ug/Kg		79	62 - 120
Fluorene	1640	1260		ug/Kg		77	63 - 120
Hexachlorobenzene	1640	1350		ug/Kg		82	60 - 120
Hexachlorobutadiene	1640	1030		ug/Kg		63	45 - 120
Hexachlorocyclopentadiene	1640	993		ug/Kg		60	47 - 120
Hexachloroethane	1640	878		ug/Kg		53	41 - 120
Indeno[1,2,3-cd]pyrene	1640	1390		ug/Kg		85	56 - 134
Isophorone	1640	1180		ug/Kg		71	56 - 120
Naphthalene	1640	1120		ug/Kg		68	55 - 120
Nitrobenzene	1640	1140		ug/Kg		69	54 - 120
N-Nitrosodi-n-propylamine	1640	1130		ug/Kg		69	52 - 120
N-Nitrosodiphenylamine	1640	1280		ug/Kg		78	51 - 128
Pentachlorophenol	3290	2700		ug/Kg		82	51 - 120
Phenanthrene	1640	1280		ug/Kg		78	60 - 120
Phenol	1640	1180		ug/Kg		72	53 - 120
Pyrene	1640	1300		ug/Kg		79	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*85*		*54 - 120*
2-Fluorobiphenyl (Surr)	*74*		*60 - 120*
2-Fluorophenol (Surr)	*64*		*52 - 120*
Nitrobenzene-d5 (Surr)	*68*		*53 - 120*
Phenol-d5 (Surr)	*70*		*54 - 120*
p-Terphenyl-d14 (Surr)	*81*		*79 - 130*

Lab Sample ID: MB 480-641992/1-A
Matrix: Water
Analysis Batch: 642153

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641992

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		09/20/22 08:49	09/21/22 12:06	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		09/20/22 08:49	09/21/22 12:06	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		09/20/22 08:49	09/21/22 12:06	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		09/20/22 08:49	09/21/22 12:06	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		09/20/22 08:49	09/21/22 12:06	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-641992/1-A
Matrix: Water
Analysis Batch: 642153

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641992

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		09/20/22 08:49	09/21/22 12:06	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		09/20/22 08:49	09/21/22 12:06	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		09/20/22 08:49	09/21/22 12:06	1
2-Chlorophenol	ND		5.0	0.53	ug/L		09/20/22 08:49	09/21/22 12:06	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		09/20/22 08:49	09/21/22 12:06	1
2-Methylphenol	ND		5.0	0.40	ug/L		09/20/22 08:49	09/21/22 12:06	1
2-Nitroaniline	ND		10	0.42	ug/L		09/20/22 08:49	09/21/22 12:06	1
2-Nitrophenol	ND		5.0	0.48	ug/L		09/20/22 08:49	09/21/22 12:06	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		09/20/22 08:49	09/21/22 12:06	1
3-Nitroaniline	ND		10	0.48	ug/L		09/20/22 08:49	09/21/22 12:06	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		09/20/22 08:49	09/21/22 12:06	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		09/20/22 08:49	09/21/22 12:06	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		09/20/22 08:49	09/21/22 12:06	1
4-Chloroaniline	ND		5.0	0.59	ug/L		09/20/22 08:49	09/21/22 12:06	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		09/20/22 08:49	09/21/22 12:06	1
4-Methylphenol	ND		10	0.36	ug/L		09/20/22 08:49	09/21/22 12:06	1
4-Nitroaniline	ND		10	0.25	ug/L		09/20/22 08:49	09/21/22 12:06	1
4-Nitrophenol	ND		10	1.5	ug/L		09/20/22 08:49	09/21/22 12:06	1
Acenaphthene	ND		5.0	0.41	ug/L		09/20/22 08:49	09/21/22 12:06	1
Acenaphthylene	ND		5.0	0.38	ug/L		09/20/22 08:49	09/21/22 12:06	1
Acetophenone	ND		5.0	0.54	ug/L		09/20/22 08:49	09/21/22 12:06	1
Anthracene	ND		5.0	0.28	ug/L		09/20/22 08:49	09/21/22 12:06	1
Atrazine	ND		5.0	0.46	ug/L		09/20/22 08:49	09/21/22 12:06	1
Benzaldehyde	ND		5.0	0.27	ug/L		09/20/22 08:49	09/21/22 12:06	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		09/20/22 08:49	09/21/22 12:06	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		09/20/22 08:49	09/21/22 12:06	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		09/20/22 08:49	09/21/22 12:06	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		09/20/22 08:49	09/21/22 12:06	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		09/20/22 08:49	09/21/22 12:06	1
Biphenyl	ND		5.0	0.65	ug/L		09/20/22 08:49	09/21/22 12:06	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		09/20/22 08:49	09/21/22 12:06	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		09/20/22 08:49	09/21/22 12:06	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		09/20/22 08:49	09/21/22 12:06	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		09/20/22 08:49	09/21/22 12:06	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		09/20/22 08:49	09/21/22 12:06	1
Caprolactam	ND		5.0	2.2	ug/L		09/20/22 08:49	09/21/22 12:06	1
Carbazole	ND		5.0	0.30	ug/L		09/20/22 08:49	09/21/22 12:06	1
Chrysene	ND		5.0	0.33	ug/L		09/20/22 08:49	09/21/22 12:06	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		09/20/22 08:49	09/21/22 12:06	1
Dibenzofuran	ND		10	0.51	ug/L		09/20/22 08:49	09/21/22 12:06	1
Diethyl phthalate	16.5		5.0	0.22	ug/L		09/20/22 08:49	09/21/22 12:06	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		09/20/22 08:49	09/21/22 12:06	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		09/20/22 08:49	09/21/22 12:06	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		09/20/22 08:49	09/21/22 12:06	1
Fluoranthene	ND		5.0	0.40	ug/L		09/20/22 08:49	09/21/22 12:06	1
Fluorene	ND		5.0	0.36	ug/L		09/20/22 08:49	09/21/22 12:06	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		09/20/22 08:49	09/21/22 12:06	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		09/20/22 08:49	09/21/22 12:06	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		09/20/22 08:49	09/21/22 12:06	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-641992/1-A
Matrix: Water
Analysis Batch: 642153

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641992

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	ND		5.0	0.59	ug/L		09/20/22 08:49	09/21/22 12:06	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		09/20/22 08:49	09/21/22 12:06	1
Isophorone	ND		5.0	0.43	ug/L		09/20/22 08:49	09/21/22 12:06	1
Naphthalene	ND		5.0	0.76	ug/L		09/20/22 08:49	09/21/22 12:06	1
Nitrobenzene	ND		5.0	0.29	ug/L		09/20/22 08:49	09/21/22 12:06	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		09/20/22 08:49	09/21/22 12:06	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		09/20/22 08:49	09/21/22 12:06	1
Pentachlorophenol	ND		10	2.2	ug/L		09/20/22 08:49	09/21/22 12:06	1
Phenanthrene	ND		5.0	0.44	ug/L		09/20/22 08:49	09/21/22 12:06	1
Phenol	ND		5.0	0.39	ug/L		09/20/22 08:49	09/21/22 12:06	1
Pyrene	ND		5.0	0.34	ug/L		09/20/22 08:49	09/21/22 12:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*76*		*41 - 120*	*09/20/22 08:49*	*09/21/22 12:06*	*1*
2-Fluorobiphenyl (Surr)	*93*		*48 - 120*	*09/20/22 08:49*	*09/21/22 12:06*	*1*
2-Fluorophenol (Surr)	*60*		*35 - 120*	*09/20/22 08:49*	*09/21/22 12:06*	*1*
Nitrobenzene-d5 (Surr)	*72*		*46 - 120*	*09/20/22 08:49*	*09/21/22 12:06*	*1*
Phenol-d5 (Surr)	*44*		*22 - 120*	*09/20/22 08:49*	*09/21/22 12:06*	*1*
p-Terphenyl-d14 (Surr)	*99*		*60 - 148*	*09/20/22 08:49*	*09/21/22 12:06*	*1*

Lab Sample ID: LCS 480-641992/2-A
Matrix: Water
Analysis Batch: 642153

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641992

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	32.0	32.2		ug/L		101	65 - 126
2,4,6-Trichlorophenol	32.0	30.3		ug/L		95	64 - 120
2,4-Dichlorophenol	32.0	29.8		ug/L		93	63 - 120
2,4-Dimethylphenol	32.0	29.9		ug/L		93	47 - 120
2,4-Dinitrophenol	64.0	73.4		ug/L		115	31 - 137
2,4-Dinitrotoluene	32.0	37.4		ug/L		117	69 - 120
2,6-Dinitrotoluene	32.0	34.8		ug/L		109	68 - 120
2-Chloronaphthalene	32.0	29.1		ug/L		91	58 - 120
2-Chlorophenol	32.0	23.0		ug/L		72	48 - 120
2-Methylnaphthalene	32.0	26.4		ug/L		83	59 - 120
2-Methylphenol	32.0	24.8		ug/L		78	39 - 120
2-Nitroaniline	32.0	32.7		ug/L		102	54 - 127
2-Nitrophenol	32.0	29.8		ug/L		93	52 - 125
3,3'-Dichlorobenzidine	64.0	59.7		ug/L		93	49 - 135
3-Nitroaniline	32.0	29.3		ug/L		92	51 - 120
4,6-Dinitro-2-methylphenol	64.0	80.0		ug/L		125	46 - 136
4-Bromophenyl phenyl ether	32.0	34.9		ug/L		109	65 - 120
4-Chloro-3-methylphenol	32.0	31.4		ug/L		98	61 - 123
4-Chloroaniline	32.0	21.4		ug/L		67	30 - 120
4-Chlorophenyl phenyl ether	32.0	31.1		ug/L		97	62 - 120
4-Methylphenol	32.0	26.1		ug/L		82	29 - 131
4-Nitroaniline	32.0	34.3		ug/L		107	65 - 120
4-Nitrophenol	64.0	53.2		ug/L		83	45 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-641992/2-A
Matrix: Water
Analysis Batch: 642153

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641992

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	32.0	29.6		ug/L		93	60 - 120
Acenaphthylene	32.0	30.5		ug/L		95	63 - 120
Acetophenone	32.0	27.8		ug/L		87	45 - 120
Anthracene	32.0	36.1		ug/L		113	67 - 120
Atrazine	64.0	76.2		ug/L		119	71 - 130
Benzaldehyde	64.0	46.0		ug/L		72	10 - 140
Benzo[a]anthracene	32.0	33.9		ug/L		106	70 - 121
Benzo[a]pyrene	32.0	34.3		ug/L		107	60 - 123
Benzo[b]fluoranthene	32.0	35.6		ug/L		111	66 - 126
Benzo[g,h,i]perylene	32.0	34.2		ug/L		107	66 - 150
Benzo[k]fluoranthene	32.0	34.2		ug/L		107	65 - 124
Biphenyl	32.0	28.5		ug/L		89	59 - 120
bis (2-chloroisopropyl) ether	32.0	22.6		ug/L		71	21 - 136
Bis(2-chloroethoxy)methane	32.0	29.5		ug/L		92	50 - 128
Bis(2-chloroethyl)ether	32.0	27.4		ug/L		86	44 - 120
Bis(2-ethylhexyl) phthalate	32.0	33.4		ug/L		104	63 - 139
Butyl benzyl phthalate	32.0	34.3		ug/L		107	70 - 129
Caprolactam	64.0	25.7		ug/L		40	22 - 120
Carbazole	32.0	37.4		ug/L		117	66 - 123
Chrysene	32.0	34.1		ug/L		107	69 - 120
Dibenz(a,h)anthracene	32.0	34.9		ug/L		109	65 - 135
Dibenzofuran	32.0	30.5		ug/L		95	66 - 120
Diethyl phthalate	32.0	67.0	E *+	ug/L		210	59 - 127
Dimethyl phthalate	32.0	34.4		ug/L		108	68 - 120
Di-n-butyl phthalate	32.0	35.7		ug/L		111	69 - 131
Di-n-octyl phthalate	32.0	33.0		ug/L		103	63 - 140
Fluoranthene	32.0	35.7		ug/L		112	69 - 126
Fluorene	32.0	31.8		ug/L		99	66 - 120
Hexachlorobenzene	32.0	35.5		ug/L		111	61 - 120
Hexachlorobutadiene	32.0	20.8		ug/L		65	35 - 120
Hexachlorocyclopentadiene	32.0	21.6		ug/L		68	31 - 120
Hexachloroethane	32.0	18.4		ug/L		58	43 - 120
Indeno[1,2,3-cd]pyrene	32.0	34.3		ug/L		107	69 - 146
Isophorone	32.0	30.6		ug/L		96	55 - 120
Naphthalene	32.0	27.7		ug/L		87	57 - 120
Nitrobenzene	32.0	28.4		ug/L		89	53 - 123
N-Nitrosodi-n-propylamine	32.0	30.3		ug/L		95	32 - 140
N-Nitrosodiphenylamine	32.0	36.2		ug/L		113	61 - 120
Pentachlorophenol	64.0	77.2		ug/L		121	29 - 136
Phenanthrene	32.0	34.6		ug/L		108	68 - 120
Phenol	32.0	15.4		ug/L		48	17 - 120
Pyrene	32.0	34.6		ug/L		108	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*112*		*41 - 120*
2-Fluorobiphenyl (Surr)	*92*		*48 - 120*
2-Fluorophenol (Surr)	*55*		*35 - 120*
Nitrobenzene-d5 (Surr)	*74*		*46 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-641992/2-A
Matrix: Water
Analysis Batch: 642153

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641992

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Phenol-d5 (Surr)	*47*		*22 - 120*
p-Terphenyl-d14 (Surr)	*108*		*60 - 148*

Lab Sample ID: LCSD 480-641992/3-A
Matrix: Water
Analysis Batch: 642153

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 641992

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4,5-Trichlorophenol			32.0	29.7		ug/L		93	65 - 126	8	18
2,4,6-Trichlorophenol			32.0	27.9		ug/L		87	64 - 120	8	19
2,4-Dichlorophenol			32.0	29.6		ug/L		92	63 - 120	1	19
2,4-Dimethylphenol			32.0	28.9		ug/L		90	47 - 120	3	42
2,4-Dinitrophenol			64.0	66.7		ug/L		104	31 - 137	10	22
2,4-Dinitrotoluene			32.0	33.6		ug/L		105	69 - 120	11	20
2,6-Dinitrotoluene			32.0	31.4		ug/L		98	68 - 120	10	15
2-Chloronaphthalene			32.0	27.0		ug/L		84	58 - 120	8	21
2-Chlorophenol			32.0	24.4		ug/L		76	48 - 120	6	25
2-Methylnaphthalene			32.0	24.9		ug/L		78	59 - 120	6	21
2-Methylphenol			32.0	25.5		ug/L		80	39 - 120	3	27
2-Nitroaniline			32.0	30.3		ug/L		95	54 - 127	8	15
2-Nitrophenol			32.0	30.6		ug/L		95	52 - 125	2	18
3,3'-Dichlorobenzidine			64.0	53.2		ug/L		83	49 - 135	12	25
3-Nitroaniline			32.0	26.3		ug/L		82	51 - 120	11	19
4,6-Dinitro-2-methylphenol			64.0	71.1		ug/L		111	46 - 136	12	15
4-Bromophenyl phenyl ether			32.0	31.1		ug/L		97	65 - 120	11	15
4-Chloro-3-methylphenol			32.0	28.7		ug/L		90	61 - 123	9	27
4-Chloroaniline			32.0	21.9		ug/L		69	30 - 120	3	22
4-Chlorophenyl phenyl ether			32.0	28.0		ug/L		87	62 - 120	11	16
4-Methylphenol			32.0	27.1		ug/L		85	29 - 131	4	24
4-Nitroaniline			32.0	31.6		ug/L		99	65 - 120	8	24
4-Nitrophenol			64.0	45.3		ug/L		71	45 - 120	16	48
Acenaphthene			32.0	28.4		ug/L		89	60 - 120	4	24
Acenaphthylene			32.0	28.6		ug/L		89	63 - 120	6	18
Acetophenone			32.0	30.1		ug/L		94	45 - 120	8	20
Anthracene			32.0	31.0		ug/L		97	67 - 120	15	15
Atrazine			64.0	68.0		ug/L		106	71 - 130	11	20
Benzaldehyde			64.0	51.2		ug/L		80	10 - 140	11	20
Benzo[a]anthracene			32.0	30.5		ug/L		95	70 - 121	11	15
Benzo[a]pyrene			32.0	30.5		ug/L		95	60 - 123	12	15
Benzo[b]fluoranthene			32.0	31.7		ug/L		99	66 - 126	12	15
Benzo[g,h,i]perylene			32.0	31.5		ug/L		99	66 - 150	8	15
Benzo[k]fluoranthene			32.0	30.9		ug/L		97	65 - 124	10	22
Biphenyl			32.0	26.8		ug/L		84	59 - 120	6	20
bis (2-chloroisopropyl) ether			32.0	24.9		ug/L		78	21 - 136	10	24
Bis(2-chloroethoxy)methane			32.0	29.5		ug/L		92	50 - 128	0	17
Bis(2-chloroethyl)ether			32.0	30.6		ug/L		96	44 - 120	11	21
Bis(2-ethylhexyl) phthalate			32.0	29.2		ug/L		91	63 - 139	14	15
Butyl benzyl phthalate			32.0	31.3		ug/L		98	70 - 129	9	16

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-641992/3-A
Matrix: Water
Analysis Batch: 642153

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 641992

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Caprolactam			64.0	22.7		ug/L		35	22 - 120	12	20
Carbazole			32.0	33.5		ug/L		105	66 - 123	11	20
Chrysene			32.0	30.3		ug/L		95	69 - 120	12	15
Dibenz(a,h)anthracene			32.0	31.9		ug/L		100	65 - 135	9	15
Dibenzofuran			32.0	28.5		ug/L		89	66 - 120	7	15
Diethyl phthalate			32.0	31.5	*1	ug/L		98	59 - 127	72	15
Dimethyl phthalate			32.0	30.8		ug/L		96	68 - 120	11	15
Di-n-butyl phthalate			32.0	31.0		ug/L		97	69 - 131	14	15
Di-n-octyl phthalate			32.0	29.5		ug/L		92	63 - 140	11	16
Fluoranthene			32.0	32.1		ug/L		100	69 - 126	11	15
Fluorene			32.0	29.2		ug/L		91	66 - 120	9	15
Hexachlorobenzene			32.0	31.1		ug/L		97	61 - 120	13	15
Hexachlorobutadiene			32.0	20.8		ug/L		65	35 - 120	0	44
Hexachlorocyclopentadiene			32.0	20.8		ug/L		65	31 - 120	4	49
Hexachloroethane			32.0	20.7		ug/L		65	43 - 120	12	46
Indeno[1,2,3-cd]pyrene			32.0	31.8		ug/L		99	69 - 146	8	15
Isophorone			32.0	29.6		ug/L		92	55 - 120	4	17
Naphthalene			32.0	26.3		ug/L		82	57 - 120	5	29
Nitrobenzene			32.0	27.6		ug/L		86	53 - 123	3	24
N-Nitrosodi-n-propylamine			32.0	30.8		ug/L		96	32 - 140	1	31
N-Nitrosodiphenylamine			32.0	31.3		ug/L		98	61 - 120	15	15
Pentachlorophenol			64.0	62.3		ug/L		97	29 - 136	21	37
Phenanthrene			32.0	30.9		ug/L		97	68 - 120	11	15
Phenol			32.0	16.3		ug/L		51	17 - 120	5	34
Pyrene			32.0	30.1		ug/L		94	70 - 125	14	19

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*97*		*41 - 120*
2-Fluorobiphenyl (Surr)	*89*		*48 - 120*
2-Fluorophenol (Surr)	*60*		*35 - 120*
Nitrobenzene-d5 (Surr)	*75*		*46 - 120*
Phenol-d5 (Surr)	*48*		*22 - 120*
p-Terphenyl-d14 (Surr)	*92*		*60 - 148*

Lab Sample ID: MB 480-642659/1-A
Matrix: Water
Analysis Batch: 642720

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 642659

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		09/24/22 09:45	09/26/22 15:11	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		09/24/22 09:45	09/26/22 15:11	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		09/24/22 09:45	09/26/22 15:11	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		09/24/22 09:45	09/26/22 15:11	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		09/24/22 09:45	09/26/22 15:11	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		09/24/22 09:45	09/26/22 15:11	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		09/24/22 09:45	09/26/22 15:11	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		09/24/22 09:45	09/26/22 15:11	1
2-Chlorophenol	ND		5.0	0.53	ug/L		09/24/22 09:45	09/26/22 15:11	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-642659/1-A
Matrix: Water
Analysis Batch: 642720

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 642659

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		5.0	0.60	ug/L		09/24/22 09:45	09/26/22 15:11	1
2-Methylphenol	ND		5.0	0.40	ug/L		09/24/22 09:45	09/26/22 15:11	1
2-Nitroaniline	ND		10	0.42	ug/L		09/24/22 09:45	09/26/22 15:11	1
2-Nitrophenol	ND		5.0	0.48	ug/L		09/24/22 09:45	09/26/22 15:11	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		09/24/22 09:45	09/26/22 15:11	1
3-Nitroaniline	ND		10	0.48	ug/L		09/24/22 09:45	09/26/22 15:11	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		09/24/22 09:45	09/26/22 15:11	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		09/24/22 09:45	09/26/22 15:11	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		09/24/22 09:45	09/26/22 15:11	1
4-Chloroaniline	ND		5.0	0.59	ug/L		09/24/22 09:45	09/26/22 15:11	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		09/24/22 09:45	09/26/22 15:11	1
4-Methylphenol	ND		10	0.36	ug/L		09/24/22 09:45	09/26/22 15:11	1
4-Nitroaniline	ND		10	0.25	ug/L		09/24/22 09:45	09/26/22 15:11	1
4-Nitrophenol	ND		10	1.5	ug/L		09/24/22 09:45	09/26/22 15:11	1
Acenaphthene	ND		5.0	0.41	ug/L		09/24/22 09:45	09/26/22 15:11	1
Acenaphthylene	ND		5.0	0.38	ug/L		09/24/22 09:45	09/26/22 15:11	1
Acetophenone	ND		5.0	0.54	ug/L		09/24/22 09:45	09/26/22 15:11	1
Anthracene	ND		5.0	0.28	ug/L		09/24/22 09:45	09/26/22 15:11	1
Atrazine	ND		5.0	0.46	ug/L		09/24/22 09:45	09/26/22 15:11	1
Benzaldehyde	ND		5.0	0.27	ug/L		09/24/22 09:45	09/26/22 15:11	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		09/24/22 09:45	09/26/22 15:11	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		09/24/22 09:45	09/26/22 15:11	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		09/24/22 09:45	09/26/22 15:11	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		09/24/22 09:45	09/26/22 15:11	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		09/24/22 09:45	09/26/22 15:11	1
Biphenyl	ND		5.0	0.65	ug/L		09/24/22 09:45	09/26/22 15:11	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		09/24/22 09:45	09/26/22 15:11	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		09/24/22 09:45	09/26/22 15:11	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		09/24/22 09:45	09/26/22 15:11	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		09/24/22 09:45	09/26/22 15:11	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		09/24/22 09:45	09/26/22 15:11	1
Caprolactam	ND		5.0	2.2	ug/L		09/24/22 09:45	09/26/22 15:11	1
Carbazole	ND		5.0	0.30	ug/L		09/24/22 09:45	09/26/22 15:11	1
Chrysene	ND		5.0	0.33	ug/L		09/24/22 09:45	09/26/22 15:11	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		09/24/22 09:45	09/26/22 15:11	1
Dibenzofuran	ND		10	0.51	ug/L		09/24/22 09:45	09/26/22 15:11	1
Diethyl phthalate	ND		5.0	0.22	ug/L		09/24/22 09:45	09/26/22 15:11	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		09/24/22 09:45	09/26/22 15:11	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		09/24/22 09:45	09/26/22 15:11	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		09/24/22 09:45	09/26/22 15:11	1
Fluoranthene	ND		5.0	0.40	ug/L		09/24/22 09:45	09/26/22 15:11	1
Fluorene	ND		5.0	0.36	ug/L		09/24/22 09:45	09/26/22 15:11	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		09/24/22 09:45	09/26/22 15:11	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		09/24/22 09:45	09/26/22 15:11	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		09/24/22 09:45	09/26/22 15:11	1
Hexachloroethane	ND		5.0	0.59	ug/L		09/24/22 09:45	09/26/22 15:11	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		09/24/22 09:45	09/26/22 15:11	1
Isophorone	ND		5.0	0.43	ug/L		09/24/22 09:45	09/26/22 15:11	1
Naphthalene	ND		5.0	0.76	ug/L		09/24/22 09:45	09/26/22 15:11	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-642659/1-A
Matrix: Water
Analysis Batch: 642720

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 642659

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrobenzene	ND		5.0	0.29	ug/L		09/24/22 09:45	09/26/22 15:11	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		09/24/22 09:45	09/26/22 15:11	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		09/24/22 09:45	09/26/22 15:11	1
Pentachlorophenol	ND		10	2.2	ug/L		09/24/22 09:45	09/26/22 15:11	1
Phenanthrene	ND		5.0	0.44	ug/L		09/24/22 09:45	09/26/22 15:11	1
Phenol	ND		5.0	0.39	ug/L		09/24/22 09:45	09/26/22 15:11	1
Pyrene	ND		5.0	0.34	ug/L		09/24/22 09:45	09/26/22 15:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*71*		*41 - 120*	*09/24/22 09:45*	*09/26/22 15:11*	*1*
2-Fluorobiphenyl (Surr)	*94*		*48 - 120*	*09/24/22 09:45*	*09/26/22 15:11*	*1*
2-Fluorophenol (Surr)	*62*		*35 - 120*	*09/24/22 09:45*	*09/26/22 15:11*	*1*
Nitrobenzene-d5 (Surr)	*76*		*46 - 120*	*09/24/22 09:45*	*09/26/22 15:11*	*1*
Phenol-d5 (Surr)	*44*		*22 - 120*	*09/24/22 09:45*	*09/26/22 15:11*	*1*
p-Terphenyl-d14 (Surr)	*100*		*60 - 148*	*09/24/22 09:45*	*09/26/22 15:11*	*1*

Lab Sample ID: LCS 480-642659/2-A
Matrix: Water
Analysis Batch: 642720

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 642659

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	32.0	31.2		ug/L		98	65 - 126
2,4,6-Trichlorophenol	32.0	29.5		ug/L		92	64 - 120
2,4-Dichlorophenol	32.0	29.4		ug/L		92	63 - 120
2,4-Dimethylphenol	32.0	29.8		ug/L		93	47 - 120
2,4-Dinitrophenol	64.0	63.7		ug/L		100	31 - 137
2,4-Dinitrotoluene	32.0	34.0		ug/L		106	69 - 120
2,6-Dinitrotoluene	32.0	31.4		ug/L		98	68 - 120
2-Chloronaphthalene	32.0	27.1		ug/L		85	58 - 120
2-Chlorophenol	32.0	25.1		ug/L		78	48 - 120
2-Methylnaphthalene	32.0	25.7		ug/L		80	59 - 120
2-Methylphenol	32.0	26.2		ug/L		82	39 - 120
2-Nitroaniline	32.0	30.9		ug/L		97	54 - 127
2-Nitrophenol	32.0	31.8		ug/L		99	52 - 125
3,3'-Dichlorobenzidine	64.0	51.5		ug/L		80	49 - 135
3-Nitroaniline	32.0	27.0		ug/L		84	51 - 120
4,6-Dinitro-2-methylphenol	64.0	70.0		ug/L		109	46 - 136
4-Bromophenyl phenyl ether	32.0	31.0		ug/L		97	65 - 120
4-Chloro-3-methylphenol	32.0	29.8		ug/L		93	61 - 123
4-Chloroaniline	32.0	21.5		ug/L		67	30 - 120
4-Chlorophenyl phenyl ether	32.0	28.1		ug/L		88	62 - 120
4-Methylphenol	32.0	26.6		ug/L		83	29 - 131
4-Nitroaniline	32.0	31.6		ug/L		99	65 - 120
4-Nitrophenol	64.0	45.7		ug/L		71	45 - 120
Acenaphthene	32.0	28.4		ug/L		89	60 - 120
Acenaphthylene	32.0	28.8		ug/L		90	63 - 120
Acetophenone	32.0	29.9		ug/L		93	45 - 120
Anthracene	32.0	32.5		ug/L		102	67 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-642659/2-A
Matrix: Water
Analysis Batch: 642720

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 642659

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Atrazine	64.0	65.8		ug/L		103	71 - 130
Benzaldehyde	64.0	51.8		ug/L		81	10 - 140
Benzo[a]anthracene	32.0	29.8		ug/L		93	70 - 121
Benzo[a]pyrene	32.0	30.6		ug/L		96	60 - 123
Benzo[b]fluoranthene	32.0	29.3		ug/L		92	66 - 126
Benzo[g,h,i]perylene	32.0	29.9		ug/L		94	66 - 150
Benzo[k]fluoranthene	32.0	29.3		ug/L		92	65 - 124
Biphenyl	32.0	28.1		ug/L		88	59 - 120
bis (2-chloroisopropyl) ether	32.0	25.4		ug/L		79	21 - 136
Bis(2-chloroethoxy)methane	32.0	30.0		ug/L		94	50 - 128
Bis(2-chloroethyl)ether	32.0	31.2		ug/L		97	44 - 120
Bis(2-ethylhexyl) phthalate	32.0	29.2		ug/L		91	63 - 139
Butyl benzyl phthalate	32.0	30.4		ug/L		95	70 - 129
Caprolactam	64.0	22.2		ug/L		35	22 - 120
Carbazole	32.0	33.8		ug/L		106	66 - 123
Chrysene	32.0	29.5		ug/L		92	69 - 120
Dibenz(a,h)anthracene	32.0	30.6		ug/L		96	65 - 135
Dibenzofuran	32.0	28.9		ug/L		90	66 - 120
Diethyl phthalate	32.0	30.8		ug/L		96	59 - 127
Dimethyl phthalate	32.0	31.4		ug/L		98	68 - 120
Di-n-butyl phthalate	32.0	32.8		ug/L		102	69 - 131
Di-n-octyl phthalate	32.0	28.2		ug/L		88	63 - 140
Fluoranthene	32.0	33.3		ug/L		104	69 - 126
Fluorene	32.0	29.2		ug/L		91	66 - 120
Hexachlorobenzene	32.0	32.3		ug/L		101	61 - 120
Hexachlorobutadiene	32.0	22.0		ug/L		69	35 - 120
Hexachlorocyclopentadiene	32.0	21.4		ug/L		67	31 - 120
Hexachloroethane	32.0	20.3		ug/L		63	43 - 120
Indeno[1,2,3-cd]pyrene	32.0	29.6		ug/L		92	69 - 146
Isophorone	32.0	30.6		ug/L		96	55 - 120
Naphthalene	32.0	26.1		ug/L		82	57 - 120
Nitrobenzene	32.0	29.0		ug/L		91	53 - 123
N-Nitrosodi-n-propylamine	32.0	30.8		ug/L		96	32 - 140
N-Nitrosodiphenylamine	32.0	32.8		ug/L		103	61 - 120
Pentachlorophenol	64.0	60.0		ug/L		94	29 - 136
Phenanthrene	32.0	32.4		ug/L		101	68 - 120
Phenol	32.0	16.3		ug/L		51	17 - 120
Pyrene	32.0	30.0		ug/L		94	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*105*		*41 - 120*
2-Fluorobiphenyl (Surr)	*90*		*48 - 120*
2-Fluorophenol (Surr)	*61*		*35 - 120*
Nitrobenzene-d5 (Surr)	*78*		*46 - 120*
Phenol-d5 (Surr)	*50*		*22 - 120*
p-Terphenyl-d14 (Surr)	*94*		*60 - 148*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-641960/1-A
Matrix: Water
Analysis Batch: 642776

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641960

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		09/19/22 16:25	09/26/22 19:31	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*40*		*15 - 110*	*09/19/22 16:25*	*09/26/22 19:31*	*1*

Lab Sample ID: LCS 480-641960/2-A
Matrix: Water
Analysis Batch: 642776

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641960

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			2.00	2.50		ug/L		125	40 - 140		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*46*		*15 - 110*

Method: 537 IDA - EPA 537 Isotope Dilution

Lab Sample ID: MB 200-183671/1-A
Matrix: Water
Analysis Batch: 183694

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 183671

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		5.0	1.2	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.68	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.65	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.54	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.76	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.49	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.46	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.55	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.49	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.48	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.64	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.62	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.55	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		2.0	0.41	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.85	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.40	ng/L		09/19/22 11:42	09/19/22 17:30	1
Perfluorooctanesulfonamide (PFOSA)	ND		2.0	0.92	ng/L		09/19/22 11:42	09/19/22 17:30	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		5.0	1.9	ng/L		09/19/22 11:42	09/19/22 17:30	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		5.0	1.6	ng/L		09/19/22 11:42	09/19/22 17:30	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		5.0	1.3	ng/L		09/19/22 11:42	09/19/22 17:30	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.0	0.77	ng/L		09/19/22 11:42	09/19/22 17:30	1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
18O2 PFHxS	96		50 - 150	09/19/22 11:42	09/19/22 17:30	1
13C4 PFHpA	101		50 - 150	09/19/22 11:42	09/19/22 17:30	1
13C4 PFOA	103		50 - 150	09/19/22 11:42	09/19/22 17:30	1
13C4 PFOS	94		50 - 150	09/19/22 11:42	09/19/22 17:30	1
13C5 PFNA	100		50 - 150	09/19/22 11:42	09/19/22 17:30	1
13C4 PFBA	90		50 - 150	09/19/22 11:42	09/19/22 17:30	1
13C2 PFHxA	101		50 - 150	09/19/22 11:42	09/19/22 17:30	1
13C2 PFDA	98		50 - 150	09/19/22 11:42	09/19/22 17:30	1
13C2 PFUnA	99		50 - 150	09/19/22 11:42	09/19/22 17:30	1
13C2 PFDoA	92		50 - 150	09/19/22 11:42	09/19/22 17:30	1
13C8 FOSA	84		50 - 150	09/19/22 11:42	09/19/22 17:30	1
13C5 PFPeA	96		50 - 150	09/19/22 11:42	09/19/22 17:30	1
13C2 PFTeDA	94		50 - 150	09/19/22 11:42	09/19/22 17:30	1
d3-NMeFOSAA	93		50 - 150	09/19/22 11:42	09/19/22 17:30	1
d5-NEtFOSAA	95		50 - 150	09/19/22 11:42	09/19/22 17:30	1
M2-6:2 FTS	96		50 - 150	09/19/22 11:42	09/19/22 17:30	1
M2-8:2 FTS	104		50 - 150	09/19/22 11:42	09/19/22 17:30	1
13C3 PFBS	91		50 - 150	09/19/22 11:42	09/19/22 17:30	1

Lab Sample ID: LCS 200-183671/2-A
Matrix: Water
Analysis Batch: 183694

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 183671

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	80.0	81.5		ng/L		102	70 - 130
Perfluoropentanoic acid (PFPeA)	80.0	91.2		ng/L		114	70 - 130
Perfluorohexanoic acid (PFHxA)	80.0	84.3		ng/L		105	70 - 130
Perfluoroheptanoic acid (PFHpA)	80.0	81.0		ng/L		101	70 - 130
Perfluorooctanoic acid (PFOA)	80.0	85.2		ng/L		106	70 - 130
Perfluorononanoic acid (PFNA)	80.0	84.8		ng/L		106	70 - 130
Perfluorodecanoic acid (PFDA)	80.0	85.5		ng/L		107	70 - 130
Perfluoroundecanoic acid (PFUnA)	80.0	83.7		ng/L		105	70 - 130
Perfluorododecanoic acid (PFDoA)	80.0	85.9		ng/L		107	70 - 130
Perfluorotridecanoic acid (PFTriA)	80.0	83.7		ng/L		105	70 - 130
Perfluorotetradecanoic acid (PFTeA)	80.0	80.1		ng/L		100	70 - 130
Perfluorobutanesulfonic acid (PFBS)	70.7	74.1		ng/L		105	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	72.8	73.4		ng/L		101	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	76.2	79.6		ng/L		104	70 - 130
Perfluorooctanesulfonic acid (PFOS)	74.2	74.5		ng/L		100	70 - 130
Perfluorodecanesulfonic acid (PFDS)	77.1	74.4		ng/L		97	70 - 130
Perfluorooctanesulfonamide (PFOSA)	80.0	80.9		ng/L		101	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	80.0	85.9		ng/L		107	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	80.0	80.9		ng/L		101	70 - 130

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 200-183671/2-A
Matrix: Water
Analysis Batch: 183694

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 183671

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)			75.8	79.8		ng/L		105	60 - 140		
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)			76.6	82.8		ng/L		108	70 - 130		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
18O2 PFHxS	*98*		*50 - 150*
13C4 PFHpA	*99*		*50 - 150*
13C4 PFOA	*101*		*50 - 150*
13C4 PFOS	*97*		*50 - 150*
13C5 PFNA	*98*		*50 - 150*
13C4 PFBA	*96*		*50 - 150*
13C2 PFHxA	*100*		*50 - 150*
13C2 PFDA	*99*		*50 - 150*
13C2 PFUnA	*94*		*50 - 150*
13C2 PFDoA	*86*		*50 - 150*
13C8 FOSA	*78*		*50 - 150*
13C5 PFPeA	*93*		*50 - 150*
13C2 PFTeDA	*87*		*50 - 150*
d3-NMeFOSAA	*91*		*50 - 150*
d5-NEtFOSAA	*93*		*50 - 150*
M2-6:2 FTS	*102*		*50 - 150*
M2-8:2 FTS	*101*		*50 - 150*
13C3 PFBS	*96*		*50 - 150*

Lab Sample ID: LCSD 200-183671/3-A
Matrix: Water
Analysis Batch: 183694

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 183671

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)			80.0	82.6		ng/L		103	70 - 130	1	30
Perfluoropentanoic acid (PFPeA)			80.0	86.4		ng/L		108	70 - 130	5	30
Perfluorohexanoic acid (PFHxA)			80.0	84.0		ng/L		105	70 - 130	0	30
Perfluoroheptanoic acid (PFHpA)			80.0	85.4		ng/L		107	70 - 130	5	30
Perfluorooctanoic acid (PFOA)			80.0	76.5		ng/L		96	70 - 130	11	30
Perfluorononanoic acid (PFNA)			80.0	82.7		ng/L		103	70 - 130	2	30
Perfluorodecanoic acid (PFDA)			80.0	93.3		ng/L		117	70 - 130	9	30
Perfluoroundecanoic acid (PFUnA)			80.0	86.3		ng/L		108	70 - 130	3	30
Perfluorododecanoic acid (PFDoA)			80.0	82.8		ng/L		104	70 - 130	4	30
Perfluorotridecanoic acid (PFTriA)			80.0	80.9		ng/L		101	70 - 130	3	30
Perfluorotetradecanoic acid (PFTeA)			80.0	81.5		ng/L		102	70 - 130	2	30
Perfluorobutanesulfonic acid (PFBS)			70.7	72.6		ng/L		103	70 - 130	2	30
Perfluorohexanesulfonic acid (PFHxS)			72.8	77.6		ng/L		107	70 - 130	6	30
Perfluoroheptanesulfonic acid (PFHpS)			76.2	78.5		ng/L		103	70 - 130	1	30

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCSD 200-183671/3-A
Matrix: Water
Analysis Batch: 183694

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 183671

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorooctanesulfonic acid (PFOS)			74.2	74.2		ng/L		100	70 - 130	0	30
Perfluorodecanesulfonic acid (PFDS)			77.1	71.4		ng/L		93	70 - 130	4	30
Perfluorooctanesulfonamide (PFOSA)			80.0	80.9		ng/L		101	70 - 130	0	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)			80.0	81.9		ng/L		102	70 - 130	5	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			80.0	81.2		ng/L		101	70 - 130	0	30
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)			75.8	84.8		ng/L		112	60 - 140	6	30
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)			76.6	80.5		ng/L		105	70 - 130	3	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
18O2 PFHxS	*88*		*50 - 150*
13C4 PFHpA	*94*		*50 - 150*
13C4 PFOA	*100*		*50 - 150*
13C4 PFOS	*95*		*50 - 150*
13C5 PFNA	*96*		*50 - 150*
13C4 PFBA	*92*		*50 - 150*
13C2 PFHxA	*96*		*50 - 150*
13C2 PFDA	*93*		*50 - 150*
13C2 PFUnA	*89*		*50 - 150*
13C2 PFDoA	*85*		*50 - 150*
13C8 FOSA	*73*		*50 - 150*
13C5 PFPeA	*93*		*50 - 150*
13C2 PFTeDA	*80*		*50 - 150*
d3-NMeFOSAA	*96*		*50 - 150*
d5-NEtFOSAA	*85*		*50 - 150*
M2-6:2 FTS	*95*		*50 - 150*
M2-8:2 FTS	*95*		*50 - 150*
13C3 PFBS	*91*		*50 - 150*

Lab Sample ID: MB 200-183718/1-A
Matrix: Solid
Analysis Batch: 183779

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 183718

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.50	0.33	ug/Kg		09/20/22 08:32	09/21/22 15:24	1
Perfluoropentanoic acid (PFPeA)	ND		0.20	0.055	ug/Kg		09/20/22 08:32	09/21/22 15:24	1
Perfluorohexanoic acid (PFHxA)	ND		0.20	0.046	ug/Kg		09/20/22 08:32	09/21/22 15:24	1
Perfluoroheptanoic acid (PFHpA)	ND		0.20	0.039	ug/Kg		09/20/22 08:32	09/21/22 15:24	1
Perfluorooctanoic acid (PFOA)	ND		0.20	0.058	ug/Kg		09/20/22 08:32	09/21/22 15:24	1
Perfluorononanoic acid (PFNA)	ND		0.20	0.034	ug/Kg		09/20/22 08:32	09/21/22 15:24	1
Perfluorodecanoic acid (PFDA)	ND		0.20	0.028	ug/Kg		09/20/22 08:32	09/21/22 15:24	1
Perfluoroundecanoic acid (PFUnA)	ND		0.20	0.027	ug/Kg		09/20/22 08:32	09/21/22 15:24	1
Perfluorododecanoic acid (PFDoA)	0.0265	J I	0.20	0.025	ug/Kg		09/20/22 08:32	09/21/22 15:24	1
Perfluorotridecanoic acid (PFTriA)	ND		0.20	0.025	ug/Kg		09/20/22 08:32	09/21/22 15:24	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.20	0.026	ug/Kg		09/20/22 08:32	09/21/22 15:24	1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: MB 200-183718/1-A
Matrix: Solid
Analysis Batch: 183779

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 183718

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanesulfonic acid (PFBS)	ND		0.20	0.033	ug/Kg		09/20/22 08:32	09/21/22 15:24	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.20	0.041	ug/Kg		09/20/22 08:32	09/21/22 15:24	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.20	0.023	ug/Kg		09/20/22 08:32	09/21/22 15:24	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.20	0.11	ug/Kg		09/20/22 08:32	09/21/22 15:24	1
Perfluorodecanesulfonic acid (PFDS)	0.0211	J	0.20	0.019	ug/Kg		09/20/22 08:32	09/21/22 15:24	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.20	0.034	ug/Kg		09/20/22 08:32	09/21/22 15:24	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.0	0.11	ug/Kg		09/20/22 08:32	09/21/22 15:24	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.0	0.083	ug/Kg		09/20/22 08:32	09/21/22 15:24	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.0	0.057	ug/Kg		09/20/22 08:32	09/21/22 15:24	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.0	0.037	ug/Kg		09/20/22 08:32	09/21/22 15:24	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*84*		*50 - 150*	*09/20/22 08:32*	*09/21/22 15:24*	*1*
13C4 PFHpA	*87*		*50 - 150*	*09/20/22 08:32*	*09/21/22 15:24*	*1*
13C4 PFOA	*88*		*50 - 150*	*09/20/22 08:32*	*09/21/22 15:24*	*1*
13C4 PFOS	*79*		*50 - 150*	*09/20/22 08:32*	*09/21/22 15:24*	*1*
13C5 PFNA	*84*		*50 - 150*	*09/20/22 08:32*	*09/21/22 15:24*	*1*
13C4 PFBA	*85*		*50 - 150*	*09/20/22 08:32*	*09/21/22 15:24*	*1*
13C2 PFHxA	*93*		*50 - 150*	*09/20/22 08:32*	*09/21/22 15:24*	*1*
13C2 PFDA	*87*		*50 - 150*	*09/20/22 08:32*	*09/21/22 15:24*	*1*
13C2 PFUnA	*76*		*50 - 150*	*09/20/22 08:32*	*09/21/22 15:24*	*1*
13C2 PFDoA	*77*		*50 - 150*	*09/20/22 08:32*	*09/21/22 15:24*	*1*
13C8 FOSA	*64*		*50 - 150*	*09/20/22 08:32*	*09/21/22 15:24*	*1*
13C5 PFPeA	*83*		*50 - 150*	*09/20/22 08:32*	*09/21/22 15:24*	*1*
13C2 PFTeDA	*80*		*50 - 150*	*09/20/22 08:32*	*09/21/22 15:24*	*1*
d3-NMeFOSAA	*84*		*50 - 150*	*09/20/22 08:32*	*09/21/22 15:24*	*1*
d5-NEtFOSAA	*79*		*50 - 150*	*09/20/22 08:32*	*09/21/22 15:24*	*1*
M2-6:2 FTS	*92*		*50 - 150*	*09/20/22 08:32*	*09/21/22 15:24*	*1*
M2-8:2 FTS	*88*		*50 - 150*	*09/20/22 08:32*	*09/21/22 15:24*	*1*
13C3 PFBS	*82*		*50 - 150*	*09/20/22 08:32*	*09/21/22 15:24*	*1*

Lab Sample ID: LCS 200-183718/2-A
Matrix: Solid
Analysis Batch: 183779

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 183718

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	2.00	1.94		ug/Kg		97	60 - 140
Perfluoropentanoic acid (PFPeA)	2.00	1.93		ug/Kg		97	60 - 140
Perfluorohexanoic acid (PFHxA)	2.00	1.88		ug/Kg		94	60 - 140
Perfluoroheptanoic acid (PFHpA)	2.00	1.89		ug/Kg		95	60 - 140
Perfluorooctanoic acid (PFOA)	2.00	1.89		ug/Kg		94	60 - 140
Perfluorononanoic acid (PFNA)	2.00	1.92		ug/Kg		96	60 - 140
Perfluorodecanoic acid (PFDA)	2.00	2.01		ug/Kg		101	60 - 140
Perfluoroundecanoic acid (PFUnA)	2.00	1.94		ug/Kg		97	60 - 140

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 200-183718/2-A
Matrix: Solid
Analysis Batch: 183779

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 183718

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorododecanoic acid (PFDoA)	2.00	1.95		ug/Kg		97	60 - 140
Perfluorotridecanoic acid (PFTriA)	2.00	1.96		ug/Kg		98	60 - 140
Perfluorotetradecanoic acid (PFTeA)	2.00	1.99		ug/Kg		100	60 - 140
Perfluorobutanesulfonic acid (PFBS)	1.77	1.64		ug/Kg		93	60 - 140
Perfluorohexanesulfonic acid (PFHxS)	1.82	1.69		ug/Kg		93	60 - 140
Perfluoroheptanesulfonic acid (PFHpS)	1.90	1.88		ug/Kg		99	60 - 140
Perfluorooctanesulfonic acid (PFOS)	1.86	1.75		ug/Kg		94	60 - 140
Perfluorodecanesulfonic acid (PFDS)	1.93	1.68		ug/Kg		87	60 - 140
Perfluorooctanesulfonamide (PFOSA)	2.00	1.92		ug/Kg		96	60 - 140
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.00	1.77	J	ug/Kg		89	60 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.00	1.86	J	ug/Kg		93	60 - 140
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	1.90	1.83	J	ug/Kg		97	50 - 150
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	1.92	1.97	J	ug/Kg		103	60 - 140

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
18O2 PFHxS	*85*		*50 - 150*
13C4 PFHpA	*86*		*50 - 150*
13C4 PFOA	*87*		*50 - 150*
13C4 PFOS	*80*		*50 - 150*
13C5 PFNA	*83*		*50 - 150*
13C4 PFBA	*85*		*50 - 150*
13C2 PFHxA	*87*		*50 - 150*
13C2 PFDA	*84*		*50 - 150*
13C2 PFUnA	*77*		*50 - 150*
13C2 PFDoA	*73*		*50 - 150*
13C8 FOSA	*70*		*50 - 150*
13C5 PFPeA	*87*		*50 - 150*
13C2 PFTeDA	*73*		*50 - 150*
d3-NMeFOSAA	*86*		*50 - 150*
d5-NEtFOSAA	*84*		*50 - 150*
M2-6:2 FTS	*95*		*50 - 150*
M2-8:2 FTS	*91*		*50 - 150*
13C3 PFBS	*86*		*50 - 150*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-641956/1-A
Matrix: Water
Analysis Batch: 642173

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641956

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		09/20/22 09:22	09/20/22 16:33	1
Antimony	ND		0.020	0.0068	mg/L		09/20/22 09:22	09/20/22 16:33	1
Arsenic	ND		0.015	0.0056	mg/L		09/20/22 09:22	09/20/22 16:33	1
Barium	ND		0.0020	0.00070	mg/L		09/20/22 09:22	09/20/22 16:33	1
Beryllium	ND		0.0020	0.00030	mg/L		09/20/22 09:22	09/20/22 16:33	1
Cadmium	ND		0.0020	0.00050	mg/L		09/20/22 09:22	09/20/22 16:33	1
Calcium	ND		0.50	0.10	mg/L		09/20/22 09:22	09/20/22 16:33	1
Chromium	ND		0.0040	0.0010	mg/L		09/20/22 09:22	09/20/22 16:33	1
Cobalt	ND		0.0040	0.00063	mg/L		09/20/22 09:22	09/20/22 16:33	1
Copper	ND		0.010	0.0016	mg/L		09/20/22 09:22	09/20/22 16:33	1
Iron	ND		0.050	0.019	mg/L		09/20/22 09:22	09/20/22 16:33	1
Lead	ND		0.010	0.0030	mg/L		09/20/22 09:22	09/20/22 16:33	1
Magnesium	ND		0.20	0.043	mg/L		09/20/22 09:22	09/20/22 16:33	1
Manganese	ND		0.0030	0.00040	mg/L		09/20/22 09:22	09/20/22 16:33	1
Nickel	ND		0.010	0.0013	mg/L		09/20/22 09:22	09/20/22 16:33	1
Potassium	ND		0.50	0.10	mg/L		09/20/22 09:22	09/20/22 16:33	1
Selenium	ND		0.025	0.0087	mg/L		09/20/22 09:22	09/20/22 16:33	1
Silver	ND		0.0060	0.0017	mg/L		09/20/22 09:22	09/20/22 16:33	1
Sodium	ND		1.0	0.32	mg/L		09/20/22 09:22	09/20/22 16:33	1
Thallium	ND		0.020	0.010	mg/L		09/20/22 09:22	09/20/22 16:33	1
Vanadium	ND		0.0050	0.0015	mg/L		09/20/22 09:22	09/20/22 16:33	1
Zinc	ND		0.010	0.0015	mg/L		09/20/22 09:22	09/20/22 16:33	1

Lab Sample ID: LCS 480-641956/2-A
Matrix: Water
Analysis Batch: 642173

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641956

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	10.0	10.02		mg/L		100	80 - 120
Antimony	0.200	0.207		mg/L		104	80 - 120
Arsenic	0.201	0.203		mg/L		101	80 - 120
Barium	0.200	0.212		mg/L		106	80 - 120
Beryllium	0.200	0.210		mg/L		105	80 - 120
Cadmium	0.200	0.199		mg/L		100	80 - 120
Calcium	10.0	10.05		mg/L		100	80 - 120
Chromium	0.200	0.205		mg/L		102	80 - 120
Cobalt	0.200	0.200		mg/L		100	80 - 120
Copper	0.200	0.209		mg/L		104	80 - 120
Iron	10.0	10.23		mg/L		102	80 - 120
Lead	0.201	0.206		mg/L		103	80 - 120
Magnesium	10.0	10.08		mg/L		101	80 - 120
Manganese	0.200	0.213		mg/L		106	80 - 120
Nickel	0.200	0.197		mg/L		99	80 - 120
Potassium	10.0	9.94		mg/L		99	80 - 120
Selenium	0.200	0.199		mg/L		99	80 - 120
Silver	0.0500	0.0503		mg/L		101	80 - 120
Sodium	10.0	9.67		mg/L		97	80 - 120
Thallium	0.200	0.203		mg/L		102	80 - 120
Vanadium	0.201	0.203		mg/L		101	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-641956/2-A
Matrix: Water
Analysis Batch: 642173

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641956

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	0.200	0.206		mg/L		103	80 - 120

Lab Sample ID: LCSD 480-641956/3-A
Matrix: Water
Analysis Batch: 642173

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 641956

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	10.0	9.92		mg/L		99	80 - 120	1	20
Antimony	0.200	0.203		mg/L		101	80 - 120	2	20
Arsenic	0.201	0.200		mg/L		100	80 - 120	1	20
Barium	0.200	0.207		mg/L		104	80 - 120	2	20
Beryllium	0.200	0.207		mg/L		104	80 - 120	1	20
Cadmium	0.200	0.196		mg/L		98	80 - 120	1	20
Calcium	10.0	9.85		mg/L		98	80 - 120	2	20
Chromium	0.200	0.201		mg/L		100	80 - 120	2	20
Cobalt	0.200	0.197		mg/L		99	80 - 120	1	20
Copper	0.200	0.203		mg/L		102	80 - 120	3	20
Iron	10.0	10.07		mg/L		101	80 - 120	1	20
Lead	0.201	0.202		mg/L		101	80 - 120	2	20
Magnesium	10.0	9.88		mg/L		99	80 - 120	2	20
Manganese	0.200	0.206		mg/L		103	80 - 120	3	20
Nickel	0.200	0.196		mg/L		98	80 - 120	1	20
Potassium	10.0	9.79		mg/L		98	80 - 120	1	20
Selenium	0.200	0.197		mg/L		99	80 - 120	1	20
Silver	0.0500	0.0493		mg/L		99	80 - 120	2	20
Sodium	10.0	9.45		mg/L		94	80 - 120	2	20
Thallium	0.200	0.201		mg/L		101	80 - 120	1	20
Vanadium	0.201	0.197		mg/L		98	80 - 120	3	20
Zinc	0.200	0.202		mg/L		101	80 - 120	2	20

Lab Sample ID: MB 480-642057/1-A
Matrix: Solid
Analysis Batch: 642370

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 642057

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		10.4	4.6	mg/Kg		09/20/22 14:15	09/21/22 15:14	1
Antimony	ND		15.5	0.41	mg/Kg		09/20/22 14:15	09/21/22 15:14	1
Arsenic	ND		2.1	0.41	mg/Kg		09/20/22 14:15	09/21/22 15:14	1
Barium	ND		0.52	0.11	mg/Kg		09/20/22 14:15	09/21/22 15:14	1
Beryllium	ND		0.21	0.029	mg/Kg		09/20/22 14:15	09/21/22 15:14	1
Cadmium	ND		0.21	0.031	mg/Kg		09/20/22 14:15	09/21/22 15:14	1
Calcium	ND		51.8	3.4	mg/Kg		09/20/22 14:15	09/21/22 15:14	1
Chromium	ND		0.52	0.21	mg/Kg		09/20/22 14:15	09/21/22 15:14	1
Cobalt	ND		0.52	0.052	mg/Kg		09/20/22 14:15	09/21/22 15:14	1
Copper	ND		1.0	0.22	mg/Kg		09/20/22 14:15	09/21/22 15:14	1
Iron	ND		10.4	3.6	mg/Kg		09/20/22 14:15	09/21/22 15:14	1
Lead	ND		1.0	0.25	mg/Kg		09/20/22 14:15	09/21/22 15:14	1
Magnesium	1.78	J	20.7	0.96	mg/Kg		09/20/22 14:15	09/21/22 15:14	1
Manganese	ND		0.21	0.033	mg/Kg		09/20/22 14:15	09/21/22 15:14	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 480-642057/1-A
Matrix: Solid
Analysis Batch: 642370

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 642057

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	ND		5.2	0.24	mg/Kg		09/20/22 14:15	09/21/22 15:14	1
Potassium	ND		31.1	20.7	mg/Kg		09/20/22 14:15	09/21/22 15:14	1
Selenium	ND		4.1	0.41	mg/Kg		09/20/22 14:15	09/21/22 15:14	1
Silver	ND		0.62	0.21	mg/Kg		09/20/22 14:15	09/21/22 15:14	1
Sodium	ND		145	13.5	mg/Kg		09/20/22 14:15	09/21/22 15:14	1
Thallium	ND		6.2	0.31	mg/Kg		09/20/22 14:15	09/21/22 15:14	1
Vanadium	ND		0.52	0.11	mg/Kg		09/20/22 14:15	09/21/22 15:14	1
Zinc	ND		2.1	0.66	mg/Kg		09/20/22 14:15	09/21/22 15:14	1

Lab Sample ID: LCDSRM 480-642057/3-A
Matrix: Solid
Analysis Batch: 642370

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 642057

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum			8630	9755		mg/Kg		113.0	50.6 - 149.5	3	20
Antimony			129	88.65		mg/Kg		68.7	19.8 - 250.4	3	20
Arsenic			84.5	72.47		mg/Kg		85.8	70.1 - 130.2	2	20
Barium			249	220.9		mg/Kg		88.7	75.1 - 124.9	2	20
Beryllium			163	143.9		mg/Kg		88.3	74.8 - 125.2	10	20
Cadmium			99.0	82.52		mg/Kg		83.4	74.9 - 125.3	1	20
Calcium			4760	4140		mg/Kg		87.0	72.7 - 127.5	3	20
Chromium			122	106.1		mg/Kg		87.0	70.2 - 130.3	1	20
Cobalt			61.7	60.91		mg/Kg		98.7	75.0 - 125.1	1	20
Copper			61.5	52.35		mg/Kg		85.1	75.0 - 124.9	3	20
Iron			14500	13060		mg/Kg		90.1	35.8 - 164.1	2	20
Lead			123	119.7		mg/Kg		97.3	71.8 - 128.5	2	20
Magnesium			2360	2154		mg/Kg		91.3	62.7 - 137.7	4	20
Manganese			456	385.8		mg/Kg		84.6	76.8 - 123.5	5	20
Nickel			135	133.5		mg/Kg		98.9	70.1 - 130.4	2	20
Potassium			2090	2286		mg/Kg		109.4	59.3 - 140.7	3	20
Selenium			121	100.3		mg/Kg		82.9	66.4 - 133.9	1	20
Silver			33.6	35.26		mg/Kg		104.9	68.5 - 131.3	4	20
Sodium			136	155.4		mg/Kg		114.2	35.4 - 164.0	5	20
Thallium			144	147.9		mg/Kg		102.7	70.1 - 129.9	2	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCDSRM 480-642057/3-A
Matrix: Solid
Analysis Batch: 642370

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 642057

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Vanadium	186	159.5		mg/Kg		85.8	74.2 - 126.3	2	20
Zinc	295	233.3		mg/Kg		79.1	70.2 - 130.2	4	20

Lab Sample ID: LCSSRM 480-642057/2-A
Matrix: Solid
Analysis Batch: 642370

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 642057

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	8630	10020		mg/Kg		116.1	50.6 - 149.5
Antimony	129	86.46		mg/Kg		67.0	19.8 - 250.4
Arsenic	84.5	73.98		mg/Kg		87.6	70.1 - 130.2
Barium	249	216.1		mg/Kg		86.8	75.1 - 124.9
Beryllium	163	130.6		mg/Kg		80.1	74.8 - 125.2
Cadmium	99.0	82.07		mg/Kg		82.9	74.9 - 125.3
Calcium	4760	4272		mg/Kg		89.7	72.7 - 127.5
Chromium	122	105.4		mg/Kg		86.4	70.2 - 130.3
Cobalt	61.7	60.29		mg/Kg		97.7	75.0 - 125.1
Copper	61.5	53.95		mg/Kg		87.7	75.0 - 124.9
Iron	14500	13370		mg/Kg		92.2	35.8 - 164.1
Lead	123	122.2		mg/Kg		99.4	71.8 - 128.5
Magnesium	2360	2231		mg/Kg		94.5	62.7 - 137.7
Manganese	456	406.9		mg/Kg		89.2	76.8 - 123.5
Nickel	135	130.9		mg/Kg		97.0	70.1 - 130.4
Potassium	2090	2363		mg/Kg		113.0	59.3 - 140.7
Selenium	121	101.8		mg/Kg		84.1	66.4 - 133.9
Silver	33.6	36.57		mg/Kg		108.9	68.5 - 131.3
Sodium	136	162.6		mg/Kg		119.5	35.4 - 164.0
Thallium	144	144.7		mg/Kg		100.5	70.1 - 129.9
Vanadium	186	163.2		mg/Kg		87.7	74.2 - 126.3
Zinc	295	241.6		mg/Kg		81.9	70.2 - 130.2

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-641876/1-A
Matrix: Water
Analysis Batch: 641965

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 641876

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		09/19/22 11:06	09/19/22 15:19	1

Lab Sample ID: LCS 480-641876/2-A
Matrix: Water
Analysis Batch: 641965

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 641876

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00667	0.00682		mg/L		102	80 - 120		

Lab Sample ID: LCSD 480-641876/3-A
Matrix: Water
Analysis Batch: 641965

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 641876

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			0.00667	0.00635		mg/L		95	80 - 120	7	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-642099/1-A
Matrix: Solid
Analysis Batch: 642254

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 642099

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019	0.0043	mg/Kg		09/21/22 10:43	09/21/22 13:43	1

Lab Sample ID: LCDSRM 480-642099/3-A ^10
Matrix: Solid
Analysis Batch: 642254

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 642099

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			18.9	18.64		mg/Kg		98.6	59.8 - 139.7	4	20

Lab Sample ID: LCSSRM 480-642099/2-A ^10
Matrix: Solid
Analysis Batch: 642254

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 642099

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			18.9	17.82		mg/Kg		94.3	59.8 - 139.7		

Lab Sample ID: 480-201707-1 MS
Matrix: Solid
Analysis Batch: 642254

Client Sample ID: SB2 (0-0.5)
Prep Type: Total/NA
Prep Batch: 642099

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	0.066	F1	0.441	0.327	F1	mg/Kg	☼	59	80 - 120		

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: 480-201707-1 MSD
Matrix: Solid
Analysis Batch: 642254

Client Sample ID: SB2 (0-0.5)
Prep Type: Total/NA
Prep Batch: 642099

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.066	F1	0.432	0.308	F1	mg/Kg	☼	56	80 - 120	6	20

GC/MS VOA

Prep Batch: 641842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201707-2	SB2 (0.5-1)	Total/NA	Solid	5035A_L	
480-201707-3	SB2 (1-2)	Total/NA	Solid	5035A_L	
480-201707-5	FDUP_091422	Total/NA	Solid	5035A_L	
480-201707-6	SB2 (13.5-15.5)	Total/NA	Solid	5035A_L	
480-201707-10	SB4 (0-0.5)	Total/NA	Solid	5035A_L	
480-201707-11	SB4 (0.5-1)	Total/NA	Solid	5035A_L	
480-201712-1	SB4 (1-2)	Total/NA	Solid	5035A_L	
MB 480-641842/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-641842/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

Analysis Batch: 641850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201707-2	SB2 (0.5-1)	Total/NA	Solid	8260C	641842
480-201707-3	SB2 (1-2)	Total/NA	Solid	8260C	641842
480-201707-5	FDUP_091422	Total/NA	Solid	8260C	641842
480-201707-6	SB2 (13.5-15.5)	Total/NA	Solid	8260C	641842
480-201707-10	SB4 (0-0.5)	Total/NA	Solid	8260C	641842
480-201707-11	SB4 (0.5-1)	Total/NA	Solid	8260C	641842
480-201712-1	SB4 (1-2)	Total/NA	Solid	8260C	641842
MB 480-641842/2-A	Method Blank	Total/NA	Solid	8260C	641842
LCS 480-641842/1-A	Lab Control Sample	Total/NA	Solid	8260C	641842

Analysis Batch: 641871

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201707-4	FB_091422	Total/NA	Water	8260C	
480-201707-7	ERB1_091422	Total/NA	Water	8260C	
480-201707-8	ERB2_091422	Total/NA	Water	8260C	
480-201707-9	FB_091522	Total/NA	Water	8260C	
MB 480-641871/8	Method Blank	Total/NA	Water	8260C	
LCS 480-641871/6	Lab Control Sample	Total/NA	Water	8260C	

Prep Batch: 642124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201707-1	SB2 (0-0.5)	Total/NA	Solid	5035A_L	
MB 480-642124/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-642124/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

Analysis Batch: 642126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201707-1	SB2 (0-0.5)	Total/NA	Solid	8260C	642124
MB 480-642124/2-A	Method Blank	Total/NA	Solid	8260C	642124
LCS 480-642124/1-A	Lab Control Sample	Total/NA	Solid	8260C	642124

GC/MS Semi VOA

Prep Batch: 641854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201707-1	SB2 (0-0.5)	Total/NA	Solid	3550C	
480-201707-2	SB2 (0.5-1)	Total/NA	Solid	3550C	
480-201707-3	SB2 (1-2)	Total/NA	Solid	3550C	
480-201707-5	FDUP_091422	Total/NA	Solid	3550C	

GC/MS Semi VOA (Continued)

Prep Batch: 641854 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201707-6	SB2 (13.5-15.5)	Total/NA	Solid	3550C	
480-201707-10	SB4 (0-0.5)	Total/NA	Solid	3550C	
480-201707-11	SB4 (0.5-1)	Total/NA	Solid	3550C	
480-201712-1	SB4 (1-2)	Total/NA	Solid	3550C	
MB 480-641854/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-641854/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Prep Batch: 641960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201707-4	FB_091422	Total/NA	Water	3510C	
480-201707-7	ERB1_091422	Total/NA	Water	3510C	
480-201707-8	ERB2_091422	Total/NA	Water	3510C	
MB 480-641960/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-641960/2-A	Lab Control Sample	Total/NA	Water	3510C	

Prep Batch: 641992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201707-4	FB_091422	Total/NA	Water	3510C	
480-201707-7	ERB1_091422	Total/NA	Water	3510C	
480-201707-8	ERB2_091422	Total/NA	Water	3510C	
480-201707-9	FB_091522	Total/NA	Water	3510C	
MB 480-641992/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-641992/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-641992/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 642153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201707-4	FB_091422	Total/NA	Water	8270D	641992
480-201707-7	ERB1_091422	Total/NA	Water	8270D	641992
480-201707-8	ERB2_091422	Total/NA	Water	8270D	641992
480-201707-9	FB_091522	Total/NA	Water	8270D	641992
MB 480-641992/1-A	Method Blank	Total/NA	Water	8270D	641992
LCS 480-641992/2-A	Lab Control Sample	Total/NA	Water	8270D	641992
LCSD 480-641992/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	641992

Analysis Batch: 642158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201707-1	SB2 (0-0.5)	Total/NA	Solid	8270D	641854
480-201707-2	SB2 (0.5-1)	Total/NA	Solid	8270D	641854
480-201707-3	SB2 (1-2)	Total/NA	Solid	8270D	641854
480-201707-5	FDUP_091422	Total/NA	Solid	8270D	641854
480-201707-6	SB2 (13.5-15.5)	Total/NA	Solid	8270D	641854
480-201707-10	SB4 (0-0.5)	Total/NA	Solid	8270D	641854
480-201707-11	SB4 (0.5-1)	Total/NA	Solid	8270D	641854
480-201712-1	SB4 (1-2)	Total/NA	Solid	8270D	641854

Analysis Batch: 642351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-641854/1-A	Method Blank	Total/NA	Solid	8270D	641854
LCS 480-641854/2-A	Lab Control Sample	Total/NA	Solid	8270D	641854

GC/MS Semi VOA

Prep Batch: 642659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201707-4 - RE	FB_091422	Total/NA	Water	3510C	
480-201707-7 - RE	ERB1_091422	Total/NA	Water	3510C	
480-201707-8 - RE	ERB2_091422	Total/NA	Water	3510C	
480-201707-9 - RE	FB_091522	Total/NA	Water	3510C	
MB 480-642659/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-642659/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 642720

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201707-4 - RE	FB_091422	Total/NA	Water	8270D	642659
480-201707-7 - RE	ERB1_091422	Total/NA	Water	8270D	642659
480-201707-8 - RE	ERB2_091422	Total/NA	Water	8270D	642659
480-201707-9 - RE	FB_091522	Total/NA	Water	8270D	642659
MB 480-642659/1-A	Method Blank	Total/NA	Water	8270D	642659
LCS 480-642659/2-A	Lab Control Sample	Total/NA	Water	8270D	642659

Analysis Batch: 642776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201707-4	FB_091422	Total/NA	Water	8270D SIM ID	641960
480-201707-7	ERB1_091422	Total/NA	Water	8270D SIM ID	641960
480-201707-8	ERB2_091422	Total/NA	Water	8270D SIM ID	641960
MB 480-641960/1-A	Method Blank	Total/NA	Water	8270D SIM ID	641960
LCS 480-641960/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	641960

LCMS

Prep Batch: 183671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201707-4	FB_091422	Total/NA	Water	3535	
480-201707-7	ERB1_091422	Total/NA	Water	3535	
480-201707-8	ERB2_091422	Total/NA	Water	3535	
MB 200-183671/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-183671/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 200-183671/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 183694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201707-4	FB_091422	Total/NA	Water	537 IDA	183671
480-201707-7	ERB1_091422	Total/NA	Water	537 IDA	183671
480-201707-8	ERB2_091422	Total/NA	Water	537 IDA	183671
MB 200-183671/1-A	Method Blank	Total/NA	Water	537 IDA	183671
LCS 200-183671/2-A	Lab Control Sample	Total/NA	Water	537 IDA	183671
LCSD 200-183671/3-A	Lab Control Sample Dup	Total/NA	Water	537 IDA	183671

Prep Batch: 183718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201707-3	SB2 (1-2)	Total/NA	Solid	SHAKE	
480-201707-5	FDUP_091422	Total/NA	Solid	SHAKE	
MB 200-183718/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 200-183718/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	

LCMS

Analysis Batch: 183779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201707-3	SB2 (1-2)	Total/NA	Solid	537 IDA	183718
480-201707-5	FDUP_091422	Total/NA	Solid	537 IDA	183718
MB 200-183718/1-A	Method Blank	Total/NA	Solid	537 IDA	183718
LCS 200-183718/2-A	Lab Control Sample	Total/NA	Solid	537 IDA	183718

Metals

Prep Batch: 641876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201707-4	FB_091422	Total/NA	Water	7470A	
480-201707-7	ERB1_091422	Total/NA	Water	7470A	
480-201707-8	ERB2_091422	Total/NA	Water	7470A	
480-201707-9	FB_091522	Total/NA	Water	7470A	
MB 480-641876/1-A	Method Blank	Total/NA	Water	7470A	
LCS 480-641876/2-A	Lab Control Sample	Total/NA	Water	7470A	
LCSD 480-641876/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	

Prep Batch: 641956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201707-4	FB_091422	Total/NA	Water	3005A	
480-201707-7	ERB1_091422	Total/NA	Water	3005A	
480-201707-8	ERB2_091422	Total/NA	Water	3005A	
480-201707-9	FB_091522	Total/NA	Water	3005A	
MB 480-641956/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-641956/2-A	Lab Control Sample	Total/NA	Water	3005A	
LCSD 480-641956/3-A	Lab Control Sample Dup	Total/NA	Water	3005A	

Analysis Batch: 641965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201707-4	FB_091422	Total/NA	Water	7470A	641876
480-201707-7	ERB1_091422	Total/NA	Water	7470A	641876
480-201707-8	ERB2_091422	Total/NA	Water	7470A	641876
480-201707-9	FB_091522	Total/NA	Water	7470A	641876
MB 480-641876/1-A	Method Blank	Total/NA	Water	7470A	641876
LCS 480-641876/2-A	Lab Control Sample	Total/NA	Water	7470A	641876
LCSD 480-641876/3-A	Lab Control Sample Dup	Total/NA	Water	7470A	641876

Prep Batch: 642057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201707-1	SB2 (0-0.5)	Total/NA	Solid	3050B	
480-201707-2	SB2 (0.5-1)	Total/NA	Solid	3050B	
480-201707-3	SB2 (1-2)	Total/NA	Solid	3050B	
480-201707-5	FDUP_091422	Total/NA	Solid	3050B	
480-201707-6	SB2 (13.5-15.5)	Total/NA	Solid	3050B	
480-201707-10	SB4 (0-0.5)	Total/NA	Solid	3050B	
480-201707-11	SB4 (0.5-1)	Total/NA	Solid	3050B	
480-201712-1	SB4 (1-2)	Total/NA	Solid	3050B	
MB 480-642057/1-A	Method Blank	Total/NA	Solid	3050B	
LCDSRM 480-642057/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 480-642057/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Metals

Prep Batch: 642099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201707-1	SB2 (0-0.5)	Total/NA	Solid	7471B	
480-201707-2	SB2 (0.5-1)	Total/NA	Solid	7471B	
480-201707-3	SB2 (1-2)	Total/NA	Solid	7471B	
480-201707-5	FDUP_091422	Total/NA	Solid	7471B	
480-201707-6	SB2 (13.5-15.5)	Total/NA	Solid	7471B	
480-201707-10	SB4 (0-0.5)	Total/NA	Solid	7471B	
480-201707-11	SB4 (0.5-1)	Total/NA	Solid	7471B	
480-201712-1	SB4 (1-2)	Total/NA	Solid	7471B	
MB 480-642099/1-A	Method Blank	Total/NA	Solid	7471B	
LCDSRM 480-642099/3-A ^1	Lab Control Sample Dup	Total/NA	Solid	7471B	
LCSSRM 480-642099/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	
480-201707-1 MS	SB2 (0-0.5)	Total/NA	Solid	7471B	
480-201707-1 MSD	SB2 (0-0.5)	Total/NA	Solid	7471B	

Analysis Batch: 642173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201707-4	FB_091422	Total/NA	Water	6010C	641956
480-201707-7	ERB1_091422	Total/NA	Water	6010C	641956
480-201707-8	ERB2_091422	Total/NA	Water	6010C	641956
480-201707-9	FB_091522	Total/NA	Water	6010C	641956
MB 480-641956/1-A	Method Blank	Total/NA	Water	6010C	641956
LCS 480-641956/2-A	Lab Control Sample	Total/NA	Water	6010C	641956
LCSD 480-641956/3-A	Lab Control Sample Dup	Total/NA	Water	6010C	641956

Analysis Batch: 642254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201707-1	SB2 (0-0.5)	Total/NA	Solid	7471B	642099
480-201707-2	SB2 (0.5-1)	Total/NA	Solid	7471B	642099
480-201707-3	SB2 (1-2)	Total/NA	Solid	7471B	642099
480-201707-5	FDUP_091422	Total/NA	Solid	7471B	642099
480-201707-6	SB2 (13.5-15.5)	Total/NA	Solid	7471B	642099
480-201707-10	SB4 (0-0.5)	Total/NA	Solid	7471B	642099
480-201707-11	SB4 (0.5-1)	Total/NA	Solid	7471B	642099
480-201712-1	SB4 (1-2)	Total/NA	Solid	7471B	642099
MB 480-642099/1-A	Method Blank	Total/NA	Solid	7471B	642099
LCDSRM 480-642099/3-A ^1	Lab Control Sample Dup	Total/NA	Solid	7471B	642099
LCSSRM 480-642099/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	642099
480-201707-1 MS	SB2 (0-0.5)	Total/NA	Solid	7471B	642099
480-201707-1 MSD	SB2 (0-0.5)	Total/NA	Solid	7471B	642099

Analysis Batch: 642370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201707-1	SB2 (0-0.5)	Total/NA	Solid	6010C	642057
480-201707-2	SB2 (0.5-1)	Total/NA	Solid	6010C	642057
480-201707-3	SB2 (1-2)	Total/NA	Solid	6010C	642057
480-201707-5	FDUP_091422	Total/NA	Solid	6010C	642057
480-201707-6	SB2 (13.5-15.5)	Total/NA	Solid	6010C	642057
480-201707-10	SB4 (0-0.5)	Total/NA	Solid	6010C	642057
480-201707-11	SB4 (0.5-1)	Total/NA	Solid	6010C	642057
480-201712-1	SB4 (1-2)	Total/NA	Solid	6010C	642057
MB 480-642057/1-A	Method Blank	Total/NA	Solid	6010C	642057

Metals (Continued)

Analysis Batch: 642370 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCDSRM 480-642057/3-A	Lab Control Sample Dup	Total/NA	Solid	6010C	642057
LCSSRM 480-642057/2-A	Lab Control Sample	Total/NA	Solid	6010C	642057

General Chemistry

Analysis Batch: 641804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-201707-1	SB2 (0-0.5)	Total/NA	Solid	Moisture	
480-201707-2	SB2 (0.5-1)	Total/NA	Solid	Moisture	
480-201707-3	SB2 (1-2)	Total/NA	Solid	Moisture	
480-201707-5	FDUP_091422	Total/NA	Solid	Moisture	
480-201707-6	SB2 (13.5-15.5)	Total/NA	Solid	Moisture	
480-201707-10	SB4 (0-0.5)	Total/NA	Solid	Moisture	
480-201707-11	SB4 (0.5-1)	Total/NA	Solid	Moisture	
480-201712-1	SB4 (1-2)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Client Sample ID: SB2 (0-0.5)
Date Collected: 09/14/22 17:05
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	641804	KER	EET BUF	09/16/22 16:20

Client Sample ID: SB2 (0-0.5)
Date Collected: 09/14/22 17:05
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-1
Matrix: Solid
Percent Solids: 75.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			642124	CDC	EET BUF	09/16/22 16:00
Total/NA	Analysis	8260C		1	642126	CDC	EET BUF	09/20/22 23:34
Total/NA	Prep	3550C			641854	MS	EET BUF	09/19/22 08:19
Total/NA	Analysis	8270D		1	642158	JMM	EET BUF	09/21/22 18:34
Total/NA	Prep	3050B			642057	NZG	EET BUF	09/20/22 14:15
Total/NA	Analysis	6010C		1	642370	LMH	EET BUF	09/21/22 16:19
Total/NA	Prep	7471B			642099	NVK	EET BUF	09/21/22 10:43
Total/NA	Analysis	7471B		1	642254	NVK	EET BUF	09/21/22 13:51

Client Sample ID: SB2 (0.5-1)
Date Collected: 09/14/22 17:10
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	641804	KER	EET BUF	09/16/22 16:20

Client Sample ID: SB2 (0.5-1)
Date Collected: 09/14/22 17:10
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-2
Matrix: Solid
Percent Solids: 79.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			641842	CDC	EET BUF	09/16/22 16:00
Total/NA	Analysis	8260C		1	641850	CDC	EET BUF	09/19/22 12:55
Total/NA	Prep	3550C			641854	MS	EET BUF	09/19/22 08:19
Total/NA	Analysis	8270D		1	642158	JMM	EET BUF	09/21/22 18:51
Total/NA	Prep	3050B			642057	NZG	EET BUF	09/20/22 14:15
Total/NA	Analysis	6010C		1	642370	LMH	EET BUF	09/21/22 16:23
Total/NA	Prep	7471B			642099	NVK	EET BUF	09/21/22 10:43
Total/NA	Analysis	7471B		1	642254	NVK	EET BUF	09/21/22 14:49

Client Sample ID: SB2 (1-2)
Date Collected: 09/14/22 17:15
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	641804	KER	EET BUF	09/16/22 16:20

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Client Sample ID: SB2 (1-2)
Date Collected: 09/14/22 17:15
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-3
Matrix: Solid
Percent Solids: 83.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			641842	CDC	EET BUF	09/16/22 16:00
Total/NA	Analysis	8260C		1	641850	CDC	EET BUF	09/19/22 13:22
Total/NA	Prep	3550C			641854	MS	EET BUF	09/19/22 08:19
Total/NA	Analysis	8270D		1	642158	JMM	EET BUF	09/21/22 19:08
Total/NA	Prep	SHAKE			183718	KFW	EET BUR	09/20/22 08:32
Total/NA	Analysis	537 IDA		1	183779	ND	EET BUR	09/21/22 18:41
Total/NA	Prep	3050B			642057	NZG	EET BUF	09/20/22 14:15
Total/NA	Analysis	6010C		1	642370	LMH	EET BUF	09/21/22 16:27
Total/NA	Prep	7471B			642099	NVK	EET BUF	09/21/22 10:43
Total/NA	Analysis	7471B		1	642254	NVK	EET BUF	09/21/22 14:50

Client Sample ID: FB_091422
Date Collected: 09/14/22 18:05
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	641871	AXK	EET BUF	09/19/22 13:24
Total/NA	Prep	3510C			641992	JMP	EET BUF	09/20/22 08:49
Total/NA	Analysis	8270D		1	642153	JMM	EET BUF	09/21/22 16:40
Total/NA	Prep	3510C	RE		642659	JMP	EET BUF	09/24/22 09:45
Total/NA	Analysis	8270D	RE	1	642720	JMM	EET BUF	09/26/22 20:42
Total/NA	Prep	3510C			641960	SJM	EET BUF	09/19/22 16:25
Total/NA	Analysis	8270D SIM ID		1	642776	IMZ	EET BUF	09/27/22 00:36
Total/NA	Prep	3535			183671	KFW	EET BUR	09/19/22 11:42
Total/NA	Analysis	537 IDA		1	183694	ND	EET BUR	09/19/22 19:32
Total/NA	Prep	3005A			641956	VAK	EET BUF	09/20/22 09:22
Total/NA	Analysis	6010C		1	642173	LMH	EET BUF	09/20/22 16:56
Total/NA	Prep	7470A			641876	NVK	EET BUF	09/19/22 11:06
Total/NA	Analysis	7470A		1	641965	NVK	EET BUF	09/19/22 15:38

Client Sample ID: FDUP_091422
Date Collected: 09/14/22 00:00
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	641804	KER	EET BUF	09/16/22 16:20

Client Sample ID: FDUP_091422
Date Collected: 09/14/22 00:00
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-5
Matrix: Solid
Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			641842	CDC	EET BUF	09/16/22 16:00
Total/NA	Analysis	8260C		1	641850	CDC	EET BUF	09/19/22 13:46

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Client Sample ID: FDUP_091422
Date Collected: 09/14/22 00:00
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-5
Matrix: Solid
Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3550C			641854	MS	EET BUF	09/19/22 08:19
Total/NA	Analysis	8270D		1	642158	JMM	EET BUF	09/21/22 19:25
Total/NA	Prep	SHAKE			183718	KFW	EET BUR	09/20/22 08:32
Total/NA	Analysis	537 IDA		1	183779	ND	EET BUR	09/21/22 18:49
Total/NA	Prep	3050B			642057	NZG	EET BUF	09/20/22 14:15
Total/NA	Analysis	6010C		1	642370	LMH	EET BUF	09/21/22 16:31
Total/NA	Prep	7471B			642099	NVK	EET BUF	09/21/22 10:43
Total/NA	Analysis	7471B		1	642254	NVK	EET BUF	09/21/22 14:51

Client Sample ID: SB2 (13.5-15.5)
Date Collected: 09/14/22 17:35
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	641804	KER	EET BUF	09/16/22 16:20

Client Sample ID: SB2 (13.5-15.5)
Date Collected: 09/14/22 17:35
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-6
Matrix: Solid
Percent Solids: 89.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			641842	CDC	EET BUF	09/16/22 16:00
Total/NA	Analysis	8260C		1	641850	CDC	EET BUF	09/19/22 14:10
Total/NA	Prep	3550C			641854	MS	EET BUF	09/19/22 08:19
Total/NA	Analysis	8270D		1	642158	JMM	EET BUF	09/21/22 19:42
Total/NA	Prep	3050B			642057	NZG	EET BUF	09/20/22 14:15
Total/NA	Analysis	6010C		1	642370	LMH	EET BUF	09/21/22 16:35
Total/NA	Prep	7471B			642099	NVK	EET BUF	09/21/22 10:43
Total/NA	Analysis	7471B		1	642254	NVK	EET BUF	09/21/22 14:53

Client Sample ID: ERB1_091422
Date Collected: 09/14/22 18:30
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	641871	AXK	EET BUF	09/19/22 13:47
Total/NA	Prep	3510C			641992	JMP	EET BUF	09/20/22 08:49
Total/NA	Analysis	8270D		1	642153	JMM	EET BUF	09/21/22 17:08
Total/NA	Prep	3510C	RE		642659	JMP	EET BUF	09/24/22 09:45
Total/NA	Analysis	8270D	RE	1	642720	JMM	EET BUF	09/26/22 21:09
Total/NA	Prep	3510C			641960	SJM	EET BUF	09/19/22 16:25
Total/NA	Analysis	8270D SIM ID		1	642776	IMZ	EET BUF	09/27/22 00:58
Total/NA	Prep	3535			183671	KFW	EET BUR	09/19/22 11:42
Total/NA	Analysis	537 IDA		1	183694	ND	EET BUR	09/19/22 19:40

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Client Sample ID: ERB1_091422
Date Collected: 09/14/22 18:30
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3005A			641956	VAK	EET BUF	09/20/22 09:22
Total/NA	Analysis	6010C		1	642173	LMH	EET BUF	09/20/22 17:00
Total/NA	Prep	7470A			641876	NVK	EET BUF	09/19/22 11:06
Total/NA	Analysis	7470A		1	641965	NVK	EET BUF	09/19/22 15:42

Client Sample ID: ERB2_091422
Date Collected: 09/14/22 18:45
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	641871	AXK	EET BUF	09/19/22 14:10
Total/NA	Prep	3510C			641992	JMP	EET BUF	09/20/22 08:49
Total/NA	Analysis	8270D		1	642153	JMM	EET BUF	09/21/22 17:35
Total/NA	Prep	3510C	RE		642659	JMP	EET BUF	09/24/22 09:45
Total/NA	Analysis	8270D	RE	1	642720	JMM	EET BUF	09/26/22 21:37
Total/NA	Prep	3510C			641960	SJM	EET BUF	09/19/22 16:25
Total/NA	Analysis	8270D SIM ID		1	642776	IMZ	EET BUF	09/27/22 01:19
Total/NA	Prep	3535			183671	KFW	EET BUR	09/19/22 11:42
Total/NA	Analysis	537 IDA		1	183694	ND	EET BUR	09/19/22 19:49
Total/NA	Prep	3005A			641956	VAK	EET BUF	09/20/22 09:22
Total/NA	Analysis	6010C		1	642173	LMH	EET BUF	09/20/22 17:03
Total/NA	Prep	7470A			641876	NVK	EET BUF	09/19/22 11:06
Total/NA	Analysis	7470A		1	641965	NVK	EET BUF	09/19/22 15:44

Client Sample ID: FB_091522
Date Collected: 09/15/22 07:20
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	641871	AXK	EET BUF	09/19/22 14:33
Total/NA	Prep	3510C			641992	JMP	EET BUF	09/20/22 08:49
Total/NA	Analysis	8270D		1	642153	JMM	EET BUF	09/21/22 18:03
Total/NA	Prep	3510C	RE		642659	JMP	EET BUF	09/24/22 09:45
Total/NA	Analysis	8270D	RE	1	642720	JMM	EET BUF	09/26/22 22:04
Total/NA	Prep	3005A			641956	VAK	EET BUF	09/20/22 09:22
Total/NA	Analysis	6010C		1	642173	LMH	EET BUF	09/20/22 17:19
Total/NA	Prep	7470A			641876	NVK	EET BUF	09/19/22 11:06
Total/NA	Analysis	7470A		1	641965	NVK	EET BUF	09/19/22 15:45

Client Sample ID: SB4 (0-0.5)
Date Collected: 09/15/22 09:00
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	641804	KER	EET BUF	09/16/22 16:20

Client Sample ID: SB4 (0-0.5)
Date Collected: 09/15/22 09:00
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-10
Matrix: Solid
Percent Solids: 93.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			641842	CDC	EET BUF	09/16/22 16:00
Total/NA	Analysis	8260C		1	641850	CDC	EET BUF	09/19/22 14:34
Total/NA	Prep	3550C			641854	MS	EET BUF	09/19/22 08:19
Total/NA	Analysis	8270D		5	642158	JMM	EET BUF	09/21/22 19:59
Total/NA	Prep	3050B			642057	NZG	EET BUF	09/20/22 14:15
Total/NA	Analysis	6010C		1	642370	LMH	EET BUF	09/21/22 16:39
Total/NA	Prep	7471B			642099	NVK	EET BUF	09/21/22 10:43
Total/NA	Analysis	7471B		1	642254	NVK	EET BUF	09/21/22 14:54

Client Sample ID: SB4 (0.5-1)
Date Collected: 09/15/22 09:05
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	641804	KER	EET BUF	09/16/22 16:20

Client Sample ID: SB4 (0.5-1)
Date Collected: 09/15/22 09:05
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201707-11
Matrix: Solid
Percent Solids: 89.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			641842	CDC	EET BUF	09/16/22 16:00
Total/NA	Analysis	8260C		1	641850	CDC	EET BUF	09/19/22 14:59
Total/NA	Prep	3550C			641854	MS	EET BUF	09/19/22 08:19
Total/NA	Analysis	8270D		5	642158	JMM	EET BUF	09/21/22 20:16
Total/NA	Prep	3050B			642057	NZG	EET BUF	09/20/22 14:15
Total/NA	Analysis	6010C		1	642370	LMH	EET BUF	09/21/22 16:42
Total/NA	Prep	7471B			642099	NVK	EET BUF	09/21/22 10:43
Total/NA	Analysis	7471B		1	642254	NVK	EET BUF	09/21/22 14:55

Client Sample ID: SB4 (1-2)
Date Collected: 09/15/22 09:10
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201712-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	641804	KER	EET BUF	09/16/22 16:20

Client Sample ID: SB4 (1-2)
Date Collected: 09/15/22 09:10
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201712-1
Matrix: Solid
Percent Solids: 91.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			641842	CDC	EET BUF	09/16/22 14:30
Total/NA	Analysis	8260C		1	641850	CDC	EET BUF	09/19/22 15:23
Total/NA	Prep	3550C			641854	MS	EET BUF	09/19/22 08:19
Total/NA	Analysis	8270D		5	642158	JMM	EET BUF	09/21/22 20:33

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Client Sample ID: SB4 (1-2)
Date Collected: 09/15/22 09:10
Date Received: 09/16/22 10:00

Lab Sample ID: 480-201712-1
Matrix: Solid
Percent Solids: 91.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3050B			642057	NZG	EET BUF	09/20/22 14:15
Total/NA	Analysis	6010C		1	642370	LMH	EET BUF	09/21/22 16:46
Total/NA	Prep	7471B			642099	NVK	EET BUF	09/21/22 10:43
Total/NA	Analysis	7471B		1	642254	NVK	EET BUF	09/21/22 14:57

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	1,2,3-Trimethylbenzene
8260C	5035A_L	Solid	1,2,3-Trimethylbenzene
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Laboratory: Eurofins Burlington

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2336	02-25-23
Connecticut	State	PH-0751	09-30-23
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	05-17-23
Florida	NELAP	E87467	06-30-23
Minnesota	NELAP	050-999-436	12-31-22
New Hampshire	NELAP	2006	12-18-22
New Jersey	NELAP	VT972	06-30-23
New York	NELAP	10391	04-01-23
Pennsylvania	NELAP	68-00489	04-30-23
Rhode Island	State	LAO00298	12-30-22
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00272	10-30-23
Vermont	State	VT4000	02-10-23
Virginia	NELAP	460209	12-14-22
Wisconsin	State	399133350	08-31-23

Method Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	EET BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	EET BUF
537 IDA	EPA 537 Isotope Dilution	EPA	EET BUR
6010C	Metals (ICP)	SW846	EET BUF
7470A	Mercury (CVAA)	SW846	EET BUF
7471B	Mercury (CVAA)	SW846	EET BUF
Moisture	Percent Moisture	EPA	EET BUF
3005A	Preparation, Total Metals	SW846	EET BUF
3050B	Preparation, Metals	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
3535	Solid-Phase Extraction (SPE)	SW846	EET BUR
3550C	Ultrasonic Extraction	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF
5035A_L	Closed System Purge and Trap	SW846	EET BUF
7470A	Preparation, Mercury	SW846	EET BUF
7471B	Preparation, Mercury	SW846	EET BUF
SHAKE	Shake Extraction with Ultrasonic Bath Extraction	SW846	EET BUR

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Sample Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-201707-1
SDG: 201707

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-201707-1	SB2 (0-0.5)	Solid	09/14/22 17:05	09/16/22 10:00
480-201707-2	SB2 (0.5-1)	Solid	09/14/22 17:10	09/16/22 10:00
480-201707-3	SB2 (1-2)	Solid	09/14/22 17:15	09/16/22 10:00
480-201707-4	FB_091422	Water	09/14/22 18:05	09/16/22 10:00
480-201707-5	FDUP_091422	Solid	09/14/22 00:00	09/16/22 10:00
480-201707-6	SB2 (13.5-15.5)	Solid	09/14/22 17:35	09/16/22 10:00
480-201707-7	ERB1_091422	Water	09/14/22 18:30	09/16/22 10:00
480-201707-8	ERB2_091422	Water	09/14/22 18:45	09/16/22 10:00
480-201707-9	FB_091522	Water	09/15/22 07:20	09/16/22 10:00
480-201707-10	SB4 (0-0.5)	Solid	09/15/22 09:00	09/16/22 10:00
480-201707-11	SB4 (0.5-1)	Solid	09/15/22 09:05	09/16/22 10:00
480-201712-1	SB4 (1-2)	Solid	09/15/22 09:10	09/16/22 10:00

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Integral	Lab PM: Beninati, John	Carrier Tracking No(s): FedEX	COC No: 480-176968-37967.2
Client Contact: Mr. Glenn Esler	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Integral Consulting Inc	PWSID:			Job #:
Address: 319 SW Washington Ave Suite 1150	Due Date Requested: Per Quote	Analysis Requested		Preservation Codes: A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3
City: Portland	TAT Requested (days): Per Quote			
State, Zip: OR, 97204	Compliance Project: Δ Yes Δ No			
Phone: 503-943-3617(Tel)	PO #: Purchase Order not required			
Email: gesler@integral-corp.com	WO #:			
Project Name: EF1017 - Refractories	Project #: 48025296			
Site:	SSOW#:			

480-201707 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs (LL)	8260C, 7474B	8270D - TCL SVOCs + 1,4 Dioxane	8260C - TCL VOCs (ML)	PFC_DA - PFAS - MY 21 Analytes	8270D - 1,4-Dioxane	8270D - TCL SVOCs	8270D_SIM_LL_ID - 1,4 Dioxane	6010C, 7470A	8260C - TCL VOCs	8270D - TCL SVOCs	Total Number of containers	Special Instructions/Note:
				Preservation Code:	X	X					N		N	N	D	A		X	
SB2(0-0.5)	9/14/22	17:05	G	Solid	N	N	X	X									X		
SB2(0.5-1)	9/14/22	17:10	G	Solid	N	N	X	X									X		
SB2(1-2)	9/14/22	17:15	G	Solid	N	N	X	X	X		X								PFAS samples shipped separately
FB-091422	9/14/22	18:05	G	Water	N	N							X	X	X	X			
FDUP_091422	9/14/22	—	G	S	N	N	X	X	X		X								
SB2(13.5-15.5)	9/14/22	17:35	G	S	N	N	X	X									X		
ERB1-091422	9/14/22	18:30	G	W	N	N							X	X	X	X			
ERB2-091422	9/14/22	18:45	G	W	N	N							X	X	X	X			
FB-091522	9/15/22	7:20	G	W	N	N							X		X	X			
SB4(0-0.5)	9/15/22	9:00	G	S	N	N	X	X									X		
SB4(0.5-1)	9/15/22	9:05	G	S	N	N	X	X									X		

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Cynthia Zatwarnicki	9/15/22 16:30	Integral		9/16/22 1000	TAL

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: #1 2.4 IR Gun

Ver: 06/08/2021

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: Integral	Lab PM: Beninati, John	Carrier Tracking No(s): FedEx	COC No: 480-175096-37695.1
Client Contact: Mr. Glenn Esler	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin:	Page: Page 1 of 3
Company: Integral Consulting Inc	PWSID:			Job #:
Address: 319 SW Washington Ave Suite 1150	Due Date Requested: Per Quote			
City: Portland	TAT Requested (days): Per Quote			
State, Zip: OR, 97204	Compliance Project: Δ Yes Δ No			
Phone: 503-943-3617(Tel)	PO #: Purchase Order not required			
Email: gesler@integral-corp.com	WO #:			
Project Name: EF1017 - Refractories - Shallow Soil	Project #: 48025298			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs (LL)	6010C, 7471B	8270D - TCL SVOCs - to include 1,4 Dioxane	PFC_IDA - PFAS - NY 21 Analytes	8270D-TCL SVOC	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N			
SB4(1-2)	9/15/22	9:10	G	Solid	N	N	X	X			X		
				Solid									
				Solid									
				Solid									
				Solid									
				Solid									
				Solid									
				Solid									
				Solid									
				Solid									
				Solid									

480-201712 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Cynthia Zatwarnicki	9/15/22 16:30	Integral	[illegible]	9/16/22 1000	~~TAS~~ TAS
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.4 #1. ICE

Ver: 06/08/2021

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

480-201707 Chain of Custody

Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Beninati, John		
Client Contact: Shipping/Receiving	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	New York	Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New York		Job #: 480-201707-1
Address: 530 Community Drive, Suite 11,	Due Date Requested: 9/29/2022			
City: South Burlington	TAT Requested (days):			
State, Zip: VT, 05403				
Phone: 802-660-1990(Tel) 802-660-1919(Fax)	PO #:			
Email:	WO #:			
Project Name: Integral Consulting - EF1017 - Refractor	Project #: 48025298			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA/Shake_Bath_14D PFAS - NY 21 Analytes	PFC_IDA/3535_IVWT PFAS - NY 21 Analytes	Total Number of containers	Special Instructions/Note:
Preservation Code:										
SB2 (1-2) (480-201707-3)	9/14/22	17:15 Eastern		Solid			X		1	
FB-091422 (480-201707-4)	9/14/22	18:05 Eastern		Water				X	2	
FDUP-091422 (480-201707-5)	9/14/22	Eastern		Solid			X		1	
ERB1-091422 (480-201707-7)	9/14/22	18.30 Eastern		Water				X	2	
ERB2-091422 (480-201707-8)	9/14/22	18 45 Eastern		Water				X	2	

Note. Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing Northeast, LLC

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For _____ Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time: 9-16-22 1800	Company: TAB	Received by:	Date/Time: 9/17/22 10:28	Company: TAB NWK
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks

Ver: 06/08/2021



ORIGIN ID:DKKA (716) 691-2600
SAMPLE RECEIPT
EUROFINS BUFFALO
10 HAZELWOOD DR

AMHERST, NY 14228
UNITED STATES US

SHIP DATE: 16SEP22
ACTWGT: 44.75 LB
CAD: 846654/CAFE3616
DIMS: 26x15x14 IN

BILL SENDER

TO SAMPLE MGT.
EUROFINS BURLINGTON
530 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 923-1026
REF: TA BURLINGTON

577C1/ECBC/432A

FedEx Express

J22202203280 1uv

TRK# 0201 5754 0126 4186

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO BTVA

05403
VT-US BTV

Login Sample Receipt Checklist

Client: Integral Consulting Inc

Job Number: 480-201707-1
SDG Number: 201707

Login Number: 201707
List Number: 1
Creator: Kolb, Chris M

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	REFER TO NCM
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	TCORE VIALS PUT INTO FREEZER 9/16 @ 1320
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	INTEGRAL
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Integral Consulting Inc

Job Number: 480-201707-1
SDG Number: 201707

Login Number: 201707
List Number: 2
Creator: Khudaier, Zahraa

List Source: Eurofins Burlington
List Creation: 09/17/22 12:15 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	1963545
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.9ºC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Integral Consulting Inc

Job Number: 480-201707-1
SDG Number: 201707

Login Number: 201712
List Number: 1
Creator: Kolb, Chris M

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	TCORE VIALS PUT IN FREEZER 9/16 @ 1430
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	INTEGRAL
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing America



ANALYTICAL REPORT

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-202448-1
Client Project/Site: EF1017 - Refractories

For:
Integral Consulting Inc
319 SW Washington Ave
Suite 1150
Portland, Oregon 97204

Attn: Mr. Glenn Esler

Authorized for release by:
10/20/2022 8:00:13 AM

John Beninati, Project Manager
(716)504-9874
John.Beninati@et.eurofinsus.com

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Cover Page 1
Table of Contents 2
Definitions/Glossary 3
Case Narrative 5
Detection Summary 7
Client Sample Results 9
Surrogate Summary 34
Isotope Dilution Summary 35
QC Sample Results 37
QC Association Summary 67
Lab Chronicle 71
Certification Summary 74
Method Summary 75
Sample Summary 76
Chain of Custody 77
Receipt Checklists 80

Definitions/Glossary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-202448-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

LCMS

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-202448-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-202448-1

Comments
No additional comments.

Receipt
The samples were received on 10/6/2022 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 4 coolers at receipt time were 2.1º C, 2.9º C, 3.1º C and 3.6º C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-644728 recovered outside acceptance criteria, low biased, for sec-Butylbenzene, m,p-Xylene, N-Propylbenzene, n-Butylbenzene, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, 1,1,2-Trichloroethane, Isopropylbenzene and Ethylbenzene. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-644817 recovered outside acceptance criteria, low biased, for Carbon tetrachloride, Dichlorobromomethane, Chloroform, and 1,1,1-Trichloroethane. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270D: The continuing calibration verification (CCV) analyzed in batch 480-644815 was outside the method criteria for the following analyte(s): 2,4,6-Tribromophenol (Surr). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-644815 recovered above the upper control limit for 4-Nitroaniline, bis (2-chloroisopropyl) ether and Carbazole. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: FB-100522 (480-202448-2), MW1-100522 (480-202448-3) and MW5-100522 (480-202448-4).

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-644815 recovered outside acceptance criteria, low biased, for 4-Nitrophenol and Hexachlorocyclopentadiene. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270D: The laboratory control sample (LCS) for preparation batch 480-644800 and analytical batch 480-644815 recovered outside control limits for the following analytes: Carbazole. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-645033 recovered above the upper control limit for bis (2-chloroisopropyl) ether and Carbazole. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: ERB-100522 (480-202448-6).

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-645033 recovered outside acceptance criteria, low biased, for 2,4-Dinitrophenol, 4-Nitrophenol, Hexachlorocyclopentadiene and Pentachlorophenol. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270D: The laboratory control sample (LCS) for preparation batch 480-644800 and analytical batch 480-645033 recovered outside control limits for the following analytes: Carbazole. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-645318 recovered above the upper control limit for bis (2-chloroisopropyl) ether and Carbazole. The samples associated with this CCV were non-detects for the affected analytes; therefore,

Job ID: 480-202448-1 (Continued)

Laboratory: Eurofins Buffalo (Continued)

the data have been reported. The associated sample is impacted: FDUP-100522 (480-202448-5).

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-645318 recovered outside acceptance criteria, low biased, for 2,4-Dinitrophenol, 4-Nitrophenol, Hexachlorocyclopentadiene and Pentachlorophenol. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270D: The laboratory control sample (LCS) for preparation batch 480-644800 and analytical batch 480-645318 recovered outside control limits for the following analytes: Carbazole. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6010C: The low level continuing calibration verification (CCVL) for analytical batch 480-645252 recovered above the upper control limit for (total Manganese). The samples associated with this CCVL contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of samples MW1-100522 (480-202448-3), MW5-100522 (480-202448-4) and FDUP-100522 (480-202448-5) was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

LCMS

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-202448-1

Client Sample ID: TB-100522 — Lab Sample ID: 480-202448-1

No Detections.

Client Sample ID: FB-100522 — Lab Sample ID: 480-202448-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl phthalate	4.0	J B	5.0	0.22	ug/L	1		8270D	Total/NA
Manganese	0.00095	J B	0.0030	0.00040	mg/L	1		6010C	Total/NA

Client Sample ID: MW1-100522 — Lab Sample ID: 480-202448-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	2.3		1.0	0.46	ug/L	1		8260C	Total/NA
Diethyl phthalate	2.4	J B	5.2	0.23	ug/L	1		8270D	Total/NA
Perfluorobutanoic acid (PFBA)	1.2	J	4.5	1.1	ng/L	1		537 IDA	Total/NA
Perfluorooctanoic acid (PFOA)	0.68	J	1.8	0.68	ng/L	1		537 IDA	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.2		1.8	0.76	ng/L	1		537 IDA	Total/NA
Aluminum	0.20		0.20	0.060	mg/L	1		6010C	Total/NA
Barium	0.11		0.0020	0.00070	mg/L	1		6010C	Total/NA
Calcium	47.9		0.50	0.10	mg/L	1		6010C	Total/NA
Iron	0.21		0.050	0.019	mg/L	1		6010C	Total/NA
Lead	0.0031	J	0.010	0.0030	mg/L	1		6010C	Total/NA
Magnesium	8.1		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	0.56	B ^+	0.0030	0.00040	mg/L	1		6010C	Total/NA
Potassium	3.5		0.50	0.10	mg/L	1		6010C	Total/NA
Sodium	136		1.0	0.32	mg/L	1		6010C	Total/NA
Zinc	0.0016	J	0.010	0.0015	mg/L	1		6010C	Total/NA
Barium, Dissolved	0.088		0.0020	0.00070	mg/L	1		6010C	Dissolved
Calcium, Dissolved	41.0		0.50	0.10	mg/L	1		6010C	Dissolved
Copper, Dissolved	0.0017	J	0.010	0.0016	mg/L	1		6010C	Dissolved
Magnesium, Dissolved	7.0		0.20	0.043	mg/L	1		6010C	Dissolved
Manganese, Dissolved	0.44	B	0.0030	0.00040	mg/L	1		6010C	Dissolved
Potassium, Dissolved	3.0		0.50	0.10	mg/L	1		6010C	Dissolved
Sodium, Dissolved	124		1.0	0.32	mg/L	1		6010C	Dissolved

Client Sample ID: MW5-100522 — Lab Sample ID: 480-202448-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.60	J	1.0	0.38	ug/L	1		8260C	Total/NA
Diethyl phthalate	3.1	J B	6.0	0.26	ug/L	1		8270D	Total/NA
Aluminum	0.41		0.20	0.060	mg/L	1		6010C	Total/NA
Barium	0.15		0.0020	0.00070	mg/L	1		6010C	Total/NA
Calcium	149		0.50	0.10	mg/L	1		6010C	Total/NA
Cobalt	0.0012	J	0.0040	0.00063	mg/L	1		6010C	Total/NA
Copper	0.0087	J	0.010	0.0016	mg/L	1		6010C	Total/NA
Iron	0.77		0.050	0.019	mg/L	1		6010C	Total/NA
Lead	0.0046	J	0.010	0.0030	mg/L	1		6010C	Total/NA
Magnesium	14.8		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	4.7	B ^+	0.0030	0.00040	mg/L	1		6010C	Total/NA
Nickel	0.0025	J	0.010	0.0013	mg/L	1		6010C	Total/NA
Potassium	6.1		0.50	0.10	mg/L	1		6010C	Total/NA
Sodium	53.1		1.0	0.32	mg/L	1		6010C	Total/NA
Zinc	0.011		0.010	0.0015	mg/L	1		6010C	Total/NA
Barium, Dissolved	0.13		0.0020	0.00070	mg/L	1		6010C	Dissolved
Calcium, Dissolved	143		0.50	0.10	mg/L	1		6010C	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample ID: MW5-100522 (Continued) — Lab Sample ID: 480-202448-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt, Dissolved	0.0011	J	0.0040	0.00063	mg/L	1		6010C	Dissolved
Copper, Dissolved	0.0036	J	0.010	0.0016	mg/L	1		6010C	Dissolved
Iron, Dissolved	0.39		0.050	0.019	mg/L	1		6010C	Dissolved
Magnesium, Dissolved	14.4		0.20	0.043	mg/L	1		6010C	Dissolved
Manganese, Dissolved	4.7	B	0.0030	0.00040	mg/L	1		6010C	Dissolved
Nickel, Dissolved	0.0025	J	0.010	0.0013	mg/L	1		6010C	Dissolved
Potassium, Dissolved	5.5		0.50	0.10	mg/L	1		6010C	Dissolved
Sodium, Dissolved	54.9		1.0	0.32	mg/L	1		6010C	Dissolved
Zinc, Dissolved	0.0065	J	0.010	0.0015	mg/L	1		6010C	Dissolved

Client Sample ID: FDUP-100522 — Lab Sample ID: 480-202448-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	2.1		1.0	0.46	ug/L	1		8260C	Total/NA
Diethyl phthalate	3.1	J B	5.2	0.23	ug/L	1		8270D	Total/NA
Perfluorobutanoic acid (PFBA)	1.3	J	4.8	1.1	ng/L	1		537 IDA	Total/NA
Perfluorooctanesulfonic acid (PFOS)	2.0		1.9	0.81	ng/L	1		537 IDA	Total/NA
Barium	0.097		0.0020	0.00070	mg/L	1		6010C	Total/NA
Calcium	41.5		0.50	0.10	mg/L	1		6010C	Total/NA
Magnesium	7.1		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	0.45	B ^+	0.0030	0.00040	mg/L	1		6010C	Total/NA
Potassium	3.3		0.50	0.10	mg/L	1		6010C	Total/NA
Sodium	131		1.0	0.32	mg/L	1		6010C	Total/NA
Barium, Dissolved	0.087		0.0020	0.00070	mg/L	1		6010C	Dissolved
Calcium, Dissolved	40.8		0.50	0.10	mg/L	1		6010C	Dissolved
Copper, Dissolved	0.0021	J	0.010	0.0016	mg/L	1		6010C	Dissolved
Magnesium, Dissolved	7.2		0.20	0.043	mg/L	1		6010C	Dissolved
Manganese, Dissolved	0.45	B	0.0030	0.00040	mg/L	1		6010C	Dissolved
Potassium, Dissolved	3.1		0.50	0.10	mg/L	1		6010C	Dissolved
Sodium, Dissolved	123		1.0	0.32	mg/L	1		6010C	Dissolved
Zinc, Dissolved	0.0016	J	0.010	0.0015	mg/L	1		6010C	Dissolved

Client Sample ID: ERB-100522 — Lab Sample ID: 480-202448-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Diethyl phthalate	1.3	J B	5.0	0.22	ug/L	1		8270D	Total/NA
Manganese	0.0014	J B	0.0030	0.00040	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-202448-1

Client Sample ID: TB-100522
Date Collected: 10/05/22 09:10
Date Received: 10/06/22 10:30

Lab Sample ID: 480-202448-1
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			10/11/22 07:26	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/22 07:26	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/22 07:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/22 07:26	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/22 07:26	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/11/22 07:26	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/22 07:26	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			10/11/22 07:26	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/22 07:26	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			10/11/22 07:26	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/11/22 07:26	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/22 07:26	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/22 07:26	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/22 07:26	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/22 07:26	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			10/11/22 07:26	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/22 07:26	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/22 07:26	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/22 07:26	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/22 07:26	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/22 07:26	1
Acetone	ND		10	3.0	ug/L			10/11/22 07:26	1
Benzene	ND		1.0	0.41	ug/L			10/11/22 07:26	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/22 07:26	1
Bromoform	ND		1.0	0.26	ug/L			10/11/22 07:26	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/22 07:26	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/11/22 07:26	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/22 07:26	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/22 07:26	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/22 07:26	1
Chloroform	ND		1.0	0.34	ug/L			10/11/22 07:26	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/22 07:26	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/11/22 07:26	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/22 07:26	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/22 07:26	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/22 07:26	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/11/22 07:26	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/22 07:26	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/22 07:26	1
m,p-Xylene	ND		2.0	0.66	ug/L			10/11/22 07:26	1
Methyl acetate	ND		2.5	1.3	ug/L			10/11/22 07:26	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/22 07:26	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/22 07:26	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/22 07:26	1
n-Butylbenzene	ND		1.0	0.64	ug/L			10/11/22 07:26	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/11/22 07:26	1
o-Xylene	ND		1.0	0.76	ug/L			10/11/22 07:26	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			10/11/22 07:26	1
Styrene	ND		1.0	0.73	ug/L			10/11/22 07:26	1

Client Sample ID: TB-100522

Date Collected: 10/05/22 09:10
Date Received: 10/06/22 10:30

Lab Sample ID: 480-202448-1
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		1.0	0.81	ug/L			10/11/22 07:26	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/11/22 07:26	1
Toluene	ND		1.0	0.51	ug/L			10/11/22 07:26	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/11/22 07:26	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/11/22 07:26	1
Trichloroethene	ND		1.0	0.46	ug/L			10/11/22 07:26	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/22 07:26	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/11/22 07:26	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/22 07:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*10/11/22 07:26*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*10/11/22 07:26*	*1*
Dibromofluoromethane (Surr)	*108*		*75 - 123*		*10/11/22 07:26*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/11/22 07:26*	*1*

Client Sample ID: FB-100522

Date Collected: 10/05/22 09:10
Date Received: 10/06/22 10:30

Lab Sample ID: 480-202448-2
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			10/11/22 07:49	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/22 07:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/22 07:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/22 07:49	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/22 07:49	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/11/22 07:49	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/22 07:49	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			10/11/22 07:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/22 07:49	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			10/11/22 07:49	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/11/22 07:49	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/22 07:49	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/22 07:49	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/22 07:49	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/22 07:49	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			10/11/22 07:49	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/22 07:49	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/22 07:49	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/22 07:49	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/22 07:49	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/22 07:49	1
Acetone	ND		10	3.0	ug/L			10/11/22 07:49	1
Benzene	ND		1.0	0.41	ug/L			10/11/22 07:49	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/22 07:49	1
Bromoform	ND		1.0	0.26	ug/L			10/11/22 07:49	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/22 07:49	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/11/22 07:49	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/22 07:49	1

Client Sample ID: FB-100522

Date Collected: 10/05/22 09:10
Date Received: 10/06/22 10:30

Lab Sample ID: 480-202448-2

Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/22 07:49	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/22 07:49	1
Chloroform	ND		1.0	0.34	ug/L			10/11/22 07:49	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/22 07:49	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/11/22 07:49	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/22 07:49	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/22 07:49	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/22 07:49	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/11/22 07:49	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/22 07:49	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/22 07:49	1
m,p-Xylene	ND		2.0	0.66	ug/L			10/11/22 07:49	1
Methyl acetate	ND		2.5	1.3	ug/L			10/11/22 07:49	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/22 07:49	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/22 07:49	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/22 07:49	1
n-Butylbenzene	ND		1.0	0.64	ug/L			10/11/22 07:49	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/11/22 07:49	1
o-Xylene	ND		1.0	0.76	ug/L			10/11/22 07:49	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			10/11/22 07:49	1
Styrene	ND		1.0	0.73	ug/L			10/11/22 07:49	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			10/11/22 07:49	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/11/22 07:49	1
Toluene	ND		1.0	0.51	ug/L			10/11/22 07:49	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/11/22 07:49	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/11/22 07:49	1
Trichloroethene	ND		1.0	0.46	ug/L			10/11/22 07:49	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/22 07:49	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/11/22 07:49	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/22 07:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*10/11/22 07:49*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*10/11/22 07:49*	*1*
Dibromofluoromethane (Surr)	*112*		*75 - 123*		*10/11/22 07:49*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*10/11/22 07:49*	*1*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.22	0.11	ug/L		10/11/22 15:56	10/13/22 21:14	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*39*		*15 - 110*	*10/11/22 15:56*	*10/13/22 21:14*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		10/11/22 08:43	10/12/22 22:58	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		10/11/22 08:43	10/12/22 22:58	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		10/11/22 08:43	10/12/22 22:58	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		10/11/22 08:43	10/12/22 22:58	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		10/11/22 08:43	10/12/22 22:58	1

Client Sample ID: FB-100522
Date Collected: 10/05/22 09:10
Date Received: 10/06/22 10:30

Lab Sample ID: 480-202448-2
Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		10/11/22 08:43	10/12/22 22:58	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		10/11/22 08:43	10/12/22 22:58	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		10/11/22 08:43	10/12/22 22:58	1
2-Chlorophenol	ND		5.0	0.53	ug/L		10/11/22 08:43	10/12/22 22:58	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		10/11/22 08:43	10/12/22 22:58	1
2-Methylphenol	ND		5.0	0.40	ug/L		10/11/22 08:43	10/12/22 22:58	1
2-Nitroaniline	ND		10	0.42	ug/L		10/11/22 08:43	10/12/22 22:58	1
2-Nitrophenol	ND		5.0	0.48	ug/L		10/11/22 08:43	10/12/22 22:58	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		10/11/22 08:43	10/12/22 22:58	1
3-Nitroaniline	ND		10	0.48	ug/L		10/11/22 08:43	10/12/22 22:58	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		10/11/22 08:43	10/12/22 22:58	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		10/11/22 08:43	10/12/22 22:58	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		10/11/22 08:43	10/12/22 22:58	1
4-Chloroaniline	ND		5.0	0.59	ug/L		10/11/22 08:43	10/12/22 22:58	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		10/11/22 08:43	10/12/22 22:58	1
4-Methylphenol	ND		10	0.36	ug/L		10/11/22 08:43	10/12/22 22:58	1
4-Nitroaniline	ND		10	0.25	ug/L		10/11/22 08:43	10/12/22 22:58	1
4-Nitrophenol	ND		10	1.5	ug/L		10/11/22 08:43	10/12/22 22:58	1
Acenaphthene	ND		5.0	0.41	ug/L		10/11/22 08:43	10/12/22 22:58	1
Acenaphthylene	ND		5.0	0.38	ug/L		10/11/22 08:43	10/12/22 22:58	1
Acetophenone	ND		5.0	0.54	ug/L		10/11/22 08:43	10/12/22 22:58	1
Anthracene	ND		5.0	0.28	ug/L		10/11/22 08:43	10/12/22 22:58	1
Atrazine	ND		5.0	0.46	ug/L		10/11/22 08:43	10/12/22 22:58	1
Benzaldehyde	ND		5.0	0.27	ug/L		10/11/22 08:43	10/12/22 22:58	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		10/11/22 08:43	10/12/22 22:58	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		10/11/22 08:43	10/12/22 22:58	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		10/11/22 08:43	10/12/22 22:58	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		10/11/22 08:43	10/12/22 22:58	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		10/11/22 08:43	10/12/22 22:58	1
Biphenyl	ND		5.0	0.65	ug/L		10/11/22 08:43	10/12/22 22:58	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		10/11/22 08:43	10/12/22 22:58	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		10/11/22 08:43	10/12/22 22:58	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		10/11/22 08:43	10/12/22 22:58	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		10/11/22 08:43	10/12/22 22:58	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		10/11/22 08:43	10/12/22 22:58	1
Caprolactam	ND		5.0	2.2	ug/L		10/11/22 08:43	10/12/22 22:58	1
Carbazole	ND	*+	5.0	0.30	ug/L		10/11/22 08:43	10/12/22 22:58	1
Chrysene	ND		5.0	0.33	ug/L		10/11/22 08:43	10/12/22 22:58	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		10/11/22 08:43	10/12/22 22:58	1
Dibenzofuran	ND		10	0.51	ug/L		10/11/22 08:43	10/12/22 22:58	1
Diethyl phthalate	**4.0**	**J B**	5.0	0.22	ug/L		10/11/22 08:43	10/12/22 22:58	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		10/11/22 08:43	10/12/22 22:58	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		10/11/22 08:43	10/12/22 22:58	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		10/11/22 08:43	10/12/22 22:58	1
Fluoranthene	ND		5.0	0.40	ug/L		10/11/22 08:43	10/12/22 22:58	1
Fluorene	ND		5.0	0.36	ug/L		10/11/22 08:43	10/12/22 22:58	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		10/11/22 08:43	10/12/22 22:58	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		10/11/22 08:43	10/12/22 22:58	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		10/11/22 08:43	10/12/22 22:58	1

Client Sample ID: FB-100522
Date Collected: 10/05/22 09:10
Date Received: 10/06/22 10:30

Lab Sample ID: 480-202448-2
Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	ND		5.0	0.59	ug/L		10/11/22 08:43	10/12/22 22:58	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		10/11/22 08:43	10/12/22 22:58	1
Isophorone	ND		5.0	0.43	ug/L		10/11/22 08:43	10/12/22 22:58	1
Naphthalene	ND		5.0	0.76	ug/L		10/11/22 08:43	10/12/22 22:58	1
Nitrobenzene	ND		5.0	0.29	ug/L		10/11/22 08:43	10/12/22 22:58	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		10/11/22 08:43	10/12/22 22:58	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		10/11/22 08:43	10/12/22 22:58	1
Pentachlorophenol	ND		10	2.2	ug/L		10/11/22 08:43	10/12/22 22:58	1
Phenanthrene	ND		5.0	0.44	ug/L		10/11/22 08:43	10/12/22 22:58	1
Phenol	ND		5.0	0.39	ug/L		10/11/22 08:43	10/12/22 22:58	1
Pyrene	ND		5.0	0.34	ug/L		10/11/22 08:43	10/12/22 22:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*63*		*41 - 120*	*10/11/22 08:43*	*10/12/22 22:58*	*1*
2-Fluorobiphenyl (Surr)	*88*		*48 - 120*	*10/11/22 08:43*	*10/12/22 22:58*	*1*
2-Fluorophenol (Surr)	*63*		*35 - 120*	*10/11/22 08:43*	*10/12/22 22:58*	*1*
Nitrobenzene-d5 (Surr)	*76*		*46 - 120*	*10/11/22 08:43*	*10/12/22 22:58*	*1*
Phenol-d5 (Surr)	*47*		*22 - 120*	*10/11/22 08:43*	*10/12/22 22:58*	*1*
p-Terphenyl-d14 (Surr)	*101*		*60 - 148*	*10/11/22 08:43*	*10/12/22 22:58*	*1*

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.5	1.1	ng/L		10/14/22 11:48	10/17/22 14:40	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	0.61	ng/L		10/14/22 11:48	10/17/22 14:40	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	0.58	ng/L		10/14/22 11:48	10/17/22 14:40	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.48	ng/L		10/14/22 11:48	10/17/22 14:40	1
Perfluorooctanoic acid (PFOA)	ND		1.8	0.68	ng/L		10/14/22 11:48	10/17/22 14:40	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.44	ng/L		10/14/22 11:48	10/17/22 14:40	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.41	ng/L		10/14/22 11:48	10/17/22 14:40	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.49	ng/L		10/14/22 11:48	10/17/22 14:40	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.44	ng/L		10/14/22 11:48	10/17/22 14:40	1
Perfluorotridecanoic acid (PFTriA)	ND		1.8	0.43	ng/L		10/14/22 11:48	10/17/22 14:40	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.57	ng/L		10/14/22 11:48	10/17/22 14:40	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	0.55	ng/L		10/14/22 11:48	10/17/22 14:40	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.49	ng/L		10/14/22 11:48	10/17/22 14:40	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.8	0.37	ng/L		10/14/22 11:48	10/17/22 14:40	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.76	ng/L		10/14/22 11:48	10/17/22 14:40	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.36	ng/L		10/14/22 11:48	10/17/22 14:40	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.8	0.82	ng/L		10/14/22 11:48	10/17/22 14:40	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.5	1.7	ng/L		10/14/22 11:48	10/17/22 14:40	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.5	1.4	ng/L		10/14/22 11:48	10/17/22 14:40	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		4.5	1.2	ng/L		10/14/22 11:48	10/17/22 14:40	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		1.8	0.69	ng/L		10/14/22 11:48	10/17/22 14:40	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*96*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:40*	*1*
13C4 PFHpA	*92*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:40*	*1*

Client Sample ID: FB-100522

Date Collected: 10/05/22 09:10
Date Received: 10/06/22 10:30

Lab Sample ID: 480-202448-2

Matrix: Water

Method: EPA 537 IDA - EPA 537 Isotope Dilution (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	96		50 - 150	10/14/22 11:48	10/17/22 14:40	1
13C4 PFOS	100		50 - 150	10/14/22 11:48	10/17/22 14:40	1
13C5 PFNA	95		50 - 150	10/14/22 11:48	10/17/22 14:40	1
13C4 PFBA	90		50 - 150	10/14/22 11:48	10/17/22 14:40	1
13C2 PFHxA	95		50 - 150	10/14/22 11:48	10/17/22 14:40	1
13C2 PFDA	98		50 - 150	10/14/22 11:48	10/17/22 14:40	1
13C2 PFUnA	101		50 - 150	10/14/22 11:48	10/17/22 14:40	1
13C2 PFDoA	98		50 - 150	10/14/22 11:48	10/17/22 14:40	1
13C8 FOSA	95		50 - 150	10/14/22 11:48	10/17/22 14:40	1
13C5 PFPeA	88		50 - 150	10/14/22 11:48	10/17/22 14:40	1
13C2 PFTeDA	99		50 - 150	10/14/22 11:48	10/17/22 14:40	1
d3-NMeFOSAA	111		50 - 150	10/14/22 11:48	10/17/22 14:40	1
d5-NEtFOSAA	109		50 - 150	10/14/22 11:48	10/17/22 14:40	1
M2-6:2 FTS	100		50 - 150	10/14/22 11:48	10/17/22 14:40	1
M2-8:2 FTS	106		50 - 150	10/14/22 11:48	10/17/22 14:40	1
13C3 PFBS	96		50 - 150	10/14/22 11:48	10/17/22 14:40	1

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		10/11/22 09:02	10/12/22 18:58	1
Antimony	ND		0.020	0.0068	mg/L		10/11/22 09:02	10/12/22 18:58	1
Arsenic	ND		0.015	0.0056	mg/L		10/11/22 09:02	10/12/22 18:58	1
Barium	ND		0.0020	0.00070	mg/L		10/11/22 09:02	10/12/22 18:58	1
Beryllium	ND		0.0020	0.00030	mg/L		10/11/22 09:02	10/12/22 18:58	1
Cadmium	ND		0.0020	0.00050	mg/L		10/11/22 09:02	10/12/22 18:58	1
Calcium	ND		0.50	0.10	mg/L		10/11/22 09:02	10/12/22 18:58	1
Chromium	ND		0.0040	0.0010	mg/L		10/11/22 09:02	10/12/22 18:58	1
Cobalt	ND		0.0040	0.00063	mg/L		10/11/22 09:02	10/12/22 18:58	1
Copper	ND		0.010	0.0016	mg/L		10/11/22 09:02	10/12/22 18:58	1
Iron	ND		0.050	0.019	mg/L		10/11/22 09:02	10/12/22 18:58	1
Lead	ND		0.010	0.0030	mg/L		10/11/22 09:02	10/14/22 13:21	1
Magnesium	ND		0.20	0.043	mg/L		10/11/22 09:02	10/12/22 18:58	1
Manganese	**0.00095**	**J B**	0.0030	0.00040	mg/L		10/11/22 09:02	10/14/22 13:21	1
Nickel	ND		0.010	0.0013	mg/L		10/11/22 09:02	10/12/22 18:58	1
Potassium	ND		0.50	0.10	mg/L		10/11/22 09:02	10/12/22 18:58	1
Selenium	ND		0.025	0.0087	mg/L		10/11/22 09:02	10/12/22 18:58	1
Silver	ND		0.0060	0.0017	mg/L		10/11/22 09:02	10/12/22 18:58	1
Sodium	ND		1.0	0.32	mg/L		10/11/22 09:02	10/12/22 18:58	1
Thallium	ND		0.020	0.010	mg/L		10/11/22 09:02	10/12/22 18:58	1
Vanadium	ND		0.0050	0.0015	mg/L		10/11/22 09:02	10/12/22 18:58	1
Zinc	ND		0.010	0.0015	mg/L		10/11/22 09:02	10/12/22 18:58	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		10/11/22 10:36	10/11/22 14:01	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-202448-1

Client Sample ID: MW1-100522
Date Collected: 10/05/22 11:45
Date Received: 10/06/22 10:30

Lab Sample ID: 480-202448-3
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			10/11/22 20:16	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/22 20:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/22 20:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/22 20:16	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/22 20:16	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/11/22 20:16	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/22 20:16	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			10/11/22 20:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/22 20:16	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			10/11/22 20:16	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/11/22 20:16	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/22 20:16	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/22 20:16	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/22 20:16	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/22 20:16	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			10/11/22 20:16	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/22 20:16	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/22 20:16	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/22 20:16	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/22 20:16	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/22 20:16	1
Acetone	ND		10	3.0	ug/L			10/11/22 20:16	1
Benzene	ND		1.0	0.41	ug/L			10/11/22 20:16	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/22 20:16	1
Bromoform	ND		1.0	0.26	ug/L			10/11/22 20:16	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/22 20:16	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/11/22 20:16	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/22 20:16	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/22 20:16	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/22 20:16	1
Chloroform	ND		1.0	0.34	ug/L			10/11/22 20:16	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/22 20:16	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/11/22 20:16	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/22 20:16	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/22 20:16	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/22 20:16	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/11/22 20:16	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/22 20:16	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/22 20:16	1
m,p-Xylene	ND		2.0	0.66	ug/L			10/11/22 20:16	1
Methyl acetate	ND		2.5	1.3	ug/L			10/11/22 20:16	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/22 20:16	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/22 20:16	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/22 20:16	1
n-Butylbenzene	ND		1.0	0.64	ug/L			10/11/22 20:16	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/11/22 20:16	1
o-Xylene	ND		1.0	0.76	ug/L			10/11/22 20:16	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			10/11/22 20:16	1
Styrene	ND		1.0	0.73	ug/L			10/11/22 20:16	1

Client Sample ID: MW1-100522

Date Collected: 10/05/22 11:45
Date Received: 10/06/22 10:30

Lab Sample ID: 480-202448-3

Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		1.0	0.81	ug/L			10/11/22 20:16	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/11/22 20:16	1
Toluene	ND		1.0	0.51	ug/L			10/11/22 20:16	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/11/22 20:16	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/11/22 20:16	1
Trichloroethene	**2.3**		1.0	0.46	ug/L			10/11/22 20:16	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/22 20:16	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/11/22 20:16	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/22 20:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*77 - 120*		*10/11/22 20:16*	*1*
4-Bromofluorobenzene (Surr)	*84*		*73 - 120*		*10/11/22 20:16*	*1*
Dibromofluoromethane (Surr)	*91*		*75 - 123*		*10/11/22 20:16*	*1*
Toluene-d8 (Surr)	*87*		*80 - 120*		*10/11/22 20:16*	*1*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.23	0.11	ug/L		10/11/22 15:56	10/13/22 20:30	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*22*		*15 - 110*	*10/11/22 15:56*	*10/13/22 20:30*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.2	0.50	ug/L		10/11/22 08:43	10/12/22 21:34	1
2,4,6-Trichlorophenol	ND		5.2	0.64	ug/L		10/11/22 08:43	10/12/22 21:34	1
2,4-Dichlorophenol	ND		5.2	0.53	ug/L		10/11/22 08:43	10/12/22 21:34	1
2,4-Dimethylphenol	ND		5.2	0.52	ug/L		10/11/22 08:43	10/12/22 21:34	1
2,4-Dinitrophenol	ND		10	2.3	ug/L		10/11/22 08:43	10/12/22 21:34	1
2,4-Dinitrotoluene	ND		5.2	0.47	ug/L		10/11/22 08:43	10/12/22 21:34	1
2,6-Dinitrotoluene	ND		5.2	0.42	ug/L		10/11/22 08:43	10/12/22 21:34	1
2-Chloronaphthalene	ND		5.2	0.48	ug/L		10/11/22 08:43	10/12/22 21:34	1
2-Chlorophenol	ND		5.2	0.55	ug/L		10/11/22 08:43	10/12/22 21:34	1
2-Methylnaphthalene	ND		5.2	0.63	ug/L		10/11/22 08:43	10/12/22 21:34	1
2-Methylphenol	ND		5.2	0.42	ug/L		10/11/22 08:43	10/12/22 21:34	1
2-Nitroaniline	ND		10	0.44	ug/L		10/11/22 08:43	10/12/22 21:34	1
2-Nitrophenol	ND		5.2	0.50	ug/L		10/11/22 08:43	10/12/22 21:34	1
3,3'-Dichlorobenzidine	ND		5.2	0.42	ug/L		10/11/22 08:43	10/12/22 21:34	1
3-Nitroaniline	ND		10	0.50	ug/L		10/11/22 08:43	10/12/22 21:34	1
4,6-Dinitro-2-methylphenol	ND		10	2.3	ug/L		10/11/22 08:43	10/12/22 21:34	1
4-Bromophenyl phenyl ether	ND		5.2	0.47	ug/L		10/11/22 08:43	10/12/22 21:34	1
4-Chloro-3-methylphenol	ND		5.2	0.47	ug/L		10/11/22 08:43	10/12/22 21:34	1
4-Chloroaniline	ND		5.2	0.61	ug/L		10/11/22 08:43	10/12/22 21:34	1
4-Chlorophenyl phenyl ether	ND		5.2	0.36	ug/L		10/11/22 08:43	10/12/22 21:34	1
4-Methylphenol	ND		10	0.38	ug/L		10/11/22 08:43	10/12/22 21:34	1
4-Nitroaniline	ND		10	0.26	ug/L		10/11/22 08:43	10/12/22 21:34	1
4-Nitrophenol	ND		10	1.6	ug/L		10/11/22 08:43	10/12/22 21:34	1
Acenaphthene	ND		5.2	0.43	ug/L		10/11/22 08:43	10/12/22 21:34	1
Acenaphthylene	ND		5.2	0.40	ug/L		10/11/22 08:43	10/12/22 21:34	1
Acetophenone	ND		5.2	0.56	ug/L		10/11/22 08:43	10/12/22 21:34	1

Client Sample ID: MW1-100522

Date Collected: 10/05/22 11:45
Date Received: 10/06/22 10:30

Lab Sample ID: 480-202448-3

Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		5.2	0.29	ug/L		10/11/22 08:43	10/12/22 21:34	1
Atrazine	ND		5.2	0.48	ug/L		10/11/22 08:43	10/12/22 21:34	1
Benzaldehyde	ND		5.2	0.28	ug/L		10/11/22 08:43	10/12/22 21:34	1
Benzo[a]anthracene	ND		5.2	0.38	ug/L		10/11/22 08:43	10/12/22 21:34	1
Benzo[a]pyrene	ND		5.2	0.49	ug/L		10/11/22 08:43	10/12/22 21:34	1
Benzo[b]fluoranthene	ND		5.2	0.35	ug/L		10/11/22 08:43	10/12/22 21:34	1
Benzo[g,h,i]perylene	ND		5.2	0.36	ug/L		10/11/22 08:43	10/12/22 21:34	1
Benzo[k]fluoranthene	ND		5.2	0.76	ug/L		10/11/22 08:43	10/12/22 21:34	1
Biphenyl	ND		5.2	0.68	ug/L		10/11/22 08:43	10/12/22 21:34	1
bis (2-chloroisopropyl) ether	ND		5.2	0.54	ug/L		10/11/22 08:43	10/12/22 21:34	1
Bis(2-chloroethoxy)methane	ND		5.2	0.36	ug/L		10/11/22 08:43	10/12/22 21:34	1
Bis(2-chloroethyl)ether	ND		5.2	0.42	ug/L		10/11/22 08:43	10/12/22 21:34	1
Bis(2-ethylhexyl) phthalate	ND		5.2	2.3	ug/L		10/11/22 08:43	10/12/22 21:34	1
Butyl benzyl phthalate	ND		5.2	1.0	ug/L		10/11/22 08:43	10/12/22 21:34	1
Caprolactam	ND		5.2	2.3	ug/L		10/11/22 08:43	10/12/22 21:34	1
Carbazole	ND	F1 *+	5.2	0.31	ug/L		10/11/22 08:43	10/12/22 21:34	1
Chrysene	ND		5.2	0.34	ug/L		10/11/22 08:43	10/12/22 21:34	1
Dibenz(a,h)anthracene	ND		5.2	0.44	ug/L		10/11/22 08:43	10/12/22 21:34	1
Dibenzofuran	ND		10	0.53	ug/L		10/11/22 08:43	10/12/22 21:34	1
Diethyl phthalate	**2.4**	**J B**	5.2	0.23	ug/L		10/11/22 08:43	10/12/22 21:34	1
Dimethyl phthalate	ND		5.2	0.38	ug/L		10/11/22 08:43	10/12/22 21:34	1
Di-n-butyl phthalate	ND		5.2	0.32	ug/L		10/11/22 08:43	10/12/22 21:34	1
Di-n-octyl phthalate	ND		5.2	0.49	ug/L		10/11/22 08:43	10/12/22 21:34	1
Fluoranthene	ND		5.2	0.42	ug/L		10/11/22 08:43	10/12/22 21:34	1
Fluorene	ND		5.2	0.38	ug/L		10/11/22 08:43	10/12/22 21:34	1
Hexachlorobenzene	ND		5.2	0.53	ug/L		10/11/22 08:43	10/12/22 21:34	1
Hexachlorobutadiene	ND		5.2	0.71	ug/L		10/11/22 08:43	10/12/22 21:34	1
Hexachlorocyclopentadiene	ND		5.2	0.61	ug/L		10/11/22 08:43	10/12/22 21:34	1
Hexachloroethane	ND		5.2	0.61	ug/L		10/11/22 08:43	10/12/22 21:34	1
Indeno[1,2,3-cd]pyrene	ND		5.2	0.49	ug/L		10/11/22 08:43	10/12/22 21:34	1
Isophorone	ND		5.2	0.45	ug/L		10/11/22 08:43	10/12/22 21:34	1
Naphthalene	ND		5.2	0.79	ug/L		10/11/22 08:43	10/12/22 21:34	1
Nitrobenzene	ND		5.2	0.30	ug/L		10/11/22 08:43	10/12/22 21:34	1
N-Nitrosodi-n-propylamine	ND		5.2	0.56	ug/L		10/11/22 08:43	10/12/22 21:34	1
N-Nitrosodiphenylamine	ND		5.2	0.53	ug/L		10/11/22 08:43	10/12/22 21:34	1
Pentachlorophenol	ND		10	2.3	ug/L		10/11/22 08:43	10/12/22 21:34	1
Phenanthrene	ND		5.2	0.46	ug/L		10/11/22 08:43	10/12/22 21:34	1
Phenol	ND		5.2	0.41	ug/L		10/11/22 08:43	10/12/22 21:34	1
Pyrene	ND		5.2	0.35	ug/L		10/11/22 08:43	10/12/22 21:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*70*		*41 - 120*	*10/11/22 08:43*	*10/12/22 21:34*	*1*
2-Fluorobiphenyl (Surr)	*80*		*48 - 120*	*10/11/22 08:43*	*10/12/22 21:34*	*1*
2-Fluorophenol (Surr)	*56*		*35 - 120*	*10/11/22 08:43*	*10/12/22 21:34*	*1*
Nitrobenzene-d5 (Surr)	*69*		*46 - 120*	*10/11/22 08:43*	*10/12/22 21:34*	*1*
Phenol-d5 (Surr)	*43*		*22 - 120*	*10/11/22 08:43*	*10/12/22 21:34*	*1*
p-Terphenyl-d14 (Surr)	*91*		*60 - 148*	*10/11/22 08:43*	*10/12/22 21:34*	*1*

Client Sample ID: MW1-100522

Date Collected: 10/05/22 11:45
Date Received: 10/06/22 10:30

Lab Sample ID: 480-202448-3

Matrix: Water

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**1.2**	**J**	4.5	1.1	ng/L		10/14/22 11:48	10/17/22 14:48	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	0.61	ng/L		10/14/22 11:48	10/17/22 14:48	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	0.58	ng/L		10/14/22 11:48	10/17/22 14:48	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.48	ng/L		10/14/22 11:48	10/17/22 14:48	1
Perfluorooctanoic acid (PFOA)	**0.68**	**J**	1.8	0.68	ng/L		10/14/22 11:48	10/17/22 14:48	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.44	ng/L		10/14/22 11:48	10/17/22 14:48	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.41	ng/L		10/14/22 11:48	10/17/22 14:48	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.49	ng/L		10/14/22 11:48	10/17/22 14:48	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.44	ng/L		10/14/22 11:48	10/17/22 14:48	1
Perfluorotridecanoic acid (PFTriA)	ND		1.8	0.43	ng/L		10/14/22 11:48	10/17/22 14:48	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.57	ng/L		10/14/22 11:48	10/17/22 14:48	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	0.56	ng/L		10/14/22 11:48	10/17/22 14:48	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.49	ng/L		10/14/22 11:48	10/17/22 14:48	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.8	0.37	ng/L		10/14/22 11:48	10/17/22 14:48	1
Perfluorooctanesulfonic acid (PFOS)	**2.2**		1.8	0.76	ng/L		10/14/22 11:48	10/17/22 14:48	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.36	ng/L		10/14/22 11:48	10/17/22 14:48	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.8	0.82	ng/L		10/14/22 11:48	10/17/22 14:48	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.5	1.7	ng/L		10/14/22 11:48	10/17/22 14:48	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.5	1.4	ng/L		10/14/22 11:48	10/17/22 14:48	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		4.5	1.2	ng/L		10/14/22 11:48	10/17/22 14:48	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		1.8	0.69	ng/L		10/14/22 11:48	10/17/22 14:48	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*102*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:48*	*1*
13C4 PFHpA	*98*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:48*	*1*
13C4 PFOA	*98*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:48*	*1*
13C4 PFOS	*101*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:48*	*1*
13C5 PFNA	*98*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:48*	*1*
13C4 PFBA	*91*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:48*	*1*
13C2 PFHxA	*96*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:48*	*1*
13C2 PFDA	*101*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:48*	*1*
13C2 PFUnA	*102*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:48*	*1*
13C2 PFDoA	*100*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:48*	*1*
13C8 FOSA	*96*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:48*	*1*
13C5 PFPeA	*92*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:48*	*1*
13C2 PFTeDA	*102*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:48*	*1*
d3-NMeFOSAA	*114*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:48*	*1*
d5-NEtFOSAA	*118*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:48*	*1*
M2-6:2 FTS	*102*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:48*	*1*
M2-8:2 FTS	*102*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:48*	*1*
13C3 PFBS	*97*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:48*	*1*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.20**		0.20	0.060	mg/L		10/11/22 09:02	10/12/22 19:02	1
Antimony	ND		0.020	0.0068	mg/L		10/11/22 09:02	10/12/22 19:02	1

Client Sample ID: MW1-100522

Date Collected: 10/05/22 11:45
Date Received: 10/06/22 10:30

Lab Sample ID: 480-202448-3

Matrix: Water

Method: SW846 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		10/11/22 09:02	10/12/22 19:02	1
Barium	**0.11**		0.0020	0.00070	mg/L		10/11/22 09:02	10/12/22 19:02	1
Beryllium	ND		0.0020	0.00030	mg/L		10/11/22 09:02	10/12/22 19:02	1
Cadmium	ND		0.0020	0.00050	mg/L		10/11/22 09:02	10/12/22 19:02	1
Calcium	**47.9**		0.50	0.10	mg/L		10/11/22 09:02	10/12/22 19:02	1
Chromium	ND		0.0040	0.0010	mg/L		10/11/22 09:02	10/12/22 19:02	1
Cobalt	ND		0.0040	0.00063	mg/L		10/11/22 09:02	10/12/22 19:02	1
Copper	ND		0.010	0.0016	mg/L		10/11/22 09:02	10/12/22 19:02	1
Iron	**0.21**		0.050	0.019	mg/L		10/11/22 09:02	10/12/22 19:02	1
Lead	**0.0031**	**J**	0.010	0.0030	mg/L		10/11/22 09:02	10/14/22 13:37	1
Magnesium	**8.1**		0.20	0.043	mg/L		10/11/22 09:02	10/12/22 19:02	1
Manganese	**0.56**	**B ^+**	0.0030	0.00040	mg/L		10/11/22 09:02	10/12/22 19:02	1
Nickel	ND		0.010	0.0013	mg/L		10/11/22 09:02	10/12/22 19:02	1
Potassium	**3.5**		0.50	0.10	mg/L		10/11/22 09:02	10/12/22 19:02	1
Selenium	ND		0.025	0.0087	mg/L		10/11/22 09:02	10/12/22 19:02	1
Silver	ND		0.0060	0.0017	mg/L		10/11/22 09:02	10/12/22 19:02	1
Sodium	**136**		1.0	0.32	mg/L		10/11/22 09:02	10/12/22 19:02	1
Thallium	ND		0.020	0.010	mg/L		10/11/22 09:02	10/12/22 19:02	1
Vanadium	ND		0.0050	0.0015	mg/L		10/11/22 09:02	10/12/22 19:02	1
Zinc	**0.0016**	**J**	0.010	0.0015	mg/L		10/11/22 09:02	10/12/22 19:02	1

Method: SW846 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	ND		0.20	0.060	mg/L		10/10/22 09:32	10/10/22 23:56	1
Antimony, Dissolved	ND		0.020	0.0068	mg/L		10/10/22 09:32	10/10/22 23:56	1
Arsenic, Dissolved	ND		0.015	0.0056	mg/L		10/10/22 09:32	10/10/22 23:56	1
Barium, Dissolved	**0.088**		0.0020	0.00070	mg/L		10/10/22 09:32	10/10/22 23:56	1
Beryllium, Dissolved	ND		0.0020	0.00030	mg/L		10/10/22 09:32	10/12/22 14:26	1
Cadmium, Dissolved	ND		0.0020	0.00050	mg/L		10/10/22 09:32	10/10/22 23:56	1
Calcium, Dissolved	**41.0**		0.50	0.10	mg/L		10/10/22 09:32	10/10/22 23:56	1
Chromium, Dissolved	ND		0.0040	0.0010	mg/L		10/10/22 09:32	10/10/22 23:56	1
Cobalt, Dissolved	ND		0.0040	0.00063	mg/L		10/10/22 09:32	10/10/22 23:56	1
Copper, Dissolved	**0.0017**	**J**	0.010	0.0016	mg/L		10/10/22 09:32	10/10/22 23:56	1
Iron, Dissolved	ND		0.050	0.019	mg/L		10/10/22 09:32	10/10/22 23:56	1
Lead, Dissolved	ND		0.010	0.0030	mg/L		10/10/22 09:32	10/10/22 23:56	1
Magnesium, Dissolved	**7.0**		0.20	0.043	mg/L		10/10/22 09:32	10/12/22 14:26	1
Manganese, Dissolved	**0.44**	**B**	0.0030	0.00040	mg/L		10/10/22 09:32	10/12/22 14:26	1
Nickel, Dissolved	ND		0.010	0.0013	mg/L		10/10/22 09:32	10/10/22 23:56	1
Potassium, Dissolved	**3.0**		0.50	0.10	mg/L		10/10/22 09:32	10/10/22 23:56	1
Selenium, Dissolved	ND		0.025	0.0087	mg/L		10/10/22 09:32	10/10/22 23:56	1
Silver, Dissolved	ND		0.0060	0.0017	mg/L		10/10/22 09:32	10/12/22 14:26	1
Sodium, Dissolved	**124**		1.0	0.32	mg/L		10/10/22 09:32	10/10/22 23:56	1
Thallium, Dissolved	ND		0.020	0.010	mg/L		10/10/22 09:32	10/10/22 23:56	1
Vanadium, Dissolved	ND		0.0050	0.0015	mg/L		10/10/22 09:32	10/10/22 23:56	1
Zinc, Dissolved	ND		0.010	0.0015	mg/L		10/10/22 09:32	10/10/22 23:56	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		10/11/22 10:36	10/11/22 14:03	1

Client Sample ID: MW1-100522

Lab Sample ID: 480-202448-3

Date Collected: 10/05/22 11:45

Matrix: Water

Date Received: 10/06/22 10:30

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00020	0.000043	mg/L		10/11/22 10:36	10/11/22 13:46	1

Client Sample ID: MW5-100522

Lab Sample ID: 480-202448-4

Date Collected: 10/05/22 16:20

Matrix: Water

Date Received: 10/06/22 10:30

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			10/11/22 20:39	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/22 20:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/22 20:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/22 20:39	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/22 20:39	1
1,1-Dichloroethane	**0.60**	**J**	1.0	0.38	ug/L			10/11/22 20:39	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/22 20:39	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			10/11/22 20:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/22 20:39	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			10/11/22 20:39	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/11/22 20:39	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/22 20:39	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/22 20:39	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/22 20:39	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/22 20:39	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			10/11/22 20:39	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/22 20:39	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/22 20:39	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/22 20:39	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/22 20:39	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/22 20:39	1
Acetone	ND		10	3.0	ug/L			10/11/22 20:39	1
Benzene	ND		1.0	0.41	ug/L			10/11/22 20:39	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/22 20:39	1
Bromoform	ND		1.0	0.26	ug/L			10/11/22 20:39	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/22 20:39	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/11/22 20:39	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/22 20:39	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/22 20:39	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/22 20:39	1
Chloroform	ND		1.0	0.34	ug/L			10/11/22 20:39	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/22 20:39	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/11/22 20:39	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/22 20:39	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/22 20:39	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/22 20:39	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/11/22 20:39	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/22 20:39	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/22 20:39	1
m,p-Xylene	ND		2.0	0.66	ug/L			10/11/22 20:39	1
Methyl acetate	ND		2.5	1.3	ug/L			10/11/22 20:39	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/22 20:39	1

Client Sample ID: MW5-100522
Date Collected: 10/05/22 16:20
Date Received: 10/06/22 10:30

Lab Sample ID: 480-202448-4
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/22 20:39	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/22 20:39	1
n-Butylbenzene	ND		1.0	0.64	ug/L			10/11/22 20:39	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/11/22 20:39	1
o-Xylene	ND		1.0	0.76	ug/L			10/11/22 20:39	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			10/11/22 20:39	1
Styrene	ND		1.0	0.73	ug/L			10/11/22 20:39	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			10/11/22 20:39	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/11/22 20:39	1
Toluene	ND		1.0	0.51	ug/L			10/11/22 20:39	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/11/22 20:39	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/11/22 20:39	1
Trichloroethene	ND		1.0	0.46	ug/L			10/11/22 20:39	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/22 20:39	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/11/22 20:39	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/22 20:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*77 - 120*		*10/11/22 20:39*	*1*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*10/11/22 20:39*	*1*
Dibromofluoromethane (Surr)	*85*		*75 - 123*		*10/11/22 20:39*	*1*
Toluene-d8 (Surr)	*84*		*80 - 120*		*10/11/22 20:39*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		6.0	0.57	ug/L		10/11/22 08:43	10/12/22 23:25	1
2,4,6-Trichlorophenol	ND		6.0	0.73	ug/L		10/11/22 08:43	10/12/22 23:25	1
2,4-Dichlorophenol	ND		6.0	0.61	ug/L		10/11/22 08:43	10/12/22 23:25	1
2,4-Dimethylphenol	ND		6.0	0.60	ug/L		10/11/22 08:43	10/12/22 23:25	1
2,4-Dinitrophenol	ND		12	2.6	ug/L		10/11/22 08:43	10/12/22 23:25	1
2,4-Dinitrotoluene	ND		6.0	0.53	ug/L		10/11/22 08:43	10/12/22 23:25	1
2,6-Dinitrotoluene	ND		6.0	0.48	ug/L		10/11/22 08:43	10/12/22 23:25	1
2-Chloronaphthalene	ND		6.0	0.55	ug/L		10/11/22 08:43	10/12/22 23:25	1
2-Chlorophenol	ND		6.0	0.63	ug/L		10/11/22 08:43	10/12/22 23:25	1
2-Methylnaphthalene	ND		6.0	0.71	ug/L		10/11/22 08:43	10/12/22 23:25	1
2-Methylphenol	ND		6.0	0.48	ug/L		10/11/22 08:43	10/12/22 23:25	1
2-Nitroaniline	ND		12	0.50	ug/L		10/11/22 08:43	10/12/22 23:25	1
2-Nitrophenol	ND		6.0	0.57	ug/L		10/11/22 08:43	10/12/22 23:25	1
3,3'-Dichlorobenzidine	ND		6.0	0.48	ug/L		10/11/22 08:43	10/12/22 23:25	1
3-Nitroaniline	ND		12	0.57	ug/L		10/11/22 08:43	10/12/22 23:25	1
4,6-Dinitro-2-methylphenol	ND		12	2.6	ug/L		10/11/22 08:43	10/12/22 23:25	1
4-Bromophenyl phenyl ether	ND		6.0	0.54	ug/L		10/11/22 08:43	10/12/22 23:25	1
4-Chloro-3-methylphenol	ND		6.0	0.54	ug/L		10/11/22 08:43	10/12/22 23:25	1
4-Chloroaniline	ND		6.0	0.70	ug/L		10/11/22 08:43	10/12/22 23:25	1
4-Chlorophenyl phenyl ether	ND		6.0	0.42	ug/L		10/11/22 08:43	10/12/22 23:25	1
4-Methylphenol	ND		12	0.43	ug/L		10/11/22 08:43	10/12/22 23:25	1
4-Nitroaniline	ND		12	0.30	ug/L		10/11/22 08:43	10/12/22 23:25	1
4-Nitrophenol	ND		12	1.8	ug/L		10/11/22 08:43	10/12/22 23:25	1
Acenaphthene	ND		6.0	0.49	ug/L		10/11/22 08:43	10/12/22 23:25	1
Acenaphthylene	ND		6.0	0.45	ug/L		10/11/22 08:43	10/12/22 23:25	1

Client Sample ID: MW5-100522
Date Collected: 10/05/22 16:20
Date Received: 10/06/22 10:30

Lab Sample ID: 480-202448-4
Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetophenone	ND		6.0	0.64	ug/L		10/11/22 08:43	10/12/22 23:25	1
Anthracene	ND		6.0	0.33	ug/L		10/11/22 08:43	10/12/22 23:25	1
Atrazine	ND		6.0	0.55	ug/L		10/11/22 08:43	10/12/22 23:25	1
Benzaldehyde	ND		6.0	0.32	ug/L		10/11/22 08:43	10/12/22 23:25	1
Benzo[a]anthracene	ND		6.0	0.43	ug/L		10/11/22 08:43	10/12/22 23:25	1
Benzo[a]pyrene	ND		6.0	0.56	ug/L		10/11/22 08:43	10/12/22 23:25	1
Benzo[b]fluoranthene	ND		6.0	0.40	ug/L		10/11/22 08:43	10/12/22 23:25	1
Benzo[g,h,i]perylene	ND		6.0	0.42	ug/L		10/11/22 08:43	10/12/22 23:25	1
Benzo[k]fluoranthene	ND		6.0	0.87	ug/L		10/11/22 08:43	10/12/22 23:25	1
Biphenyl	ND		6.0	0.78	ug/L		10/11/22 08:43	10/12/22 23:25	1
bis (2-chloroisopropyl) ether	ND		6.0	0.62	ug/L		10/11/22 08:43	10/12/22 23:25	1
Bis(2-chloroethoxy)methane	ND		6.0	0.42	ug/L		10/11/22 08:43	10/12/22 23:25	1
Bis(2-chloroethyl)ether	ND		6.0	0.48	ug/L		10/11/22 08:43	10/12/22 23:25	1
Bis(2-ethylhexyl) phthalate	ND		6.0	2.6	ug/L		10/11/22 08:43	10/12/22 23:25	1
Butyl benzyl phthalate	ND		6.0	1.2	ug/L		10/11/22 08:43	10/12/22 23:25	1
Caprolactam	ND		6.0	2.6	ug/L		10/11/22 08:43	10/12/22 23:25	1
Carbazole	ND	*+	6.0	0.36	ug/L		10/11/22 08:43	10/12/22 23:25	1
Chrysene	ND		6.0	0.39	ug/L		10/11/22 08:43	10/12/22 23:25	1
Dibenz(a,h)anthracene	ND		6.0	0.50	ug/L		10/11/22 08:43	10/12/22 23:25	1
Dibenzofuran	ND		12	0.61	ug/L		10/11/22 08:43	10/12/22 23:25	1
Diethyl phthalate	**3.1**	**J B**	6.0	0.26	ug/L		10/11/22 08:43	10/12/22 23:25	1
Dimethyl phthalate	ND		6.0	0.43	ug/L		10/11/22 08:43	10/12/22 23:25	1
Di-n-butyl phthalate	ND		6.0	0.37	ug/L		10/11/22 08:43	10/12/22 23:25	1
Di-n-octyl phthalate	ND		6.0	0.56	ug/L		10/11/22 08:43	10/12/22 23:25	1
Fluoranthene	ND		6.0	0.48	ug/L		10/11/22 08:43	10/12/22 23:25	1
Fluorene	ND		6.0	0.43	ug/L		10/11/22 08:43	10/12/22 23:25	1
Hexachlorobenzene	ND		6.0	0.61	ug/L		10/11/22 08:43	10/12/22 23:25	1
Hexachlorobutadiene	ND		6.0	0.81	ug/L		10/11/22 08:43	10/12/22 23:25	1
Hexachlorocyclopentadiene	ND		6.0	0.70	ug/L		10/11/22 08:43	10/12/22 23:25	1
Hexachloroethane	ND		6.0	0.70	ug/L		10/11/22 08:43	10/12/22 23:25	1
Indeno[1,2,3-cd]pyrene	ND		6.0	0.56	ug/L		10/11/22 08:43	10/12/22 23:25	1
Isophorone	ND		6.0	0.51	ug/L		10/11/22 08:43	10/12/22 23:25	1
Naphthalene	ND		6.0	0.90	ug/L		10/11/22 08:43	10/12/22 23:25	1
Nitrobenzene	ND		6.0	0.35	ug/L		10/11/22 08:43	10/12/22 23:25	1
N-Nitrosodi-n-propylamine	ND		6.0	0.64	ug/L		10/11/22 08:43	10/12/22 23:25	1
N-Nitrosodiphenylamine	ND		6.0	0.61	ug/L		10/11/22 08:43	10/12/22 23:25	1
Pentachlorophenol	ND		12	2.6	ug/L		10/11/22 08:43	10/12/22 23:25	1
Phenanthrene	ND		6.0	0.52	ug/L		10/11/22 08:43	10/12/22 23:25	1
Phenol	ND		6.0	0.46	ug/L		10/11/22 08:43	10/12/22 23:25	1
Pyrene	ND		6.0	0.40	ug/L		10/11/22 08:43	10/12/22 23:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*67*		*41 - 120*	*10/11/22 08:43*	*10/12/22 23:25*	*1*
2-Fluorobiphenyl (Surr)	*79*		*48 - 120*	*10/11/22 08:43*	*10/12/22 23:25*	*1*
2-Fluorophenol (Surr)	*57*		*35 - 120*	*10/11/22 08:43*	*10/12/22 23:25*	*1*
Nitrobenzene-d5 (Surr)	*68*		*46 - 120*	*10/11/22 08:43*	*10/12/22 23:25*	*1*
Phenol-d5 (Surr)	*47*		*22 - 120*	*10/11/22 08:43*	*10/12/22 23:25*	*1*
p-Terphenyl-d14 (Surr)	*74*		*60 - 148*	*10/11/22 08:43*	*10/12/22 23:25*	*1*

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-202448-1

Client Sample ID: MW5-100522

Date Collected: 10/05/22 16:20
Date Received: 10/06/22 10:30

Lab Sample ID: 480-202448-4

Matrix: Water

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.41**		0.20	0.060	mg/L		10/11/22 09:02	10/12/22 19:14	1
Antimony	ND		0.020	0.0068	mg/L		10/11/22 09:02	10/12/22 19:14	1
Arsenic	ND		0.015	0.0056	mg/L		10/11/22 09:02	10/12/22 19:14	1
Barium	**0.15**		0.0020	0.00070	mg/L		10/11/22 09:02	10/12/22 19:14	1
Beryllium	ND		0.0020	0.00030	mg/L		10/11/22 09:02	10/12/22 19:14	1
Cadmium	ND		0.0020	0.00050	mg/L		10/11/22 09:02	10/12/22 19:14	1
Calcium	**149**		0.50	0.10	mg/L		10/11/22 09:02	10/12/22 19:14	1
Chromium	ND		0.0040	0.0010	mg/L		10/11/22 09:02	10/12/22 19:14	1
Cobalt	**0.0012**	**J**	0.0040	0.00063	mg/L		10/11/22 09:02	10/12/22 19:14	1
Copper	**0.0087**	**J**	0.010	0.0016	mg/L		10/11/22 09:02	10/12/22 19:14	1
Iron	**0.77**		0.050	0.019	mg/L		10/11/22 09:02	10/12/22 19:14	1
Lead	**0.0046**	**J**	0.010	0.0030	mg/L		10/11/22 09:02	10/14/22 13:48	1
Magnesium	**14.8**		0.20	0.043	mg/L		10/11/22 09:02	10/12/22 19:14	1
Manganese	**4.7**	**B ^+**	0.0030	0.00040	mg/L		10/11/22 09:02	10/12/22 19:14	1
Nickel	**0.0025**	**J**	0.010	0.0013	mg/L		10/11/22 09:02	10/12/22 19:14	1
Potassium	**6.1**		0.50	0.10	mg/L		10/11/22 09:02	10/12/22 19:14	1
Selenium	ND		0.025	0.0087	mg/L		10/11/22 09:02	10/12/22 19:14	1
Silver	ND		0.0060	0.0017	mg/L		10/11/22 09:02	10/12/22 19:14	1
Sodium	**53.1**		1.0	0.32	mg/L		10/11/22 09:02	10/12/22 19:14	1
Thallium	ND		0.020	0.010	mg/L		10/11/22 09:02	10/12/22 19:14	1
Vanadium	ND		0.0050	0.0015	mg/L		10/11/22 09:02	10/12/22 19:14	1
Zinc	**0.011**		0.010	0.0015	mg/L		10/11/22 09:02	10/12/22 19:14	1

Method: SW846 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	ND		0.20	0.060	mg/L		10/10/22 09:32	10/11/22 00:15	1
Antimony, Dissolved	ND		0.020	0.0068	mg/L		10/10/22 09:32	10/11/22 00:15	1
Arsenic, Dissolved	ND		0.015	0.0056	mg/L		10/10/22 09:32	10/11/22 00:15	1
Barium, Dissolved	**0.13**		0.0020	0.00070	mg/L		10/10/22 09:32	10/11/22 00:15	1
Beryllium, Dissolved	ND		0.0020	0.00030	mg/L		10/10/22 09:32	10/12/22 14:45	1
Cadmium, Dissolved	ND		0.0020	0.00050	mg/L		10/10/22 09:32	10/11/22 00:15	1
Calcium, Dissolved	**143**		0.50	0.10	mg/L		10/10/22 09:32	10/11/22 00:15	1
Chromium, Dissolved	ND		0.0040	0.0010	mg/L		10/10/22 09:32	10/11/22 00:15	1
Cobalt, Dissolved	**0.0011**	**J**	0.0040	0.00063	mg/L		10/10/22 09:32	10/11/22 00:15	1
Copper, Dissolved	**0.0036**	**J**	0.010	0.0016	mg/L		10/10/22 09:32	10/11/22 00:15	1
Iron, Dissolved	**0.39**		0.050	0.019	mg/L		10/10/22 09:32	10/11/22 00:15	1
Lead, Dissolved	ND		0.010	0.0030	mg/L		10/10/22 09:32	10/11/22 00:15	1
Magnesium, Dissolved	**14.4**		0.20	0.043	mg/L		10/10/22 09:32	10/12/22 14:45	1
Manganese, Dissolved	**4.7**	**B**	0.0030	0.00040	mg/L		10/10/22 09:32	10/12/22 14:45	1
Nickel, Dissolved	**0.0025**	**J**	0.010	0.0013	mg/L		10/10/22 09:32	10/11/22 00:15	1
Potassium, Dissolved	**5.5**		0.50	0.10	mg/L		10/10/22 09:32	10/11/22 00:15	1
Selenium, Dissolved	ND		0.025	0.0087	mg/L		10/10/22 09:32	10/11/22 00:15	1
Silver, Dissolved	ND		0.0060	0.0017	mg/L		10/10/22 09:32	10/12/22 14:45	1
Sodium, Dissolved	**54.9**		1.0	0.32	mg/L		10/10/22 09:32	10/11/22 00:15	1
Thallium, Dissolved	ND		0.020	0.010	mg/L		10/10/22 09:32	10/11/22 00:15	1
Vanadium, Dissolved	ND		0.0050	0.0015	mg/L		10/10/22 09:32	10/11/22 00:15	1
Zinc, Dissolved	**0.0065**	**J**	0.010	0.0015	mg/L		10/10/22 09:32	10/11/22 00:15	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-202448-1

Client Sample ID: MW5-100522

Lab Sample ID: 480-202448-4
Matrix: Water
Date Collected: 10/05/22 16:20
Date Received: 10/06/22 10:30

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		10/11/22 10:36	10/11/22 14:11	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00020	0.000043	mg/L		10/11/22 10:36	10/11/22 13:54	1

Client Sample ID: FDUP-100522

Lab Sample ID: 480-202448-5
Matrix: Water
Date Collected: 10/05/22 00:00
Date Received: 10/06/22 10:30

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			10/11/22 21:01	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/22 21:01	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/22 21:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/22 21:01	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/22 21:01	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/11/22 21:01	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/22 21:01	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			10/11/22 21:01	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/22 21:01	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			10/11/22 21:01	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/11/22 21:01	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/22 21:01	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/22 21:01	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/22 21:01	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/22 21:01	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			10/11/22 21:01	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/22 21:01	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/22 21:01	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/22 21:01	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/22 21:01	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/22 21:01	1
Acetone	ND		10	3.0	ug/L			10/11/22 21:01	1
Benzene	ND		1.0	0.41	ug/L			10/11/22 21:01	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/22 21:01	1
Bromoform	ND		1.0	0.26	ug/L			10/11/22 21:01	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/22 21:01	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/11/22 21:01	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/22 21:01	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/22 21:01	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/22 21:01	1
Chloroform	ND		1.0	0.34	ug/L			10/11/22 21:01	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/22 21:01	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/11/22 21:01	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/22 21:01	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/22 21:01	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/22 21:01	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/11/22 21:01	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/22 21:01	1

Client Sample ID: FDUP-100522

Date Collected: 10/05/22 00:00
Date Received: 10/06/22 10:30

Lab Sample ID: 480-202448-5

Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/22 21:01	1
m,p-Xylene	ND		2.0	0.66	ug/L			10/11/22 21:01	1
Methyl acetate	ND		2.5	1.3	ug/L			10/11/22 21:01	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/22 21:01	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/22 21:01	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/22 21:01	1
n-Butylbenzene	ND		1.0	0.64	ug/L			10/11/22 21:01	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/11/22 21:01	1
o-Xylene	ND		1.0	0.76	ug/L			10/11/22 21:01	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			10/11/22 21:01	1
Styrene	ND		1.0	0.73	ug/L			10/11/22 21:01	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			10/11/22 21:01	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/11/22 21:01	1
Toluene	ND		1.0	0.51	ug/L			10/11/22 21:01	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/11/22 21:01	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/11/22 21:01	1
Trichloroethene	**2.1**		1.0	0.46	ug/L			10/11/22 21:01	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/22 21:01	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/11/22 21:01	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/22 21:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*83*		*77 - 120*		*10/11/22 21:01*	*1*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*		*10/11/22 21:01*	*1*
Dibromofluoromethane (Surr)	*86*		*75 - 123*		*10/11/22 21:01*	*1*
Toluene-d8 (Surr)	*84*		*80 - 120*		*10/11/22 21:01*	*1*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.22	0.11	ug/L		10/11/22 15:56	10/13/22 21:36	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*26*		*15 - 110*	*10/11/22 15:56*	*10/13/22 21:36*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.2	0.50	ug/L		10/11/22 08:43	10/13/22 18:59	1
2,4,6-Trichlorophenol	ND		5.2	0.64	ug/L		10/11/22 08:43	10/13/22 18:59	1
2,4-Dichlorophenol	ND		5.2	0.53	ug/L		10/11/22 08:43	10/13/22 18:59	1
2,4-Dimethylphenol	ND		5.2	0.52	ug/L		10/11/22 08:43	10/13/22 18:59	1
2,4-Dinitrophenol	ND		10	2.3	ug/L		10/11/22 08:43	10/13/22 18:59	1
2,4-Dinitrotoluene	ND		5.2	0.47	ug/L		10/11/22 08:43	10/13/22 18:59	1
2,6-Dinitrotoluene	ND		5.2	0.42	ug/L		10/11/22 08:43	10/13/22 18:59	1
2-Chloronaphthalene	ND		5.2	0.48	ug/L		10/11/22 08:43	10/13/22 18:59	1
2-Chlorophenol	ND		5.2	0.55	ug/L		10/11/22 08:43	10/13/22 18:59	1
2-Methylnaphthalene	ND		5.2	0.63	ug/L		10/11/22 08:43	10/13/22 18:59	1
2-Methylphenol	ND		5.2	0.42	ug/L		10/11/22 08:43	10/13/22 18:59	1
2-Nitroaniline	ND		10	0.44	ug/L		10/11/22 08:43	10/13/22 18:59	1
2-Nitrophenol	ND		5.2	0.50	ug/L		10/11/22 08:43	10/13/22 18:59	1
3,3'-Dichlorobenzidine	ND		5.2	0.42	ug/L		10/11/22 08:43	10/13/22 18:59	1
3-Nitroaniline	ND		10	0.50	ug/L		10/11/22 08:43	10/13/22 18:59	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-202448-1

Client Sample ID: FDUP-100522
Date Collected: 10/05/22 00:00
Date Received: 10/06/22 10:30

Lab Sample ID: 480-202448-5
Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	ND		10	2.3	ug/L		10/11/22 08:43	10/13/22 18:59	1
4-Bromophenyl phenyl ether	ND		5.2	0.47	ug/L		10/11/22 08:43	10/13/22 18:59	1
4-Chloro-3-methylphenol	ND		5.2	0.47	ug/L		10/11/22 08:43	10/13/22 18:59	1
4-Chloroaniline	ND		5.2	0.61	ug/L		10/11/22 08:43	10/13/22 18:59	1
4-Chlorophenyl phenyl ether	ND		5.2	0.36	ug/L		10/11/22 08:43	10/13/22 18:59	1
4-Methylphenol	ND		10	0.38	ug/L		10/11/22 08:43	10/13/22 18:59	1
4-Nitroaniline	ND		10	0.26	ug/L		10/11/22 08:43	10/13/22 18:59	1
4-Nitrophenol	ND		10	1.6	ug/L		10/11/22 08:43	10/13/22 18:59	1
Acenaphthene	ND		5.2	0.43	ug/L		10/11/22 08:43	10/13/22 18:59	1
Acenaphthylene	ND		5.2	0.40	ug/L		10/11/22 08:43	10/13/22 18:59	1
Acetophenone	ND		5.2	0.56	ug/L		10/11/22 08:43	10/13/22 18:59	1
Anthracene	ND		5.2	0.29	ug/L		10/11/22 08:43	10/13/22 18:59	1
Atrazine	ND		5.2	0.48	ug/L		10/11/22 08:43	10/13/22 18:59	1
Benzaldehyde	ND		5.2	0.28	ug/L		10/11/22 08:43	10/13/22 18:59	1
Benzo[a]anthracene	ND		5.2	0.38	ug/L		10/11/22 08:43	10/13/22 18:59	1
Benzo[a]pyrene	ND		5.2	0.49	ug/L		10/11/22 08:43	10/13/22 18:59	1
Benzo[b]fluoranthene	ND		5.2	0.35	ug/L		10/11/22 08:43	10/13/22 18:59	1
Benzo[g,h,i]perylene	ND		5.2	0.36	ug/L		10/11/22 08:43	10/13/22 18:59	1
Benzo[k]fluoranthene	ND		5.2	0.76	ug/L		10/11/22 08:43	10/13/22 18:59	1
Biphenyl	ND		5.2	0.68	ug/L		10/11/22 08:43	10/13/22 18:59	1
bis (2-chloroisopropyl) ether	ND		5.2	0.54	ug/L		10/11/22 08:43	10/13/22 18:59	1
Bis(2-chloroethoxy)methane	ND		5.2	0.36	ug/L		10/11/22 08:43	10/13/22 18:59	1
Bis(2-chloroethyl)ether	ND		5.2	0.42	ug/L		10/11/22 08:43	10/13/22 18:59	1
Bis(2-ethylhexyl) phthalate	ND		5.2	2.3	ug/L		10/11/22 08:43	10/13/22 18:59	1
Butyl benzyl phthalate	ND		5.2	1.0	ug/L		10/11/22 08:43	10/13/22 18:59	1
Caprolactam	ND		5.2	2.3	ug/L		10/11/22 08:43	10/13/22 18:59	1
Carbazole	ND	*+	5.2	0.31	ug/L		10/11/22 08:43	10/13/22 18:59	1
Chrysene	ND		5.2	0.34	ug/L		10/11/22 08:43	10/13/22 18:59	1
Dibenz(a,h)anthracene	ND		5.2	0.44	ug/L		10/11/22 08:43	10/13/22 18:59	1
Dibenzofuran	ND		10	0.53	ug/L		10/11/22 08:43	10/13/22 18:59	1
Diethyl phthalate	**3.1**	**J B**	5.2	0.23	ug/L		10/11/22 08:43	10/13/22 18:59	1
Dimethyl phthalate	ND		5.2	0.38	ug/L		10/11/22 08:43	10/13/22 18:59	1
Di-n-butyl phthalate	ND		5.2	0.32	ug/L		10/11/22 08:43	10/13/22 18:59	1
Di-n-octyl phthalate	ND		5.2	0.49	ug/L		10/11/22 08:43	10/13/22 18:59	1
Fluoranthene	ND		5.2	0.42	ug/L		10/11/22 08:43	10/13/22 18:59	1
Fluorene	ND		5.2	0.38	ug/L		10/11/22 08:43	10/13/22 18:59	1
Hexachlorobenzene	ND		5.2	0.53	ug/L		10/11/22 08:43	10/13/22 18:59	1
Hexachlorobutadiene	ND		5.2	0.71	ug/L		10/11/22 08:43	10/13/22 18:59	1
Hexachlorocyclopentadiene	ND		5.2	0.61	ug/L		10/11/22 08:43	10/13/22 18:59	1
Hexachloroethane	ND		5.2	0.61	ug/L		10/11/22 08:43	10/13/22 18:59	1
Indeno[1,2,3-cd]pyrene	ND		5.2	0.49	ug/L		10/11/22 08:43	10/13/22 18:59	1
Isophorone	ND		5.2	0.45	ug/L		10/11/22 08:43	10/13/22 18:59	1
Naphthalene	ND		5.2	0.79	ug/L		10/11/22 08:43	10/13/22 18:59	1
Nitrobenzene	ND		5.2	0.30	ug/L		10/11/22 08:43	10/13/22 18:59	1
N-Nitrosodi-n-propylamine	ND		5.2	0.56	ug/L		10/11/22 08:43	10/13/22 18:59	1
N-Nitrosodiphenylamine	ND		5.2	0.53	ug/L		10/11/22 08:43	10/13/22 18:59	1
Pentachlorophenol	ND		10	2.3	ug/L		10/11/22 08:43	10/13/22 18:59	1
Phenanthrene	ND		5.2	0.46	ug/L		10/11/22 08:43	10/13/22 18:59	1
Phenol	ND		5.2	0.41	ug/L		10/11/22 08:43	10/13/22 18:59	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-202448-1

Client Sample ID: FDUP-100522

Date Collected: 10/05/22 00:00
Date Received: 10/06/22 10:30

Lab Sample ID: 480-202448-5

Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		5.2	0.35	ug/L		10/11/22 08:43	10/13/22 18:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*73*		*41 - 120*	*10/11/22 08:43*	*10/13/22 18:59*	*1*
2-Fluorobiphenyl (Surr)	*95*		*48 - 120*	*10/11/22 08:43*	*10/13/22 18:59*	*1*
2-Fluorophenol (Surr)	*64*		*35 - 120*	*10/11/22 08:43*	*10/13/22 18:59*	*1*
Nitrobenzene-d5 (Surr)	*82*		*46 - 120*	*10/11/22 08:43*	*10/13/22 18:59*	*1*
Phenol-d5 (Surr)	*47*		*22 - 120*	*10/11/22 08:43*	*10/13/22 18:59*	*1*
p-Terphenyl-d14 (Surr)	*100*		*60 - 148*	*10/11/22 08:43*	*10/13/22 18:59*	*1*

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	**1.3**	**J**	4.8	1.1	ng/L		10/14/22 11:48	10/17/22 15:12	1
Perfluoropentanoic acid (PFPeA)	ND		1.9	0.65	ng/L		10/14/22 11:48	10/17/22 15:12	1
Perfluorohexanoic acid (PFHxA)	ND		1.9	0.62	ng/L		10/14/22 11:48	10/17/22 15:12	1
Perfluoroheptanoic acid (PFHpA)	ND		1.9	0.52	ng/L		10/14/22 11:48	10/17/22 15:12	1
Perfluorooctanoic acid (PFOA)	ND		1.9	0.73	ng/L		10/14/22 11:48	10/17/22 15:12	1
Perfluorononanoic acid (PFNA)	ND		1.9	0.47	ng/L		10/14/22 11:48	10/17/22 15:12	1
Perfluorodecanoic acid (PFDA)	ND		1.9	0.44	ng/L		10/14/22 11:48	10/17/22 15:12	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	0.53	ng/L		10/14/22 11:48	10/17/22 15:12	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.47	ng/L		10/14/22 11:48	10/17/22 15:12	1
Perfluorotridecanoic acid (PFTriA)	ND		1.9	0.46	ng/L		10/14/22 11:48	10/17/22 15:12	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.61	ng/L		10/14/22 11:48	10/17/22 15:12	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	0.59	ng/L		10/14/22 11:48	10/17/22 15:12	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	0.53	ng/L		10/14/22 11:48	10/17/22 15:12	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.9	0.39	ng/L		10/14/22 11:48	10/17/22 15:12	1
Perfluorooctanesulfonic acid (PFOS)	**2.0**		1.9	0.81	ng/L		10/14/22 11:48	10/17/22 15:12	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.38	ng/L		10/14/22 11:48	10/17/22 15:12	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.9	0.88	ng/L		10/14/22 11:48	10/17/22 15:12	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.8	1.8	ng/L		10/14/22 11:48	10/17/22 15:12	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.8	1.5	ng/L		10/14/22 11:48	10/17/22 15:12	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		4.8	1.2	ng/L		10/14/22 11:48	10/17/22 15:12	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		1.9	0.74	ng/L		10/14/22 11:48	10/17/22 15:12	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*100*		*50 - 150*	*10/14/22 11:48*	*10/17/22 15:12*	*1*
13C4 PFHpA	*97*		*50 - 150*	*10/14/22 11:48*	*10/17/22 15:12*	*1*
13C4 PFOA	*97*		*50 - 150*	*10/14/22 11:48*	*10/17/22 15:12*	*1*
13C4 PFOS	*99*		*50 - 150*	*10/14/22 11:48*	*10/17/22 15:12*	*1*
13C5 PFNA	*90*		*50 - 150*	*10/14/22 11:48*	*10/17/22 15:12*	*1*
13C4 PFBA	*91*		*50 - 150*	*10/14/22 11:48*	*10/17/22 15:12*	*1*
13C2 PFHxA	*93*		*50 - 150*	*10/14/22 11:48*	*10/17/22 15:12*	*1*
13C2 PFDA	*93*		*50 - 150*	*10/14/22 11:48*	*10/17/22 15:12*	*1*
13C2 PFUnA	*100*		*50 - 150*	*10/14/22 11:48*	*10/17/22 15:12*	*1*
13C2 PFDoA	*99*		*50 - 150*	*10/14/22 11:48*	*10/17/22 15:12*	*1*
13C8 FOSA	*94*		*50 - 150*	*10/14/22 11:48*	*10/17/22 15:12*	*1*

Client Sample ID: FDUP-100522

Date Collected: 10/05/22 00:00
Date Received: 10/06/22 10:30

Lab Sample ID: 480-202448-5

Matrix: Water

Method: EPA 537 IDA - EPA 537 Isotope Dilution (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C5 PFPeA	90		50 - 150	10/14/22 11:48	10/17/22 15:12	1
13C2 PFTeDA	99		50 - 150	10/14/22 11:48	10/17/22 15:12	1
d3-NMeFOSAA	112		50 - 150	10/14/22 11:48	10/17/22 15:12	1
d5-NEtFOSAA	114		50 - 150	10/14/22 11:48	10/17/22 15:12	1
M2-6:2 FTS	103		50 - 150	10/14/22 11:48	10/17/22 15:12	1
M2-8:2 FTS	104		50 - 150	10/14/22 11:48	10/17/22 15:12	1
13C3 PFBS	98		50 - 150	10/14/22 11:48	10/17/22 15:12	1

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		10/11/22 09:02	10/12/22 19:17	1
Antimony	ND		0.020	0.0068	mg/L		10/11/22 09:02	10/12/22 19:17	1
Arsenic	ND		0.015	0.0056	mg/L		10/11/22 09:02	10/12/22 19:17	1
Barium	**0.097**		0.0020	0.00070	mg/L		10/11/22 09:02	10/12/22 19:17	1
Beryllium	ND		0.0020	0.00030	mg/L		10/11/22 09:02	10/12/22 19:17	1
Cadmium	ND		0.0020	0.00050	mg/L		10/11/22 09:02	10/12/22 19:17	1
Calcium	**41.5**		0.50	0.10	mg/L		10/11/22 09:02	10/12/22 19:17	1
Chromium	ND		0.0040	0.0010	mg/L		10/11/22 09:02	10/12/22 19:17	1
Cobalt	ND		0.0040	0.00063	mg/L		10/11/22 09:02	10/12/22 19:17	1
Copper	ND		0.010	0.0016	mg/L		10/11/22 09:02	10/12/22 19:17	1
Iron	ND		0.050	0.019	mg/L		10/11/22 09:02	10/12/22 19:17	1
Lead	ND		0.010	0.0030	mg/L		10/11/22 09:02	10/14/22 13:52	1
Magnesium	**7.1**		0.20	0.043	mg/L		10/11/22 09:02	10/12/22 19:17	1
Manganese	**0.45**	**B ^+**	0.0030	0.00040	mg/L		10/11/22 09:02	10/12/22 19:17	1
Nickel	ND		0.010	0.0013	mg/L		10/11/22 09:02	10/12/22 19:17	1
Potassium	**3.3**		0.50	0.10	mg/L		10/11/22 09:02	10/12/22 19:17	1
Selenium	ND		0.025	0.0087	mg/L		10/11/22 09:02	10/12/22 19:17	1
Silver	ND		0.0060	0.0017	mg/L		10/11/22 09:02	10/12/22 19:17	1
Sodium	**131**		1.0	0.32	mg/L		10/11/22 09:02	10/12/22 19:17	1
Thallium	ND		0.020	0.010	mg/L		10/11/22 09:02	10/12/22 19:17	1
Vanadium	ND		0.0050	0.0015	mg/L		10/11/22 09:02	10/12/22 19:17	1
Zinc	ND		0.010	0.0015	mg/L		10/11/22 09:02	10/12/22 19:17	1

Method: SW846 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	ND		0.20	0.060	mg/L		10/10/22 09:32	10/11/22 00:19	1
Antimony, Dissolved	ND		0.020	0.0068	mg/L		10/10/22 09:32	10/11/22 00:19	1
Arsenic, Dissolved	ND		0.015	0.0056	mg/L		10/10/22 09:32	10/11/22 00:19	1
Barium, Dissolved	**0.087**		0.0020	0.00070	mg/L		10/10/22 09:32	10/11/22 00:19	1
Beryllium, Dissolved	ND		0.0020	0.00030	mg/L		10/10/22 09:32	10/12/22 14:49	1
Cadmium, Dissolved	ND		0.0020	0.00050	mg/L		10/10/22 09:32	10/11/22 00:19	1
Calcium, Dissolved	**40.8**		0.50	0.10	mg/L		10/10/22 09:32	10/11/22 00:19	1
Chromium, Dissolved	ND		0.0040	0.0010	mg/L		10/10/22 09:32	10/11/22 00:19	1
Cobalt, Dissolved	ND		0.0040	0.00063	mg/L		10/10/22 09:32	10/11/22 00:19	1
Copper, Dissolved	**0.0021**	**J**	0.010	0.0016	mg/L		10/10/22 09:32	10/11/22 00:19	1
Iron, Dissolved	ND		0.050	0.019	mg/L		10/10/22 09:32	10/11/22 00:19	1
Lead, Dissolved	ND		0.010	0.0030	mg/L		10/10/22 09:32	10/11/22 00:19	1
Magnesium, Dissolved	**7.2**		0.20	0.043	mg/L		10/10/22 09:32	10/12/22 14:49	1
Manganese, Dissolved	**0.45**	**B**	0.0030	0.00040	mg/L		10/10/22 09:32	10/12/22 14:49	1
Nickel, Dissolved	ND		0.010	0.0013	mg/L		10/10/22 09:32	10/11/22 00:19	1

Client Sample ID: FDUP-100522

Lab Sample ID: 480-202448-5

Date Collected: 10/05/22 00:00

Matrix: Water

Date Received: 10/06/22 10:30

Method: SW846 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Potassium, Dissolved	**3.1**		0.50	0.10	mg/L		10/10/22 09:32	10/11/22 00:19	1
Selenium, Dissolved	ND		0.025	0.0087	mg/L		10/10/22 09:32	10/11/22 00:19	1
Silver, Dissolved	ND		0.0060	0.0017	mg/L		10/10/22 09:32	10/12/22 14:49	1
Sodium, Dissolved	**123**		1.0	0.32	mg/L		10/10/22 09:32	10/11/22 00:19	1
Thallium, Dissolved	ND		0.020	0.010	mg/L		10/10/22 09:32	10/11/22 00:19	1
Vanadium, Dissolved	ND		0.0050	0.0015	mg/L		10/10/22 09:32	10/11/22 00:19	1
Zinc, Dissolved	**0.0016**	**J**	0.010	0.0015	mg/L		10/10/22 09:32	10/11/22 00:19	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		10/11/22 10:36	10/11/22 14:12	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00020	0.000043	mg/L		10/11/22 10:36	10/11/22 13:55	1

Client Sample ID: ERB-100522

Lab Sample ID: 480-202448-6

Date Collected: 10/05/22 17:05

Matrix: Water

Date Received: 10/06/22 10:30

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			10/11/22 08:13	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/22 08:13	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/22 08:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/22 08:13	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/22 08:13	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/11/22 08:13	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/22 08:13	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			10/11/22 08:13	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/22 08:13	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			10/11/22 08:13	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/11/22 08:13	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/22 08:13	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/22 08:13	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/22 08:13	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/22 08:13	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			10/11/22 08:13	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/22 08:13	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/22 08:13	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/22 08:13	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/22 08:13	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/22 08:13	1
Acetone	ND		10	3.0	ug/L			10/11/22 08:13	1
Benzene	ND		1.0	0.41	ug/L			10/11/22 08:13	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/22 08:13	1
Bromoform	ND		1.0	0.26	ug/L			10/11/22 08:13	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/22 08:13	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/11/22 08:13	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/22 08:13	1

Client Sample ID: ERB-100522
Date Collected: 10/05/22 17:05
Date Received: 10/06/22 10:30

Lab Sample ID: 480-202448-6
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/22 08:13	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/22 08:13	1
Chloroform	ND		1.0	0.34	ug/L			10/11/22 08:13	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/22 08:13	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/11/22 08:13	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/22 08:13	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/22 08:13	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/22 08:13	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/11/22 08:13	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/22 08:13	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/22 08:13	1
m,p-Xylene	ND		2.0	0.66	ug/L			10/11/22 08:13	1
Methyl acetate	ND		2.5	1.3	ug/L			10/11/22 08:13	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/22 08:13	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/22 08:13	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/22 08:13	1
n-Butylbenzene	ND		1.0	0.64	ug/L			10/11/22 08:13	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/11/22 08:13	1
o-Xylene	ND		1.0	0.76	ug/L			10/11/22 08:13	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			10/11/22 08:13	1
Styrene	ND		1.0	0.73	ug/L			10/11/22 08:13	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			10/11/22 08:13	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/11/22 08:13	1
Toluene	ND		1.0	0.51	ug/L			10/11/22 08:13	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/11/22 08:13	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/11/22 08:13	1
Trichloroethene	ND		1.0	0.46	ug/L			10/11/22 08:13	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/22 08:13	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/11/22 08:13	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/22 08:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*10/11/22 08:13*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*10/11/22 08:13*	*1*
Dibromofluoromethane (Surr)	*110*		*75 - 123*		*10/11/22 08:13*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*10/11/22 08:13*	*1*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		10/11/22 15:56	10/13/22 21:58	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*37*		*15 - 110*	*10/11/22 15:56*	*10/13/22 21:58*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		10/11/22 08:43	10/13/22 02:12	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		10/11/22 08:43	10/13/22 02:12	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		10/11/22 08:43	10/13/22 02:12	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		10/11/22 08:43	10/13/22 02:12	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		10/11/22 08:43	10/13/22 02:12	1

Client Sample ID: ERB-100522
Date Collected: 10/05/22 17:05
Date Received: 10/06/22 10:30

Lab Sample ID: 480-202448-6
Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		10/11/22 08:43	10/13/22 02:12	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		10/11/22 08:43	10/13/22 02:12	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		10/11/22 08:43	10/13/22 02:12	1
2-Chlorophenol	ND		5.0	0.53	ug/L		10/11/22 08:43	10/13/22 02:12	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		10/11/22 08:43	10/13/22 02:12	1
2-Methylphenol	ND		5.0	0.40	ug/L		10/11/22 08:43	10/13/22 02:12	1
2-Nitroaniline	ND		10	0.42	ug/L		10/11/22 08:43	10/13/22 02:12	1
2-Nitrophenol	ND		5.0	0.48	ug/L		10/11/22 08:43	10/13/22 02:12	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		10/11/22 08:43	10/13/22 02:12	1
3-Nitroaniline	ND		10	0.48	ug/L		10/11/22 08:43	10/13/22 02:12	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		10/11/22 08:43	10/13/22 02:12	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		10/11/22 08:43	10/13/22 02:12	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		10/11/22 08:43	10/13/22 02:12	1
4-Chloroaniline	ND		5.0	0.59	ug/L		10/11/22 08:43	10/13/22 02:12	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		10/11/22 08:43	10/13/22 02:12	1
4-Methylphenol	ND		10	0.36	ug/L		10/11/22 08:43	10/13/22 02:12	1
4-Nitroaniline	ND		10	0.25	ug/L		10/11/22 08:43	10/13/22 02:12	1
4-Nitrophenol	ND		10	1.5	ug/L		10/11/22 08:43	10/13/22 02:12	1
Acenaphthene	ND		5.0	0.41	ug/L		10/11/22 08:43	10/13/22 02:12	1
Acenaphthylene	ND		5.0	0.38	ug/L		10/11/22 08:43	10/13/22 02:12	1
Acetophenone	ND		5.0	0.54	ug/L		10/11/22 08:43	10/13/22 02:12	1
Anthracene	ND		5.0	0.28	ug/L		10/11/22 08:43	10/13/22 02:12	1
Atrazine	ND		5.0	0.46	ug/L		10/11/22 08:43	10/13/22 02:12	1
Benzaldehyde	ND		5.0	0.27	ug/L		10/11/22 08:43	10/13/22 02:12	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		10/11/22 08:43	10/13/22 02:12	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		10/11/22 08:43	10/13/22 02:12	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		10/11/22 08:43	10/13/22 02:12	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		10/11/22 08:43	10/13/22 02:12	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		10/11/22 08:43	10/13/22 02:12	1
Biphenyl	ND		5.0	0.65	ug/L		10/11/22 08:43	10/13/22 02:12	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		10/11/22 08:43	10/13/22 02:12	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		10/11/22 08:43	10/13/22 02:12	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		10/11/22 08:43	10/13/22 02:12	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		10/11/22 08:43	10/13/22 02:12	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		10/11/22 08:43	10/13/22 02:12	1
Caprolactam	ND		5.0	2.2	ug/L		10/11/22 08:43	10/13/22 02:12	1
Carbazole	ND	*+	5.0	0.30	ug/L		10/11/22 08:43	10/13/22 02:12	1
Chrysene	ND		5.0	0.33	ug/L		10/11/22 08:43	10/13/22 02:12	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		10/11/22 08:43	10/13/22 02:12	1
Dibenzofuran	ND		10	0.51	ug/L		10/11/22 08:43	10/13/22 02:12	1
Diethyl phthalate	**1.3**	**J B**	5.0	0.22	ug/L		10/11/22 08:43	10/13/22 02:12	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		10/11/22 08:43	10/13/22 02:12	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		10/11/22 08:43	10/13/22 02:12	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		10/11/22 08:43	10/13/22 02:12	1
Fluoranthene	ND		5.0	0.40	ug/L		10/11/22 08:43	10/13/22 02:12	1
Fluorene	ND		5.0	0.36	ug/L		10/11/22 08:43	10/13/22 02:12	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		10/11/22 08:43	10/13/22 02:12	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		10/11/22 08:43	10/13/22 02:12	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		10/11/22 08:43	10/13/22 02:12	1

Client Sample ID: ERB-100522
Date Collected: 10/05/22 17:05
Date Received: 10/06/22 10:30

Lab Sample ID: 480-202448-6
Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	ND		5.0	0.59	ug/L		10/11/22 08:43	10/13/22 02:12	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		10/11/22 08:43	10/13/22 02:12	1
Isophorone	ND		5.0	0.43	ug/L		10/11/22 08:43	10/13/22 02:12	1
Naphthalene	ND		5.0	0.76	ug/L		10/11/22 08:43	10/13/22 02:12	1
Nitrobenzene	ND		5.0	0.29	ug/L		10/11/22 08:43	10/13/22 02:12	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		10/11/22 08:43	10/13/22 02:12	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		10/11/22 08:43	10/13/22 02:12	1
Pentachlorophenol	ND		10	2.2	ug/L		10/11/22 08:43	10/13/22 02:12	1
Phenanthrene	ND		5.0	0.44	ug/L		10/11/22 08:43	10/13/22 02:12	1
Phenol	ND		5.0	0.39	ug/L		10/11/22 08:43	10/13/22 02:12	1
Pyrene	ND		5.0	0.34	ug/L		10/11/22 08:43	10/13/22 02:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*53*		*41 - 120*	*10/11/22 08:43*	*10/13/22 02:12*	*1*
2-Fluorobiphenyl (Surr)	*90*		*48 - 120*	*10/11/22 08:43*	*10/13/22 02:12*	*1*
2-Fluorophenol (Surr)	*65*		*35 - 120*	*10/11/22 08:43*	*10/13/22 02:12*	*1*
Nitrobenzene-d5 (Surr)	*79*		*46 - 120*	*10/11/22 08:43*	*10/13/22 02:12*	*1*
Phenol-d5 (Surr)	*50*		*22 - 120*	*10/11/22 08:43*	*10/13/22 02:12*	*1*
p-Terphenyl-d14 (Surr)	*103*		*60 - 148*	*10/11/22 08:43*	*10/13/22 02:12*	*1*

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.8	1.1	ng/L		10/14/22 11:48	10/17/22 15:20	1
Perfluoropentanoic acid (PFPeA)	ND		1.9	0.65	ng/L		10/14/22 11:48	10/17/22 15:20	1
Perfluorohexanoic acid (PFHxA)	ND		1.9	0.62	ng/L		10/14/22 11:48	10/17/22 15:20	1
Perfluoroheptanoic acid (PFHpA)	ND		1.9	0.51	ng/L		10/14/22 11:48	10/17/22 15:20	1
Perfluorooctanoic acid (PFOA)	ND		1.9	0.72	ng/L		10/14/22 11:48	10/17/22 15:20	1
Perfluorononanoic acid (PFNA)	ND		1.9	0.47	ng/L		10/14/22 11:48	10/17/22 15:20	1
Perfluorodecanoic acid (PFDA)	ND		1.9	0.44	ng/L		10/14/22 11:48	10/17/22 15:20	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	0.52	ng/L		10/14/22 11:48	10/17/22 15:20	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.47	ng/L		10/14/22 11:48	10/17/22 15:20	1
Perfluorotridecanoic acid (PFTriA)	ND		1.9	0.46	ng/L		10/14/22 11:48	10/17/22 15:20	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.61	ng/L		10/14/22 11:48	10/17/22 15:20	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	0.59	ng/L		10/14/22 11:48	10/17/22 15:20	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	0.52	ng/L		10/14/22 11:48	10/17/22 15:20	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.9	0.39	ng/L		10/14/22 11:48	10/17/22 15:20	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	0.81	ng/L		10/14/22 11:48	10/17/22 15:20	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.38	ng/L		10/14/22 11:48	10/17/22 15:20	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.9	0.88	ng/L		10/14/22 11:48	10/17/22 15:20	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.8	1.8	ng/L		10/14/22 11:48	10/17/22 15:20	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.8	1.5	ng/L		10/14/22 11:48	10/17/22 15:20	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		4.8	1.2	ng/L		10/14/22 11:48	10/17/22 15:20	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		1.9	0.73	ng/L		10/14/22 11:48	10/17/22 15:20	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*101*		*50 - 150*	*10/14/22 11:48*	*10/17/22 15:20*	*1*
13C4 PFHpA	*95*		*50 - 150*	*10/14/22 11:48*	*10/17/22 15:20*	*1*

Client Sample ID: ERB-100522

Date Collected: 10/05/22 17:05
Date Received: 10/06/22 10:30

Lab Sample ID: 480-202448-6

Matrix: Water

Method: EPA 537 IDA - EPA 537 Isotope Dilution (Continued)

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFOA	93		50 - 150	10/14/22 11:48	10/17/22 15:20	1
13C4 PFOS	100		50 - 150	10/14/22 11:48	10/17/22 15:20	1
13C5 PFNA	94		50 - 150	10/14/22 11:48	10/17/22 15:20	1
13C4 PFBA	93		50 - 150	10/14/22 11:48	10/17/22 15:20	1
13C2 PFHxA	96		50 - 150	10/14/22 11:48	10/17/22 15:20	1
13C2 PFDA	102		50 - 150	10/14/22 11:48	10/17/22 15:20	1
13C2 PFUnA	102		50 - 150	10/14/22 11:48	10/17/22 15:20	1
13C2 PFDoA	107		50 - 150	10/14/22 11:48	10/17/22 15:20	1
13C8 FOSA	90		50 - 150	10/14/22 11:48	10/17/22 15:20	1
13C5 PFPeA	90		50 - 150	10/14/22 11:48	10/17/22 15:20	1
13C2 PFTeDA	97		50 - 150	10/14/22 11:48	10/17/22 15:20	1
d3-NMeFOSAA	113		50 - 150	10/14/22 11:48	10/17/22 15:20	1
d5-NEtFOSAA	115		50 - 150	10/14/22 11:48	10/17/22 15:20	1
M2-6:2 FTS	104		50 - 150	10/14/22 11:48	10/17/22 15:20	1
M2-8:2 FTS	107		50 - 150	10/14/22 11:48	10/17/22 15:20	1
13C3 PFBS	96		50 - 150	10/14/22 11:48	10/17/22 15:20	1

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		10/11/22 09:02	10/12/22 19:21	1
Antimony	ND		0.020	0.0068	mg/L		10/11/22 09:02	10/12/22 19:21	1
Arsenic	ND		0.015	0.0056	mg/L		10/11/22 09:02	10/12/22 19:21	1
Barium	ND		0.0020	0.00070	mg/L		10/11/22 09:02	10/12/22 19:21	1
Beryllium	ND		0.0020	0.00030	mg/L		10/11/22 09:02	10/12/22 19:21	1
Cadmium	ND		0.0020	0.00050	mg/L		10/11/22 09:02	10/12/22 19:21	1
Calcium	ND		0.50	0.10	mg/L		10/11/22 09:02	10/12/22 19:21	1
Chromium	ND		0.0040	0.0010	mg/L		10/11/22 09:02	10/12/22 19:21	1
Cobalt	ND		0.0040	0.00063	mg/L		10/11/22 09:02	10/12/22 19:21	1
Copper	ND		0.010	0.0016	mg/L		10/11/22 09:02	10/12/22 19:21	1
Iron	ND		0.050	0.019	mg/L		10/11/22 09:02	10/12/22 19:21	1
Lead	ND		0.010	0.0030	mg/L		10/11/22 09:02	10/14/22 13:56	1
Magnesium	ND		0.20	0.043	mg/L		10/11/22 09:02	10/12/22 19:21	1
Manganese	**0.0014**	**J B**	0.0030	0.00040	mg/L		10/11/22 09:02	10/14/22 13:56	1
Nickel	ND		0.010	0.0013	mg/L		10/11/22 09:02	10/12/22 19:21	1
Potassium	ND		0.50	0.10	mg/L		10/11/22 09:02	10/12/22 19:21	1
Selenium	ND		0.025	0.0087	mg/L		10/11/22 09:02	10/12/22 19:21	1
Silver	ND		0.0060	0.0017	mg/L		10/11/22 09:02	10/12/22 19:21	1
Sodium	ND		1.0	0.32	mg/L		10/11/22 09:02	10/12/22 19:21	1
Thallium	ND		0.020	0.010	mg/L		10/11/22 09:02	10/12/22 19:21	1
Vanadium	ND		0.0050	0.0015	mg/L		10/11/22 09:02	10/12/22 19:21	1
Zinc	ND		0.010	0.0015	mg/L		10/11/22 09:02	10/12/22 19:21	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		10/11/22 10:36	10/11/22 14:13	1

Surrogate Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-202448-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-202448-1	TB-100522	103	102	108	98
480-202448-2	FB-100522	105	104	112	100
480-202448-3	MW1-100522	85	84	91	87
480-202448-3 MS	MW1-100522	98	96	99	98
480-202448-3 MSD	MW1-100522	101	99	99	100
480-202448-4	MW5-100522	85	92	85	84
480-202448-5	FDUP-100522	83	90	86	84
480-202448-6	ERB-100522	104	100	110	100
LCS 480-644728/6	Lab Control Sample	106	98	112	97
LCS 480-644817/58	Lab Control Sample	93	90	95	90
LCS 480-645328/7	Lab Control Sample	98	102	100	97
MB 480-644728/8	Method Blank	107	107	114	100
MB 480-644817/10	Method Blank	89	93	89	90
MB 480-645328/9	Method Blank	99	98	98	98

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(41-120)	(48-120)	(35-120)	(46-120)	(22-120)	(60-148)
480-202448-2	FB-100522	63	88	63	76	47	101
480-202448-3	MW1-100522	70	80	56	69	43	91
480-202448-3 MS	MW1-100522	85	83	56	68	49	91
480-202448-3 MSD	MW1-100522	81	87	64	75	55	88
480-202448-4	MW5-100522	67	79	57	68	47	74
480-202448-5	FDUP-100522	73	95	64	82	47	100
480-202448-6	ERB-100522	53	90	65	79	50	103
LCS 480-644800/2-A	Lab Control Sample	83	86	62	73	54	98
MB 480-644800/1-A	Method Blank	66	81	56	72	44	100

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Isotope Dilution Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-202448-1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)
		DXE
Lab Sample ID	Client Sample ID	(15-110)
480-202448-2	FB-100522	39
480-202448-3	MW1-100522	22
480-202448-3 MS	MW1-100522	28
480-202448-3 MSD	MW1-100522	29
480-202448-5	FDUP-100522	26
480-202448-6	ERB-100522	37
LCS 480-644962/2-A	Lab Control Sample	38
MB 480-644962/1-A	Method Blank	41

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 537 IDA - EPA 537 Isotope Dilution

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFHxS	C4PFHA	PFOA	PFOS	PFNA	PFBA	PFHxA	PFDA
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)
480-202448-2	FB-100522	96	92	96	100	95	90	95	98
480-202448-3	MW1-100522	102	98	98	101	98	91	96	101
480-202448-3 MS	MW1-100522	102	98	100	103	98	93	96	96
480-202448-3 MSD	MW1-100522	92	91	88	96	87	86	92	90
480-202448-5	FDUP-100522	100	97	97	99	90	91	93	93
480-202448-6	ERB-100522	101	95	93	100	94	93	96	102
LLCS 200-184709/2-A	Lab Control Sample	100	95	99	103	96	89	96	100
MB 200-184709/1-A	Method Blank	101	95	99	105	93	88	97	103

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFUnA	PFDoA	PFOSA	PFPeA	PFTDA	d3NMFOS	d5NEFOS	M262FTS
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)
480-202448-2	FB-100522	101	98	95	88	99	111	109	100
480-202448-3	MW1-100522	102	100	96	92	102	114	118	102
480-202448-3 MS	MW1-100522	104	105	98	93	96	113	110	111
480-202448-3 MSD	MW1-100522	92	92	86	86	93	107	108	97
480-202448-5	FDUP-100522	100	99	94	90	99	112	114	103
480-202448-6	ERB-100522	102	107	90	90	97	113	115	104
LLCS 200-184709/2-A	Lab Control Sample	106	99	86	88	104	112	114	107
MB 200-184709/1-A	Method Blank	104	108	91	88	106	112	115	107

		Percent Isotope Dilution Recovery (Acceptance Limits)	
		M282FTS	C3PFBS
Lab Sample ID	Client Sample ID	(50-150)	(50-150)
480-202448-2	FB-100522	106	96
480-202448-3	MW1-100522	102	97
480-202448-3 MS	MW1-100522	105	98
480-202448-3 MSD	MW1-100522	98	92
480-202448-5	FDUP-100522	104	98
480-202448-6	ERB-100522	107	96
LLCS 200-184709/2-A	Lab Control Sample	109	95
MB 200-184709/1-A	Method Blank	110	93

Surrogate Legend

Isotope Dilution Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-202448-1

PFHxS = 18O2 PFHxS
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFOS = 13C4 PFOS
PFNA = 13C5 PFNA
PFBA = 13C4 PFBA
PFHxA = 13C2 PFHxA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFOSA = 13C8 FOSA
PFPeA = 13C5 PFPeA
PFTDA = 13C2 PFTeDA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
C3PFBS = 13C3 PFBS

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-644728/8
Matrix: Water
Analysis Batch: 644728

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			10/10/22 23:55	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/10/22 23:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/10/22 23:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/10/22 23:55	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/10/22 23:55	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/10/22 23:55	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/10/22 23:55	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			10/10/22 23:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/10/22 23:55	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			10/10/22 23:55	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/10/22 23:55	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/10/22 23:55	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/10/22 23:55	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/10/22 23:55	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/10/22 23:55	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			10/10/22 23:55	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/10/22 23:55	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/10/22 23:55	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/10/22 23:55	1
2-Hexanone	ND		5.0	1.2	ug/L			10/10/22 23:55	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/10/22 23:55	1
Acetone	ND		10	3.0	ug/L			10/10/22 23:55	1
Benzene	ND		1.0	0.41	ug/L			10/10/22 23:55	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/10/22 23:55	1
Bromoform	ND		1.0	0.26	ug/L			10/10/22 23:55	1
Bromomethane	ND		1.0	0.69	ug/L			10/10/22 23:55	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/10/22 23:55	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/10/22 23:55	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/10/22 23:55	1
Chloroethane	ND		1.0	0.32	ug/L			10/10/22 23:55	1
Chloroform	ND		1.0	0.34	ug/L			10/10/22 23:55	1
Chloromethane	ND		1.0	0.35	ug/L			10/10/22 23:55	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/10/22 23:55	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/10/22 23:55	1
Cyclohexane	ND		1.0	0.18	ug/L			10/10/22 23:55	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/10/22 23:55	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/10/22 23:55	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/10/22 23:55	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/10/22 23:55	1
m,p-Xylene	ND		2.0	0.66	ug/L			10/10/22 23:55	1
Methyl acetate	ND		2.5	1.3	ug/L			10/10/22 23:55	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/10/22 23:55	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/10/22 23:55	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/10/22 23:55	1
n-Butylbenzene	ND		1.0	0.64	ug/L			10/10/22 23:55	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/10/22 23:55	1
o-Xylene	ND		1.0	0.76	ug/L			10/10/22 23:55	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			10/10/22 23:55	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-644728/8
Matrix: Water
Analysis Batch: 644728

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0	0.73	ug/L			10/10/22 23:55	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			10/10/22 23:55	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/10/22 23:55	1
Toluene	ND		1.0	0.51	ug/L			10/10/22 23:55	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/10/22 23:55	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/10/22 23:55	1
Trichloroethene	ND		1.0	0.46	ug/L			10/10/22 23:55	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/10/22 23:55	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/10/22 23:55	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/10/22 23:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*		*10/10/22 23:55*	*1*
4-Bromofluorobenzene (Surr)	*107*		*73 - 120*		*10/10/22 23:55*	*1*
Dibromofluoromethane (Surr)	*114*		*75 - 123*		*10/10/22 23:55*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*10/10/22 23:55*	*1*

Lab Sample ID: LCS 480-644728/6
Matrix: Water
Analysis Batch: 644728

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	25.0	22.9		ug/L		92	80 - 120
1,1,1-Trichloroethane	25.0	24.4		ug/L		97	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.0		ug/L		92	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.1		ug/L		92	61 - 148
1,1,2-Trichloroethane	25.0	21.3		ug/L		85	76 - 122
1,1-Dichloroethane	25.0	25.2		ug/L		101	77 - 120
1,1-Dichloroethene	25.0	25.4		ug/L		102	66 - 127
1,2,4-Trichlorobenzene	25.0	22.0		ug/L		88	79 - 122
1,2,4-Trimethylbenzene	25.0	21.0		ug/L		84	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	26.4		ug/L		106	56 - 134
1,2-Dibromoethane	25.0	24.0		ug/L		96	77 - 120
1,2-Dichlorobenzene	25.0	21.9		ug/L		88	80 - 124
1,2-Dichloroethane	25.0	25.2		ug/L		101	75 - 120
1,2-Dichloropropane	25.0	25.5		ug/L		102	76 - 120
1,3,5-Trimethylbenzene	25.0	21.4		ug/L		85	77 - 121
1,3-Dichlorobenzene	25.0	21.8		ug/L		87	77 - 120
1,4-Dichlorobenzene	25.0	21.9		ug/L		88	80 - 120
2-Butanone (MEK)	125	162		ug/L		130	57 - 140
2-Hexanone	125	156		ug/L		125	65 - 127
4-Methyl-2-pentanone (MIBK)	125	150		ug/L		120	71 - 125
Acetone	125	132		ug/L		106	56 - 142
Benzene	25.0	24.8		ug/L		99	71 - 124
Bromodichloromethane	25.0	24.4		ug/L		97	80 - 122
Bromoform	25.0	27.6		ug/L		110	61 - 132
Bromomethane	25.0	30.7		ug/L		123	55 - 144
Carbon disulfide	25.0	25.5		ug/L		102	59 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-644728/6
Matrix: Water
Analysis Batch: 644728

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon tetrachloride	25.0	26.5		ug/L		106	72 - 134
Chlorobenzene	25.0	22.8		ug/L		91	80 - 120
Chloroethane	25.0	30.4		ug/L		122	69 - 136
Chloroform	25.0	24.1		ug/L		96	73 - 127
Chloromethane	25.0	30.3		ug/L		121	68 - 124
cis-1,2-Dichloroethene	25.0	26.1		ug/L		104	74 - 124
cis-1,3-Dichloropropene	25.0	25.1		ug/L		100	74 - 124
Cyclohexane	25.0	24.7		ug/L		99	59 - 135
Dibromochloromethane	25.0	24.7		ug/L		99	75 - 125
Dichlorodifluoromethane	25.0	27.7		ug/L		111	59 - 135
Ethylbenzene	25.0	21.9		ug/L		87	77 - 123
Isopropylbenzene	25.0	21.7		ug/L		87	77 - 122
m,p-Xylene	25.0	22.0		ug/L		88	76 - 122
Methyl acetate	50.0	64.9		ug/L		130	74 - 133
Methyl tert-butyl ether	25.0	27.8		ug/L		111	77 - 120
Methylcyclohexane	25.0	25.0		ug/L		100	68 - 134
Methylene Chloride	25.0	26.0		ug/L		104	75 - 124
n-Butylbenzene	25.0	20.6		ug/L		82	71 - 128
N-Propylbenzene	25.0	21.2		ug/L		85	75 - 127
o-Xylene	25.0	22.7		ug/L		91	76 - 122
sec-Butylbenzene	25.0	21.4		ug/L		86	74 - 127
Styrene	25.0	22.5		ug/L		90	80 - 120
tert-Butylbenzene	25.0	22.9		ug/L		92	75 - 123
Tetrachloroethene	25.0	25.1		ug/L		101	74 - 122
Toluene	25.0	21.7		ug/L		87	80 - 122
trans-1,2-Dichloroethene	25.0	26.3		ug/L		105	73 - 127
Trichloroethene	25.0	25.7		ug/L		103	74 - 123
Trichlorofluoromethane	25.0	34.8		ug/L		139	62 - 150
Vinyl chloride	25.0	32.8		ug/L		131	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*
Dibromofluoromethane (Surr)	*112*		*75 - 123*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: MB 480-644817/10
Matrix: Water
Analysis Batch: 644817

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			10/11/22 12:45	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/11/22 12:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/11/22 12:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/11/22 12:45	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/11/22 12:45	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/11/22 12:45	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/11/22 12:45	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-644817/10
Matrix: Water
Analysis Batch: 644817

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			10/11/22 12:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/11/22 12:45	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			10/11/22 12:45	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/11/22 12:45	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/11/22 12:45	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/11/22 12:45	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/11/22 12:45	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/11/22 12:45	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			10/11/22 12:45	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/11/22 12:45	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/11/22 12:45	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/11/22 12:45	1
2-Hexanone	ND		5.0	1.2	ug/L			10/11/22 12:45	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/11/22 12:45	1
Acetone	ND		10	3.0	ug/L			10/11/22 12:45	1
Benzene	ND		1.0	0.41	ug/L			10/11/22 12:45	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/11/22 12:45	1
Bromoform	ND		1.0	0.26	ug/L			10/11/22 12:45	1
Bromomethane	ND		1.0	0.69	ug/L			10/11/22 12:45	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/11/22 12:45	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/11/22 12:45	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/11/22 12:45	1
Chloroethane	ND		1.0	0.32	ug/L			10/11/22 12:45	1
Chloroform	ND		1.0	0.34	ug/L			10/11/22 12:45	1
Chloromethane	ND		1.0	0.35	ug/L			10/11/22 12:45	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/11/22 12:45	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/11/22 12:45	1
Cyclohexane	ND		1.0	0.18	ug/L			10/11/22 12:45	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/11/22 12:45	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/11/22 12:45	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/11/22 12:45	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/11/22 12:45	1
m,p-Xylene	ND		2.0	0.66	ug/L			10/11/22 12:45	1
Methyl acetate	ND		2.5	1.3	ug/L			10/11/22 12:45	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/11/22 12:45	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/11/22 12:45	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/11/22 12:45	1
n-Butylbenzene	ND		1.0	0.64	ug/L			10/11/22 12:45	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/11/22 12:45	1
o-Xylene	ND		1.0	0.76	ug/L			10/11/22 12:45	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			10/11/22 12:45	1
Styrene	ND		1.0	0.73	ug/L			10/11/22 12:45	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			10/11/22 12:45	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/11/22 12:45	1
Toluene	ND		1.0	0.51	ug/L			10/11/22 12:45	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/11/22 12:45	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/11/22 12:45	1
Trichloroethene	ND		1.0	0.46	ug/L			10/11/22 12:45	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/11/22 12:45	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-644817/10
Matrix: Water
Analysis Batch: 644817

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	ND		1.0	0.90	ug/L			10/11/22 12:45	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/11/22 12:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*77 - 120*		*10/11/22 12:45*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*10/11/22 12:45*	*1*
Dibromofluoromethane (Surr)	*89*		*75 - 123*		*10/11/22 12:45*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*10/11/22 12:45*	*1*

Lab Sample ID: LCS 480-644817/58
Matrix: Water
Analysis Batch: 644817

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	25.0	21.7		ug/L		87	80 - 120
1,1,1-Trichloroethane	25.0	21.7		ug/L		87	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.7		ug/L		95	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	22.6		ug/L		91	61 - 148
1,1,2-Trichloroethane	25.0	22.9		ug/L		92	76 - 122
1,1-Dichloroethane	25.0	23.0		ug/L		92	77 - 120
1,1-Dichloroethene	25.0	22.7		ug/L		91	66 - 127
1,2,4-Trichlorobenzene	25.0	22.0		ug/L		88	79 - 122
1,2,4-Trimethylbenzene	25.0	22.9		ug/L		92	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	21.5		ug/L		86	56 - 134
1,2-Dibromoethane	25.0	23.3		ug/L		93	77 - 120
1,2-Dichlorobenzene	25.0	22.5		ug/L		90	80 - 124
1,2-Dichloroethane	25.0	22.6		ug/L		91	75 - 120
1,2-Dichloropropane	25.0	23.6		ug/L		94	76 - 120
1,3,5-Trimethylbenzene	25.0	22.7		ug/L		91	77 - 121
1,3-Dichlorobenzene	25.0	23.3		ug/L		93	77 - 120
1,4-Dichlorobenzene	25.0	23.3		ug/L		93	80 - 120
2-Butanone (MEK)	125	123		ug/L		98	57 - 140
2-Hexanone	125	128		ug/L		103	65 - 127
4-Methyl-2-pentanone (MIBK)	125	113		ug/L		91	71 - 125
Acetone	125	123		ug/L		99	56 - 142
Benzene	25.0	23.0		ug/L		92	71 - 124
Bromodichloromethane	25.0	23.2		ug/L		93	80 - 122
Bromoform	25.0	21.4		ug/L		85	61 - 132
Bromomethane	25.0	19.4		ug/L		78	55 - 144
Carbon disulfide	25.0	22.1		ug/L		88	59 - 134
Carbon tetrachloride	25.0	20.9		ug/L		84	72 - 134
Chlorobenzene	25.0	22.5		ug/L		90	80 - 120
Chloroethane	25.0	21.8		ug/L		87	69 - 136
Chloroform	25.0	22.0		ug/L		88	73 - 127
Chloromethane	25.0	20.4		ug/L		82	68 - 124
cis-1,2-Dichloroethene	25.0	23.3		ug/L		93	74 - 124
cis-1,3-Dichloropropene	25.0	24.2		ug/L		97	74 - 124
Cyclohexane	25.0	22.7		ug/L		91	59 - 135

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-644817/58
Matrix: Water
Analysis Batch: 644817

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Dibromochloromethane	25.0	21.7		ug/L		87	75 - 125
Dichlorodifluoromethane	25.0	17.6		ug/L		70	59 - 135
Ethylbenzene	25.0	21.7		ug/L		87	77 - 123
Isopropylbenzene	25.0	22.7		ug/L		91	77 - 122
m,p-Xylene	25.0	21.9		ug/L		87	76 - 122
Methyl acetate	50.0	47.0		ug/L		94	74 - 133
Methyl tert-butyl ether	25.0	23.7		ug/L		95	77 - 120
Methylcyclohexane	25.0	23.1		ug/L		92	68 - 134
Methylene Chloride	25.0	24.5		ug/L		98	75 - 124
n-Butylbenzene	25.0	22.4		ug/L		90	71 - 128
N-Propylbenzene	25.0	22.7		ug/L		91	75 - 127
o-Xylene	25.0	22.3		ug/L		89	76 - 122
sec-Butylbenzene	25.0	22.3		ug/L		89	74 - 127
Styrene	25.0	22.6		ug/L		90	80 - 120
tert-Butylbenzene	25.0	23.0		ug/L		92	75 - 123
Tetrachloroethene	25.0	21.6		ug/L		86	74 - 122
Toluene	25.0	22.2		ug/L		89	80 - 122
trans-1,2-Dichloroethene	25.0	22.9		ug/L		92	73 - 127
Trichloroethene	25.0	23.1		ug/L		92	74 - 123
Trichlorofluoromethane	25.0	22.5		ug/L		90	62 - 150
Vinyl chloride	25.0	21.4		ug/L		86	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*77 - 120*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*
Dibromofluoromethane (Surr)	*95*		*75 - 123*
Toluene-d8 (Surr)	*90*		*80 - 120*

Lab Sample ID: MB 480-645328/9
Matrix: Water
Analysis Batch: 645328

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			10/14/22 01:27	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			10/14/22 01:27	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			10/14/22 01:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			10/14/22 01:27	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			10/14/22 01:27	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			10/14/22 01:27	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			10/14/22 01:27	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			10/14/22 01:27	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			10/14/22 01:27	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			10/14/22 01:27	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			10/14/22 01:27	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			10/14/22 01:27	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			10/14/22 01:27	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			10/14/22 01:27	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			10/14/22 01:27	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-645328/9
Matrix: Water
Analysis Batch: 645328

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			10/14/22 01:27	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			10/14/22 01:27	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			10/14/22 01:27	1
2-Butanone (MEK)	ND		10	1.3	ug/L			10/14/22 01:27	1
2-Hexanone	ND		5.0	1.2	ug/L			10/14/22 01:27	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			10/14/22 01:27	1
Acetone	ND		10	3.0	ug/L			10/14/22 01:27	1
Benzene	ND		1.0	0.41	ug/L			10/14/22 01:27	1
Bromodichloromethane	ND		1.0	0.39	ug/L			10/14/22 01:27	1
Bromoform	ND		1.0	0.26	ug/L			10/14/22 01:27	1
Bromomethane	ND		1.0	0.69	ug/L			10/14/22 01:27	1
Carbon disulfide	ND		1.0	0.19	ug/L			10/14/22 01:27	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			10/14/22 01:27	1
Chlorobenzene	ND		1.0	0.75	ug/L			10/14/22 01:27	1
Chloroethane	ND		1.0	0.32	ug/L			10/14/22 01:27	1
Chloroform	ND		1.0	0.34	ug/L			10/14/22 01:27	1
Chloromethane	ND		1.0	0.35	ug/L			10/14/22 01:27	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			10/14/22 01:27	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			10/14/22 01:27	1
Cyclohexane	ND		1.0	0.18	ug/L			10/14/22 01:27	1
Dibromochloromethane	ND		1.0	0.32	ug/L			10/14/22 01:27	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			10/14/22 01:27	1
Ethylbenzene	ND		1.0	0.74	ug/L			10/14/22 01:27	1
Isopropylbenzene	ND		1.0	0.79	ug/L			10/14/22 01:27	1
m,p-Xylene	ND		2.0	0.66	ug/L			10/14/22 01:27	1
Methyl acetate	ND		2.5	1.3	ug/L			10/14/22 01:27	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			10/14/22 01:27	1
Methylcyclohexane	ND		1.0	0.16	ug/L			10/14/22 01:27	1
Methylene Chloride	ND		1.0	0.44	ug/L			10/14/22 01:27	1
n-Butylbenzene	ND		1.0	0.64	ug/L			10/14/22 01:27	1
N-Propylbenzene	ND		1.0	0.69	ug/L			10/14/22 01:27	1
o-Xylene	ND		1.0	0.76	ug/L			10/14/22 01:27	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			10/14/22 01:27	1
Styrene	ND		1.0	0.73	ug/L			10/14/22 01:27	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			10/14/22 01:27	1
Tetrachloroethene	ND		1.0	0.36	ug/L			10/14/22 01:27	1
Toluene	ND		1.0	0.51	ug/L			10/14/22 01:27	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			10/14/22 01:27	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			10/14/22 01:27	1
Trichloroethene	ND		1.0	0.46	ug/L			10/14/22 01:27	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			10/14/22 01:27	1
Vinyl chloride	ND		1.0	0.90	ug/L			10/14/22 01:27	1
Xylenes, Total	ND		2.0	0.66	ug/L			10/14/22 01:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*10/14/22 01:27*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*10/14/22 01:27*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*10/14/22 01:27*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-645328/9
Matrix: Water
Analysis Batch: 645328

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		10/14/22 01:27	1

Lab Sample ID: LCS 480-645328/7
Matrix: Water
Analysis Batch: 645328

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	25.0	24.3		ug/L		97	80 - 120
1,1,1-Trichloroethane	25.0	22.6		ug/L		91	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.4		ug/L		102	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	23.5		ug/L		94	61 - 148
1,1,2-Trichloroethane	25.0	25.6		ug/L		103	76 - 122
1,1-Dichloroethane	25.0	24.4		ug/L		98	77 - 120
1,1-Dichloroethene	25.0	25.3		ug/L		101	66 - 127
1,2,4-Trichlorobenzene	25.0	23.9		ug/L		96	79 - 122
1,2,4-Trimethylbenzene	25.0	24.7		ug/L		99	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	25.1		ug/L		100	56 - 134
1,2-Dibromoethane	25.0	25.2		ug/L		101	77 - 120
1,2-Dichlorobenzene	25.0	23.9		ug/L		96	80 - 124
1,2-Dichloroethane	25.0	24.4		ug/L		98	75 - 120
1,2-Dichloropropane	25.0	26.2		ug/L		105	76 - 120
1,3,5-Trimethylbenzene	25.0	24.6		ug/L		98	77 - 121
1,3-Dichlorobenzene	25.0	24.1		ug/L		96	77 - 120
1,4-Dichlorobenzene	25.0	24.8		ug/L		99	80 - 120
2-Butanone (MEK)	125	143		ug/L		114	57 - 140
2-Hexanone	125	133		ug/L		106	65 - 127
4-Methyl-2-pentanone (MIBK)	125	138		ug/L		110	71 - 125
Acetone	125	163		ug/L		131	56 - 142
Benzene	25.0	23.9		ug/L		96	71 - 124
Bromodichloromethane	25.0	24.9		ug/L		100	80 - 122
Bromoform	25.0	25.9		ug/L		104	61 - 132
Bromomethane	25.0	22.1		ug/L		89	55 - 144
Carbon disulfide	25.0	22.8		ug/L		91	59 - 134
Carbon tetrachloride	25.0	23.5		ug/L		94	72 - 134
Chlorobenzene	25.0	24.5		ug/L		98	80 - 120
Chloroethane	25.0	22.7		ug/L		91	69 - 136
Chloroform	25.0	22.9		ug/L		92	73 - 127
Chloromethane	25.0	22.6		ug/L		90	68 - 124
cis-1,2-Dichloroethene	25.0	24.2		ug/L		97	74 - 124
cis-1,3-Dichloropropene	25.0	26.0		ug/L		104	74 - 124
Cyclohexane	25.0	25.1		ug/L		101	59 - 135
Dibromochloromethane	25.0	24.2		ug/L		97	75 - 125
Dichlorodifluoromethane	25.0	20.7		ug/L		83	59 - 135
Ethylbenzene	25.0	24.6		ug/L		98	77 - 123
Isopropylbenzene	25.0	24.2		ug/L		97	77 - 122
m,p-Xylene	25.0	24.4		ug/L		97	76 - 122
Methyl acetate	50.0	53.1		ug/L		106	74 - 133
Methyl tert-butyl ether	25.0	25.9		ug/L		104	77 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-645328/7
Matrix: Water
Analysis Batch: 645328

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Methylcyclohexane	25.0	25.0		ug/L		100	68 - 134
Methylene Chloride	25.0	25.2		ug/L		101	75 - 124
n-Butylbenzene	25.0	25.1		ug/L		101	71 - 128
N-Propylbenzene	25.0	24.8		ug/L		99	75 - 127
o-Xylene	25.0	24.9		ug/L		100	76 - 122
sec-Butylbenzene	25.0	25.5		ug/L		102	74 - 127
Styrene	25.0	26.2		ug/L		105	80 - 120
tert-Butylbenzene	25.0	26.6		ug/L		106	75 - 123
Tetrachloroethene	25.0	24.9		ug/L		99	74 - 122
Toluene	25.0	23.5		ug/L		94	80 - 122
trans-1,2-Dichloroethene	25.0	23.6		ug/L		94	73 - 127
Trichloroethene	25.0	24.7		ug/L		99	74 - 123
Trichlorofluoromethane	25.0	22.7		ug/L		91	62 - 150
Vinyl chloride	25.0	23.0		ug/L		92	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*
Dibromofluoromethane (Surr)	*100*		*75 - 123*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: 480-202448-3 MS
Matrix: Water
Analysis Batch: 645328

Client Sample ID: MW1-100522
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	ND		25.0	24.1		ug/L		96	80 - 120
1,1,1-Trichloroethane	ND		25.0	22.9		ug/L		91	73 - 126
1,1,2,2-Tetrachloroethane	ND		25.0	26.3		ug/L		105	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	20.8		ug/L		83	61 - 148
1,1,2-Trichloroethane	ND		25.0	25.1		ug/L		100	76 - 122
1,1-Dichloroethane	ND		25.0	24.0		ug/L		96	77 - 120
1,1-Dichloroethene	ND		25.0	25.7		ug/L		103	66 - 127
1,2,4-Trichlorobenzene	ND		25.0	22.4		ug/L		90	79 - 122
1,2,4-Trimethylbenzene	ND		25.0	24.6		ug/L		98	76 - 121
1,2-Dibromo-3-Chloropropane	ND		25.0	26.1		ug/L		104	56 - 134
1,2-Dibromoethane	ND		25.0	25.0		ug/L		100	77 - 120
1,2-Dichlorobenzene	ND		25.0	23.8		ug/L		95	80 - 124
1,2-Dichloroethane	ND		25.0	23.3		ug/L		93	75 - 120
1,2-Dichloropropane	ND		25.0	25.4		ug/L		102	76 - 120
1,3,5-Trimethylbenzene	ND		25.0	24.9		ug/L		100	77 - 121
1,3-Dichlorobenzene	ND		25.0	23.7		ug/L		95	77 - 120
1,4-Dichlorobenzene	ND		25.0	24.2		ug/L		97	78 - 124
2-Butanone (MEK)	ND		125	151		ug/L		121	57 - 140
2-Hexanone	ND		125	133		ug/L		107	65 - 127
4-Methyl-2-pentanone (MIBK)	ND		125	140		ug/L		112	71 - 125
Acetone	ND		125	134		ug/L		107	56 - 142
Benzene	ND		25.0	24.1		ug/L		96	71 - 124

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-202448-3 MS
Matrix: Water
Analysis Batch: 645328

Client Sample ID: MW1-100522
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Bromodichloromethane	ND		25.0	23.9		ug/L		96	80 - 122
Bromoform	ND		25.0	24.3		ug/L		97	61 - 132
Bromomethane	ND		25.0	22.7		ug/L		91	55 - 144
Carbon disulfide	ND		25.0	23.3		ug/L		93	59 - 134
Carbon tetrachloride	ND		25.0	23.0		ug/L		92	72 - 134
Chlorobenzene	ND		25.0	24.3		ug/L		97	80 - 120
Chloroethane	ND		25.0	23.5		ug/L		94	69 - 136
Chloroform	ND		25.0	22.2		ug/L		89	73 - 127
Chloromethane	ND		25.0	24.5		ug/L		98	68 - 124
cis-1,2-Dichloroethene	ND		25.0	23.9		ug/L		95	74 - 124
cis-1,3-Dichloropropene	ND		25.0	24.1		ug/L		96	74 - 124
Cyclohexane	ND		25.0	23.0		ug/L		92	59 - 135
Dibromochloromethane	ND		25.0	23.6		ug/L		94	75 - 125
Dichlorodifluoromethane	ND		25.0	18.4		ug/L		74	59 - 135
Ethylbenzene	ND		25.0	23.9		ug/L		96	77 - 123
Isopropylbenzene	ND		25.0	24.8		ug/L		99	77 - 122
m,p-Xylene	ND		25.0	24.2		ug/L		97	76 - 122
Methyl acetate	ND		50.0	53.7		ug/L		107	74 - 133
Methyl tert-butyl ether	ND		25.0	24.5		ug/L		98	77 - 120
Methylcyclohexane	ND		25.0	21.6		ug/L		86	68 - 134
Methylene Chloride	ND		25.0	25.5		ug/L		102	75 - 124
n-Butylbenzene	ND		25.0	24.5		ug/L		98	71 - 128
N-Propylbenzene	ND		25.0	24.8		ug/L		99	75 - 127
o-Xylene	ND		25.0	24.4		ug/L		98	76 - 122
sec-Butylbenzene	ND		25.0	25.3		ug/L		101	74 - 127
Styrene	ND		25.0	26.0		ug/L		104	80 - 120
tert-Butylbenzene	ND		25.0	25.5		ug/L		102	75 - 123
Tetrachloroethene	ND		25.0	24.6		ug/L		98	74 - 122
Toluene	ND		25.0	23.8		ug/L		95	80 - 122
trans-1,2-Dichloroethene	ND		25.0	23.7		ug/L		95	73 - 127
Trichloroethene	2.3		25.0	26.2		ug/L		96	74 - 123
Trichlorofluoromethane	ND		25.0	22.5		ug/L		90	62 - 150
Vinyl chloride	ND		25.0	24.5		ug/L		98	65 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*
Dibromofluoromethane (Surr)	*99*		*75 - 123*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: 480-202448-3 MSD
Matrix: Water
Analysis Batch: 645328

Client Sample ID: MW1-100522
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	23.9		ug/L		95	80 - 120	1	20
1,1,1-Trichloroethane	ND		25.0	23.0		ug/L		92	73 - 126	1	15
1,1,2,2-Tetrachloroethane	ND		25.0	26.8		ug/L		107	76 - 120	2	15

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-202448-3 MSD
Matrix: Water
Analysis Batch: 645328

Client Sample ID: MW1-100522
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	22.2		ug/L		89	61 - 148	7	20
1,1,2-Trichloroethane	ND		25.0	25.0		ug/L		100	76 - 122	0	15
1,1-Dichloroethane	ND		25.0	24.9		ug/L		100	77 - 120	4	20
1,1-Dichloroethene	ND		25.0	25.6		ug/L		102	66 - 127	1	16
1,2,4-Trichlorobenzene	ND		25.0	22.5		ug/L		90	79 - 122	1	20
1,2,4-Trimethylbenzene	ND		25.0	24.4		ug/L		97	76 - 121	1	20
1,2-Dibromo-3-Chloropropane	ND		25.0	26.1		ug/L		104	56 - 134	0	15
1,2-Dibromoethane	ND		25.0	24.5		ug/L		98	77 - 120	2	15
1,2-Dichlorobenzene	ND		25.0	24.1		ug/L		96	80 - 124	1	20
1,2-Dichloroethane	ND		25.0	24.0		ug/L		96	75 - 120	3	20
1,2-Dichloropropane	ND		25.0	26.1		ug/L		105	76 - 120	3	20
1,3,5-Trimethylbenzene	ND		25.0	24.2		ug/L		97	77 - 121	3	20
1,3-Dichlorobenzene	ND		25.0	23.7		ug/L		95	77 - 120	0	20
1,4-Dichlorobenzene	ND		25.0	24.7		ug/L		99	78 - 124	2	20
2-Butanone (MEK)	ND		125	151		ug/L		121	57 - 140	0	20
2-Hexanone	ND		125	137		ug/L		109	65 - 127	3	15
4-Methyl-2-pentanone (MIBK)	ND		125	141		ug/L		113	71 - 125	1	35
Acetone	ND		125	144		ug/L		115	56 - 142	7	15
Benzene	ND		25.0	24.6		ug/L		98	71 - 124	2	13
Bromodichloromethane	ND		25.0	24.3		ug/L		97	80 - 122	2	15
Bromoform	ND		25.0	24.1		ug/L		97	61 - 132	1	15
Bromomethane	ND		25.0	21.7		ug/L		87	55 - 144	4	15
Carbon disulfide	ND		25.0	21.8		ug/L		87	59 - 134	6	15
Carbon tetrachloride	ND		25.0	23.1		ug/L		93	72 - 134	0	15
Chlorobenzene	ND		25.0	24.2		ug/L		97	80 - 120	0	25
Chloroethane	ND		25.0	22.9		ug/L		92	69 - 136	3	15
Chloroform	ND		25.0	22.5		ug/L		90	73 - 127	1	20
Chloromethane	ND		25.0	23.9		ug/L		96	68 - 124	3	15
cis-1,2-Dichloroethene	ND		25.0	24.4		ug/L		98	74 - 124	2	15
cis-1,3-Dichloropropene	ND		25.0	24.9		ug/L		100	74 - 124	3	15
Cyclohexane	ND		25.0	23.7		ug/L		95	59 - 135	3	20
Dibromochloromethane	ND		25.0	23.6		ug/L		95	75 - 125	0	15
Dichlorodifluoromethane	ND		25.0	19.5		ug/L		78	59 - 135	6	20
Ethylbenzene	ND		25.0	24.2		ug/L		97	77 - 123	1	15
Isopropylbenzene	ND		25.0	24.4		ug/L		98	77 - 122	1	20
m,p-Xylene	ND		25.0	24.4		ug/L		97	76 - 122	1	16
Methyl acetate	ND		50.0	47.1		ug/L		94	74 - 133	13	20
Methyl tert-butyl ether	ND		25.0	25.1		ug/L		100	77 - 120	2	37
Methylcyclohexane	ND		25.0	23.2		ug/L		93	68 - 134	7	20
Methylene Chloride	ND		25.0	24.9		ug/L		100	75 - 124	3	15
n-Butylbenzene	ND		25.0	24.3		ug/L		97	71 - 128	1	15
N-Propylbenzene	ND		25.0	24.7		ug/L		99	75 - 127	0	15
o-Xylene	ND		25.0	24.0		ug/L		96	76 - 122	2	16
sec-Butylbenzene	ND		25.0	25.3		ug/L		101	74 - 127	0	15
Styrene	ND		25.0	26.0		ug/L		104	80 - 120	0	20
tert-Butylbenzene	ND		25.0	25.0		ug/L		100	75 - 123	2	15
Tetrachloroethene	ND		25.0	24.7		ug/L		99	74 - 122	0	20
Toluene	ND		25.0	23.5		ug/L		94	80 - 122	1	15

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-202448-3 MSD
Matrix: Water
Analysis Batch: 645328

Client Sample ID: MW1-100522
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
trans-1,2-Dichloroethene	ND		25.0	24.3		ug/L		97	73 - 127	3	20
Trichloroethene	2.3		25.0	26.0		ug/L		95	74 - 123	1	16
Trichlorofluoromethane	ND		25.0	23.2		ug/L		93	62 - 150	3	20
Vinyl chloride	ND		25.0	23.7		ug/L		95	65 - 133	3	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*
Dibromofluoromethane (Surr)	*99*		*75 - 123*
Toluene-d8 (Surr)	*100*		*80 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-644800/1-A
Matrix: Water
Analysis Batch: 644815

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 644800

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		10/11/22 08:43	10/12/22 19:43	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		10/11/22 08:43	10/12/22 19:43	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		10/11/22 08:43	10/12/22 19:43	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		10/11/22 08:43	10/12/22 19:43	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		10/11/22 08:43	10/12/22 19:43	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		10/11/22 08:43	10/12/22 19:43	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		10/11/22 08:43	10/12/22 19:43	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		10/11/22 08:43	10/12/22 19:43	1
2-Chlorophenol	ND		5.0	0.53	ug/L		10/11/22 08:43	10/12/22 19:43	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		10/11/22 08:43	10/12/22 19:43	1
2-Methylphenol	ND		5.0	0.40	ug/L		10/11/22 08:43	10/12/22 19:43	1
2-Nitroaniline	ND		10	0.42	ug/L		10/11/22 08:43	10/12/22 19:43	1
2-Nitrophenol	ND		5.0	0.48	ug/L		10/11/22 08:43	10/12/22 19:43	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		10/11/22 08:43	10/12/22 19:43	1
3-Nitroaniline	ND		10	0.48	ug/L		10/11/22 08:43	10/12/22 19:43	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		10/11/22 08:43	10/12/22 19:43	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		10/11/22 08:43	10/12/22 19:43	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		10/11/22 08:43	10/12/22 19:43	1
4-Chloroaniline	ND		5.0	0.59	ug/L		10/11/22 08:43	10/12/22 19:43	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		10/11/22 08:43	10/12/22 19:43	1
4-Methylphenol	ND		10	0.36	ug/L		10/11/22 08:43	10/12/22 19:43	1
4-Nitroaniline	ND		10	0.25	ug/L		10/11/22 08:43	10/12/22 19:43	1
4-Nitrophenol	ND		10	1.5	ug/L		10/11/22 08:43	10/12/22 19:43	1
Acenaphthene	ND		5.0	0.41	ug/L		10/11/22 08:43	10/12/22 19:43	1
Acenaphthylene	ND		5.0	0.38	ug/L		10/11/22 08:43	10/12/22 19:43	1
Acetophenone	ND		5.0	0.54	ug/L		10/11/22 08:43	10/12/22 19:43	1
Anthracene	ND		5.0	0.28	ug/L		10/11/22 08:43	10/12/22 19:43	1
Atrazine	ND		5.0	0.46	ug/L		10/11/22 08:43	10/12/22 19:43	1
Benzaldehyde	ND		5.0	0.27	ug/L		10/11/22 08:43	10/12/22 19:43	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		10/11/22 08:43	10/12/22 19:43	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		10/11/22 08:43	10/12/22 19:43	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-644800/1-A
Matrix: Water
Analysis Batch: 644815

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 644800

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		10/11/22 08:43	10/12/22 19:43	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		10/11/22 08:43	10/12/22 19:43	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		10/11/22 08:43	10/12/22 19:43	1
Biphenyl	ND		5.0	0.65	ug/L		10/11/22 08:43	10/12/22 19:43	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		10/11/22 08:43	10/12/22 19:43	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		10/11/22 08:43	10/12/22 19:43	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		10/11/22 08:43	10/12/22 19:43	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		10/11/22 08:43	10/12/22 19:43	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		10/11/22 08:43	10/12/22 19:43	1
Caprolactam	ND		5.0	2.2	ug/L		10/11/22 08:43	10/12/22 19:43	1
Carbazole	ND		5.0	0.30	ug/L		10/11/22 08:43	10/12/22 19:43	1
Chrysene	ND		5.0	0.33	ug/L		10/11/22 08:43	10/12/22 19:43	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		10/11/22 08:43	10/12/22 19:43	1
Dibenzofuran	ND		10	0.51	ug/L		10/11/22 08:43	10/12/22 19:43	1
Diethyl phthalate	4.29	J	5.0	0.22	ug/L		10/11/22 08:43	10/12/22 19:43	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		10/11/22 08:43	10/12/22 19:43	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		10/11/22 08:43	10/12/22 19:43	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		10/11/22 08:43	10/12/22 19:43	1
Fluoranthene	ND		5.0	0.40	ug/L		10/11/22 08:43	10/12/22 19:43	1
Fluorene	ND		5.0	0.36	ug/L		10/11/22 08:43	10/12/22 19:43	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		10/11/22 08:43	10/12/22 19:43	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		10/11/22 08:43	10/12/22 19:43	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		10/11/22 08:43	10/12/22 19:43	1
Hexachloroethane	ND		5.0	0.59	ug/L		10/11/22 08:43	10/12/22 19:43	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		10/11/22 08:43	10/12/22 19:43	1
Isophorone	ND		5.0	0.43	ug/L		10/11/22 08:43	10/12/22 19:43	1
Naphthalene	ND		5.0	0.76	ug/L		10/11/22 08:43	10/12/22 19:43	1
Nitrobenzene	ND		5.0	0.29	ug/L		10/11/22 08:43	10/12/22 19:43	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		10/11/22 08:43	10/12/22 19:43	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		10/11/22 08:43	10/12/22 19:43	1
Pentachlorophenol	ND		10	2.2	ug/L		10/11/22 08:43	10/12/22 19:43	1
Phenanthrene	ND		5.0	0.44	ug/L		10/11/22 08:43	10/12/22 19:43	1
Phenol	ND		5.0	0.39	ug/L		10/11/22 08:43	10/12/22 19:43	1
Pyrene	ND		5.0	0.34	ug/L		10/11/22 08:43	10/12/22 19:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*66*		*41 - 120*	*10/11/22 08:43*	*10/12/22 19:43*	*1*
2-Fluorobiphenyl (Surr)	*81*		*48 - 120*	*10/11/22 08:43*	*10/12/22 19:43*	*1*
2-Fluorophenol (Surr)	*56*		*35 - 120*	*10/11/22 08:43*	*10/12/22 19:43*	*1*
Nitrobenzene-d5 (Surr)	*72*		*46 - 120*	*10/11/22 08:43*	*10/12/22 19:43*	*1*
Phenol-d5 (Surr)	*44*		*22 - 120*	*10/11/22 08:43*	*10/12/22 19:43*	*1*
p-Terphenyl-d14 (Surr)	*100*		*60 - 148*	*10/11/22 08:43*	*10/12/22 19:43*	*1*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-644800/2-A
Matrix: Water
Analysis Batch: 644815

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 644800

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	32.0	28.4		ug/L		89	65 - 126
2,4,6-Trichlorophenol	32.0	27.6		ug/L		86	64 - 120
2,4-Dichlorophenol	32.0	27.5		ug/L		86	63 - 120
2,4-Dimethylphenol	32.0	26.1		ug/L		81	47 - 120
2,4-Dinitrophenol	64.0	58.6		ug/L		92	31 - 137
2,4-Dinitrotoluene	32.0	30.8		ug/L		96	69 - 120
2,6-Dinitrotoluene	32.0	30.1		ug/L		94	68 - 120
2-Chloronaphthalene	32.0	25.3		ug/L		79	58 - 120
2-Chlorophenol	32.0	25.9		ug/L		81	48 - 120
2-Methylnaphthalene	32.0	22.1		ug/L		69	59 - 120
2-Methylphenol	32.0	29.9		ug/L		94	39 - 120
2-Nitroaniline	32.0	31.1		ug/L		97	54 - 127
2-Nitrophenol	32.0	28.2		ug/L		88	52 - 125
3,3'-Dichlorobenzidine	64.0	64.0		ug/L		100	49 - 135
3-Nitroaniline	32.0	29.5		ug/L		92	51 - 120
4,6-Dinitro-2-methylphenol	64.0	64.6		ug/L		101	46 - 136
4-Bromophenyl phenyl ether	32.0	28.0		ug/L		88	65 - 120
4-Chloro-3-methylphenol	32.0	26.3		ug/L		82	61 - 123
4-Chloroaniline	32.0	21.7		ug/L		68	30 - 120
4-Chlorophenyl phenyl ether	32.0	25.9		ug/L		81	62 - 120
4-Methylphenol	32.0	26.6		ug/L		83	29 - 131
4-Nitroaniline	32.0	36.6		ug/L		114	65 - 120
4-Nitrophenol	64.0	42.7		ug/L		67	45 - 120
Acenaphthene	32.0	27.4		ug/L		86	60 - 120
Acenaphthylene	32.0	28.9		ug/L		90	63 - 120
Acetophenone	32.0	27.6		ug/L		86	45 - 120
Anthracene	32.0	32.8		ug/L		102	67 - 120
Atrazine	64.0	64.1		ug/L		100	71 - 130
Benzaldehyde	64.0	55.1		ug/L		86	10 - 140
Benzo[a]anthracene	32.0	32.4		ug/L		101	70 - 121
Benzo[a]pyrene	32.0	32.4		ug/L		101	60 - 123
Benzo[b]fluoranthene	32.0	34.5		ug/L		108	66 - 126
Benzo[g,h,i]perylene	32.0	31.8		ug/L		99	66 - 150
Benzo[k]fluoranthene	32.0	31.9		ug/L		100	65 - 124
Biphenyl	32.0	26.2		ug/L		82	59 - 120
bis (2-chloroisopropyl) ether	32.0	32.8		ug/L		103	21 - 136
Bis(2-chloroethoxy)methane	32.0	28.6		ug/L		89	50 - 128
Bis(2-chloroethyl)ether	32.0	28.3		ug/L		89	44 - 120
Bis(2-ethylhexyl) phthalate	32.0	34.4		ug/L		107	63 - 139
Butyl benzyl phthalate	32.0	35.5		ug/L		111	70 - 129
Caprolactam	64.0	25.1		ug/L		39	22 - 120
Carbazole	32.0	51.0	*+	ug/L		159	66 - 123
Chrysene	32.0	32.4		ug/L		101	69 - 120
Dibenz(a,h)anthracene	32.0	32.8		ug/L		102	65 - 135
Dibenzofuran	32.0	27.6		ug/L		86	66 - 120
Diethyl phthalate	32.0	35.8		ug/L		112	59 - 127
Dimethyl phthalate	32.0	30.3		ug/L		95	68 - 120
Di-n-butyl phthalate	32.0	36.3		ug/L		113	69 - 131

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-644800/2-A
Matrix: Water
Analysis Batch: 644815

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 644800

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Di-n-octyl phthalate	32.0	32.6		ug/L		102	63 - 140
Fluoranthene	32.0	33.6		ug/L		105	69 - 126
Fluorene	32.0	29.9		ug/L		94	66 - 120
Hexachlorobenzene	32.0	27.3		ug/L		85	61 - 120
Hexachlorobutadiene	32.0	15.0		ug/L		47	35 - 120
Hexachlorocyclopentadiene	32.0	9.85		ug/L		31	31 - 120
Hexachloroethane	32.0	19.6		ug/L		61	43 - 120
Indeno[1,2,3-cd]pyrene	32.0	33.1		ug/L		103	69 - 146
Isophorone	32.0	28.8		ug/L		90	55 - 120
Naphthalene	32.0	25.1		ug/L		78	57 - 120
Nitrobenzene	32.0	26.4		ug/L		83	53 - 123
N-Nitrosodi-n-propylamine	32.0	29.4		ug/L		92	32 - 140
Pentachlorophenol	64.0	52.1		ug/L		81	29 - 136
Phenanthrene	32.0	31.7		ug/L		99	68 - 120
Phenol	32.0	18.7		ug/L		58	17 - 120
Pyrene	32.0	34.2		ug/L		107	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*83*		*41 - 120*
2-Fluorobiphenyl (Surr)	*86*		*48 - 120*
2-Fluorophenol (Surr)	*62*		*35 - 120*
Nitrobenzene-d5 (Surr)	*73*		*46 - 120*
Phenol-d5 (Surr)	*54*		*22 - 120*
p-Terphenyl-d14 (Surr)	*98*		*60 - 148*

Lab Sample ID: 480-202448-3 MS
Matrix: Water
Analysis Batch: 644815

Client Sample ID: MW1-100522
Prep Type: Total/NA
Prep Batch: 644800

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	ND		33.3	27.7		ug/L		83	65 - 126
2,4,6-Trichlorophenol	ND		33.3	28.0		ug/L		84	64 - 120
2,4-Dichlorophenol	ND		33.3	26.5		ug/L		80	48 - 132
2,4-Dimethylphenol	ND		33.3	24.5		ug/L		74	39 - 130
2,4-Dinitrophenol	ND		66.7	64.0		ug/L		96	21 - 150
2,4-Dinitrotoluene	ND		33.3	33.1		ug/L		99	54 - 138
2,6-Dinitrotoluene	ND		33.3	31.1		ug/L		93	17 - 150
2-Chloronaphthalene	ND		33.3	24.9		ug/L		75	52 - 124
2-Chlorophenol	ND		33.3	25.3		ug/L		76	48 - 120
2-Methylnaphthalene	ND		33.3	21.5		ug/L		65	34 - 140
2-Methylphenol	ND		33.3	28.0		ug/L		84	46 - 120
2-Nitroaniline	ND		33.3	31.6		ug/L		95	44 - 136
2-Nitrophenol	ND		33.3	26.9		ug/L		81	38 - 141
3,3'-Dichlorobenzidine	ND		66.7	65.5		ug/L		98	10 - 150
3-Nitroaniline	ND		33.3	29.4		ug/L		88	32 - 150
4,6-Dinitro-2-methylphenol	ND		66.7	69.1		ug/L		104	38 - 150
4-Bromophenyl phenyl ether	ND		33.3	28.9		ug/L		87	63 - 126
4-Chloro-3-methylphenol	ND		33.3	26.5		ug/L		80	64 - 127

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-202448-3 MS
Matrix: Water
Analysis Batch: 644815

Client Sample ID: MW1-100522
Prep Type: Total/NA
Prep Batch: 644800

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
4-Chloroaniline	ND		33.3	22.4		ug/L		67	16 - 124
4-Chlorophenyl phenyl ether	ND		33.3	27.7		ug/L		83	61 - 120
4-Methylphenol	ND		33.3	25.3		ug/L		76	36 - 120
4-Nitroaniline	ND		33.3	34.4		ug/L		103	32 - 150
4-Nitrophenol	ND		66.7	44.7		ug/L		67	23 - 132
Acenaphthene	ND		33.3	28.2		ug/L		84	48 - 120
Acenaphthylene	ND		33.3	29.7		ug/L		89	63 - 120
Acetophenone	ND		33.3	26.0		ug/L		78	53 - 120
Anthracene	ND		33.3	35.5		ug/L		107	65 - 122
Atrazine	ND		66.7	65.7		ug/L		99	50 - 150
Benzaldehyde	ND		66.7	50.0		ug/L		75	10 - 150
Benzo[a]anthracene	ND		33.3	32.5		ug/L		97	43 - 124
Benzo[a]pyrene	ND		33.3	33.1		ug/L		99	23 - 125
Benzo[b]fluoranthene	ND		33.3	33.0		ug/L		99	27 - 127
Benzo[g,h,i]perylene	ND		33.3	32.4		ug/L		97	16 - 147
Benzo[k]fluoranthene	ND		33.3	33.9		ug/L		102	20 - 124
Biphenyl	ND		33.3	26.2		ug/L		79	57 - 120
bis (2-chloroisopropyl) ether	ND		33.3	30.7		ug/L		92	28 - 121
Bis(2-chloroethoxy)methane	ND		33.3	27.6		ug/L		83	44 - 128
Bis(2-chloroethyl)ether	ND		33.3	27.7		ug/L		83	45 - 120
Bis(2-ethylhexyl) phthalate	ND		33.3	35.2		ug/L		106	16 - 150
Butyl benzyl phthalate	ND		33.3	36.4		ug/L		109	51 - 140
Caprolactam	ND		66.7	26.5		ug/L		40	10 - 120
Carbazole	ND	F1 *+	33.3	52.5	F1	ug/L		158	16 - 148
Chrysene	ND		33.3	33.1		ug/L		99	44 - 122
Dibenz(a,h)anthracene	ND		33.3	34.7		ug/L		104	16 - 139
Dibenzofuran	ND		33.3	29.2		ug/L		87	60 - 120
Diethyl phthalate	2.4	J B	33.3	32.7		ug/L		91	53 - 133
Dimethyl phthalate	ND		33.3	32.0		ug/L		96	59 - 123
Di-n-butyl phthalate	ND		33.3	37.2		ug/L		112	65 - 129
Di-n-octyl phthalate	ND		33.3	32.6		ug/L		98	16 - 150
Fluoranthene	ND		33.3	35.5		ug/L		106	63 - 129
Fluorene	ND		33.3	31.2		ug/L		94	62 - 120
Hexachlorobenzene	ND		33.3	28.0		ug/L		84	57 - 121
Hexachlorobutadiene	ND		33.3	14.2		ug/L		43	37 - 120
Hexachlorocyclopentadiene	ND		33.3	10.0		ug/L		30	21 - 120
Hexachloroethane	ND		33.3	19.2		ug/L		58	16 - 130
Indeno[1,2,3-cd]pyrene	ND		33.3	34.4		ug/L		103	16 - 140
Isophorone	ND		33.3	28.2		ug/L		85	48 - 133
Naphthalene	ND		33.3	23.6		ug/L		71	45 - 120
Nitrobenzene	ND		33.3	25.5		ug/L		76	45 - 123
N-Nitrosodi-n-propylamine	ND		33.3	28.3		ug/L		85	49 - 120
Pentachlorophenol	ND		66.7	56.0		ug/L		84	23 - 149
Phenanthrene	ND		33.3	34.9		ug/L		105	65 - 122
Phenol	ND		33.3	18.3		ug/L		55	16 - 120
Pyrene	ND		33.3	36.2		ug/L		109	58 - 128

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-202448-3 MS
Matrix: Water
Analysis Batch: 644815

Client Sample ID: MW1-100522
Prep Type: Total/NA
Prep Batch: 644800

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*85*		*41 - 120*
2-Fluorobiphenyl (Surr)	*83*		*48 - 120*
2-Fluorophenol (Surr)	*56*		*35 - 120*
Nitrobenzene-d5 (Surr)	*68*		*46 - 120*
Phenol-d5 (Surr)	*49*		*22 - 120*
p-Terphenyl-d14 (Surr)	*91*		*60 - 148*

Lab Sample ID: 480-202448-3 MSD
Matrix: Water
Analysis Batch: 644815

Client Sample ID: MW1-100522
Prep Type: Total/NA
Prep Batch: 644800

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4,5-Trichlorophenol	ND		34.8	31.6		ug/L		91	65 - 126	13	18
2,4,6-Trichlorophenol	ND		34.8	30.5		ug/L		88	64 - 120	8	19
2,4-Dichlorophenol	ND		34.8	30.1		ug/L		86	48 - 132	12	19
2,4-Dimethylphenol	ND		34.8	27.8		ug/L		80	39 - 130	13	42
2,4-Dinitrophenol	ND		69.6	65.2		ug/L		94	21 - 150	2	22
2,4-Dinitrotoluene	ND		34.8	33.3		ug/L		96	54 - 138	1	20
2,6-Dinitrotoluene	ND		34.8	32.7		ug/L		94	17 - 150	5	15
2-Chloronaphthalene	ND		34.8	28.9		ug/L		83	52 - 124	15	21
2-Chlorophenol	ND		34.8	28.1		ug/L		81	48 - 120	11	25
2-Methylnaphthalene	ND		34.8	25.6		ug/L		73	34 - 140	17	21
2-Methylphenol	ND		34.8	32.3		ug/L		93	46 - 120	14	27
2-Nitroaniline	ND		34.8	32.1		ug/L		92	44 - 136	1	15
2-Nitrophenol	ND		34.8	29.6		ug/L		85	38 - 141	10	18
3,3'-Dichlorobenzidine	ND		69.6	62.2		ug/L		89	10 - 150	5	25
3-Nitroaniline	ND		34.8	30.8		ug/L		89	32 - 150	5	19
4,6-Dinitro-2-methylphenol	ND		69.6	67.6		ug/L		97	38 - 150	2	15
4-Bromophenyl phenyl ether	ND		34.8	30.7		ug/L		88	63 - 126	6	15
4-Chloro-3-methylphenol	ND		34.8	28.1		ug/L		81	64 - 127	6	27
4-Chloroaniline	ND		34.8	23.0		ug/L		66	16 - 124	3	22
4-Chlorophenyl phenyl ether	ND		34.8	28.4		ug/L		82	61 - 120	3	16
4-Methylphenol	ND		34.8	29.8		ug/L		86	36 - 120	16	24
4-Nitroaniline	ND		34.8	36.4		ug/L		105	32 - 150	6	24
4-Nitrophenol	ND		69.6	48.2		ug/L		69	23 - 132	8	48
Acenaphthene	ND		34.8	31.1		ug/L		89	48 - 120	10	24
Acenaphthylene	ND		34.8	32.2		ug/L		92	63 - 120	8	18
Acetophenone	ND		34.8	29.6		ug/L		85	53 - 120	13	20
Anthracene	ND		34.8	34.6		ug/L		99	65 - 122	3	15
Atrazine	ND		69.6	65.5		ug/L		94	50 - 150	0	20
Benzaldehyde	ND		69.6	59.1		ug/L		85	10 - 150	17	20
Benzo[a]anthracene	ND		34.8	32.9		ug/L		94	43 - 124	1	15
Benzo[a]pyrene	ND		34.8	33.7		ug/L		97	23 - 125	2	15
Benzo[b]fluoranthene	ND		34.8	33.2		ug/L		96	27 - 127	1	15
Benzo[g,h,i]perylene	ND		34.8	33.0		ug/L		95	16 - 147	2	15
Benzo[k]fluoranthene	ND		34.8	35.2		ug/L		101	20 - 124	4	22
Biphenyl	ND		34.8	30.1		ug/L		87	57 - 120	14	20
bis (2-chloroisopropyl) ether	ND		34.8	35.4		ug/L		102	28 - 121	14	24

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-202448-3 MSD
Matrix: Water
Analysis Batch: 644815

Client Sample ID: MW1-100522
Prep Type: Total/NA
Prep Batch: 644800

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bis(2-chloroethoxy)methane	ND		34.8	31.1		ug/L		90	44 - 128	12	17
Bis(2-chloroethyl)ether	ND		34.8	30.8		ug/L		89	45 - 120	11	21
Bis(2-ethylhexyl) phthalate	ND		34.8	34.7		ug/L		100	16 - 150	2	15
Butyl benzyl phthalate	ND		34.8	35.9		ug/L		103	51 - 140	1	16
Caprolactam	ND		69.6	27.8		ug/L		40	10 - 120	5	20
Carbazole	ND	F1 *+	34.8	51.8	F1	ug/L		149	16 - 148	1	20
Chrysene	ND		34.8	33.0		ug/L		95	44 - 122	0	15
Dibenz(a,h)anthracene	ND		34.8	34.9		ug/L		100	16 - 139	1	15
Dibenzofuran	ND		34.8	30.9		ug/L		89	60 - 120	6	15
Diethyl phthalate	2.4	J B	34.8	32.8		ug/L		88	53 - 133	0	15
Dimethyl phthalate	ND		34.8	32.3		ug/L		93	59 - 123	1	15
Di-n-butyl phthalate	ND		34.8	37.4		ug/L		108	65 - 129	1	15
Di-n-octyl phthalate	ND		34.8	32.8		ug/L		94	16 - 150	1	16
Fluoranthene	ND		34.8	34.8		ug/L		100	63 - 129	2	15
Fluorene	ND		34.8	33.0		ug/L		95	62 - 120	6	15
Hexachlorobenzene	ND		34.8	28.6		ug/L		82	57 - 121	2	15
Hexachlorobutadiene	ND		34.8	18.0		ug/L		52	37 - 120	24	44
Hexachlorocyclopentadiene	ND		34.8	14.5		ug/L		42	21 - 120	37	49
Hexachloroethane	ND		34.8	22.6		ug/L		65	16 - 130	16	46
Indeno[1,2,3-cd]pyrene	ND		34.8	34.6		ug/L		99	16 - 140	1	15
Isophorone	ND		34.8	31.3		ug/L		90	48 - 133	11	17
Naphthalene	ND		34.8	28.2		ug/L		81	45 - 120	18	29
Nitrobenzene	ND		34.8	29.2		ug/L		84	45 - 123	14	24
N-Nitrosodi-n-propylamine	ND		34.8	31.7		ug/L		91	49 - 120	11	31
Pentachlorophenol	ND		69.6	55.9		ug/L		80	23 - 149	0	37
Phenanthrene	ND		34.8	34.2		ug/L		98	65 - 122	2	15
Phenol	ND		34.8	21.2		ug/L		61	16 - 120	15	34
Pyrene	ND		34.8	34.7		ug/L		100	58 - 128	4	19

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*81*		*41 - 120*
2-Fluorobiphenyl (Surr)	*87*		*48 - 120*
2-Fluorophenol (Surr)	*64*		*35 - 120*
Nitrobenzene-d5 (Surr)	*75*		*46 - 120*
Phenol-d5 (Surr)	*55*		*22 - 120*
p-Terphenyl-d14 (Surr)	*88*		*60 - 148*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-644962/1-A
Matrix: Water
Analysis Batch: 645349

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 644962

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		10/11/22 15:56	10/13/22 18:15	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*41*		*15 - 110*	*10/11/22 15:56*	*10/13/22 18:15*	*1*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution) (Continued)

Lab Sample ID: LCS 480-644962/2-A
Matrix: Water
Analysis Batch: 645349

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 644962

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			2.00	2.54		ug/L		127	40 - 140		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*38*		*15 - 110*

Lab Sample ID: 480-202448-3 MS
Matrix: Water
Analysis Batch: 645349

Client Sample ID: MW1-100522
Prep Type: Total/NA
Prep Batch: 644962

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane	ND		2.27	3.00		ug/L		132	40 - 140		

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
1,4-Dioxane-d8	*28*		*15 - 110*

Lab Sample ID: 480-202448-3 MSD
Matrix: Water
Analysis Batch: 645349

Client Sample ID: MW1-100522
Prep Type: Total/NA
Prep Batch: 644962

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	ND		2.27	2.97		ug/L		131	40 - 140	1	20

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,4-Dioxane-d8	*29*		*15 - 110*

Method: 537 IDA - EPA 537 Isotope Dilution

Lab Sample ID: MB 200-184709/1-A
Matrix: Water
Analysis Batch: 184763

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 184709

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		5.0	1.2	ng/L		10/14/22 11:48	10/17/22 14:23	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.68	ng/L		10/14/22 11:48	10/17/22 14:23	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.65	ng/L		10/14/22 11:48	10/17/22 14:23	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.54	ng/L		10/14/22 11:48	10/17/22 14:23	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.76	ng/L		10/14/22 11:48	10/17/22 14:23	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.49	ng/L		10/14/22 11:48	10/17/22 14:23	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.46	ng/L		10/14/22 11:48	10/17/22 14:23	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.55	ng/L		10/14/22 11:48	10/17/22 14:23	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.49	ng/L		10/14/22 11:48	10/17/22 14:23	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.48	ng/L		10/14/22 11:48	10/17/22 14:23	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.64	ng/L		10/14/22 11:48	10/17/22 14:23	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.62	ng/L		10/14/22 11:48	10/17/22 14:23	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.55	ng/L		10/14/22 11:48	10/17/22 14:23	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		2.0	0.41	ng/L		10/14/22 11:48	10/17/22 14:23	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.85	ng/L		10/14/22 11:48	10/17/22 14:23	1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: MB 200-184709/1-A
Matrix: Water
Analysis Batch: 184763

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 184709

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.40	ng/L		10/14/22 11:48	10/17/22 14:23	1
Perfluorooctanesulfonamide (PFOSA)	ND		2.0	0.92	ng/L		10/14/22 11:48	10/17/22 14:23	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		5.0	1.9	ng/L		10/14/22 11:48	10/17/22 14:23	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		5.0	1.6	ng/L		10/14/22 11:48	10/17/22 14:23	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		5.0	1.3	ng/L		10/14/22 11:48	10/17/22 14:23	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.0	0.77	ng/L		10/14/22 11:48	10/17/22 14:23	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*101*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:23*	*1*
13C4 PFHpA	*95*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:23*	*1*
13C4 PFOA	*99*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:23*	*1*
13C4 PFOS	*105*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:23*	*1*
13C5 PFNA	*93*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:23*	*1*
13C4 PFBA	*88*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:23*	*1*
13C2 PFHxA	*97*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:23*	*1*
13C2 PFDA	*103*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:23*	*1*
13C2 PFUnA	*104*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:23*	*1*
13C2 PFDoA	*108*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:23*	*1*
13C8 FOSA	*91*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:23*	*1*
13C5 PFPeA	*88*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:23*	*1*
13C2 PFTeDA	*106*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:23*	*1*
d3-NMeFOSAA	*112*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:23*	*1*
d5-NEtFOSAA	*115*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:23*	*1*
M2-6:2 FTS	*107*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:23*	*1*
M2-8:2 FTS	*110*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:23*	*1*
13C3 PFBS	*93*		*50 - 150*	*10/14/22 11:48*	*10/17/22 14:23*	*1*

Lab Sample ID: LLCS 200-184709/2-A
Matrix: Water
Analysis Batch: 184763

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 184709

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	10.0	12.2		ng/L		122	50 - 150
Perfluoropentanoic acid (PFPeA)	4.00	4.95		ng/L		124	50 - 150
Perfluorohexanoic acid (PFHxA)	4.00	4.43		ng/L		111	50 - 150
Perfluoroheptanoic acid (PFHpA)	4.00	4.47		ng/L		112	50 - 150
Perfluorooctanoic acid (PFOA)	4.00	4.57		ng/L		114	50 - 150
Perfluorononanoic acid (PFNA)	4.00	4.57		ng/L		114	50 - 150
Perfluorodecanoic acid (PFDA)	4.00	4.76		ng/L		119	50 - 150
Perfluoroundecanoic acid (PFUnA)	4.00	4.34		ng/L		109	50 - 150
Perfluorododecanoic acid (PFDoA)	4.00	4.38		ng/L		110	50 - 150
Perfluorotridecanoic acid (PFTriA)	4.00	4.41		ng/L		110	50 - 150
Perfluorotetradecanoic acid (PFTeA)	4.00	4.63		ng/L		116	50 - 150

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LLCS 200-184709/2-A
Matrix: Water
Analysis Batch: 184763

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 184709

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanesulfonic acid (PFBS)	3.54	4.05		ng/L		115	50 - 150
Perfluorohexanesulfonic acid (PFHxS)	3.64	4.27		ng/L		117	50 - 150
Perfluoroheptanesulfonic acid (PFHpS)	3.81	4.54		ng/L		119	50 - 150
Perfluorooctanesulfonic acid (PFOS)	3.71	4.29		ng/L		115	50 - 150
Perfluorodecanesulfonic acid (PFDS)	3.86	4.19		ng/L		109	50 - 150
Perfluorooctanesulfonamide (PFOSA)	4.00	4.74		ng/L		118	50 - 150
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	10.0	10.8		ng/L		108	50 - 150
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	10.0	10.5		ng/L		105	50 - 150
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	9.48	12.0		ng/L		127	50 - 150
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	3.83	5.18		ng/L		135	50 - 150

Isotope Dilution	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
18O2 PFHxS	*100*		*50 - 150*
13C4 PFHpA	*95*		*50 - 150*
13C4 PFOA	*99*		*50 - 150*
13C4 PFOS	*103*		*50 - 150*
13C5 PFNA	*96*		*50 - 150*
13C4 PFBA	*89*		*50 - 150*
13C2 PFHxA	*96*		*50 - 150*
13C2 PFDA	*100*		*50 - 150*
13C2 PFUnA	*106*		*50 - 150*
13C2 PFDoA	*99*		*50 - 150*
13C8 FOSA	*86*		*50 - 150*
13C5 PFPeA	*88*		*50 - 150*
13C2 PFTeDA	*104*		*50 - 150*
d3-NMeFOSAA	*112*		*50 - 150*
d5-NEtFOSAA	*114*		*50 - 150*
M2-6:2 FTS	*107*		*50 - 150*
M2-8:2 FTS	*109*		*50 - 150*
13C3 PFBS	*95*		*50 - 150*

Lab Sample ID: 480-202448-3 MS
Matrix: Water
Analysis Batch: 184763

Client Sample ID: MW1-100522
Prep Type: Total/NA
Prep Batch: 184709

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	1.2	J	9.00	11.5		ng/L		115	60 - 140
Perfluoropentanoic acid (PFPeA)	ND		3.60	4.44		ng/L		123	60 - 140
Perfluorohexanoic acid (PFHxA)	ND		3.60	4.60		ng/L		128	60 - 140
Perfluoroheptanoic acid (PFHpA)	ND		3.60	4.32		ng/L		120	60 - 140
Perfluorooctanoic acid (PFOA)	0.68	J	3.60	4.59		ng/L		109	60 - 140

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: 480-202448-3 MS
Matrix: Water
Analysis Batch: 184763

Client Sample ID: MW1-100522
Prep Type: Total/NA
Prep Batch: 184709

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorononanoic acid (PFNA)	ND		3.60	4.17		ng/L		116	60 - 140
Perfluorodecanoic acid (PFDA)	ND		3.60	4.40		ng/L		122	60 - 140
Perfluoroundecanoic acid (PFUnA)	ND		3.60	3.89		ng/L		108	60 - 140
Perfluorododecanoic acid (PFDoA)	ND		3.60	4.02		ng/L		112	60 - 140
Perfluorotridecanoic acid (PFTriA)	ND		3.60	4.04		ng/L		112	60 - 140
Perfluorotetradecanoic acid (PFTeA)	ND		3.60	4.06		ng/L		113	60 - 140
Perfluorobutanesulfonic acid (PFBS)	ND		3.18	4.30		ng/L		135	60 - 140
Perfluorohexanesulfonic acid (PFHxS)	ND		3.28	4.23		ng/L		129	60 - 140
Perfluoroheptanesulfonic acid (PFHpS)	ND		3.43	4.09		ng/L		119	60 - 140
Perfluorooctanesulfonic acid (PFOS)	2.2		3.34	5.39		ng/L		95	60 - 140
Perfluorodecanesulfonic acid (PFDS)	ND		3.47	3.70		ng/L		107	60 - 140
Perfluorooctanesulfonamide (PFOSA)	ND		3.60	4.25		ng/L		118	60 - 140
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		9.00	10.6		ng/L		117	60 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		9.00	10.6		ng/L		118	60 - 140
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		8.53	10.9		ng/L		127	50 - 150
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		3.45	4.58		ng/L		133	60 - 140

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
18O2 PFHxS	*102*		*50 - 150*
13C4 PFHpA	*98*		*50 - 150*
13C4 PFOA	*100*		*50 - 150*
13C4 PFOS	*103*		*50 - 150*
13C5 PFNA	*98*		*50 - 150*
13C4 PFBA	*93*		*50 - 150*
13C2 PFHxA	*96*		*50 - 150*
13C2 PFDA	*96*		*50 - 150*
13C2 PFUnA	*104*		*50 - 150*
13C2 PFDoA	*105*		*50 - 150*
13C8 FOSA	*98*		*50 - 150*
13C5 PFPeA	*93*		*50 - 150*
13C2 PFTeDA	*96*		*50 - 150*
d3-NMeFOSAA	*113*		*50 - 150*
d5-NEtFOSAA	*110*		*50 - 150*
M2-6:2 FTS	*111*		*50 - 150*
M2-8:2 FTS	*105*		*50 - 150*
13C3 PFBS	*98*		*50 - 150*

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: 480-202448-3 MSD
Matrix: Water
Analysis Batch: 184763

Client Sample ID: MW1-100522
Prep Type: Total/NA
Prep Batch: 184709

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	1.2	J	9.59	12.4		ng/L		118	60 - 140	7	30
Perfluoropentanoic acid (PFPeA)	ND		3.83	4.70		ng/L		123	60 - 140	6	30
Perfluorohexanoic acid (PFHxA)	ND		3.83	4.55		ng/L		119	60 - 140	1	30
Perfluoroheptanoic acid (PFHpA)	ND		3.83	4.41		ng/L		115	60 - 140	2	30
Perfluorooctanoic acid (PFOA)	0.68	J	3.83	5.04		ng/L		114	60 - 140	9	30
Perfluorononanoic acid (PFNA)	ND		3.83	4.57		ng/L		119	60 - 140	9	30
Perfluorodecanoic acid (PFDA)	ND		3.83	4.62		ng/L		120	60 - 140	5	30
Perfluoroundecanoic acid (PFUnA)	ND		3.83	4.26		ng/L		111	60 - 140	9	30
Perfluorododecanoic acid (PFDoA)	ND		3.83	4.33		ng/L		113	60 - 140	7	30
Perfluorotridecanoic acid (PFTriA)	ND		3.83	4.34		ng/L		113	60 - 140	7	30
Perfluorotetradecanoic acid (PFTeA)	ND		3.83	4.02		ng/L		105	60 - 140	1	30
Perfluorobutanesulfonic acid (PFBS)	ND		3.39	4.45		ng/L		131	60 - 140	3	30
Perfluorohexanesulfonic acid (PFHxS)	ND		3.49	4.50		ng/L		129	60 - 140	6	30
Perfluoroheptanesulfonic acid (PFHpS)	ND		3.65	4.29		ng/L		118	60 - 140	5	30
Perfluorooctanesulfonic acid (PFOS)	2.2		3.56	5.99		ng/L		106	60 - 140	11	30
Perfluorodecanesulfonic acid (PFDS)	ND		3.70	3.87		ng/L		105	60 - 140	5	30
Perfluorooctanesulfonamide (PFOSA)	ND		3.83	4.34		ng/L		113	60 - 140	2	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		9.59	10.7		ng/L		111	60 - 140	1	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		9.59	10.4		ng/L		108	60 - 140	2	30
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		9.09	11.7		ng/L		129	50 - 150	8	30
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		3.67	4.94		ng/L		135	60 - 140	7	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
18O2 PFHxS	*92*		*50 - 150*
13C4 PFHpA	*91*		*50 - 150*
13C4 PFOA	*88*		*50 - 150*
13C4 PFOS	*96*		*50 - 150*
13C5 PFNA	*87*		*50 - 150*
13C4 PFBA	*86*		*50 - 150*
13C2 PFHxA	*92*		*50 - 150*
13C2 PFDA	*90*		*50 - 150*
13C2 PFUnA	*92*		*50 - 150*
13C2 PFDoA	*92*		*50 - 150*
13C8 FOSA	*86*		*50 - 150*
13C5 PFPeA	*86*		*50 - 150*
13C2 PFTeDA	*93*		*50 - 150*
d3-NMeFOSAA	*107*		*50 - 150*
d5-NEtFOSAA	*108*		*50 - 150*

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: 480-202448-3 MSD
Matrix: Water
Analysis Batch: 184763

Client Sample ID: MW1-100522
Prep Type: Total/NA
Prep Batch: 184709

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
M2-6:2 FTS	*97*		*50 - 150*
M2-8:2 FTS	*98*		*50 - 150*
13C3 PFBS	*92*		*50 - 150*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-644708/1-A
Matrix: Water
Analysis Batch: 645252

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 644708

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		10/11/22 09:02	10/12/22 17:36	1
Antimony	ND		0.020	0.0068	mg/L		10/11/22 09:02	10/12/22 17:36	1
Arsenic	ND		0.015	0.0056	mg/L		10/11/22 09:02	10/12/22 17:36	1
Barium	ND		0.0020	0.00070	mg/L		10/11/22 09:02	10/12/22 17:36	1
Beryllium	ND		0.0020	0.00030	mg/L		10/11/22 09:02	10/12/22 17:36	1
Cadmium	ND		0.0020	0.00050	mg/L		10/11/22 09:02	10/12/22 17:36	1
Calcium	ND		0.50	0.10	mg/L		10/11/22 09:02	10/12/22 17:36	1
Chromium	ND		0.0040	0.0010	mg/L		10/11/22 09:02	10/12/22 17:36	1
Cobalt	ND		0.0040	0.00063	mg/L		10/11/22 09:02	10/12/22 17:36	1
Copper	ND		0.010	0.0016	mg/L		10/11/22 09:02	10/12/22 17:36	1
Iron	ND		0.050	0.019	mg/L		10/11/22 09:02	10/12/22 17:36	1
Lead	ND		0.010	0.0030	mg/L		10/11/22 09:02	10/12/22 17:36	1
Magnesium	ND		0.20	0.043	mg/L		10/11/22 09:02	10/12/22 17:36	1
Manganese	0.000540	J	0.0030	0.00040	mg/L		10/11/22 09:02	10/12/22 17:36	1
Nickel	ND		0.010	0.0013	mg/L		10/11/22 09:02	10/12/22 17:36	1
Potassium	ND		0.50	0.10	mg/L		10/11/22 09:02	10/12/22 17:36	1
Selenium	ND		0.025	0.0087	mg/L		10/11/22 09:02	10/12/22 17:36	1
Silver	ND		0.0060	0.0017	mg/L		10/11/22 09:02	10/12/22 17:36	1
Sodium	ND		1.0	0.32	mg/L		10/11/22 09:02	10/12/22 17:36	1
Thallium	ND		0.020	0.010	mg/L		10/11/22 09:02	10/12/22 17:36	1
Vanadium	ND		0.0050	0.0015	mg/L		10/11/22 09:02	10/12/22 17:36	1
Zinc	ND		0.010	0.0015	mg/L		10/11/22 09:02	10/12/22 17:36	1

Lab Sample ID: LCS 480-644708/2-A
Matrix: Water
Analysis Batch: 645252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 644708

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	10.0	10.26		mg/L		102	80 - 120
Antimony	0.200	0.206		mg/L		103	80 - 120
Arsenic	0.201	0.204		mg/L		102	80 - 120
Barium	0.200	0.218		mg/L		109	80 - 120
Beryllium	0.200	0.214		mg/L		107	80 - 120
Cadmium	0.200	0.198		mg/L		99	80 - 120
Calcium	10.0	9.98		mg/L		100	80 - 120
Chromium	0.200	0.199		mg/L		99	80 - 120
Cobalt	0.200	0.197		mg/L		98	80 - 120
Copper	0.200	0.207		mg/L		103	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-644708/2-A
Matrix: Water
Analysis Batch: 645252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 644708

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Iron	10.0	10.27		mg/L		103	80 - 120
Lead	0.201	0.192		mg/L		96	80 - 120
Magnesium	10.0	9.87		mg/L		99	80 - 120
Manganese	0.200	0.212		mg/L		106	80 - 120
Nickel	0.200	0.195		mg/L		98	80 - 120
Potassium	10.0	10.03		mg/L		100	80 - 120
Selenium	0.200	0.195		mg/L		97	80 - 120
Silver	0.0500	0.0515		mg/L		103	80 - 120
Sodium	10.0	9.81		mg/L		98	80 - 120
Thallium	0.200	0.199		mg/L		99	80 - 120
Vanadium	0.201	0.198		mg/L		99	80 - 120
Zinc	0.200	0.198		mg/L		99	80 - 120

Lab Sample ID: 480-202448-3 MS
Matrix: Water
Analysis Batch: 645252

Client Sample ID: MW1-100522
Prep Type: Total/NA
Prep Batch: 644708

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	0.20		10.0	10.43		mg/L		102	75 - 125
Antimony	ND		0.200	0.213		mg/L		106	75 - 125
Arsenic	ND		0.201	0.214		mg/L		107	75 - 125
Barium	0.11		0.200	0.320		mg/L		106	75 - 125
Beryllium	ND		0.200	0.220		mg/L		110	75 - 125
Cadmium	ND		0.200	0.205		mg/L		103	75 - 125
Calcium	47.9		10.0	58.07	4	mg/L		102	75 - 125
Chromium	ND		0.200	0.204		mg/L		102	75 - 125
Cobalt	ND		0.200	0.207		mg/L		104	75 - 125
Copper	ND		0.200	0.211		mg/L		105	75 - 125
Iron	0.21		10.0	10.44		mg/L		102	75 - 125
Magnesium	8.1		10.0	17.84		mg/L		97	75 - 125
Manganese	0.56	B ^+	0.200	0.752	^+	mg/L		97	75 - 125
Nickel	ND		0.200	0.205		mg/L		103	75 - 125
Potassium	3.5		10.0	13.98		mg/L		105	75 - 125
Selenium	ND		0.200	0.212		mg/L		106	75 - 125
Silver	ND		0.0500	0.0531		mg/L		106	75 - 125
Sodium	136		10.0	146.4	4	mg/L		100	75 - 125
Thallium	ND		0.200	0.202		mg/L		101	75 - 125
Vanadium	ND		0.201	0.204		mg/L		102	75 - 125
Zinc	0.0016	J	0.200	0.204		mg/L		101	75 - 125

Lab Sample ID: 480-202448-3 MS
Matrix: Water
Analysis Batch: 645551

Client Sample ID: MW1-100522
Prep Type: Total/NA
Prep Batch: 644708

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Lead	0.0031	J	0.201	0.221		mg/L		108	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-202448-3 MSD
Matrix: Water
Analysis Batch: 645252

Client Sample ID: MW1-100522
Prep Type: Total/NA
Prep Batch: 644708

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	0.20		10.0	10.38		mg/L		102	75 - 125	0	20
Antimony	ND		0.200	0.208		mg/L		104	75 - 125	3	20
Arsenic	ND		0.201	0.210		mg/L		105	75 - 125	2	20
Barium	0.11		0.200	0.320		mg/L		106	75 - 125	0	20
Beryllium	ND		0.200	0.216		mg/L		108	75 - 125	2	20
Cadmium	ND		0.200	0.202		mg/L		101	75 - 125	2	20
Calcium	47.9		10.0	57.42	4	mg/L		95	75 - 125	1	20
Chromium	ND		0.200	0.200		mg/L		100	75 - 125	2	20
Cobalt	ND		0.200	0.202		mg/L		101	75 - 125	2	20
Copper	ND		0.200	0.206		mg/L		103	75 - 125	2	20
Iron	0.21		10.0	10.26		mg/L		100	75 - 125	2	20
Magnesium	8.1		10.0	17.64		mg/L		95	75 - 125	1	20
Manganese	0.56	B ^+	0.200	0.748	^+	mg/L		95	75 - 125	0	20
Nickel	ND		0.200	0.201		mg/L		100	75 - 125	2	20
Potassium	3.5		10.0	13.84		mg/L		104	75 - 125	1	20
Selenium	ND		0.200	0.199		mg/L		100	75 - 125	6	20
Silver	ND		0.0500	0.0525		mg/L		105	75 - 125	1	20
Sodium	136		10.0	147.6	4	mg/L		113	75 - 125	1	20
Thallium	ND		0.200	0.197		mg/L		98	75 - 125	2	20
Vanadium	ND		0.201	0.201		mg/L		100	75 - 125	2	20
Zinc	0.0016	J	0.200	0.200		mg/L		99	75 - 125	2	20

Lab Sample ID: 480-202448-3 MSD
Matrix: Water
Analysis Batch: 645551

Client Sample ID: MW1-100522
Prep Type: Total/NA
Prep Batch: 644708

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Lead	0.0031	J	0.201	0.216		mg/L		106	75 - 125	2	20

Lab Sample ID: MB 480-644516/1-A
Matrix: Water
Analysis Batch: 644854

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 644516

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	ND		0.20	0.060	mg/L		10/10/22 09:32	10/10/22 23:48	1
Antimony, Dissolved	ND		0.020	0.0068	mg/L		10/10/22 09:32	10/10/22 23:48	1
Arsenic, Dissolved	ND		0.015	0.0056	mg/L		10/10/22 09:32	10/10/22 23:48	1
Barium, Dissolved	ND		0.0020	0.00070	mg/L		10/10/22 09:32	10/10/22 23:48	1
Cadmium, Dissolved	ND		0.0020	0.00050	mg/L		10/10/22 09:32	10/10/22 23:48	1
Calcium, Dissolved	ND		0.50	0.10	mg/L		10/10/22 09:32	10/10/22 23:48	1
Chromium, Dissolved	ND		0.0040	0.0010	mg/L		10/10/22 09:32	10/10/22 23:48	1
Cobalt, Dissolved	ND		0.0040	0.00063	mg/L		10/10/22 09:32	10/10/22 23:48	1
Copper, Dissolved	ND		0.010	0.0016	mg/L		10/10/22 09:32	10/10/22 23:48	1
Iron, Dissolved	ND		0.050	0.019	mg/L		10/10/22 09:32	10/10/22 23:48	1
Lead, Dissolved	ND		0.010	0.0030	mg/L		10/10/22 09:32	10/10/22 23:48	1
Nickel, Dissolved	ND		0.010	0.0013	mg/L		10/10/22 09:32	10/10/22 23:48	1
Potassium, Dissolved	ND		0.50	0.10	mg/L		10/10/22 09:32	10/10/22 23:48	1
Sodium, Dissolved	ND		1.0	0.32	mg/L		10/10/22 09:32	10/10/22 23:48	1
Thallium, Dissolved	ND		0.020	0.010	mg/L		10/10/22 09:32	10/10/22 23:48	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 480-644516/1-A
Matrix: Water
Analysis Batch: 644854

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 644516

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vanadium, Dissolved	ND		0.0050	0.0015	mg/L		10/10/22 09:32	10/10/22 23:48	1
Zinc, Dissolved	ND		0.010	0.0015	mg/L		10/10/22 09:32	10/10/22 23:48	1

Lab Sample ID: MB 480-644516/1-A
Matrix: Water
Analysis Batch: 645159

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 644516

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium, Dissolved	ND		0.0020	0.00030	mg/L		10/10/22 09:32	10/12/22 14:18	1
Magnesium, Dissolved	ND		0.20	0.043	mg/L		10/10/22 09:32	10/12/22 14:18	1
Manganese, Dissolved	0.00107	J	0.0030	0.00040	mg/L		10/10/22 09:32	10/12/22 14:18	1
Selenium, Dissolved	ND		0.025	0.0087	mg/L		10/10/22 09:32	10/12/22 14:18	1
Silver, Dissolved	ND		0.0060	0.0017	mg/L		10/10/22 09:32	10/12/22 14:18	1

Lab Sample ID: LCS 480-644516/2-A
Matrix: Water
Analysis Batch: 644854

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 644516

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum, Dissolved	10.0	10.49		mg/L		105	80 - 120
Antimony, Dissolved	0.200	0.210		mg/L		105	80 - 120
Arsenic, Dissolved	0.201	0.207		mg/L		103	80 - 120
Barium, Dissolved	0.200	0.204		mg/L		102	80 - 120
Cadmium, Dissolved	0.200	0.200		mg/L		100	80 - 120
Calcium, Dissolved	10.0	10.26		mg/L		102	80 - 120
Chromium, Dissolved	0.200	0.209		mg/L		105	80 - 120
Cobalt, Dissolved	0.200	0.202		mg/L		101	80 - 120
Copper, Dissolved	0.200	0.219		mg/L		109	80 - 120
Iron, Dissolved	10.0	10.76		mg/L		107	80 - 120
Lead, Dissolved	0.201	0.192		mg/L		96	80 - 120
Nickel, Dissolved	0.200	0.205		mg/L		102	80 - 120
Potassium, Dissolved	10.0	9.57		mg/L		96	80 - 120
Sodium, Dissolved	10.0	10.32		mg/L		103	80 - 120
Thallium, Dissolved	0.200	0.193		mg/L		97	80 - 120
Vanadium, Dissolved	0.201	0.211		mg/L		105	80 - 120
Zinc, Dissolved	0.200	0.212		mg/L		106	80 - 120

Lab Sample ID: LCS 480-644516/2-A
Matrix: Water
Analysis Batch: 645159

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 644516

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium, Dissolved	0.200	0.226		mg/L		113	80 - 120
Magnesium, Dissolved	10.0	10.43		mg/L		104	80 - 120
Manganese, Dissolved	0.200	0.221		mg/L		111	80 - 120
Selenium, Dissolved	0.200	0.209		mg/L		105	80 - 120
Silver, Dissolved	0.0500	0.0511		mg/L		102	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-202448-3 MS
Matrix: Water
Analysis Batch: 644854

Client Sample ID: MW1-100522
Prep Type: Dissolved
Prep Batch: 644516

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum, Dissolved	ND		10.0	10.47		mg/L		105	75 - 125
Antimony, Dissolved	ND		0.200	0.208		mg/L		104	75 - 125
Arsenic, Dissolved	ND		0.201	0.211		mg/L		105	75 - 125
Barium, Dissolved	0.088		0.200	0.286		mg/L		99	75 - 125
Cadmium, Dissolved	ND		0.200	0.200		mg/L		100	75 - 125
Calcium, Dissolved	41.0		10.0	51.43	4	mg/L		104	75 - 125
Chromium, Dissolved	ND		0.200	0.207		mg/L		104	75 - 125
Cobalt, Dissolved	ND		0.200	0.205		mg/L		102	75 - 125
Copper, Dissolved	0.0017	J	0.200	0.216		mg/L		107	75 - 125
Iron, Dissolved	ND		10.0	10.58		mg/L		106	75 - 125
Lead, Dissolved	ND		0.201	0.192		mg/L		96	75 - 125
Nickel, Dissolved	ND		0.200	0.207		mg/L		104	75 - 125
Potassium, Dissolved	3.0		10.0	12.94		mg/L		99	75 - 125
Selenium, Dissolved	ND		0.200	0.186		mg/L		93	75 - 125
Sodium, Dissolved	124		10.0	133.3	4	mg/L		93	75 - 125
Thallium, Dissolved	ND		0.200	0.188		mg/L		94	75 - 125
Vanadium, Dissolved	ND		0.201	0.210		mg/L		105	75 - 125
Zinc, Dissolved	ND		0.200	0.213		mg/L		106	75 - 125

Lab Sample ID: 480-202448-3 MS
Matrix: Water
Analysis Batch: 645159

Client Sample ID: MW1-100522
Prep Type: Dissolved
Prep Batch: 644516

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Beryllium, Dissolved	ND		0.200	0.224		mg/L		112	75 - 125
Magnesium, Dissolved	7.0		10.0	17.25		mg/L		102	75 - 125
Manganese, Dissolved	0.44	B	0.200	0.667		mg/L		111	75 - 125
Silver, Dissolved	ND		0.0500	0.0532		mg/L		106	75 - 125

Lab Sample ID: 480-202448-3 MSD
Matrix: Water
Analysis Batch: 644854

Client Sample ID: MW1-100522
Prep Type: Dissolved
Prep Batch: 644516

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum, Dissolved	ND		10.0	10.48		mg/L		105	75 - 125	0	20
Antimony, Dissolved	ND		0.200	0.207		mg/L		104	75 - 125	1	20
Arsenic, Dissolved	ND		0.201	0.209		mg/L		104	75 - 125	1	20
Barium, Dissolved	0.088		0.200	0.280		mg/L		96	75 - 125	2	20
Cadmium, Dissolved	ND		0.200	0.199		mg/L		99	75 - 125	0	20
Calcium, Dissolved	41.0		10.0	48.81	4	mg/L		78	75 - 125	5	20
Chromium, Dissolved	ND		0.200	0.208		mg/L		104	75 - 125	0	20
Cobalt, Dissolved	ND		0.200	0.203		mg/L		102	75 - 125	1	20
Copper, Dissolved	0.0017	J	0.200	0.217		mg/L		108	75 - 125	1	20
Iron, Dissolved	ND		10.0	10.59		mg/L		106	75 - 125	0	20
Lead, Dissolved	ND		0.201	0.191		mg/L		95	75 - 125	1	20
Nickel, Dissolved	ND		0.200	0.206		mg/L		103	75 - 125	1	20
Potassium, Dissolved	3.0		10.0	12.85		mg/L		98	75 - 125	1	20
Selenium, Dissolved	ND		0.200	0.184		mg/L		92	75 - 125	1	20
Sodium, Dissolved	124		10.0	131.1	4	mg/L		72	75 - 125	2	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-202448-3 MSD
Matrix: Water
Analysis Batch: 644854

Client Sample ID: MW1-100522
Prep Type: Dissolved
Prep Batch: 644516

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Thallium, Dissolved	ND		0.200	0.186		mg/L		93	75 - 125	1	20
Vanadium, Dissolved	ND		0.201	0.209		mg/L		104	75 - 125	0	20
Zinc, Dissolved	ND		0.200	0.214		mg/L		107	75 - 125	1	20

Lab Sample ID: 480-202448-3 MSD
Matrix: Water
Analysis Batch: 645159

Client Sample ID: MW1-100522
Prep Type: Dissolved
Prep Batch: 644516

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Beryllium, Dissolved	ND		0.200	0.228		mg/L		114	75 - 125	2	20
Magnesium, Dissolved	7.0		10.0	16.86		mg/L		98	75 - 125	2	20
Manganese, Dissolved	0.44	B	0.200	0.630		mg/L		93	75 - 125	6	20
Silver, Dissolved	ND		0.0500	0.0528		mg/L		106	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-644831/1-A
Matrix: Water
Analysis Batch: 644973

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 644831

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00020	0.000043	mg/L		10/11/22 10:36	10/11/22 13:20	1

Lab Sample ID: LCS 480-644831/2-A
Matrix: Water
Analysis Batch: 644973

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 644831

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury, Dissolved	0.00667	0.00665		mg/L		100	80 - 120

Lab Sample ID: MB 480-644832/1-A
Matrix: Water
Analysis Batch: 644973

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 644832

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		10/11/22 10:36	10/11/22 13:58	1

Lab Sample ID: LCS 480-644832/2-A
Matrix: Water
Analysis Batch: 644973

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 644832

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00667	0.00673		mg/L		101	80 - 120

Lab Sample ID: 480-202448-3 MS
Matrix: Water
Analysis Batch: 644973

Client Sample ID: MW1-100522
Prep Type: Total/NA
Prep Batch: 644832

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	ND		0.00667	0.00677		mg/L		101	80 - 120

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 480-202448-3 MSD
Matrix: Water
Analysis Batch: 644973

Client Sample ID: MW1-100522
Prep Type: Total/NA
Prep Batch: 644832

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00667	0.00667		mg/L		100	80 - 120	1	20

Lab Sample ID: 480-202448-3 MS
Matrix: Water
Analysis Batch: 644973

Client Sample ID: MW1-100522
Prep Type: Dissolved
Prep Batch: 644831

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury, Dissolved	ND		0.00667	0.00677		mg/L		101	80 - 120		

Lab Sample ID: 480-202448-3 MSD
Matrix: Water
Analysis Batch: 644973

Client Sample ID: MW1-100522
Prep Type: Dissolved
Prep Batch: 644831

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury, Dissolved	ND		0.00667	0.00675		mg/L		101	80 - 120	0	20

GC/MS VOA

Analysis Batch: 644728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202448-1	TB-100522	Total/NA	Water	8260C	
480-202448-2	FB-100522	Total/NA	Water	8260C	
480-202448-6	ERB-100522	Total/NA	Water	8260C	
MB 480-644728/8	Method Blank	Total/NA	Water	8260C	
LCS 480-644728/6	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 644817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202448-3	MW1-100522	Total/NA	Water	8260C	
480-202448-4	MW5-100522	Total/NA	Water	8260C	
480-202448-5	FDUP-100522	Total/NA	Water	8260C	
MB 480-644817/10	Method Blank	Total/NA	Water	8260C	
LCS 480-644817/58	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 645328

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-645328/9	Method Blank	Total/NA	Water	8260C	
LCS 480-645328/7	Lab Control Sample	Total/NA	Water	8260C	
480-202448-3 MS	MW1-100522	Total/NA	Water	8260C	
480-202448-3 MSD	MW1-100522	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 644800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202448-2	FB-100522	Total/NA	Water	3510C	
480-202448-3	MW1-100522	Total/NA	Water	3510C	
480-202448-4	MW5-100522	Total/NA	Water	3510C	
480-202448-5	FDUP-100522	Total/NA	Water	3510C	
480-202448-6	ERB-100522	Total/NA	Water	3510C	
MB 480-644800/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-644800/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-202448-3 MS	MW1-100522	Total/NA	Water	3510C	
480-202448-3 MSD	MW1-100522	Total/NA	Water	3510C	

Analysis Batch: 644815

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202448-2	FB-100522	Total/NA	Water	8270D	644800
480-202448-3	MW1-100522	Total/NA	Water	8270D	644800
480-202448-4	MW5-100522	Total/NA	Water	8270D	644800
MB 480-644800/1-A	Method Blank	Total/NA	Water	8270D	644800
LCS 480-644800/2-A	Lab Control Sample	Total/NA	Water	8270D	644800
480-202448-3 MS	MW1-100522	Total/NA	Water	8270D	644800
480-202448-3 MSD	MW1-100522	Total/NA	Water	8270D	644800

Prep Batch: 644962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202448-2	FB-100522	Total/NA	Water	3510C	
480-202448-3	MW1-100522	Total/NA	Water	3510C	
480-202448-5	FDUP-100522	Total/NA	Water	3510C	
480-202448-6	ERB-100522	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 644962 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-644962/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-644962/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-202448-3 MS	MW1-100522	Total/NA	Water	3510C	
480-202448-3 MSD	MW1-100522	Total/NA	Water	3510C	

Analysis Batch: 645033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202448-6	ERB-100522	Total/NA	Water	8270D	644800

Analysis Batch: 645318

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202448-5	FDUP-100522	Total/NA	Water	8270D	644800

Analysis Batch: 645349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202448-2	FB-100522	Total/NA	Water	8270D SIM ID	644962
480-202448-3	MW1-100522	Total/NA	Water	8270D SIM ID	644962
480-202448-5	FDUP-100522	Total/NA	Water	8270D SIM ID	644962
480-202448-6	ERB-100522	Total/NA	Water	8270D SIM ID	644962
MB 480-644962/1-A	Method Blank	Total/NA	Water	8270D SIM ID	644962
LCS 480-644962/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	644962
480-202448-3 MS	MW1-100522	Total/NA	Water	8270D SIM ID	644962
480-202448-3 MSD	MW1-100522	Total/NA	Water	8270D SIM ID	644962

LCMS

Prep Batch: 184709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202448-2	FB-100522	Total/NA	Water	3535	
480-202448-3	MW1-100522	Total/NA	Water	3535	
480-202448-5	FDUP-100522	Total/NA	Water	3535	
480-202448-6	ERB-100522	Total/NA	Water	3535	
MB 200-184709/1-A	Method Blank	Total/NA	Water	3535	
LLCS 200-184709/2-A	Lab Control Sample	Total/NA	Water	3535	
480-202448-3 MS	MW1-100522	Total/NA	Water	3535	
480-202448-3 MSD	MW1-100522	Total/NA	Water	3535	

Analysis Batch: 184763

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202448-2	FB-100522	Total/NA	Water	537 IDA	184709
480-202448-3	MW1-100522	Total/NA	Water	537 IDA	184709
480-202448-5	FDUP-100522	Total/NA	Water	537 IDA	184709
480-202448-6	ERB-100522	Total/NA	Water	537 IDA	184709
MB 200-184709/1-A	Method Blank	Total/NA	Water	537 IDA	184709
LLCS 200-184709/2-A	Lab Control Sample	Total/NA	Water	537 IDA	184709
480-202448-3 MS	MW1-100522	Total/NA	Water	537 IDA	184709
480-202448-3 MSD	MW1-100522	Total/NA	Water	537 IDA	184709

Metals

Prep Batch: 644516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202448-3	MW1-100522	Dissolved	Water	3005A	
480-202448-4	MW5-100522	Dissolved	Water	3005A	
480-202448-5	FDUP-100522	Dissolved	Water	3005A	
MB 480-644516/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 480-644516/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
480-202448-3 MS	MW1-100522	Dissolved	Water	3005A	
480-202448-3 MSD	MW1-100522	Dissolved	Water	3005A	

Prep Batch: 644708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202448-2	FB-100522	Total/NA	Water	3005A	
480-202448-3	MW1-100522	Total/NA	Water	3005A	
480-202448-4	MW5-100522	Total/NA	Water	3005A	
480-202448-5	FDUP-100522	Total/NA	Water	3005A	
480-202448-6	ERB-100522	Total/NA	Water	3005A	
MB 480-644708/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-644708/2-A	Lab Control Sample	Total/NA	Water	3005A	
480-202448-3 MS	MW1-100522	Total/NA	Water	3005A	
480-202448-3 MSD	MW1-100522	Total/NA	Water	3005A	

Prep Batch: 644831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202448-3	MW1-100522	Dissolved	Water	7470A	
480-202448-4	MW5-100522	Dissolved	Water	7470A	
480-202448-5	FDUP-100522	Dissolved	Water	7470A	
MB 480-644831/1-A	Method Blank	Total/NA	Water	7470A	
LCS 480-644831/2-A	Lab Control Sample	Total/NA	Water	7470A	
480-202448-3 MS	MW1-100522	Dissolved	Water	7470A	
480-202448-3 MSD	MW1-100522	Dissolved	Water	7470A	

Prep Batch: 644832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202448-2	FB-100522	Total/NA	Water	7470A	
480-202448-3	MW1-100522	Total/NA	Water	7470A	
480-202448-4	MW5-100522	Total/NA	Water	7470A	
480-202448-5	FDUP-100522	Total/NA	Water	7470A	
480-202448-6	ERB-100522	Total/NA	Water	7470A	
MB 480-644832/1-A	Method Blank	Total/NA	Water	7470A	
LCS 480-644832/2-A	Lab Control Sample	Total/NA	Water	7470A	
480-202448-3 MS	MW1-100522	Total/NA	Water	7470A	
480-202448-3 MSD	MW1-100522	Total/NA	Water	7470A	

Analysis Batch: 644854

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202448-3	MW1-100522	Dissolved	Water	6010C	644516
480-202448-4	MW5-100522	Dissolved	Water	6010C	644516
480-202448-5	FDUP-100522	Dissolved	Water	6010C	644516
MB 480-644516/1-A	Method Blank	Total Recoverable	Water	6010C	644516
LCS 480-644516/2-A	Lab Control Sample	Total Recoverable	Water	6010C	644516
480-202448-3 MS	MW1-100522	Dissolved	Water	6010C	644516
480-202448-3 MSD	MW1-100522	Dissolved	Water	6010C	644516

Metals

Analysis Batch: 644973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202448-2	FB-100522	Total/NA	Water	7470A	644832
480-202448-3	MW1-100522	Dissolved	Water	7470A	644831
480-202448-3	MW1-100522	Total/NA	Water	7470A	644832
480-202448-4	MW5-100522	Dissolved	Water	7470A	644831
480-202448-4	MW5-100522	Total/NA	Water	7470A	644832
480-202448-5	FDUP-100522	Dissolved	Water	7470A	644831
480-202448-5	FDUP-100522	Total/NA	Water	7470A	644832
480-202448-6	ERB-100522	Total/NA	Water	7470A	644832
MB 480-644831/1-A	Method Blank	Total/NA	Water	7470A	644831
MB 480-644832/1-A	Method Blank	Total/NA	Water	7470A	644832
LCS 480-644831/2-A	Lab Control Sample	Total/NA	Water	7470A	644831
LCS 480-644832/2-A	Lab Control Sample	Total/NA	Water	7470A	644832
480-202448-3 MS	MW1-100522	Dissolved	Water	7470A	644831
480-202448-3 MS	MW1-100522	Total/NA	Water	7470A	644832
480-202448-3 MSD	MW1-100522	Dissolved	Water	7470A	644831
480-202448-3 MSD	MW1-100522	Total/NA	Water	7470A	644832

Analysis Batch: 645159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202448-3	MW1-100522	Dissolved	Water	6010C	644516
480-202448-4	MW5-100522	Dissolved	Water	6010C	644516
480-202448-5	FDUP-100522	Dissolved	Water	6010C	644516
MB 480-644516/1-A	Method Blank	Total Recoverable	Water	6010C	644516
LCS 480-644516/2-A	Lab Control Sample	Total Recoverable	Water	6010C	644516
480-202448-3 MS	MW1-100522	Dissolved	Water	6010C	644516
480-202448-3 MSD	MW1-100522	Dissolved	Water	6010C	644516

Analysis Batch: 645252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202448-2	FB-100522	Total/NA	Water	6010C	644708
480-202448-3	MW1-100522	Total/NA	Water	6010C	644708
480-202448-4	MW5-100522	Total/NA	Water	6010C	644708
480-202448-5	FDUP-100522	Total/NA	Water	6010C	644708
480-202448-6	ERB-100522	Total/NA	Water	6010C	644708
MB 480-644708/1-A	Method Blank	Total/NA	Water	6010C	644708
LCS 480-644708/2-A	Lab Control Sample	Total/NA	Water	6010C	644708
480-202448-3 MS	MW1-100522	Total/NA	Water	6010C	644708
480-202448-3 MSD	MW1-100522	Total/NA	Water	6010C	644708

Analysis Batch: 645551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202448-2	FB-100522	Total/NA	Water	6010C	644708
480-202448-3	MW1-100522	Total/NA	Water	6010C	644708
480-202448-4	MW5-100522	Total/NA	Water	6010C	644708
480-202448-5	FDUP-100522	Total/NA	Water	6010C	644708
480-202448-6	ERB-100522	Total/NA	Water	6010C	644708
480-202448-3 MS	MW1-100522	Total/NA	Water	6010C	644708
480-202448-3 MSD	MW1-100522	Total/NA	Water	6010C	644708

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-202448-1

Client Sample ID: TB-100522
Date Collected: 10/05/22 09:10
Date Received: 10/06/22 10:30

Lab Sample ID: 480-202448-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	644728	CR	EET BUF	10/11/22 07:26

Client Sample ID: FB-100522
Date Collected: 10/05/22 09:10
Date Received: 10/06/22 10:30

Lab Sample ID: 480-202448-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	644728	CR	EET BUF	10/11/22 07:49
Total/NA	Prep	3510C			644800	MS	EET BUF	10/11/22 08:43
Total/NA	Analysis	8270D		1	644815	RJS	EET BUF	10/12/22 22:58
Total/NA	Prep	3510C			644962	SJM	EET BUF	10/11/22 15:56
Total/NA	Analysis	8270D SIM ID		1	645349	RJS	EET BUF	10/13/22 21:14
Total/NA	Prep	3535			184709	KFW	EET BUR	10/14/22 11:48
Total/NA	Analysis	537 IDA		1	184763	BWC	EET BUR	10/17/22 14:40
Total/NA	Prep	3005A			644708	VAK	EET BUF	10/11/22 09:02
Total/NA	Analysis	6010C		1	645551	LMH	EET BUF	10/14/22 13:21
Total/NA	Prep	3005A			644708	VAK	EET BUF	10/11/22 09:02
Total/NA	Analysis	6010C		1	645252	BMB	EET BUF	10/12/22 18:58
Total/NA	Prep	7470A			644832	NVK	EET BUF	10/11/22 10:36
Total/NA	Analysis	7470A		1	644973	NVK	EET BUF	10/11/22 14:01

Client Sample ID: MW1-100522
Date Collected: 10/05/22 11:45
Date Received: 10/06/22 10:30

Lab Sample ID: 480-202448-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	644817	CB	EET BUF	10/11/22 20:16
Total/NA	Prep	3510C			644800	MS	EET BUF	10/11/22 08:43
Total/NA	Analysis	8270D		1	644815	RJS	EET BUF	10/12/22 21:34
Total/NA	Prep	3510C			644962	SJM	EET BUF	10/11/22 15:56
Total/NA	Analysis	8270D SIM ID		1	645349	RJS	EET BUF	10/13/22 20:30
Total/NA	Prep	3535			184709	KFW	EET BUR	10/14/22 11:48
Total/NA	Analysis	537 IDA		1	184763	BWC	EET BUR	10/17/22 14:48
Dissolved	Prep	3005A			644516	NVK	EET BUF	10/10/22 09:32
Dissolved	Analysis	6010C		1	644854	LMH	EET BUF	10/10/22 23:56
Dissolved	Prep	3005A			644516	NVK	EET BUF	10/10/22 09:32
Dissolved	Analysis	6010C		1	645159	LMH	EET BUF	10/12/22 14:26
Total/NA	Prep	3005A			644708	VAK	EET BUF	10/11/22 09:02
Total/NA	Analysis	6010C		1	645551	LMH	EET BUF	10/14/22 13:37
Total/NA	Prep	3005A			644708	VAK	EET BUF	10/11/22 09:02
Total/NA	Analysis	6010C		1	645252	BMB	EET BUF	10/12/22 19:02
Dissolved	Prep	7470A			644831	NVK	EET BUF	10/11/22 10:36
Dissolved	Analysis	7470A		1	644973	NVK	EET BUF	10/11/22 13:46
Total/NA	Prep	7470A			644832	NVK	EET BUF	10/11/22 10:36
Total/NA	Analysis	7470A		1	644973	NVK	EET BUF	10/11/22 14:03

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-202448-1

Client Sample ID: MW5-100522

Lab Sample ID: 480-202448-4

Date Collected: 10/05/22 16:20

Matrix: Water

Date Received: 10/06/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	644817	CB	EET BUF	10/11/22 20:39
Total/NA	Prep	3510C			644800	MS	EET BUF	10/11/22 08:43
Total/NA	Analysis	8270D		1	644815	RJS	EET BUF	10/12/22 23:25
Dissolved	Prep	3005A			644516	NVK	EET BUF	10/10/22 09:32
Dissolved	Analysis	6010C		1	644854	LMH	EET BUF	10/11/22 00:15
Dissolved	Prep	3005A			644516	NVK	EET BUF	10/10/22 09:32
Dissolved	Analysis	6010C		1	645159	LMH	EET BUF	10/12/22 14:45
Total/NA	Prep	3005A			644708	VAK	EET BUF	10/11/22 09:02
Total/NA	Analysis	6010C		1	645551	LMH	EET BUF	10/14/22 13:48
Total/NA	Prep	3005A			644708	VAK	EET BUF	10/11/22 09:02
Total/NA	Analysis	6010C		1	645252	BMB	EET BUF	10/12/22 19:14
Dissolved	Prep	7470A			644831	NVK	EET BUF	10/11/22 10:36
Dissolved	Analysis	7470A		1	644973	NVK	EET BUF	10/11/22 13:54
Total/NA	Prep	7470A			644832	NVK	EET BUF	10/11/22 10:36
Total/NA	Analysis	7470A		1	644973	NVK	EET BUF	10/11/22 14:11

Client Sample ID: FDUP-100522

Lab Sample ID: 480-202448-5

Date Collected: 10/05/22 00:00

Matrix: Water

Date Received: 10/06/22 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	644817	CB	EET BUF	10/11/22 21:01
Total/NA	Prep	3510C			644800	MS	EET BUF	10/11/22 08:43
Total/NA	Analysis	8270D		1	645318	JMM	EET BUF	10/13/22 18:59
Total/NA	Prep	3510C			644962	SJM	EET BUF	10/11/22 15:56
Total/NA	Analysis	8270D SIM ID		1	645349	RJS	EET BUF	10/13/22 21:36
Total/NA	Prep	3535			184709	KFW	EET BUR	10/14/22 11:48
Total/NA	Analysis	537 IDA		1	184763	BWC	EET BUR	10/17/22 15:12
Dissolved	Prep	3005A			644516	NVK	EET BUF	10/10/22 09:32
Dissolved	Analysis	6010C		1	644854	LMH	EET BUF	10/11/22 00:19
Dissolved	Prep	3005A			644516	NVK	EET BUF	10/10/22 09:32
Dissolved	Analysis	6010C		1	645159	LMH	EET BUF	10/12/22 14:49
Total/NA	Prep	3005A			644708	VAK	EET BUF	10/11/22 09:02
Total/NA	Analysis	6010C		1	645551	LMH	EET BUF	10/14/22 13:52
Total/NA	Prep	3005A			644708	VAK	EET BUF	10/11/22 09:02
Total/NA	Analysis	6010C		1	645252	BMB	EET BUF	10/12/22 19:17
Dissolved	Prep	7470A			644831	NVK	EET BUF	10/11/22 10:36
Dissolved	Analysis	7470A		1	644973	NVK	EET BUF	10/11/22 13:55
Total/NA	Prep	7470A			644832	NVK	EET BUF	10/11/22 10:36
Total/NA	Analysis	7470A		1	644973	NVK	EET BUF	10/11/22 14:12

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-202448-1

Client Sample ID: ERB-100522

Date Collected: 10/05/22 17:05
Date Received: 10/06/22 10:30

Lab Sample ID: 480-202448-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	644728	CR	EET BUF	10/11/22 08:13
Total/NA	Prep	3510C			644800	MS	EET BUF	10/11/22 08:43
Total/NA	Analysis	8270D		1	645033	RJS	EET BUF	10/13/22 02:12
Total/NA	Prep	3510C			644962	SJM	EET BUF	10/11/22 15:56
Total/NA	Analysis	8270D SIM ID		1	645349	RJS	EET BUF	10/13/22 21:58
Total/NA	Prep	3535			184709	KFW	EET BUR	10/14/22 11:48
Total/NA	Analysis	537 IDA		1	184763	BWC	EET BUR	10/17/22 15:20
Total/NA	Prep	3005A			644708	VAK	EET BUF	10/11/22 09:02
Total/NA	Analysis	6010C		1	645551	LMH	EET BUF	10/14/22 13:56
Total/NA	Prep	3005A			644708	VAK	EET BUF	10/11/22 09:02
Total/NA	Analysis	6010C		1	645252	BMB	EET BUF	10/12/22 19:21
Total/NA	Prep	7470A			644832	NVK	EET BUF	10/11/22 10:36
Total/NA	Analysis	7470A		1	644973	NVK	EET BUF	10/11/22 14:13

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-202448-1

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	1,2,3-Trimethylbenzene

Laboratory: Eurofins Burlington

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2336	02-25-23
Connecticut	State	PH-0751	09-30-23
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	05-17-23
Florida	NELAP	E87467	06-30-23
Minnesota	NELAP	050-999-436	12-31-22
New Hampshire	NELAP	2006	12-18-22
New Jersey	NELAP	VT972	06-30-23
New York	NELAP	10391	04-01-23
Pennsylvania	NELAP	68-00489	04-30-23
Rhode Island	State	LAO00298	12-30-22
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00272	10-30-23
Vermont	State	VT4000	02-10-23
Virginia	NELAP	460209	12-14-22
Wisconsin	State	399133350	08-31-23

Method Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-202448-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	EET BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	EET BUF
537 IDA	EPA 537 Isotope Dilution	EPA	EET BUR
6010C	Metals (ICP)	SW846	EET BUF
7470A	Mercury (CVAA)	SW846	EET BUF
3005A	Preparation, Total Metals	SW846	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
3535	Solid-Phase Extraction (SPE)	SW846	EET BUR
5030C	Purge and Trap	SW846	EET BUF
7470A	Preparation, Mercury	SW846	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Sample Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-202448-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-202448-1	TB-100522	Water	10/05/22 09:10	10/06/22 10:30
480-202448-2	FB-100522	Water	10/05/22 09:10	10/06/22 10:30
480-202448-3	MW1-100522	Water	10/05/22 11:45	10/06/22 10:30
480-202448-4	MW5-100522	Water	10/05/22 16:20	10/06/22 10:30
480-202448-5	FDUP-100522	Water	10/05/22 00:00	10/06/22 10:30
480-202448-6	ERB-100522	Water	10/05/22 17:05	10/06/22 10:30

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler:	Lab PM: Beninati, John	Carrier Tracking No(s):	COC No: 480-176966-37967.1
Client Contact: Mr. Glenn Esler	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Integral Consulting Inc	PWSID:			Job #:
Address: 319 SW Washington Ave Suite 1150	Due Date Requested: per contract			
City: Portland	TAT Requested (days): per contract			
State, Zip: OR, 97204	Compliance Project: Δ Yes Δ No			
Phone: 503-943-3617(Tel)	PO #: Purchase Order not required			
Email: gesler@integral-corp.com	WO #:			
Project Name: EF1017 - Refractories	Project #: 48025298			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	MS/MSD (Yes or No)	8260C - TCL VOCs (LL)	6010C, 7471B	8270D - TCL SVOCs	8260C - TCL VOCs (RL)	PFC_EDA - PFAS - NY 21 Analytes	8270D - 1,4-Dioxane	8270D - TCL SVOCs	8270D_SIM_MS_ID - 1,4 Dioxane	6010C, 7470A	8260C - TCL VOCs	7470A, 6010C dissolved	8260C TCL VOCs	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	N	N	N	N	N	N	N	N	D	A			X	
~~FB-100522~~ TB-100522	10/5/22	9:10	G	~~Solid~~ Water														X		
~~FB-100522~~ FB-100522		9:10		~~Solid~~					X		X			X	X			X		
MW1-100522		11:45		~~Solid~~	Y	Y			X		X			X	X		X	X		FF metals (dissolved)
MW5-100522		16:20		~~Solid~~	Y				X					X	X		X	X		FF metals (dissolved)
FIELD-100522				~~Solid~~					X		X			X	X		X	X		FF metals (dissolved)
ERB-100522		17:05		~~Solid~~					X		X			X	X			X		
				Solid																All water samples. All VOCs in coolers/ TB
				Solid																
				Solid																
				Solid																
				Solid																

480-202448 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☑ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
	10/5/22 18:15	Integral		10/6/22 1030	TVA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 3.6, 2, 1.3, 1 # ICE

Ver: 06/08/2021

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

480-202448 Chain of Custody

Eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Beninati, John		864.1
Client Contact: Shipping/Receiving	Phone	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New York		Job #: 480-202448-1
Address: 530 Community Drive, Suite 11,	Due Date Requested: 10/19/2022			
City: South Burlington	TAT Requested (days):			
State, Zip: VT, 05403				
Phone: 802-660-1990(Tel) 802-660-1919(Fax)	PO #:			
Email	WO #:			
Project Name: EF1017 - Refractories	Project #: 48025298			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	PFC_IDA/3535_IWT PFAS - NY 21 Analytes	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
FB-100522 (480-202448-2)	10/5/22	09.10 Eastern		Water			X	2	
MW1-100522 (480-202448-3)	10/5/22	11:45 Eastern		Water			X	2	
MW1-100522 (480-202448-3MS)	10/5/22	11:45 Eastern	MS	Water			X	2	
MW1-100522 (480-202448-3MSD)	10/5/22	11.45 Eastern	MSD	Water			X	2	
FDUP-100522 (480-202448-5)	10/5/22	Eastern		Water			X	2	
ERB-100522 (480-202448-6)	10/5/22	17:05 Eastern		Water			X	2	

Note. Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing Northeast, LLC

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time.	Company	Received by:	Date/Time	Company
1	[signature]	10-7-22 1800	TAB	[signature]	10/8/22 9:30	DARM
2	Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
3	Relinquished by:	Date/Time.	Company	Received by:	Date/Time.	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 06/08/2021

10/20/2022



ORIGIN ID:DKKA (716) 691-2600
SAMPLE RECEIPT
EUROFINS BUFFALO
10 HAZELWOOD DR

AMHERST, NY 14228
UNITED STATES US

SHIP DATE: 07OCT22
ACTWGT: 28.30 LB
CAD: 846654/CAFE3616
DIMS: 23x15x14 IN

BILL SENDER

TO SAMPLE MGT.
EUROFINS BURLINGTON
530 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 923-1026
REF: TA BURLINGTON

FedEx Express

TRK# 0201 5754 0128 0013

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO BTVA

05403
VT-US BTV

Login Sample Receipt Checklist

Client: Integral Consulting Inc

Job Number: 480-202448-1

Login Number: 202448
List Number: 1
Creator: Sabuda, Brendan D

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.6 2.9 2.1 3.1 #1 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: Integral Consulting Inc

Job Number: 480-202448-1

Login Number: 202448
List Number: 2
Creator: Cunningham, Caroline R

List Source: Eurofins Burlington
List Creation: 10/08/22 11:11 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	1963680
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.5ºC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Glenn Esler
Integral Consulting Inc
319 SW Washington Ave
Suite 1150
Portland, Oregon 97204

Generated 1/20/2023 9:51:13 AM Revision 1

JOB DESCRIPTION

Integral Consulting - EF1017 - Refractor

JOB NUMBER

480-204989-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing Northeast, LLC Buffalo and its client. All questions regarding this report should be directed to the Eurofins Environment Testing Northeast, LLC Buffalo Project Manager or designee who has signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
1/20/2023 9:51:13 AM
Revision 1

Authorized for release by
Steve Hartmann, Project Manager
Steve.Hartmann@et.eurofinsus.com
Designee for
John Beninati, Project Manager
John.Beninati@et.eurofinsus.com
(716)504-9874

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 6
Detection Summary 9
Client Sample Results 13
Surrogate Summary 39
Isotope Dilution Summary 41
QC Sample Results 43
QC Association Summary 79
Lab Chronicle 84
Certification Summary 87
Method Summary 88
Sample Summary 89
Chain of Custody 90
Receipt Checklists 91

Definitions/Glossary

Client: Integral Consulting Inc
Job ID: 480-204989-1
Project/Site: Integral Consulting - EF1017 - Refractor

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*3	ISTD response or retention time outside acceptable limits.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.

LCMS

Qualifier	Qualifier Description
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-204989-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-204989-1

Revision
The report being provided is a revision of the original report sent on 1/10/2023. The report (revision 1) is being revised to remove extraneous dashes in the sample IDs.

Comments
No additional comments.

Receipt
The samples were received on 12/22/2022 11:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.6º C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-654333 recovered above the upper control limit for 2-Hexanone and 4-Methyl-2-pentanone. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: FB_122122 (480-204989-1) and TB_122122 (480-204989-2).

Method 8260C: Due to the coelution of Ethyl Acetate with 2-Butanone (MEK) in the full spike solution, these analytes exceeded control limits in the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) associated with batch 480-654333 . The following samples were affected : FB_122122 (480-204989-1) and TB_122122 (480-204989-2).

Method 8260C: Internal standard (ISTD) response for the following sample was outside of acceptance limits: FDUP_122122 (480-204989-7). The sample(s) was not re-analyzed due to insufficient volume.

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-654942 recovered above the upper control limit for Cyclohexane, Methylcyclohexane, n-Butylbenzene, N-Propylbenzene, sec-Butylbenzene, tert-Butylbenzene, Trichlorofluoromethane and Vinyl chloride. The samples associated with this CCV were non-detects above the reporting limits for the affected analytes; therefore, the data have been reported. The associated samples are impacted: SB-2 (0-0.5) (480-204989-3), SB-2 (0.5-1) (480-204989-4), SB-2 (1-2) (480-204989-5), SB-2 (20.4-22.4) (480-204989-6) and FDUP_122122 (480-204989-7).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270D: The continuing calibration verification (CCV) associated with batch 480-654446 recovered above the upper control limit for Atrazine. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: FB_122122 (480-204989-1).

Method 8270D: The continuing calibration verification (CCV) analyzed in batch 480-654446 was outside the method criteria for the following analyte(s): Phenol-d5 (Surr). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-654446 recovered outside acceptance criteria, low biased, for 4-Methylphenol, 4-Nitrophenol, bis (2-chloroisopropyl) ether, Hexachlorocyclopentadiene and Pentachlorophenol. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270D: The minimum response factor (RF) criteria for the continuing calibration verification (CCV) analyzed in batch 480-654446 was outside criteria for the following analyte(s): Bis(2-chloroethoxy)methane. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte(s) is considered estimated.

Method 8270D: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 480-654335 and analytical batch 480-654446 recovered outside control limits for the following analytes: Atrazine. These analytes were

Job ID: 480-204989-1 (Continued)

Laboratory: Eurofins Buffalo (Continued)

biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 480-654335 and analytical batch 480-654446 recovered outside control limits for the following analytes: 2,4,5-Trichlorophenol.

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: FB_122122 (480-204989-1) and (LCSD 480-654335/3-A). These results have been reported and qualified.

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-654983 recovered above the upper control limit for 2,4-Dinitrophenol and 2,4-Dinitrotoluene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: SB-2 (1-2) (480-204989-5).

Method 8270D: The following samples were diluted due color, appearance, and viscosity: SB-2 (0-0.5) (480-204989-3), SB-2 (0.5-1) (480-204989-4), SB-2 (1-2) (480-204989-5), SB-2 (1-2) (480-204989-5[MS]), SB-2 (1-2) (480-204989-5[MSD]) and FDUP_122122 (480-204989-7). Elevated reporting limits (RL) are provided.

Method 8270D: The following samples were diluted due to the nature of the sample matrix: SB-2 (1-2) (480-204989-5[MS]) and SB-2 (1-2) (480-204989-5[MSD]). Because of this dilution, the surrogate spike and matrix spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method 8270D: The following samples were diluted due to the nature of the sample matrix: SB-2 (1-2) (480-204989-5) and FDUP_122122 (480-204989-7). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Method 8270D: The continuing calibration verification (CCV) associated with batch 480-654983 recovered above the upper control limit for 2,4-Dinitrophenol and 2,4-Dinitrotoluene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: SB-2 (0-0.5) (480-204989-3), SB-2 (0.5-1) (480-204989-4), SB-2 (20.4-22.4) (480-204989-6) and FDUP_122122 (480-204989-7).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Method 6010C: The low level continuing calibration verification (CCVL 480-654754/39) recovered above the upper control limit for Total Iron. The samples associated with this CCVL were either less than the reporting limit (RL) for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of samples SB-2 (0.5-1) (480-204989-4), SB-2 (20.4-22.4) (480-204989-6) and FDUP_122122 (480-204989-7) was not performed.

Method 6010C: The serial dilution and post spike (480-204989-B-5-A PDS) and (480-204989-B-5-A SD ^5), associated with batch 480-654477, exceeded the quality control limits for Total Aluminum, Barium, and Zinc. Sample matrix is suspected, therefore, no corrective action was necessary.

Method 6010C: The serial dilution (480-204989-B-5-A SD ^5) associated with batch 480-654754, exhibited results outside the quality control limits for Total Arsenic, Calcium, Magnesium, and Manganese. However, the post digestion spike (PDS) was compliant, therefore no corrective action was necessary.

Method 6010C: The following samples were diluted due to the presence of Total Iron which interferes with Silver, Cadmium, Nickel, Lead, Antimony, and Vanadium: SB-2 (1-2) (480-204989-5), SB-2 (1-2) (480-204989-5[MS]), SB-2 (1-2) (480-204989-5[MSD]), (480-204989-B-5-A PDS ^2) and (480-204989-B-5-A SD ^10). Elevated reporting limits (RLs) are provided.

Method 6010C: The serial dilution and post spike (480-204989-B-5-A PDS ^2) and (480-204989-B-5-A SD ^10), associated with batch 480-654477, exceeded the quality control limits for Total Nickel and Lead. Sample matrix is suspected, therefore, no corrective action was necessary.

Job ID: 480-204989-1 (Continued)

Laboratory: Eurofins Buffalo (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

LCMS

Method 537 (modified): Method 537 (modified): The “I” qualifier associated with sample FDUP_122122 (480-204989-7) is applied because the transition mass ratio for the indicated analyte(s) was outside of the established ratio limits. The qualitative identification has some degree of uncertainty, however analyst judgment was used to positively identify the analyte(s).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-654335.

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-654366.

Method 3550C: Due to the matrix, the following samples could not be concentrated to the final method required volume: SB-2 (1-2) (480-204989-5[MS]) and FDUP_122122 (480-204989-7). The reporting limits (RLs) are elevated proportionately.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Integral Consulting Inc
Project/Site: Integral Consulting - EF1017 - Refractor

Job ID: 480-204989-1

Client Sample ID: FB_122122 — Lab Sample ID: 480-204989-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	0.27		0.050	0.019	mg/L	1		6010C	Total/NA
Manganese	0.00070	J B	0.0030	0.00040	mg/L	1		6010C	Total/NA
Nickel	0.0022	J B	0.010	0.0013	mg/L	1		6010C	Total/NA

Client Sample ID: TB_122122 — Lab Sample ID: 480-204989-2

No Detections.

Client Sample ID: SB2 (0-0.5) — Lab Sample ID: 480-204989-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.55	J B	6.5	0.40	ug/Kg	1	☼	8260C	Total/NA
Ethylbenzene	0.73	J	6.5	0.45	ug/Kg	1	☼	8260C	Total/NA
m,p-Xylene	1.8	J	13	1.1	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	2.9	J B	6.5	0.88	ug/Kg	1	☼	8260C	Total/NA
Xylenes, Total	1.8	J	13	1.1	ug/Kg	1	☼	8260C	Total/NA
Benzo[a]anthracene	140	J	1000	100	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	150	J	1000	150	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	120	J	1000	110	ug/Kg	5	☼	8270D	Total/NA
Butyl benzyl phthalate	250	J	1000	170	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	240	J	1000	110	ug/Kg	5	☼	8270D	Total/NA
Pyrene	200	J	1000	120	ug/Kg	5	☼	8270D	Total/NA
Aluminum	10700	B	12.4	5.5	mg/Kg	1	☼	6010C	Total/NA
Arsenic	7.2		2.5	0.50	mg/Kg	1	☼	6010C	Total/NA
Barium	87.5		0.62	0.14	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.54		0.25	0.035	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.20	J	0.25	0.037	mg/Kg	1	☼	6010C	Total/NA
Calcium	3270	B	62.1	4.1	mg/Kg	1	☼	6010C	Total/NA
Chromium	17.3		0.62	0.25	mg/Kg	1	☼	6010C	Total/NA
Cobalt	8.5		0.62	0.062	mg/Kg	1	☼	6010C	Total/NA
Copper	19.5		1.2	0.26	mg/Kg	1	☼	6010C	Total/NA
Iron	19700	B	12.4	4.3	mg/Kg	1	☼	6010C	Total/NA
Lead	26.5		1.2	0.30	mg/Kg	1	☼	6010C	Total/NA
Magnesium	3450	B	24.8	1.2	mg/Kg	1	☼	6010C	Total/NA
Manganese	508	B	0.25	0.040	mg/Kg	1	☼	6010C	Total/NA
Nickel	21.3		6.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Potassium	1920		37.2	24.8	mg/Kg	1	☼	6010C	Total/NA
Selenium	1.3	J	5.0	0.50	mg/Kg	1	☼	6010C	Total/NA
Silver	0.64	J	0.74	0.25	mg/Kg	1	☼	6010C	Total/NA
Sodium	60.7	J	174	16.1	mg/Kg	1	☼	6010C	Total/NA
Vanadium	16.1		0.62	0.14	mg/Kg	1	☼	6010C	Total/NA
Zinc	77.7		2.5	0.79	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.030		0.024	0.0054	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB2 (0.5-1) — Lab Sample ID: 480-204989-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.56	J B	6.6	0.41	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	2.1	J B	6.6	0.88	ug/Kg	1	☼	8260C	Total/NA
Fluoranthene	120	J	930	99	ug/Kg	5	☼	8270D	Total/NA
Aluminum	13000	B	11.3	5.0	mg/Kg	1	☼	6010C	Total/NA
Arsenic	9.2		2.3	0.45	mg/Kg	1	☼	6010C	Total/NA
Barium	63.8		0.57	0.12	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample ID: SB2 (0.5-1) (Continued)
Lab Sample ID: 480-204989-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Beryllium	0.57		0.23	0.032	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.21	J	0.23	0.034	mg/Kg	1	☼	6010C	Total/NA
Calcium	8990	B	56.7	3.7	mg/Kg	1	☼	6010C	Total/NA
Chromium	17.3		0.57	0.23	mg/Kg	1	☼	6010C	Total/NA
Cobalt	10.0		0.57	0.057	mg/Kg	1	☼	6010C	Total/NA
Copper	34.5		1.1	0.24	mg/Kg	1	☼	6010C	Total/NA
Iron	27600	B ^+	11.3	4.0	mg/Kg	1	☼	6010C	Total/NA
Lead	78.7		1.1	0.27	mg/Kg	1	☼	6010C	Total/NA
Magnesium	7540	B	22.7	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	441	B	0.23	0.036	mg/Kg	1	☼	6010C	Total/NA
Nickel	28.0		5.7	0.26	mg/Kg	1	☼	6010C	Total/NA
Potassium	1830		34.0	22.7	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.73	J	4.5	0.45	mg/Kg	1	☼	6010C	Total/NA
Silver	1.0		0.68	0.23	mg/Kg	1	☼	6010C	Total/NA
Sodium	85.5	J	159	14.7	mg/Kg	1	☼	6010C	Total/NA
Vanadium	19.7		0.57	0.12	mg/Kg	1	☼	6010C	Total/NA
Zinc	103		2.3	0.73	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.022		0.022	0.0051	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB2 (1-2)
Lab Sample ID: 480-204989-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.37	J B	4.5	0.28	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	1.7	J B	4.5	0.60	ug/Kg	1	☼	8260C	Total/NA
Fluoranthene	3300	J F1	18000	2000	ug/Kg	100	☼	8270D	Total/NA
Pyrene	2800	J F1	18000	2200	ug/Kg	100	☼	8270D	Total/NA
Perfluorooctanoic acid (PFOA)	0.070	J	0.22	0.063	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorononanoic acid (PFNA)	0.051	J	0.22	0.037	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.20	J	0.22	0.12	ug/Kg	1	☼	537 IDA	Total/NA
Aluminum	8640	B F1	10.6	4.7	mg/Kg	1	☼	6010C	Total/NA
Antimony	4.1	J F1 F2	31.7	0.85	mg/Kg	2	☼	6010C	Total/NA
Arsenic	14.2	F2	2.1	0.42	mg/Kg	1	☼	6010C	Total/NA
Barium	79.8	F1 F2	0.53	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.50		0.21	0.030	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.79	F2	0.42	0.063	mg/Kg	2	☼	6010C	Total/NA
Calcium	2730	B F1	52.9	3.5	mg/Kg	1	☼	6010C	Total/NA
Chromium	16.2		0.53	0.21	mg/Kg	1	☼	6010C	Total/NA
Cobalt	7.8		0.53	0.053	mg/Kg	1	☼	6010C	Total/NA
Copper	60.6	F1	1.1	0.22	mg/Kg	1	☼	6010C	Total/NA
Iron	84900	B F2	21.2	7.4	mg/Kg	2	☼	6010C	Total/NA
Lead	105	F1 F2	2.1	0.51	mg/Kg	2	☼	6010C	Total/NA
Magnesium	2570	B F1	21.2	0.98	mg/Kg	1	☼	6010C	Total/NA
Manganese	610	B	0.21	0.034	mg/Kg	1	☼	6010C	Total/NA
Nickel	23.2	F1 F2	10.6	0.49	mg/Kg	2	☼	6010C	Total/NA
Potassium	1380	F1 F2	31.7	21.2	mg/Kg	1	☼	6010C	Total/NA
Selenium	1.9	J	4.2	0.42	mg/Kg	1	☼	6010C	Total/NA
Sodium	92.8	J	148	13.7	mg/Kg	1	☼	6010C	Total/NA
Vanadium	28.7	F1 F2	1.1	0.23	mg/Kg	2	☼	6010C	Total/NA
Zinc	89.4	F1 F2	2.1	0.68	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.053		0.021	0.0049	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Integral Consulting Inc
Job ID: 480-204989-1
Project/Site: Integral Consulting - EF1017 - Refractor

Client Sample ID: SB2 (20.4-22.4) — Lab Sample ID: 480-204989-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	6.9	J	27	2.0	ug/Kg	1	☼	8260C	Total/NA
Acetone	20	J	27	4.5	ug/Kg	1	☼	8260C	Total/NA
Chloroform	0.43	J B	5.3	0.33	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	1.8	J B	5.3	0.72	ug/Kg	1	☼	8260C	Total/NA
Bis(2-ethylhexyl) phthalate	110	J	190	64	ug/Kg	1	☼	8270D	Total/NA
Aluminum	7590	B	11.5	5.1	mg/Kg	1	☼	6010C	Total/NA
Arsenic	12.3		2.3	0.46	mg/Kg	1	☼	6010C	Total/NA
Barium	135		0.57	0.13	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.40		0.23	0.032	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.059	J	0.23	0.034	mg/Kg	1	☼	6010C	Total/NA
Calcium	1210	B	57.4	3.8	mg/Kg	1	☼	6010C	Total/NA
Chromium	9.5		0.57	0.23	mg/Kg	1	☼	6010C	Total/NA
Cobalt	7.5		0.57	0.057	mg/Kg	1	☼	6010C	Total/NA
Copper	16.7		1.1	0.24	mg/Kg	1	☼	6010C	Total/NA
Iron	22200	B ^+	11.5	4.0	mg/Kg	1	☼	6010C	Total/NA
Lead	9.2		1.1	0.28	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2160	B	23.0	1.1	mg/Kg	1	☼	6010C	Total/NA
Manganese	1190	B	0.23	0.037	mg/Kg	1	☼	6010C	Total/NA
Nickel	17.1		5.7	0.26	mg/Kg	1	☼	6010C	Total/NA
Potassium	1240		34.5	23.0	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.74	J	4.6	0.46	mg/Kg	1	☼	6010C	Total/NA
Silver	0.84		0.69	0.23	mg/Kg	1	☼	6010C	Total/NA
Sodium	102	J	161	14.9	mg/Kg	1	☼	6010C	Total/NA
Vanadium	13.8		0.57	0.13	mg/Kg	1	☼	6010C	Total/NA
Zinc	60.0		2.3	0.74	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.0060	J	0.021	0.0047	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: FDUP_122122 — Lab Sample ID: 480-204989-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.9	J	29	4.9	ug/Kg	1	☼	8260C	Total/NA
Chloroform	0.57	J B	5.8	0.36	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	3.0	J B	5.8	0.78	ug/Kg	1	☼	8260C	Total/NA
Benzo[a]anthracene	3800	J	18000	1800	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]pyrene	4400	J	18000	2600	ug/Kg	10	☼	8270D	Total/NA
Benzo[b]fluoranthene	5400	J	18000	2800	ug/Kg	10	☼	8270D	Total/NA
Benzo[g,h,i]perylene	3600	J	18000	1900	ug/Kg	10	☼	8270D	Total/NA
Benzo[k]fluoranthene	2500	J	18000	2300	ug/Kg	10	☼	8270D	Total/NA
Chrysene	4900	J	18000	3900	ug/Kg	10	☼	8270D	Total/NA
Fluoranthene	8100	J	18000	1900	ug/Kg	10	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	3100	J	18000	2200	ug/Kg	10	☼	8270D	Total/NA
Phenanthrene	3100	J	18000	2600	ug/Kg	10	☼	8270D	Total/NA
Pyrene	5900	J	18000	2100	ug/Kg	10	☼	8270D	Total/NA
Perfluoropentanoic acid (PFPeA)	0.060	J	0.20	0.056	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorooctanoic acid (PFOA)	0.076	J I	0.20	0.059	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorononanoic acid (PFNA)	0.048	J	0.20	0.034	ug/Kg	1	☼	537 IDA	Total/NA
Perfluorooctanesulfonic acid (PFOS)	0.24		0.20	0.11	ug/Kg	1	☼	537 IDA	Total/NA
Aluminum	8800	B	10.3	4.5	mg/Kg	1	☼	6010C	Total/NA
Arsenic	10.0		2.1	0.41	mg/Kg	1	☼	6010C	Total/NA
Barium	94.5		0.51	0.11	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.44		0.21	0.029	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Integral Consulting Inc
Job ID: 480-204989-1
Project/Site: Integral Consulting - EF1017 - Refractor

Client Sample ID: FDUP_122122 (Continued)
Lab Sample ID: 480-204989-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.27		0.21	0.031	mg/Kg	1	☼	6010C	Total/NA
Calcium	1920	B	51.5	3.4	mg/Kg	1	☼	6010C	Total/NA
Chromium	18.5		0.51	0.21	mg/Kg	1	☼	6010C	Total/NA
Cobalt	7.3		0.51	0.051	mg/Kg	1	☼	6010C	Total/NA
Copper	23.9		1.0	0.22	mg/Kg	1	☼	6010C	Total/NA
Iron	26400	B ^+	10.3	3.6	mg/Kg	1	☼	6010C	Total/NA
Lead	1010		1.0	0.25	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2770	B	20.6	0.95	mg/Kg	1	☼	6010C	Total/NA
Manganese	367	B	0.21	0.033	mg/Kg	1	☼	6010C	Total/NA
Nickel	20.6		5.1	0.24	mg/Kg	1	☼	6010C	Total/NA
Potassium	1260		30.9	20.6	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.88	J	4.1	0.41	mg/Kg	1	☼	6010C	Total/NA
Silver	1.1		0.62	0.21	mg/Kg	1	☼	6010C	Total/NA
Sodium	68.9	J	144	13.4	mg/Kg	1	☼	6010C	Total/NA
Vanadium	19.1		0.51	0.11	mg/Kg	1	☼	6010C	Total/NA
Zinc	98.4		2.1	0.66	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.061		0.021	0.0047	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Integral Consulting Inc
Project/Site: Integral Consulting - EF1017 - Refractor

Job ID: 480-204989-1

Client Sample ID: FB_122122
Date Collected: 12/21/22 09:30
Date Received: 12/22/22 11:00

Lab Sample ID: 480-204989-1
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			12/22/22 17:08	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/22/22 17:08	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/22/22 17:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/22/22 17:08	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/22/22 17:08	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/22/22 17:08	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/22/22 17:08	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			12/22/22 17:08	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/22/22 17:08	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			12/22/22 17:08	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/22/22 17:08	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/22/22 17:08	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/22/22 17:08	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/22/22 17:08	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/22/22 17:08	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			12/22/22 17:08	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/22/22 17:08	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/22/22 17:08	1
2-Butanone (MEK)	ND	*+	10	1.3	ug/L			12/22/22 17:08	1
2-Hexanone	ND		5.0	1.2	ug/L			12/22/22 17:08	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/22/22 17:08	1
Acetone	ND		10	3.0	ug/L			12/22/22 17:08	1
Benzene	ND		1.0	0.41	ug/L			12/22/22 17:08	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/22/22 17:08	1
Bromoform	ND		1.0	0.26	ug/L			12/22/22 17:08	1
Bromomethane	ND		1.0	0.69	ug/L			12/22/22 17:08	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/22/22 17:08	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/22/22 17:08	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/22/22 17:08	1
Chloroethane	ND		1.0	0.32	ug/L			12/22/22 17:08	1
Chloroform	ND		1.0	0.34	ug/L			12/22/22 17:08	1
Chloromethane	ND		1.0	0.35	ug/L			12/22/22 17:08	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/22/22 17:08	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/22/22 17:08	1
Cyclohexane	ND		1.0	0.18	ug/L			12/22/22 17:08	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/22/22 17:08	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/22/22 17:08	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/22/22 17:08	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/22/22 17:08	1
m,p-Xylene	ND		2.0	0.66	ug/L			12/22/22 17:08	1
Methyl acetate	ND		2.5	1.3	ug/L			12/22/22 17:08	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/22/22 17:08	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/22/22 17:08	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/22/22 17:08	1
n-Butylbenzene	ND		1.0	0.64	ug/L			12/22/22 17:08	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/22/22 17:08	1
o-Xylene	ND		1.0	0.76	ug/L			12/22/22 17:08	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			12/22/22 17:08	1
Styrene	ND		1.0	0.73	ug/L			12/22/22 17:08	1

Client Sample ID: FB_122122
Date Collected: 12/21/22 09:30
Date Received: 12/22/22 11:00

Lab Sample ID: 480-204989-1
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		1.0	0.81	ug/L			12/22/22 17:08	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/22/22 17:08	1
Toluene	ND		1.0	0.51	ug/L			12/22/22 17:08	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/22/22 17:08	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/22/22 17:08	1
Trichloroethene	ND		1.0	0.46	ug/L			12/22/22 17:08	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/22/22 17:08	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/22/22 17:08	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/22/22 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*12/22/22 17:08*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*12/22/22 17:08*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*12/22/22 17:08*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*12/22/22 17:08*	*1*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.21	0.10	ug/L		12/22/22 12:40	12/27/22 15:34	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*31*		*15 - 110*	*12/22/22 12:40*	*12/27/22 15:34*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND	*1	5.2	0.50	ug/L		12/22/22 12:43	12/27/22 16:15	1
2,4,6-Trichlorophenol	ND		5.2	0.64	ug/L		12/22/22 12:43	12/27/22 16:15	1
2,4-Dichlorophenol	ND		5.2	0.53	ug/L		12/22/22 12:43	12/27/22 16:15	1
2,4-Dimethylphenol	ND		5.2	0.52	ug/L		12/22/22 12:43	12/27/22 16:15	1
2,4-Dinitrophenol	ND		10	2.3	ug/L		12/22/22 12:43	12/27/22 16:15	1
2,4-Dinitrotoluene	ND		5.2	0.47	ug/L		12/22/22 12:43	12/27/22 16:15	1
2,6-Dinitrotoluene	ND		5.2	0.42	ug/L		12/22/22 12:43	12/27/22 16:15	1
2-Chloronaphthalene	ND		5.2	0.48	ug/L		12/22/22 12:43	12/27/22 16:15	1
2-Chlorophenol	ND		5.2	0.55	ug/L		12/22/22 12:43	12/27/22 16:15	1
2-Methylnaphthalene	ND		5.2	0.63	ug/L		12/22/22 12:43	12/27/22 16:15	1
2-Methylphenol	ND		5.2	0.42	ug/L		12/22/22 12:43	12/27/22 16:15	1
2-Nitroaniline	ND		10	0.44	ug/L		12/22/22 12:43	12/27/22 16:15	1
2-Nitrophenol	ND		5.2	0.50	ug/L		12/22/22 12:43	12/27/22 16:15	1
3,3'-Dichlorobenzidine	ND		5.2	0.42	ug/L		12/22/22 12:43	12/27/22 16:15	1
3-Nitroaniline	ND		10	0.50	ug/L		12/22/22 12:43	12/27/22 16:15	1
4,6-Dinitro-2-methylphenol	ND		10	2.3	ug/L		12/22/22 12:43	12/27/22 16:15	1
4-Bromophenyl phenyl ether	ND		5.2	0.47	ug/L		12/22/22 12:43	12/27/22 16:15	1
4-Chloro-3-methylphenol	ND		5.2	0.47	ug/L		12/22/22 12:43	12/27/22 16:15	1
4-Chloroaniline	ND		5.2	0.61	ug/L		12/22/22 12:43	12/27/22 16:15	1
4-Chlorophenyl phenyl ether	ND		5.2	0.36	ug/L		12/22/22 12:43	12/27/22 16:15	1
4-Methylphenol	ND		10	0.38	ug/L		12/22/22 12:43	12/27/22 16:15	1
4-Nitroaniline	ND		10	0.26	ug/L		12/22/22 12:43	12/27/22 16:15	1
4-Nitrophenol	ND		10	1.6	ug/L		12/22/22 12:43	12/27/22 16:15	1
Acenaphthene	ND		5.2	0.43	ug/L		12/22/22 12:43	12/27/22 16:15	1
Acenaphthylene	ND		5.2	0.40	ug/L		12/22/22 12:43	12/27/22 16:15	1
Acetophenone	ND		5.2	0.56	ug/L		12/22/22 12:43	12/27/22 16:15	1

Client Sample ID: FB_122122
Date Collected: 12/21/22 09:30
Date Received: 12/22/22 11:00

Lab Sample ID: 480-204989-1
Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		5.2	0.29	ug/L		12/22/22 12:43	12/27/22 16:15	1
Atrazine	ND	*+	5.2	0.48	ug/L		12/22/22 12:43	12/27/22 16:15	1
Benzaldehyde	ND		5.2	0.28	ug/L		12/22/22 12:43	12/27/22 16:15	1
Benzo[a]anthracene	ND		5.2	0.38	ug/L		12/22/22 12:43	12/27/22 16:15	1
Benzo[a]pyrene	ND		5.2	0.49	ug/L		12/22/22 12:43	12/27/22 16:15	1
Benzo[b]fluoranthene	ND		5.2	0.35	ug/L		12/22/22 12:43	12/27/22 16:15	1
Benzo[g,h,i]perylene	ND		5.2	0.36	ug/L		12/22/22 12:43	12/27/22 16:15	1
Benzo[k]fluoranthene	ND		5.2	0.76	ug/L		12/22/22 12:43	12/27/22 16:15	1
Biphenyl	ND		5.2	0.68	ug/L		12/22/22 12:43	12/27/22 16:15	1
bis (2-chloroisopropyl) ether	ND		5.2	0.54	ug/L		12/22/22 12:43	12/27/22 16:15	1
Bis(2-chloroethoxy)methane	ND		5.2	0.36	ug/L		12/22/22 12:43	12/27/22 16:15	1
Bis(2-chloroethyl)ether	ND		5.2	0.42	ug/L		12/22/22 12:43	12/27/22 16:15	1
Bis(2-ethylhexyl) phthalate	ND		5.2	2.3	ug/L		12/22/22 12:43	12/27/22 16:15	1
Butyl benzyl phthalate	ND		5.2	1.0	ug/L		12/22/22 12:43	12/27/22 16:15	1
Caprolactam	ND		5.2	2.3	ug/L		12/22/22 12:43	12/27/22 16:15	1
Carbazole	ND		5.2	0.31	ug/L		12/22/22 12:43	12/27/22 16:15	1
Chrysene	ND		5.2	0.34	ug/L		12/22/22 12:43	12/27/22 16:15	1
Dibenz(a,h)anthracene	ND		5.2	0.44	ug/L		12/22/22 12:43	12/27/22 16:15	1
Dibenzofuran	ND		10	0.53	ug/L		12/22/22 12:43	12/27/22 16:15	1
Diethyl phthalate	ND		5.2	0.23	ug/L		12/22/22 12:43	12/27/22 16:15	1
Dimethyl phthalate	ND		5.2	0.38	ug/L		12/22/22 12:43	12/27/22 16:15	1
Di-n-butyl phthalate	ND		5.2	0.32	ug/L		12/22/22 12:43	12/27/22 16:15	1
Di-n-octyl phthalate	ND		5.2	0.49	ug/L		12/22/22 12:43	12/27/22 16:15	1
Fluoranthene	ND		5.2	0.42	ug/L		12/22/22 12:43	12/27/22 16:15	1
Fluorene	ND		5.2	0.38	ug/L		12/22/22 12:43	12/27/22 16:15	1
Hexachlorobenzene	ND		5.2	0.53	ug/L		12/22/22 12:43	12/27/22 16:15	1
Hexachlorobutadiene	ND		5.2	0.71	ug/L		12/22/22 12:43	12/27/22 16:15	1
Hexachlorocyclopentadiene	ND		5.2	0.61	ug/L		12/22/22 12:43	12/27/22 16:15	1
Hexachloroethane	ND		5.2	0.61	ug/L		12/22/22 12:43	12/27/22 16:15	1
Indeno[1,2,3-cd]pyrene	ND		5.2	0.49	ug/L		12/22/22 12:43	12/27/22 16:15	1
Isophorone	ND		5.2	0.45	ug/L		12/22/22 12:43	12/27/22 16:15	1
Naphthalene	ND		5.2	0.79	ug/L		12/22/22 12:43	12/27/22 16:15	1
Nitrobenzene	ND		5.2	0.30	ug/L		12/22/22 12:43	12/27/22 16:15	1
N-Nitrosodi-n-propylamine	ND		5.2	0.56	ug/L		12/22/22 12:43	12/27/22 16:15	1
N-Nitrosodiphenylamine	ND		5.2	0.53	ug/L		12/22/22 12:43	12/27/22 16:15	1
Pentachlorophenol	ND		10	2.3	ug/L		12/22/22 12:43	12/27/22 16:15	1
Phenanthrene	ND		5.2	0.46	ug/L		12/22/22 12:43	12/27/22 16:15	1
Phenol	ND		5.2	0.41	ug/L		12/22/22 12:43	12/27/22 16:15	1
Pyrene	ND		5.2	0.35	ug/L		12/22/22 12:43	12/27/22 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*80*		*41 - 120*	*12/22/22 12:43*	*12/27/22 16:15*	*1*
2-Fluorobiphenyl (Surr)	*121*	*S1+*	*48 - 120*	*12/22/22 12:43*	*12/27/22 16:15*	*1*
2-Fluorophenol (Surr)	*65*		*35 - 120*	*12/22/22 12:43*	*12/27/22 16:15*	*1*
Nitrobenzene-d5 (Surr)	*97*		*46 - 120*	*12/22/22 12:43*	*12/27/22 16:15*	*1*
Phenol-d5 (Surr)	*39*		*22 - 120*	*12/22/22 12:43*	*12/27/22 16:15*	*1*
p-Terphenyl-d14 (Surr)	*108*		*60 - 148*	*12/22/22 12:43*	*12/27/22 16:15*	*1*

Client: Integral Consulting Inc
Job ID: 480-204989-1
Project/Site: Integral Consulting - EF1017 - Refractor

Client Sample ID: FB_122122
Date Collected: 12/21/22 09:30
Date Received: 12/22/22 11:00

Lab Sample ID: 480-204989-1
Matrix: Water

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.4	1.1	ng/L		01/03/23 10:54	01/04/23 16:56	1
Perfluoropentanoic acid (PFPeA)	ND		1.8	0.60	ng/L		01/03/23 10:54	01/04/23 16:56	1
Perfluorohexanoic acid (PFHxA)	ND		1.8	0.57	ng/L		01/03/23 10:54	01/04/23 16:56	1
Perfluoroheptanoic acid (PFHpA)	ND		1.8	0.47	ng/L		01/03/23 10:54	01/04/23 16:56	1
Perfluorooctanoic acid (PFOA)	ND		1.8	0.67	ng/L		01/03/23 10:54	01/04/23 16:56	1
Perfluorononanoic acid (PFNA)	ND		1.8	0.43	ng/L		01/03/23 10:54	01/04/23 16:56	1
Perfluorodecanoic acid (PFDA)	ND		1.8	0.40	ng/L		01/03/23 10:54	01/04/23 16:56	1
Perfluoroundecanoic acid (PFUnA)	ND		1.8	0.48	ng/L		01/03/23 10:54	01/04/23 16:56	1
Perfluorododecanoic acid (PFDoA)	ND		1.8	0.43	ng/L		01/03/23 10:54	01/04/23 16:56	1
Perfluorotridecanoic acid (PFTriA)	ND		1.8	0.42	ng/L		01/03/23 10:54	01/04/23 16:56	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.8	0.56	ng/L		01/03/23 10:54	01/04/23 16:56	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.8	0.54	ng/L		01/03/23 10:54	01/04/23 16:56	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.8	0.48	ng/L		01/03/23 10:54	01/04/23 16:56	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.8	0.36	ng/L		01/03/23 10:54	01/04/23 16:56	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.8	0.75	ng/L		01/03/23 10:54	01/04/23 16:56	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.8	0.35	ng/L		01/03/23 10:54	01/04/23 16:56	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.8	0.81	ng/L		01/03/23 10:54	01/04/23 16:56	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.4	1.7	ng/L		01/03/23 10:54	01/04/23 16:56	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.4	1.4	ng/L		01/03/23 10:54	01/04/23 16:56	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		4.4	1.1	ng/L		01/03/23 10:54	01/04/23 16:56	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		1.8	0.68	ng/L		01/03/23 10:54	01/04/23 16:56	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*93*		*50 - 150*	*01/03/23 10:54*	*01/04/23 16:56*	*1*
13C4 PFHpA	*93*		*50 - 150*	*01/03/23 10:54*	*01/04/23 16:56*	*1*
13C4 PFOA	*94*		*50 - 150*	*01/03/23 10:54*	*01/04/23 16:56*	*1*
13C4 PFOS	*96*		*50 - 150*	*01/03/23 10:54*	*01/04/23 16:56*	*1*
13C5 PFNA	*100*		*50 - 150*	*01/03/23 10:54*	*01/04/23 16:56*	*1*
13C4 PFBA	*84*		*50 - 150*	*01/03/23 10:54*	*01/04/23 16:56*	*1*
13C2 PFHxA	*93*		*50 - 150*	*01/03/23 10:54*	*01/04/23 16:56*	*1*
13C2 PFDA	*104*		*50 - 150*	*01/03/23 10:54*	*01/04/23 16:56*	*1*
13C2 PFUnA	*90*		*50 - 150*	*01/03/23 10:54*	*01/04/23 16:56*	*1*
13C2 PFDoA	*86*		*50 - 150*	*01/03/23 10:54*	*01/04/23 16:56*	*1*
13C8 FOSA	*66*		*50 - 150*	*01/03/23 10:54*	*01/04/23 16:56*	*1*
13C5 PFPeA	*84*		*50 - 150*	*01/03/23 10:54*	*01/04/23 16:56*	*1*
13C2 PFTeDA	*94*		*50 - 150*	*01/03/23 10:54*	*01/04/23 16:56*	*1*
d3-NMeFOSAA	*83*		*50 - 150*	*01/03/23 10:54*	*01/04/23 16:56*	*1*
d5-NEtFOSAA	*81*		*50 - 150*	*01/03/23 10:54*	*01/04/23 16:56*	*1*
M2-6:2 FTS	*108*		*50 - 150*	*01/03/23 10:54*	*01/04/23 16:56*	*1*
M2-8:2 FTS	*102*		*50 - 150*	*01/03/23 10:54*	*01/04/23 16:56*	*1*
13C3 PFBS	*90*		*50 - 150*	*01/03/23 10:54*	*01/04/23 16:56*	*1*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		12/27/22 09:25	12/29/22 00:09	1
Antimony	ND		0.020	0.0068	mg/L		12/27/22 09:25	12/29/22 00:09	1
Arsenic	ND		0.015	0.0056	mg/L		12/27/22 09:25	12/29/22 00:09	1

Client Sample ID: FB_122122
Lab Sample ID: 480-204989-1
Date Collected: 12/21/22 09:30
Matrix: Water
Date Received: 12/22/22 11:00

Method: SW846 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	ND		0.0020	0.00070	mg/L		12/27/22 09:25	12/29/22 00:09	1
Beryllium	ND		0.0020	0.00030	mg/L		12/27/22 09:25	12/29/22 00:09	1
Cadmium	ND		0.0020	0.00050	mg/L		12/27/22 09:25	12/29/22 00:09	1
Calcium	ND		0.50	0.10	mg/L		12/27/22 09:25	12/29/22 00:09	1
Chromium	ND		0.0040	0.0010	mg/L		12/27/22 09:25	12/29/22 00:09	1
Cobalt	ND		0.0040	0.00063	mg/L		12/27/22 09:25	12/29/22 00:09	1
Copper	ND		0.010	0.0016	mg/L		12/27/22 09:25	12/29/22 00:09	1
Iron	**0.27**		0.050	0.019	mg/L		12/27/22 09:25	12/29/22 00:09	1
Lead	ND		0.010	0.0030	mg/L		12/27/22 09:25	12/29/22 00:09	1
Magnesium	ND		0.20	0.043	mg/L		12/27/22 09:25	12/29/22 00:09	1
Manganese	**0.00070**	**J B**	0.0030	0.00040	mg/L		12/27/22 09:25	12/29/22 00:09	1
Nickel	**0.0022**	**J B**	0.010	0.0013	mg/L		12/27/22 09:25	12/29/22 00:09	1
Potassium	ND		0.50	0.10	mg/L		12/27/22 09:25	12/29/22 00:09	1
Selenium	ND		0.025	0.0087	mg/L		12/27/22 09:25	12/29/22 00:09	1
Silver	ND		0.0060	0.0017	mg/L		12/27/22 09:25	12/29/22 00:09	1
Sodium	ND		1.0	0.32	mg/L		12/27/22 09:25	12/29/22 00:09	1
Thallium	ND		0.020	0.010	mg/L		12/27/22 09:25	12/29/22 00:09	1
Vanadium	ND		0.0050	0.0015	mg/L		12/27/22 09:25	12/29/22 00:09	1
Zinc	ND		0.010	0.0015	mg/L		12/27/22 09:25	12/29/22 00:09	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		01/03/23 11:10	01/03/23 15:48	1

Client Sample ID: TB_122122
Lab Sample ID: 480-204989-2
Date Collected: 12/21/22 00:00
Matrix: Water
Date Received: 12/22/22 11:00

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			12/22/22 17:30	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/22/22 17:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/22/22 17:30	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/22/22 17:30	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/22/22 17:30	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/22/22 17:30	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/22/22 17:30	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			12/22/22 17:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/22/22 17:30	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			12/22/22 17:30	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/22/22 17:30	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/22/22 17:30	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/22/22 17:30	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/22/22 17:30	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/22/22 17:30	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			12/22/22 17:30	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/22/22 17:30	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/22/22 17:30	1
2-Butanone (MEK)	ND	*+	10	1.3	ug/L			12/22/22 17:30	1
2-Hexanone	ND		5.0	1.2	ug/L			12/22/22 17:30	1

Client: Integral Consulting Inc
Project/Site: Integral Consulting - EF1017 - Refractor

Job ID: 480-204989-1

Client Sample ID: TB_122122
Date Collected: 12/21/22 00:00
Date Received: 12/22/22 11:00

Lab Sample ID: 480-204989-2
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/22/22 17:30	1
Acetone	ND		10	3.0	ug/L			12/22/22 17:30	1
Benzene	ND		1.0	0.41	ug/L			12/22/22 17:30	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/22/22 17:30	1
Bromoform	ND		1.0	0.26	ug/L			12/22/22 17:30	1
Bromomethane	ND		1.0	0.69	ug/L			12/22/22 17:30	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/22/22 17:30	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/22/22 17:30	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/22/22 17:30	1
Chloroethane	ND		1.0	0.32	ug/L			12/22/22 17:30	1
Chloroform	ND		1.0	0.34	ug/L			12/22/22 17:30	1
Chloromethane	ND		1.0	0.35	ug/L			12/22/22 17:30	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/22/22 17:30	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/22/22 17:30	1
Cyclohexane	ND		1.0	0.18	ug/L			12/22/22 17:30	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/22/22 17:30	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/22/22 17:30	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/22/22 17:30	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/22/22 17:30	1
m,p-Xylene	ND		2.0	0.66	ug/L			12/22/22 17:30	1
Methyl acetate	ND		2.5	1.3	ug/L			12/22/22 17:30	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/22/22 17:30	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/22/22 17:30	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/22/22 17:30	1
n-Butylbenzene	ND		1.0	0.64	ug/L			12/22/22 17:30	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/22/22 17:30	1
o-Xylene	ND		1.0	0.76	ug/L			12/22/22 17:30	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			12/22/22 17:30	1
Styrene	ND		1.0	0.73	ug/L			12/22/22 17:30	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			12/22/22 17:30	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/22/22 17:30	1
Toluene	ND		1.0	0.51	ug/L			12/22/22 17:30	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/22/22 17:30	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/22/22 17:30	1
Trichloroethene	ND		1.0	0.46	ug/L			12/22/22 17:30	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/22/22 17:30	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/22/22 17:30	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/22/22 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*		*12/22/22 17:30*	*1*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*12/22/22 17:30*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*12/22/22 17:30*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*12/22/22 17:30*	*1*

Client: Integral Consulting Inc
Job ID: 480-204989-1
Project/Site: Integral Consulting - EF1017 - Refractor

Client Sample ID: SB2 (0-0.5)
Lab Sample ID: 480-204989-3
Date Collected: 12/21/22 09:35
Matrix: Solid
Date Received: 12/22/22 11:00
Percent Solids: 79.6

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		6.5	0.65	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
1,1,1-Trichloroethane	ND		6.5	0.48	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
1,1,2,2-Tetrachloroethane	ND		6.5	1.1	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.5	1.5	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
1,1,2-Trichloroethane	ND		6.5	0.85	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
1,1-Dichloroethane	ND		6.5	0.80	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
1,1-Dichloroethene	ND		6.5	0.80	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
1,2,3-Trimethylbenzene	ND		6.5	1.3	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
1,2,4-Trichlorobenzene	ND		6.5	0.40	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
1,2,4-Trimethylbenzene	ND		6.5	1.3	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
1,2-Dibromo-3-Chloropropane	ND		6.5	3.3	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
1,2-Dibromoethane	ND		6.5	0.84	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
1,2-Dichlorobenzene	ND		6.5	0.51	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
1,2-Dichloroethane	ND		6.5	0.33	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
1,2-Dichloropropane	ND		6.5	3.3	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
1,3,5-Trimethylbenzene	ND		6.5	0.42	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
1,3-Dichlorobenzene	ND		6.5	0.34	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
1,4-Dichlorobenzene	ND		6.5	0.92	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
2-Butanone (MEK)	ND		33	2.4	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
2-Hexanone	ND		33	3.3	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
4-Methyl-2-pentanone (MIBK)	ND		33	2.1	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
Acetone	ND		33	5.5	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
Benzene	ND		6.5	0.32	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
Bromodichloromethane	ND		6.5	0.88	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
Bromoform	ND		6.5	3.3	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
Bromomethane	ND		6.5	0.59	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
Carbon disulfide	ND		6.5	3.3	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
Carbon tetrachloride	ND		6.5	0.63	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
Chlorobenzene	ND		6.5	0.86	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
Chloroethane	ND		6.5	1.5	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
Chloroform	**0.55**	**J B**	6.5	0.40	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
Chloromethane	ND		6.5	0.40	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
cis-1,2-Dichloroethene	ND		6.5	0.84	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
cis-1,3-Dichloropropene	ND		6.5	0.94	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
Cyclohexane	ND		6.5	0.92	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
Dibromochloromethane	ND		6.5	0.84	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
Dichlorodifluoromethane	ND		6.5	0.54	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
Ethylbenzene	**0.73**	**J**	6.5	0.45	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
Isopropylbenzene	ND		6.5	0.99	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
m,p-Xylene	**1.8**	**J**	13	1.1	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
Methyl acetate	ND		33	4.0	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
Methyl tert-butyl ether	ND		6.5	0.64	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
Methylcyclohexane	ND		6.5	1.0	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
Methylene Chloride	ND		6.5	3.0	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
n-Butylbenzene	ND		6.5	0.57	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
N-Propylbenzene	ND		6.5	0.52	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
o-Xylene	ND		6.5	0.86	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
sec-Butylbenzene	ND		6.5	0.57	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
Styrene	ND		6.5	0.33	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1

Client: Integral Consulting Inc
Project/Site: Integral Consulting - EF1017 - Refractor

Job ID: 480-204989-1

Client Sample ID: SB2 (0-0.5)
Date Collected: 12/21/22 09:35
Date Received: 12/22/22 11:00

Lab Sample ID: 480-204989-3
Matrix: Solid
Percent Solids: 79.6

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		6.5	0.68	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
Tetrachloroethene	**2.9**	**J B**	6.5	0.88	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
Toluene	ND		6.5	0.49	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
trans-1,2-Dichloroethene	ND		6.5	0.68	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
trans-1,3-Dichloropropene	ND		6.5	2.9	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
Trichloroethene	ND		6.5	1.4	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
Trichlorofluoromethane	ND		6.5	0.62	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
Vinyl chloride	ND		6.5	0.80	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1
Xylenes, Total	**1.8**	**J**	13	1.1	ug/Kg	☼	12/22/22 12:00	01/03/23 22:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*64 - 126*	*12/22/22 12:00*	*01/03/23 22:36*	*1*
4-Bromofluorobenzene (Surr)	*83*		*72 - 126*	*12/22/22 12:00*	*01/03/23 22:36*	*1*
Dibromofluoromethane (Surr)	*103*		*60 - 140*	*12/22/22 12:00*	*01/03/23 22:36*	*1*
Toluene-d8 (Surr)	*105*		*71 - 125*	*12/22/22 12:00*	*01/03/23 22:36*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		1000	280	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
2,4,6-Trichlorophenol	ND		1000	210	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
2,4-Dichlorophenol	ND		1000	110	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
2,4-Dimethylphenol	ND		1000	250	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
2,4-Dinitrophenol	ND		10000	4800	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
2,4-Dinitrotoluene	ND		1000	210	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
2,6-Dinitrotoluene	ND		1000	120	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
2-Chloronaphthalene	ND		1000	170	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
2-Chlorophenol	ND		2000	190	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
2-Methylnaphthalene	ND		1000	210	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
2-Methylphenol	ND		1000	120	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
2-Nitroaniline	ND		2000	150	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
2-Nitrophenol	ND		1000	290	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
3,3'-Dichlorobenzidine	ND		2000	1200	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
3-Nitroaniline	ND		2000	290	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
4,6-Dinitro-2-methylphenol	ND		2000	1000	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
4-Bromophenyl phenyl ether	ND		1000	150	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
4-Chloro-3-methylphenol	ND		1000	260	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
4-Chloroaniline	ND		1000	260	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
4-Chlorophenyl phenyl ether	ND		1000	130	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
4-Methylphenol	ND		2000	120	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
4-Nitroaniline	ND		2000	550	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
4-Nitrophenol	ND		2000	730	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Acenaphthene	ND		1000	150	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Acenaphthylene	ND		1000	130	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Acetophenone	ND		1000	140	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Anthracene	ND		1000	260	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Atrazine	ND		1000	360	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Benzaldehyde	ND		1000	830	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Benzo[a]anthracene	**140**	**J**	1000	100	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Benzo[a]pyrene	**150**	**J**	1000	150	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Benzo[b]fluoranthene	ND		1000	170	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5

Client Sample ID: SB2 (0-0.5)
Date Collected: 12/21/22 09:35
Date Received: 12/22/22 11:00

Lab Sample ID: 480-204989-3
Matrix: Solid
Percent Solids: 79.6

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	**120**	**J**	1000	110	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Benzo[k]fluoranthene	ND		1000	130	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Biphenyl	ND		1000	150	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
bis (2-chloroisopropyl) ether	ND		1000	210	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Bis(2-chloroethoxy)methane	ND		1000	220	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Bis(2-chloroethyl)ether	ND		1000	130	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Bis(2-ethylhexyl) phthalate	ND		1000	360	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Butyl benzyl phthalate	**250**	**J**	1000	170	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Caprolactam	ND		1000	310	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Carbazole	ND		1000	120	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Chrysene	ND		1000	230	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Dibenz(a,h)anthracene	ND		1000	180	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Dibenzofuran	ND		1000	120	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Diethyl phthalate	ND		1000	130	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Dimethyl phthalate	ND		1000	120	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Di-n-butyl phthalate	ND		1000	180	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Di-n-octyl phthalate	ND		1000	120	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Fluoranthene	**240**	**J**	1000	110	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Fluorene	ND		1000	120	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Hexachlorobenzene	ND		1000	140	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Hexachlorobutadiene	ND		1000	150	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Hexachlorocyclopentadiene	ND		1000	140	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Hexachloroethane	ND		1000	130	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Indeno[1,2,3-cd]pyrene	ND		1000	130	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Isophorone	ND		1000	220	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Naphthalene	ND		1000	130	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Nitrobenzene	ND		1000	120	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
N-Nitrosodi-n-propylamine	ND		1000	180	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
N-Nitrosodiphenylamine	ND		1000	850	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Pentachlorophenol	ND		2000	1000	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Phenanthrene	ND		1000	150	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Phenol	ND		1000	160	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5
Pyrene	**200**	**J**	1000	120	ug/Kg	☼	01/03/23 15:42	01/04/23 17:15	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*78*		*54 - 120*	*01/03/23 15:42*	*01/04/23 17:15*	*5*
2-Fluorobiphenyl (Surr)	*80*		*60 - 120*	*01/03/23 15:42*	*01/04/23 17:15*	*5*
2-Fluorophenol (Surr)	*68*		*52 - 120*	*01/03/23 15:42*	*01/04/23 17:15*	*5*
Nitrobenzene-d5 (Surr)	*69*		*53 - 120*	*01/03/23 15:42*	*01/04/23 17:15*	*5*
Phenol-d5 (Surr)	*69*		*54 - 120*	*01/03/23 15:42*	*01/04/23 17:15*	*5*
p-Terphenyl-d14 (Surr)	*99*		*79 - 130*	*01/03/23 15:42*	*01/04/23 17:15*	*5*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**10700**	**B**	12.4	5.5	mg/Kg	☼	12/28/22 14:47	12/29/22 12:59	1
Antimony	ND		18.6	0.50	mg/Kg	☼	12/28/22 14:47	12/29/22 12:59	1
Arsenic	**7.2**		2.5	0.50	mg/Kg	☼	12/28/22 14:47	12/29/22 12:59	1
Barium	**87.5**		0.62	0.14	mg/Kg	☼	12/28/22 14:47	12/29/22 12:59	1
Beryllium	**0.54**		0.25	0.035	mg/Kg	☼	12/28/22 14:47	12/29/22 12:59	1
Cadmium	**0.20**	**J**	0.25	0.037	mg/Kg	☼	12/28/22 14:47	12/29/22 12:59	1

Client Sample ID: SB2 (0-0.5)
Lab Sample ID: 480-204989-3

Date Collected: 12/21/22 09:35
Matrix: Solid
Date Received: 12/22/22 11:00
Percent Solids: 79.6

Method: SW846 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	3270	B	62.1	4.1	mg/Kg	☼	12/28/22 14:47	12/29/22 12:59	1
Chromium	17.3		0.62	0.25	mg/Kg	☼	12/28/22 14:47	12/29/22 12:59	1
Cobalt	8.5		0.62	0.062	mg/Kg	☼	12/28/22 14:47	12/29/22 12:59	1
Copper	19.5		1.2	0.26	mg/Kg	☼	12/28/22 14:47	12/29/22 12:59	1
Iron	19700	B	12.4	4.3	mg/Kg	☼	12/28/22 14:47	12/29/22 12:59	1
Lead	26.5		1.2	0.30	mg/Kg	☼	12/28/22 14:47	12/29/22 12:59	1
Magnesium	3450	B	24.8	1.2	mg/Kg	☼	12/28/22 14:47	12/29/22 12:59	1
Manganese	508	B	0.25	0.040	mg/Kg	☼	12/28/22 14:47	12/29/22 12:59	1
Nickel	21.3		6.2	0.29	mg/Kg	☼	12/28/22 14:47	12/29/22 12:59	1
Potassium	1920		37.2	24.8	mg/Kg	☼	12/28/22 14:47	12/29/22 12:59	1
Selenium	1.3	J	5.0	0.50	mg/Kg	☼	12/28/22 14:47	12/29/22 12:59	1
Silver	0.64	J	0.74	0.25	mg/Kg	☼	12/28/22 14:47	12/29/22 12:59	1
Sodium	60.7	J	174	16.1	mg/Kg	☼	12/28/22 14:47	12/29/22 12:59	1
Thallium	ND		7.4	0.37	mg/Kg	☼	12/28/22 14:47	12/29/22 12:59	1
Vanadium	16.1		0.62	0.14	mg/Kg	☼	12/28/22 14:47	12/29/22 12:59	1
Zinc	77.7		2.5	0.79	mg/Kg	☼	12/28/22 14:47	12/29/22 12:59	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.030		0.024	0.0054	mg/Kg	☼	12/29/22 10:27	12/29/22 13:39	1

Client Sample ID: SB2 (0.5-1)
Lab Sample ID: 480-204989-4

Date Collected: 12/21/22 09:40
Matrix: Solid
Date Received: 12/22/22 11:00
Percent Solids: 89.2

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		6.6	0.66	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
1,1,1-Trichloroethane	ND		6.6	0.48	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
1,1,2,2-Tetrachloroethane	ND		6.6	1.1	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.6	1.5	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
1,1,2-Trichloroethane	ND		6.6	0.85	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
1,1-Dichloroethane	ND		6.6	0.80	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
1,1-Dichloroethene	ND		6.6	0.80	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
1,2,3-Trimethylbenzene	ND		6.6	1.3	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
1,2,4-Trichlorobenzene	ND		6.6	0.40	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
1,2,4-Trimethylbenzene	ND		6.6	1.3	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
1,2-Dibromo-3-Chloropropane	ND		6.6	3.3	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
1,2-Dibromoethane	ND		6.6	0.84	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
1,2-Dichlorobenzene	ND		6.6	0.51	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
1,2-Dichloroethane	ND		6.6	0.33	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
1,2-Dichloropropane	ND		6.6	3.3	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
1,3,5-Trimethylbenzene	ND		6.6	0.42	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
1,3-Dichlorobenzene	ND		6.6	0.34	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
1,4-Dichlorobenzene	ND		6.6	0.92	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
2-Butanone (MEK)	ND		33	2.4	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
2-Hexanone	ND		33	3.3	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
4-Methyl-2-pentanone (MIBK)	ND		33	2.2	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
Acetone	ND		33	5.5	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
Benzene	ND		6.6	0.32	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1

Client Sample ID: SB2 (0.5-1)
Lab Sample ID: 480-204989-4
Date Collected: 12/21/22 09:40
Matrix: Solid
Date Received: 12/22/22 11:00
Percent Solids: 89.2

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		6.6	0.88	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
Bromoform	ND		6.6	3.3	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
Bromomethane	ND		6.6	0.59	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
Carbon disulfide	ND		6.6	3.3	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
Carbon tetrachloride	ND		6.6	0.63	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
Chlorobenzene	ND		6.6	0.87	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
Chloroethane	ND		6.6	1.5	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
Chloroform	**0.56**	**J B**	6.6	0.41	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
Chloromethane	ND		6.6	0.40	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
cis-1,2-Dichloroethene	ND		6.6	0.84	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
cis-1,3-Dichloropropene	ND		6.6	0.94	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
Cyclohexane	ND		6.6	0.92	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
Dibromochloromethane	ND		6.6	0.84	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
Dichlorodifluoromethane	ND		6.6	0.54	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
Ethylbenzene	ND		6.6	0.45	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
Isopropylbenzene	ND		6.6	0.99	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
m,p-Xylene	ND		13	1.1	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
Methyl acetate	ND		33	4.0	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
Methyl tert-butyl ether	ND		6.6	0.64	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
Methylcyclohexane	ND		6.6	1.0	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
Methylene Chloride	ND		6.6	3.0	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
n-Butylbenzene	ND		6.6	0.57	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
N-Propylbenzene	ND		6.6	0.52	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
o-Xylene	ND		6.6	0.86	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
sec-Butylbenzene	ND		6.6	0.57	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
Styrene	ND		6.6	0.33	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
tert-Butylbenzene	ND		6.6	0.68	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
Tetrachloroethene	**2.1**	**J B**	6.6	0.88	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
Toluene	ND		6.6	0.50	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
trans-1,2-Dichloroethene	ND		6.6	0.68	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
trans-1,3-Dichloropropene	ND		6.6	2.9	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
Trichloroethene	ND		6.6	1.4	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
Trichlorofluoromethane	ND		6.6	0.62	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
Vinyl chloride	ND		6.6	0.80	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1
Xylenes, Total	ND		13	1.1	ug/Kg	☼	12/22/22 12:00	01/03/23 23:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*64 - 126*	*12/22/22 12:00*	*01/03/23 23:00*	*1*
4-Bromofluorobenzene (Surr)	*93*		*72 - 126*	*12/22/22 12:00*	*01/03/23 23:00*	*1*
Dibromofluoromethane (Surr)	*102*		*60 - 140*	*12/22/22 12:00*	*01/03/23 23:00*	*1*
Toluene-d8 (Surr)	*95*		*71 - 125*	*12/22/22 12:00*	*01/03/23 23:00*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		930	250	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
2,4,6-Trichlorophenol	ND		930	190	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
2,4-Dichlorophenol	ND		930	99	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
2,4-Dimethylphenol	ND		930	220	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
2,4-Dinitrophenol	ND		9100	4300	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
2,4-Dinitrotoluene	ND		930	190	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5

Client: Integral Consulting Inc
Job ID: 480-204989-1
Project/Site: Integral Consulting - EF1017 - Refractor

Client Sample ID: SB2 (0.5-1)
Lab Sample ID: 480-204989-4
Date Collected: 12/21/22 09:40
Matrix: Solid
Date Received: 12/22/22 11:00
Percent Solids: 89.2

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,6-Dinitrotoluene	ND		930	110	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
2-Chloronaphthalene	ND		930	150	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
2-Chlorophenol	ND		1800	170	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
2-Methylnaphthalene	ND		930	190	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
2-Methylphenol	ND		930	110	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
2-Nitroaniline	ND		1800	140	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
2-Nitrophenol	ND		930	260	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
3,3'-Dichlorobenzidine	ND		1800	1100	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
3-Nitroaniline	ND		1800	260	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
4,6-Dinitro-2-methylphenol	ND		1800	930	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
4-Bromophenyl phenyl ether	ND		930	130	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
4-Chloro-3-methylphenol	ND		930	230	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
4-Chloroaniline	ND		930	230	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
4-Chlorophenyl phenyl ether	ND		930	120	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
4-Methylphenol	ND		1800	110	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
4-Nitroaniline	ND		1800	490	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
4-Nitrophenol	ND		1800	650	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Acenaphthene	ND		930	140	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Acenaphthylene	ND		930	120	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Acetophenone	ND		930	130	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Anthracene	ND		930	230	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Atrazine	ND		930	320	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Benzaldehyde	ND		930	740	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Benzo[a]anthracene	ND		930	93	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Benzo[a]pyrene	ND		930	140	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Benzo[b]fluoranthene	ND		930	150	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Benzo[g,h,i]perylene	ND		930	99	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Benzo[k]fluoranthene	ND		930	120	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Biphenyl	ND		930	140	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
bis (2-chloroisopropyl) ether	ND		930	190	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Bis(2-chloroethoxy)methane	ND		930	200	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Bis(2-chloroethyl)ether	ND		930	120	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Bis(2-ethylhexyl) phthalate	ND		930	320	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Butyl benzyl phthalate	ND		930	150	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Caprolactam	ND		930	280	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Carbazole	ND		930	110	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Chrysene	ND		930	210	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Dibenz(a,h)anthracene	ND		930	160	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Dibenzofuran	ND		930	110	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Diethyl phthalate	ND		930	120	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Dimethyl phthalate	ND		930	110	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Di-n-butyl phthalate	ND		930	160	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Di-n-octyl phthalate	ND		930	110	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Fluoranthene	**120**	**J**	930	99	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Fluorene	ND		930	110	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Hexachlorobenzene	ND		930	130	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Hexachlorobutadiene	ND		930	140	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Hexachlorocyclopentadiene	ND		930	130	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Hexachloroethane	ND		930	120	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5

Client Sample ID: SB2 (0.5-1)
Date Collected: 12/21/22 09:40
Date Received: 12/22/22 11:00

Lab Sample ID: 480-204989-4
Matrix: Solid
Percent Solids: 89.2

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Indeno[1,2,3-cd]pyrene	ND		930	120	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Isophorone	ND		930	200	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Naphthalene	ND		930	120	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Nitrobenzene	ND		930	100	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
N-Nitrosodi-n-propylamine	ND		930	160	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
N-Nitrosodiphenylamine	ND		930	760	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Pentachlorophenol	ND		1800	930	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Phenanthrene	ND		930	140	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Phenol	ND		930	140	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5
Pyrene	ND		930	110	ug/Kg	☼	01/03/23 15:42	01/04/23 17:39	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*77*		*54 - 120*	*01/03/23 15:42*	*01/04/23 17:39*	*5*
2-Fluorobiphenyl (Surr)	*84*		*60 - 120*	*01/03/23 15:42*	*01/04/23 17:39*	*5*
2-Fluorophenol (Surr)	*72*		*52 - 120*	*01/03/23 15:42*	*01/04/23 17:39*	*5*
Nitrobenzene-d5 (Surr)	*70*		*53 - 120*	*01/03/23 15:42*	*01/04/23 17:39*	*5*
Phenol-d5 (Surr)	*71*		*54 - 120*	*01/03/23 15:42*	*01/04/23 17:39*	*5*
p-Terphenyl-d14 (Surr)	*97*		*79 - 130*	*01/03/23 15:42*	*01/04/23 17:39*	*5*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**13000**	**B**	11.3	5.0	mg/Kg	☼	12/28/22 14:47	12/29/22 13:14	1
Antimony	ND		17.0	0.45	mg/Kg	☼	12/28/22 14:47	12/29/22 13:14	1
Arsenic	**9.2**		2.3	0.45	mg/Kg	☼	12/28/22 14:47	12/29/22 13:14	1
Barium	**63.8**		0.57	0.12	mg/Kg	☼	12/28/22 14:47	12/29/22 13:14	1
Beryllium	**0.57**		0.23	0.032	mg/Kg	☼	12/28/22 14:47	12/29/22 13:14	1
Cadmium	**0.21**	**J**	0.23	0.034	mg/Kg	☼	12/28/22 14:47	12/29/22 13:14	1
Calcium	**8990**	**B**	56.7	3.7	mg/Kg	☼	12/28/22 14:47	12/29/22 13:14	1
Chromium	**17.3**		0.57	0.23	mg/Kg	☼	12/28/22 14:47	12/29/22 13:14	1
Cobalt	**10.0**		0.57	0.057	mg/Kg	☼	12/28/22 14:47	12/29/22 13:14	1
Copper	**34.5**		1.1	0.24	mg/Kg	☼	12/28/22 14:47	12/29/22 13:14	1
Iron	**27600**	**B ^+**	11.3	4.0	mg/Kg	☼	12/28/22 14:47	12/29/22 13:14	1
Lead	**78.7**		1.1	0.27	mg/Kg	☼	12/28/22 14:47	12/29/22 13:14	1
Magnesium	**7540**	**B**	22.7	1.1	mg/Kg	☼	12/28/22 14:47	12/29/22 13:14	1
Manganese	**441**	**B**	0.23	0.036	mg/Kg	☼	12/28/22 14:47	12/29/22 13:14	1
Nickel	**28.0**		5.7	0.26	mg/Kg	☼	12/28/22 14:47	12/29/22 13:14	1
Potassium	**1830**		34.0	22.7	mg/Kg	☼	12/28/22 14:47	12/29/22 13:14	1
Selenium	**0.73**	**J**	4.5	0.45	mg/Kg	☼	12/28/22 14:47	12/29/22 13:14	1
Silver	**1.0**		0.68	0.23	mg/Kg	☼	12/28/22 14:47	12/29/22 13:14	1
Sodium	**85.5**	**J**	159	14.7	mg/Kg	☼	12/28/22 14:47	12/29/22 13:14	1
Thallium	ND		6.8	0.34	mg/Kg	☼	12/28/22 14:47	12/29/22 13:14	1
Vanadium	**19.7**		0.57	0.12	mg/Kg	☼	12/28/22 14:47	12/29/22 13:14	1
Zinc	**103**		2.3	0.73	mg/Kg	☼	12/28/22 14:47	12/29/22 13:14	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.022**		0.022	0.0051	mg/Kg	☼	12/29/22 10:27	12/29/22 13:41	1

Client: Integral Consulting Inc
Project/Site: Integral Consulting - EF1017 - Refractor

Job ID: 480-204989-1

Client Sample ID: SB2 (1-2)
Date Collected: 12/21/22 09:45
Date Received: 12/22/22 11:00

Lab Sample ID: 480-204989-5
Matrix: Solid
Percent Solids: 91.5

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.5	0.45	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
1,1,1-Trichloroethane	ND		4.5	0.33	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
1,1,2,2-Tetrachloroethane	ND		4.5	0.73	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.5	1.0	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
1,1,2-Trichloroethane	ND		4.5	0.58	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
1,1-Dichloroethane	ND		4.5	0.55	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
1,1-Dichloroethene	ND		4.5	0.55	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
1,2,3-Trimethylbenzene	ND		4.5	0.92	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
1,2,4-Trichlorobenzene	ND	F1	4.5	0.27	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
1,2,4-Trimethylbenzene	ND		4.5	0.86	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
1,2-Dibromo-3-Chloropropane	ND		4.5	2.2	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
1,2-Dibromoethane	ND		4.5	0.58	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
1,2-Dichlorobenzene	ND	F1	4.5	0.35	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
1,2-Dichloroethane	ND		4.5	0.23	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
1,2-Dichloropropane	ND		4.5	2.2	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
1,3,5-Trimethylbenzene	ND	F1	4.5	0.29	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
1,3-Dichlorobenzene	ND		4.5	0.23	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
1,4-Dichlorobenzene	ND	F1	4.5	0.63	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
2-Butanone (MEK)	ND		22	1.6	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
2-Hexanone	ND		22	2.2	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
4-Methyl-2-pentanone (MIBK)	ND		22	1.5	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
Acetone	ND		22	3.8	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
Benzene	ND		4.5	0.22	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
Bromodichloromethane	ND		4.5	0.60	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
Bromoform	ND	F1	4.5	2.2	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
Bromomethane	ND		4.5	0.40	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
Carbon disulfide	ND		4.5	2.2	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
Carbon tetrachloride	ND		4.5	0.43	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
Chlorobenzene	ND		4.5	0.59	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
Chloroethane	ND		4.5	1.0	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
Chloroform	**0.37**	**J B**	4.5	0.28	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
Chloromethane	ND		4.5	0.27	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
cis-1,2-Dichloroethene	ND		4.5	0.57	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
cis-1,3-Dichloropropene	ND		4.5	0.65	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
Cyclohexane	ND		4.5	0.63	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
Dibromochloromethane	ND	F1	4.5	0.57	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
Dichlorodifluoromethane	ND		4.5	0.37	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
Ethylbenzene	ND		4.5	0.31	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
Isopropylbenzene	ND	F1	4.5	0.68	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
m,p-Xylene	ND		9.0	0.75	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
Methyl acetate	ND		22	2.7	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
Methyl tert-butyl ether	ND		4.5	0.44	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
Methylcyclohexane	ND	F1 F2	4.5	0.68	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
Methylene Chloride	ND		4.5	2.1	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
n-Butylbenzene	ND	F1	4.5	0.39	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
N-Propylbenzene	ND		4.5	0.36	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
o-Xylene	ND		4.5	0.59	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
sec-Butylbenzene	ND		4.5	0.39	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
Styrene	ND	F1	4.5	0.22	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1

Client Sample ID: SB2 (1-2)
Date Collected: 12/21/22 09:45
Date Received: 12/22/22 11:00

Lab Sample ID: 480-204989-5
Matrix: Solid
Percent Solids: 91.5

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND	F1	4.5	0.47	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
Tetrachloroethene	**1.7**	**J B**	4.5	0.60	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
Toluene	ND		4.5	0.34	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
trans-1,2-Dichloroethene	ND		4.5	0.46	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
trans-1,3-Dichloropropene	ND		4.5	2.0	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
Trichloroethene	ND		4.5	0.99	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
Trichlorofluoromethane	ND		4.5	0.42	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
Vinyl chloride	ND		4.5	0.55	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1
Xylenes, Total	ND		9.0	0.75	ug/Kg	☼	12/22/22 12:00	01/03/23 23:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*64 - 126*	*12/22/22 12:00*	*01/03/23 23:25*	*1*
4-Bromofluorobenzene (Surr)	*80*		*72 - 126*	*12/22/22 12:00*	*01/03/23 23:25*	*1*
Dibromofluoromethane (Surr)	*99*		*60 - 140*	*12/22/22 12:00*	*01/03/23 23:25*	*1*
Toluene-d8 (Surr)	*104*		*71 - 125*	*12/22/22 12:00*	*01/03/23 23:25*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		11000	6000	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
2,4,5-Trichlorophenol	ND		18000	5000	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
2,4,6-Trichlorophenol	ND		18000	3700	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
2,4-Dichlorophenol	ND		18000	2000	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
2,4-Dimethylphenol	ND		18000	4500	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
2,4-Dinitrophenol	ND		180000	85000	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
2,4-Dinitrotoluene	ND		18000	3800	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
2,6-Dinitrotoluene	ND		18000	2200	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
2-Chloronaphthalene	ND		18000	3000	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
2-Chlorophenol	ND		36000	3400	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
2-Methylnaphthalene	ND		18000	3700	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
2-Methylphenol	ND		18000	2200	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
2-Nitroaniline	ND		36000	2700	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
2-Nitrophenol	ND		18000	5200	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
3,3'-Dichlorobenzidine	ND		36000	22000	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
3-Nitroaniline	ND		36000	5100	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
4,6-Dinitro-2-methylphenol	ND		36000	18000	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
4-Bromophenyl phenyl ether	ND		18000	2600	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
4-Chloro-3-methylphenol	ND		18000	4600	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
4-Chloroaniline	ND		18000	4600	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
4-Chlorophenyl phenyl ether	ND		18000	2300	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
4-Methylphenol	ND		36000	2200	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
4-Nitroaniline	ND		36000	9700	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
4-Nitrophenol	ND		36000	13000	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Acenaphthene	ND		18000	2700	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Acenaphthylene	ND		18000	2400	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Acetophenone	ND		18000	2500	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Anthracene	ND		18000	4600	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Atrazine	ND		18000	6400	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Benzaldehyde	ND		18000	15000	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Benzo[a]anthracene	ND	F1	18000	1800	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Benzo[a]pyrene	ND		18000	2700	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100

Client: Integral Consulting Inc
Project/Site: Integral Consulting - EF1017 - Refractor

Job ID: 480-204989-1

Client Sample ID: SB2 (1-2)
Date Collected: 12/21/22 09:45
Date Received: 12/22/22 11:00

Lab Sample ID: 480-204989-5
Matrix: Solid
Percent Solids: 91.5

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	ND		18000	2900	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Benzo[g,h,i]perylene	ND	F2	18000	2000	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Benzo[k]fluoranthene	ND	F2	18000	2400	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Biphenyl	ND		18000	2700	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
bis (2-chloroisopropyl) ether	ND		18000	3700	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Bis(2-chloroethoxy)methane	ND		18000	3900	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Bis(2-chloroethyl)ether	ND		18000	2400	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Bis(2-ethylhexyl) phthalate	ND		18000	6300	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Butyl benzyl phthalate	ND		18000	3000	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Caprolactam	ND		18000	5500	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Carbazole	ND		18000	2200	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Chrysene	ND		18000	4100	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Dibenz(a,h)anthracene	ND		18000	3300	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Dibenzofuran	ND		18000	2200	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Diethyl phthalate	ND		18000	2400	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Dimethyl phthalate	ND		18000	2200	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Di-n-butyl phthalate	ND		18000	3200	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Di-n-octyl phthalate	ND		18000	2200	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Fluoranthene	**3300**	**J F1**	18000	2000	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Fluorene	ND		18000	2200	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Hexachlorobenzene	ND		18000	2500	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Hexachlorobutadiene	ND		18000	2700	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Hexachlorocyclopentadiene	ND		18000	2500	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Hexachloroethane	ND		18000	2400	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Indeno[1,2,3-cd]pyrene	ND		18000	2300	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Isophorone	ND		18000	3900	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Naphthalene	ND		18000	2400	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Nitrobenzene	ND		18000	2100	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
N-Nitrosodi-n-propylamine	ND		18000	3200	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
N-Nitrosodiphenylamine	ND		18000	15000	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Pentachlorophenol	ND		36000	18000	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Phenanthrene	ND	F2	18000	2700	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Phenol	ND		18000	2800	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100
Pyrene	**2800**	**J F1**	18000	2200	ug/Kg	☼	01/03/23 15:42	01/04/23 16:50	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*0*	*S1-*	*54 - 120*	*01/03/23 15:42*	*01/04/23 16:50*	*100*
2-Fluorobiphenyl (Surr)	*74*		*60 - 120*	*01/03/23 15:42*	*01/04/23 16:50*	*100*
2-Fluorophenol (Surr)	*0*	*S1-*	*52 - 120*	*01/03/23 15:42*	*01/04/23 16:50*	*100*
Nitrobenzene-d5 (Surr)	*0*	*S1-*	*53 - 120*	*01/03/23 15:42*	*01/04/23 16:50*	*100*
Phenol-d5 (Surr)	*0*	*S1-*	*54 - 120*	*01/03/23 15:42*	*01/04/23 16:50*	*100*
p-Terphenyl-d14 (Surr)	*94*		*79 - 130*	*01/03/23 15:42*	*01/04/23 16:50*	*100*

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.54	0.36	ug/Kg	☼	01/03/23 09:24	01/05/23 18:22	1
Perfluoropentanoic acid (PFPeA)	ND		0.22	0.060	ug/Kg	☼	01/03/23 09:24	01/05/23 18:22	1
Perfluorohexanoic acid (PFHxA)	ND		0.22	0.050	ug/Kg	☼	01/03/23 09:24	01/05/23 18:22	1
Perfluoroheptanoic acid (PFHpA)	ND		0.22	0.042	ug/Kg	☼	01/03/23 09:24	01/05/23 18:22	1
Perfluorooctanoic acid (PFOA)	**0.070**	**J**	0.22	0.063	ug/Kg	☼	01/03/23 09:24	01/05/23 18:22	1

Client Sample ID: SB2 (1-2)
Date Collected: 12/21/22 09:45
Date Received: 12/22/22 11:00

Lab Sample ID: 480-204989-5
Matrix: Solid
Percent Solids: 91.5

Method: EPA 537 IDA - EPA 537 Isotope Dilution (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	**0.051**	**J**	0.22	0.037	ug/Kg	☼	01/03/23 09:24	01/05/23 18:22	1
Perfluorodecanoic acid (PFDA)	ND		0.22	0.030	ug/Kg	☼	01/03/23 09:24	01/05/23 18:22	1
Perfluoroundecanoic acid (PFUnA)	ND		0.22	0.029	ug/Kg	☼	01/03/23 09:24	01/05/23 18:22	1
Perfluorododecanoic acid (PFDoA)	ND		0.22	0.027	ug/Kg	☼	01/03/23 09:24	01/05/23 18:22	1
Perfluorotridecanoic acid (PFTriA)	ND		0.22	0.027	ug/Kg	☼	01/03/23 09:24	01/05/23 18:22	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.22	0.028	ug/Kg	☼	01/03/23 09:24	01/05/23 18:22	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.22	0.036	ug/Kg	☼	01/03/23 09:24	01/05/23 18:22	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.22	0.044	ug/Kg	☼	01/03/23 09:24	01/05/23 18:22	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.22	0.025	ug/Kg	☼	01/03/23 09:24	01/05/23 18:22	1
Perfluorooctanesulfonic acid (PFOS)	**0.20**	**J**	0.22	0.12	ug/Kg	☼	01/03/23 09:24	01/05/23 18:22	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.22	0.021	ug/Kg	☼	01/03/23 09:24	01/05/23 18:22	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.22	0.037	ug/Kg	☼	01/03/23 09:24	01/05/23 18:22	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.2	0.12	ug/Kg	☼	01/03/23 09:24	01/05/23 18:22	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.2	0.090	ug/Kg	☼	01/03/23 09:24	01/05/23 18:22	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.2	0.062	ug/Kg	☼	01/03/23 09:24	01/05/23 18:22	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.2	0.040	ug/Kg	☼	01/03/23 09:24	01/05/23 18:22	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*84*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:22*	*1*
13C4 PFHpA	*93*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:22*	*1*
13C4 PFOA	*94*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:22*	*1*
13C4 PFOS	*83*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:22*	*1*
13C5 PFNA	*96*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:22*	*1*
13C4 PFBA	*85*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:22*	*1*
13C2 PFHxA	*89*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:22*	*1*
13C2 PFDA	*97*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:22*	*1*
13C2 PFUnA	*100*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:22*	*1*
13C2 PFDoA	*97*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:22*	*1*
13C8 FOSA	*75*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:22*	*1*
13C5 PFPeA	*86*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:22*	*1*
13C2 PFTeDA	*109*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:22*	*1*
d3-NMeFOSAA	*88*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:22*	*1*
d5-NEtFOSAA	*92*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:22*	*1*
M2-6:2 FTS	*95*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:22*	*1*
M2-8:2 FTS	*92*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:22*	*1*
13C3 PFBS	*82*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:22*	*1*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8640**	**B F1**	10.6	4.7	mg/Kg	☼	12/28/22 14:47	12/29/22 13:57	1
Antimony	**4.1**	**J F1 F2**	31.7	0.85	mg/Kg	☼	12/28/22 14:47	01/04/23 14:20	2
Arsenic	**14.2**	**F2**	2.1	0.42	mg/Kg	☼	12/28/22 14:47	12/29/22 13:57	1
Barium	**79.8**	**F1 F2**	0.53	0.12	mg/Kg	☼	12/28/22 14:47	12/29/22 13:57	1
Beryllium	**0.50**		0.21	0.030	mg/Kg	☼	12/28/22 14:47	12/29/22 13:57	1
Cadmium	**0.79**	**F2**	0.42	0.063	mg/Kg	☼	12/28/22 14:47	01/04/23 14:20	2
Calcium	**2730**	**B F1**	52.9	3.5	mg/Kg	☼	12/28/22 14:47	12/29/22 13:57	1

Client Sample ID: SB2 (1-2)
Lab Sample ID: 480-204989-5

Date Collected: 12/21/22 09:45
Matrix: Solid
Date Received: 12/22/22 11:00
Percent Solids: 91.5

Method: SW846 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	16.2		0.53	0.21	mg/Kg	☼	12/28/22 14:47	12/29/22 13:57	1
Cobalt	7.8		0.53	0.053	mg/Kg	☼	12/28/22 14:47	12/29/22 13:57	1
Copper	60.6	F1	1.1	0.22	mg/Kg	☼	12/28/22 14:47	12/29/22 13:57	1
Iron	84900	B F2	21.2	7.4	mg/Kg	☼	12/28/22 14:47	01/04/23 14:20	2
Lead	105	F1 F2	2.1	0.51	mg/Kg	☼	12/28/22 14:47	01/04/23 14:20	2
Magnesium	2570	B F1	21.2	0.98	mg/Kg	☼	12/28/22 14:47	12/29/22 13:57	1
Manganese	610	B	0.21	0.034	mg/Kg	☼	12/28/22 14:47	12/29/22 13:57	1
Nickel	23.2	F1 F2	10.6	0.49	mg/Kg	☼	12/28/22 14:47	01/04/23 14:20	2
Potassium	1380	F1 F2	31.7	21.2	mg/Kg	☼	12/28/22 14:47	12/29/22 13:57	1
Selenium	1.9	J	4.2	0.42	mg/Kg	☼	12/28/22 14:47	12/29/22 13:57	1
Silver	ND	F2	1.3	0.42	mg/Kg	☼	12/28/22 14:47	01/04/23 14:20	2
Sodium	92.8	J	148	13.7	mg/Kg	☼	12/28/22 14:47	12/29/22 13:57	1
Thallium	ND		6.3	0.32	mg/Kg	☼	12/28/22 14:47	12/29/22 13:57	1
Vanadium	28.7	F1 F2	1.1	0.23	mg/Kg	☼	12/28/22 14:47	01/04/23 14:20	2
Zinc	89.4	F1 F2	2.1	0.68	mg/Kg	☼	12/28/22 14:47	12/29/22 13:57	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.053		0.021	0.0049	mg/Kg	☼	12/29/22 10:27	12/29/22 13:42	1

Client Sample ID: SB2 (20.4-22.4)
Lab Sample ID: 480-204989-6

Date Collected: 12/21/22 11:00
Matrix: Solid
Date Received: 12/22/22 11:00
Percent Solids: 89.8

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.3	0.53	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
1,1,1-Trichloroethane	ND		5.3	0.39	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
1,1,2,2-Tetrachloroethane	ND		5.3	0.87	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.3	1.2	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
1,1,2-Trichloroethane	ND		5.3	0.69	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
1,1-Dichloroethane	ND		5.3	0.65	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
1,1-Dichloroethene	ND		5.3	0.65	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
1,2,3-Trimethylbenzene	ND		5.3	1.1	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
1,2,4-Trichlorobenzene	ND		5.3	0.32	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
1,2,4-Trimethylbenzene	ND		5.3	1.0	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
1,2-Dibromo-3-Chloropropane	ND		5.3	2.7	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
1,2-Dibromoethane	ND		5.3	0.69	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
1,2-Dichlorobenzene	ND		5.3	0.42	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
1,2-Dichloroethane	ND		5.3	0.27	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
1,2-Dichloropropane	ND		5.3	2.7	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
1,3,5-Trimethylbenzene	ND		5.3	0.34	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
1,3-Dichlorobenzene	ND		5.3	0.27	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
1,4-Dichlorobenzene	ND		5.3	0.75	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
2-Butanone (MEK)	6.9	J	27	2.0	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
2-Hexanone	ND		27	2.7	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
4-Methyl-2-pentanone (MIBK)	ND		27	1.8	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
Acetone	20	J	27	4.5	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
Benzene	ND		5.3	0.26	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
Bromodichloromethane	ND		5.3	0.72	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1

Client: Integral Consulting Inc
Job ID: 480-204989-1
Project/Site: Integral Consulting - EF1017 - Refractor

Client Sample ID: SB2 (20.4-22.4)
Lab Sample ID: 480-204989-6
Date Collected: 12/21/22 11:00
Matrix: Solid
Date Received: 12/22/22 11:00
Percent Solids: 89.8

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	ND		5.3	2.7	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
Bromomethane	ND		5.3	0.48	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
Carbon disulfide	ND		5.3	2.7	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
Carbon tetrachloride	ND		5.3	0.52	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
Chlorobenzene	ND		5.3	0.71	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
Chloroethane	ND		5.3	1.2	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
Chloroform	**0.43**	**J B**	5.3	0.33	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
Chloromethane	ND		5.3	0.32	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
cis-1,2-Dichloroethene	ND		5.3	0.68	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
cis-1,3-Dichloropropene	ND		5.3	0.77	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
Cyclohexane	ND		5.3	0.75	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
Dibromochloromethane	ND		5.3	0.68	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
Dichlorodifluoromethane	ND		5.3	0.44	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
Ethylbenzene	ND		5.3	0.37	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
Isopropylbenzene	ND		5.3	0.81	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
m,p-Xylene	ND		11	0.90	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
Methyl acetate	ND		27	3.2	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
Methyl tert-butyl ether	ND		5.3	0.52	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
Methylcyclohexane	ND		5.3	0.81	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
Methylene Chloride	ND		5.3	2.5	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
n-Butylbenzene	ND		5.3	0.46	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
N-Propylbenzene	ND		5.3	0.43	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
o-Xylene	ND		5.3	0.70	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
sec-Butylbenzene	ND		5.3	0.46	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
Styrene	ND		5.3	0.27	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
tert-Butylbenzene	ND		5.3	0.56	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
Tetrachloroethene	**1.8**	**J B**	5.3	0.72	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
Toluene	ND		5.3	0.40	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
trans-1,2-Dichloroethene	ND		5.3	0.55	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
trans-1,3-Dichloropropene	ND		5.3	2.4	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
Trichloroethene	ND		5.3	1.2	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
Trichlorofluoromethane	ND		5.3	0.51	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
Vinyl chloride	ND		5.3	0.65	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1
Xylenes, Total	ND		11	0.90	ug/Kg	☼	12/22/22 12:00	01/03/23 23:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*64 - 126*	*12/22/22 12:00*	*01/03/23 23:49*	*1*
4-Bromofluorobenzene (Surr)	*95*		*72 - 126*	*12/22/22 12:00*	*01/03/23 23:49*	*1*
Dibromofluoromethane (Surr)	*103*		*60 - 140*	*12/22/22 12:00*	*01/03/23 23:49*	*1*
Toluene-d8 (Surr)	*96*		*71 - 125*	*12/22/22 12:00*	*01/03/23 23:49*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		190	50	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
2,4,6-Trichlorophenol	ND		190	37	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
2,4-Dichlorophenol	ND		190	20	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
2,4-Dimethylphenol	ND		190	45	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
2,4-Dinitrophenol	ND		1800	860	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
2,4-Dinitrotoluene	ND		190	38	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
2,6-Dinitrotoluene	ND		190	22	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1

Client Sample ID: SB2 (20.4-22.4)
Date Collected: 12/21/22 11:00
Date Received: 12/22/22 11:00

Lab Sample ID: 480-204989-6
Matrix: Solid
Percent Solids: 89.8

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND		190	31	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
2-Chlorophenol	ND		360	34	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
2-Methylnaphthalene	ND		190	37	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
2-Methylphenol	ND		190	22	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
2-Nitroaniline	ND		360	27	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
2-Nitrophenol	ND		190	53	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
3,3'-Dichlorobenzidine	ND		360	220	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
3-Nitroaniline	ND		360	51	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
4,6-Dinitro-2-methylphenol	ND		360	190	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
4-Bromophenyl phenyl ether	ND		190	26	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
4-Chloro-3-methylphenol	ND		190	46	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
4-Chloroaniline	ND		190	46	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
4-Chlorophenyl phenyl ether	ND		190	23	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
4-Methylphenol	ND		360	22	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
4-Nitroaniline	ND		360	98	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
4-Nitrophenol	ND		360	130	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Acenaphthene	ND		190	27	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Acenaphthylene	ND		190	24	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Acetophenone	ND		190	25	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Anthracene	ND		190	46	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Atrazine	ND		190	65	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Benzaldehyde	ND		190	150	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Benzo[a]anthracene	ND		190	19	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Benzo[a]pyrene	ND		190	27	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Benzo[b]fluoranthene	ND		190	30	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Benzo[g,h,i]perylene	ND		190	20	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Benzo[k]fluoranthene	ND		190	24	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Biphenyl	ND		190	27	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
bis (2-chloroisopropyl) ether	ND		190	37	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Bis(2-chloroethoxy)methane	ND		190	39	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Bis(2-chloroethyl)ether	ND		190	24	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Bis(2-ethylhexyl) phthalate	**110**	**J**	190	64	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Butyl benzyl phthalate	ND		190	31	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Caprolactam	ND		190	56	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Carbazole	ND		190	22	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Chrysene	ND		190	42	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Dibenz(a,h)anthracene	ND		190	33	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Dibenzofuran	ND		190	22	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Diethyl phthalate	ND		190	24	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Dimethyl phthalate	ND		190	22	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Di-n-butyl phthalate	ND		190	32	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Di-n-octyl phthalate	ND		190	22	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Fluoranthene	ND		190	20	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Fluorene	ND		190	22	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Hexachlorobenzene	ND		190	25	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Hexachlorobutadiene	ND		190	27	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Hexachlorocyclopentadiene	ND		190	25	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Hexachloroethane	ND		190	24	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Indeno[1,2,3-cd]pyrene	ND		190	23	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1

Client Sample ID: SB2 (20.4-22.4)
Date Collected: 12/21/22 11:00
Date Received: 12/22/22 11:00

Lab Sample ID: 480-204989-6
Matrix: Solid
Percent Solids: 89.8

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isophorone	ND		190	39	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Naphthalene	ND		190	24	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Nitrobenzene	ND		190	21	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
N-Nitrosodi-n-propylamine	ND		190	32	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
N-Nitrosodiphenylamine	ND		190	150	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Pentachlorophenol	ND		360	190	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Phenanthrene	ND		190	27	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Phenol	ND		190	28	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1
Pyrene	ND		190	22	ug/Kg	☼	01/03/23 15:42	01/04/23 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*92*		*54 - 120*	*01/03/23 15:42*	*01/04/23 18:04*	*1*
2-Fluorobiphenyl (Surr)	*97*		*60 - 120*	*01/03/23 15:42*	*01/04/23 18:04*	*1*
2-Fluorophenol (Surr)	*83*		*52 - 120*	*01/03/23 15:42*	*01/04/23 18:04*	*1*
Nitrobenzene-d5 (Surr)	*92*		*53 - 120*	*01/03/23 15:42*	*01/04/23 18:04*	*1*
Phenol-d5 (Surr)	*87*		*54 - 120*	*01/03/23 15:42*	*01/04/23 18:04*	*1*
p-Terphenyl-d14 (Surr)	*130*		*79 - 130*	*01/03/23 15:42*	*01/04/23 18:04*	*1*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**7590**	**B**	11.5	5.1	mg/Kg	☼	12/28/22 14:47	12/29/22 14:16	1
Antimony	ND		17.2	0.46	mg/Kg	☼	12/28/22 14:47	12/29/22 14:16	1
Arsenic	**12.3**		2.3	0.46	mg/Kg	☼	12/28/22 14:47	12/29/22 14:16	1
Barium	**135**		0.57	0.13	mg/Kg	☼	12/28/22 14:47	12/29/22 14:16	1
Beryllium	**0.40**		0.23	0.032	mg/Kg	☼	12/28/22 14:47	12/29/22 14:16	1
Cadmium	**0.059**	**J**	0.23	0.034	mg/Kg	☼	12/28/22 14:47	12/29/22 14:16	1
Calcium	**1210**	**B**	57.4	3.8	mg/Kg	☼	12/28/22 14:47	12/29/22 14:16	1
Chromium	**9.5**		0.57	0.23	mg/Kg	☼	12/28/22 14:47	12/29/22 14:16	1
Cobalt	**7.5**		0.57	0.057	mg/Kg	☼	12/28/22 14:47	12/29/22 14:16	1
Copper	**16.7**		1.1	0.24	mg/Kg	☼	12/28/22 14:47	12/29/22 14:16	1
Iron	**22200**	**B ^+**	11.5	4.0	mg/Kg	☼	12/28/22 14:47	12/29/22 14:16	1
Lead	**9.2**		1.1	0.28	mg/Kg	☼	12/28/22 14:47	12/29/22 14:16	1
Magnesium	**2160**	**B**	23.0	1.1	mg/Kg	☼	12/28/22 14:47	12/29/22 14:16	1
Manganese	**1190**	**B**	0.23	0.037	mg/Kg	☼	12/28/22 14:47	12/29/22 14:16	1
Nickel	**17.1**		5.7	0.26	mg/Kg	☼	12/28/22 14:47	12/29/22 14:16	1
Potassium	**1240**		34.5	23.0	mg/Kg	☼	12/28/22 14:47	12/29/22 14:16	1
Selenium	**0.74**	**J**	4.6	0.46	mg/Kg	☼	12/28/22 14:47	12/29/22 14:16	1
Silver	**0.84**		0.69	0.23	mg/Kg	☼	12/28/22 14:47	12/29/22 14:16	1
Sodium	**102**	**J**	161	14.9	mg/Kg	☼	12/28/22 14:47	12/29/22 14:16	1
Thallium	ND		6.9	0.34	mg/Kg	☼	12/28/22 14:47	12/29/22 14:16	1
Vanadium	**13.8**		0.57	0.13	mg/Kg	☼	12/28/22 14:47	12/29/22 14:16	1
Zinc	**60.0**		2.3	0.74	mg/Kg	☼	12/28/22 14:47	12/29/22 14:16	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.0060**	**J**	0.021	0.0047	mg/Kg	☼	12/29/22 10:27	12/29/22 13:47	1

Client: Integral Consulting Inc
Job ID: 480-204989-1
Project/Site: Integral Consulting - EF1017 - Refractor

Client Sample ID: FDUP_122122
Lab Sample ID: 480-204989-7
Date Collected: 12/21/22 00:00
Matrix: Solid
Date Received: 12/22/22 11:00
Percent Solids: 95.4

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.8	0.58	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
1,1,1-Trichloroethane	ND		5.8	0.42	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
1,1,2,2-Tetrachloroethane	ND	*3	5.8	0.94	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.8	1.3	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
1,1,2-Trichloroethane	ND		5.8	0.75	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
1,1-Dichloroethane	ND		5.8	0.70	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
1,1-Dichloroethene	ND		5.8	0.71	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
1,2,3-Trimethylbenzene	ND	*3	5.8	1.2	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
1,2,4-Trichlorobenzene	ND	*3	5.8	0.35	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
1,2,4-Trimethylbenzene	ND	*3	5.8	1.1	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
1,2-Dibromo-3-Chloropropane	ND	*3	5.8	2.9	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
1,2-Dibromoethane	ND		5.8	0.74	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
1,2-Dichlorobenzene	ND	*3	5.8	0.45	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
1,2-Dichloroethane	ND		5.8	0.29	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
1,2-Dichloropropane	ND		5.8	2.9	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
1,3,5-Trimethylbenzene	ND	*3	5.8	0.37	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
1,3-Dichlorobenzene	ND	*3	5.8	0.30	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
1,4-Dichlorobenzene	ND	*3	5.8	0.81	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
2-Butanone (MEK)	ND		29	2.1	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
2-Hexanone	ND		29	2.9	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
4-Methyl-2-pentanone (MIBK)	ND		29	1.9	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
Acetone	**5.9**	**J**	29	4.9	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
Benzene	ND		5.8	0.28	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
Bromodichloromethane	ND		5.8	0.77	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
Bromoform	ND		5.8	2.9	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
Bromomethane	ND		5.8	0.52	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
Carbon disulfide	ND		5.8	2.9	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
Carbon tetrachloride	ND		5.8	0.56	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
Chlorobenzene	ND		5.8	0.76	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
Chloroethane	ND		5.8	1.3	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
Chloroform	**0.57**	**J B**	5.8	0.36	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
Chloromethane	ND		5.8	0.35	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
cis-1,2-Dichloroethene	ND		5.8	0.74	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
cis-1,3-Dichloropropene	ND		5.8	0.83	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
Cyclohexane	ND		5.8	0.81	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
Dibromochloromethane	ND		5.8	0.74	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
Dichlorodifluoromethane	ND		5.8	0.48	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
Ethylbenzene	ND		5.8	0.40	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
Isopropylbenzene	ND	*3	5.8	0.87	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
m,p-Xylene	ND		12	0.97	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
Methyl acetate	ND		29	3.5	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
Methyl tert-butyl ether	ND		5.8	0.57	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
Methylcyclohexane	ND		5.8	0.88	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
Methylene Chloride	ND		5.8	2.7	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
n-Butylbenzene	ND	*3	5.8	0.50	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
N-Propylbenzene	ND	*3	5.8	0.46	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
o-Xylene	ND		5.8	0.75	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
sec-Butylbenzene	ND	*3	5.8	0.50	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
Styrene	ND		5.8	0.29	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1

Client: Integral Consulting Inc
Project/Site: Integral Consulting - EF1017 - Refractor

Job ID: 480-204989-1

Client Sample ID: FDUP_122122
Date Collected: 12/21/22 00:00
Date Received: 12/22/22 11:00

Lab Sample ID: 480-204989-7
Matrix: Solid
Percent Solids: 95.4

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND	*3	5.8	0.60	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
Tetrachloroethene	**3.0**	**J B**	5.8	0.78	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
Toluene	ND		5.8	0.44	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
trans-1,2-Dichloroethene	ND		5.8	0.60	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
trans-1,3-Dichloropropene	ND		5.8	2.5	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
Trichloroethene	ND		5.8	1.3	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
Trichlorofluoromethane	ND		5.8	0.55	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
Vinyl chloride	ND		5.8	0.70	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1
Xylenes, Total	ND		12	0.97	ug/Kg	☼	12/22/22 12:00	01/04/23 00:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*64 - 126*	*12/22/22 12:00*	*01/04/23 00:13*	*1*
4-Bromofluorobenzene (Surr)	*73*		*72 - 126*	*12/22/22 12:00*	*01/04/23 00:13*	*1*
Dibromofluoromethane (Surr)	*111*		*60 - 140*	*12/22/22 12:00*	*01/04/23 00:13*	*1*
Toluene-d8 (Surr)	*122*		*71 - 125*	*12/22/22 12:00*	*01/04/23 00:13*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		10000	5700	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
2,4,5-Trichlorophenol	ND		18000	4800	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
2,4,6-Trichlorophenol	ND		18000	3500	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
2,4-Dichlorophenol	ND		18000	1900	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
2,4-Dimethylphenol	ND		18000	4200	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
2,4-Dinitrophenol	ND		170000	81000	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
2,4-Dinitrotoluene	ND		18000	3600	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
2,6-Dinitrotoluene	ND		18000	2100	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
2-Chloronaphthalene	ND		18000	2900	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
2-Chlorophenol	ND		34000	3200	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
2-Methylnaphthalene	ND		18000	3500	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
2-Methylphenol	ND		18000	2100	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
2-Nitroaniline	ND		34000	2600	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
2-Nitrophenol	ND		18000	5000	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
3,3'-Dichlorobenzidine	ND		34000	21000	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
3-Nitroaniline	ND		34000	4900	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
4,6-Dinitro-2-methylphenol	ND		34000	18000	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
4-Bromophenyl phenyl ether	ND		18000	2500	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
4-Chloro-3-methylphenol	ND		18000	4300	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
4-Chloroaniline	ND		18000	4300	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
4-Chlorophenyl phenyl ether	ND		18000	2200	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
4-Methylphenol	ND		34000	2100	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
4-Nitroaniline	ND		34000	9200	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
4-Nitrophenol	ND		34000	12000	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Acenaphthene	ND		18000	2600	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Acenaphthylene	ND		18000	2300	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Acetophenone	ND		18000	2400	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Anthracene	ND		18000	4300	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Atrazine	ND		18000	6100	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Benzaldehyde	ND		18000	14000	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Benzo[a]anthracene	**3800**	**J**	18000	1800	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Benzo[a]pyrene	**4400**	**J**	18000	2600	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10

Client: Integral Consulting Inc
Job ID: 480-204989-1
Project/Site: Integral Consulting - EF1017 - Refractor

Client Sample ID: FDUP_122122
Lab Sample ID: 480-204989-7
Date Collected: 12/21/22 00:00
Matrix: Solid
Date Received: 12/22/22 11:00
Percent Solids: 95.4

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	**5400**	**J**	18000	2800	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Benzo[g,h,i]perylene	**3600**	**J**	18000	1900	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Benzo[k]fluoranthene	**2500**	**J**	18000	2300	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Biphenyl	ND		18000	2600	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
bis (2-chloroisopropyl) ether	ND		18000	3500	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Bis(2-chloroethoxy)methane	ND		18000	3700	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Bis(2-chloroethyl)ether	ND		18000	2300	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Bis(2-ethylhexyl) phthalate	ND		18000	6000	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Butyl benzyl phthalate	ND		18000	2900	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Caprolactam	ND		18000	5300	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Carbazole	ND		18000	2100	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Chrysene	**4900**	**J**	18000	3900	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Dibenz(a,h)anthracene	ND		18000	3100	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Dibenzofuran	ND		18000	2100	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Diethyl phthalate	ND		18000	2300	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Dimethyl phthalate	ND		18000	2100	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Di-n-butyl phthalate	ND		18000	3000	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Di-n-octyl phthalate	ND		18000	2100	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Fluoranthene	**8100**	**J**	18000	1900	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Fluorene	ND		18000	2100	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Hexachlorobenzene	ND		18000	2400	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Hexachlorobutadiene	ND		18000	2600	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Hexachlorocyclopentadiene	ND		18000	2400	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Hexachloroethane	ND		18000	2300	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Indeno[1,2,3-cd]pyrene	**3100**	**J**	18000	2200	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Isophorone	ND		18000	3700	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Naphthalene	ND		18000	2300	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Nitrobenzene	ND		18000	2000	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
N-Nitrosodi-n-propylamine	ND		18000	3000	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
N-Nitrosodiphenylamine	ND		18000	14000	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Pentachlorophenol	ND		34000	18000	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Phenanthrene	**3100**	**J**	18000	2600	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Phenol	ND		18000	2700	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10
Pyrene	**5900**	**J**	18000	2100	ug/Kg	☼	01/03/23 15:42	01/04/23 18:29	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*0*	*S1-*	*54 - 120*	*01/03/23 15:42*	*01/04/23 18:29*	*10*
2-Fluorobiphenyl (Surr)	*86*		*60 - 120*	*01/03/23 15:42*	*01/04/23 18:29*	*10*
2-Fluorophenol (Surr)	*0*	*S1-*	*52 - 120*	*01/03/23 15:42*	*01/04/23 18:29*	*10*
Nitrobenzene-d5 (Surr)	*0*	*S1-*	*53 - 120*	*01/03/23 15:42*	*01/04/23 18:29*	*10*
Phenol-d5 (Surr)	*0*	*S1-*	*54 - 120*	*01/03/23 15:42*	*01/04/23 18:29*	*10*
p-Terphenyl-d14 (Surr)	*104*		*79 - 130*	*01/03/23 15:42*	*01/04/23 18:29*	*10*

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.51	0.33	ug/Kg	☼	01/03/23 09:24	01/05/23 18:46	1
Perfluoropentanoic acid (PFPeA)	**0.060**	**J**	0.20	0.056	ug/Kg	☼	01/03/23 09:24	01/05/23 18:46	1
Perfluorohexanoic acid (PFHxA)	ND		0.20	0.046	ug/Kg	☼	01/03/23 09:24	01/05/23 18:46	1
Perfluoroheptanoic acid (PFHpA)	ND		0.20	0.039	ug/Kg	☼	01/03/23 09:24	01/05/23 18:46	1
Perfluorooctanoic acid (PFOA)	**0.076**	**J I**	0.20	0.059	ug/Kg	☼	01/03/23 09:24	01/05/23 18:46	1

Client Sample ID: FDUP_122122
Date Collected: 12/21/22 00:00
Date Received: 12/22/22 11:00

Lab Sample ID: 480-204989-7
Matrix: Solid
Percent Solids: 95.4

Method: EPA 537 IDA - EPA 537 Isotope Dilution (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorononanoic acid (PFNA)	**0.048**	**J**	0.20	0.034	ug/Kg	☼	01/03/23 09:24	01/05/23 18:46	1
Perfluorodecanoic acid (PFDA)	ND		0.20	0.028	ug/Kg	☼	01/03/23 09:24	01/05/23 18:46	1
Perfluoroundecanoic acid (PFUnA)	ND		0.20	0.027	ug/Kg	☼	01/03/23 09:24	01/05/23 18:46	1
Perfluorododecanoic acid (PFDoA)	ND		0.20	0.025	ug/Kg	☼	01/03/23 09:24	01/05/23 18:46	1
Perfluorotridecanoic acid (PFTriA)	ND		0.20	0.025	ug/Kg	☼	01/03/23 09:24	01/05/23 18:46	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.20	0.026	ug/Kg	☼	01/03/23 09:24	01/05/23 18:46	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.20	0.033	ug/Kg	☼	01/03/23 09:24	01/05/23 18:46	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.20	0.041	ug/Kg	☼	01/03/23 09:24	01/05/23 18:46	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.20	0.023	ug/Kg	☼	01/03/23 09:24	01/05/23 18:46	1
Perfluorooctanesulfonic acid (PFOS)	**0.24**		0.20	0.11	ug/Kg	☼	01/03/23 09:24	01/05/23 18:46	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.20	0.019	ug/Kg	☼	01/03/23 09:24	01/05/23 18:46	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.20	0.034	ug/Kg	☼	01/03/23 09:24	01/05/23 18:46	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.0	0.11	ug/Kg	☼	01/03/23 09:24	01/05/23 18:46	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.0	0.084	ug/Kg	☼	01/03/23 09:24	01/05/23 18:46	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.0	0.058	ug/Kg	☼	01/03/23 09:24	01/05/23 18:46	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.0	0.037	ug/Kg	☼	01/03/23 09:24	01/05/23 18:46	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*83*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:46*	*1*
13C4 PFHpA	*88*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:46*	*1*
13C4 PFOA	*92*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:46*	*1*
13C4 PFOS	*80*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:46*	*1*
13C5 PFNA	*93*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:46*	*1*
13C4 PFBA	*84*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:46*	*1*
13C2 PFHxA	*85*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:46*	*1*
13C2 PFDA	*101*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:46*	*1*
13C2 PFUnA	*101*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:46*	*1*
13C2 PFDoA	*95*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:46*	*1*
13C8 FOSA	*77*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:46*	*1*
13C5 PFPeA	*86*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:46*	*1*
13C2 PFTeDA	*106*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:46*	*1*
d3-NMeFOSAA	*89*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:46*	*1*
d5-NEtFOSAA	*92*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:46*	*1*
M2-6:2 FTS	*102*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:46*	*1*
M2-8:2 FTS	*106*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:46*	*1*
13C3 PFBS	*82*		*50 - 150*	*01/03/23 09:24*	*01/05/23 18:46*	*1*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8800**	**B**	10.3	4.5	mg/Kg	☼	12/28/22 14:47	12/29/22 14:20	1
Antimony	ND		15.4	0.41	mg/Kg	☼	12/28/22 14:47	12/29/22 14:20	1
Arsenic	**10.0**		2.1	0.41	mg/Kg	☼	12/28/22 14:47	12/29/22 14:20	1
Barium	**94.5**		0.51	0.11	mg/Kg	☼	12/28/22 14:47	12/29/22 14:20	1
Beryllium	**0.44**		0.21	0.029	mg/Kg	☼	12/28/22 14:47	12/29/22 14:20	1
Cadmium	**0.27**		0.21	0.031	mg/Kg	☼	12/28/22 14:47	12/29/22 14:20	1
Calcium	**1920**	**B**	51.5	3.4	mg/Kg	☼	12/28/22 14:47	12/29/22 14:20	1

Client: Integral Consulting Inc
Project/Site: Integral Consulting - EF1017 - Refractor

Job ID: 480-204989-1

Client Sample ID: FDUP_122122
Date Collected: 12/21/22 00:00
Date Received: 12/22/22 11:00

Lab Sample ID: 480-204989-7
Matrix: Solid
Percent Solids: 95.4

Method: SW846 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	18.5		0.51	0.21	mg/Kg	☼	12/28/22 14:47	12/29/22 14:20	1
Cobalt	7.3		0.51	0.051	mg/Kg	☼	12/28/22 14:47	12/29/22 14:20	1
Copper	23.9		1.0	0.22	mg/Kg	☼	12/28/22 14:47	12/29/22 14:20	1
Iron	26400	B ^+	10.3	3.6	mg/Kg	☼	12/28/22 14:47	12/29/22 14:20	1
Lead	1010		1.0	0.25	mg/Kg	☼	12/28/22 14:47	12/29/22 14:20	1
Magnesium	2770	B	20.6	0.95	mg/Kg	☼	12/28/22 14:47	12/29/22 14:20	1
Manganese	367	B	0.21	0.033	mg/Kg	☼	12/28/22 14:47	12/29/22 14:20	1
Nickel	20.6		5.1	0.24	mg/Kg	☼	12/28/22 14:47	12/29/22 14:20	1
Potassium	1260		30.9	20.6	mg/Kg	☼	12/28/22 14:47	12/29/22 14:20	1
Selenium	0.88	J	4.1	0.41	mg/Kg	☼	12/28/22 14:47	12/29/22 14:20	1
Silver	1.1		0.62	0.21	mg/Kg	☼	12/28/22 14:47	12/29/22 14:20	1
Sodium	68.9	J	144	13.4	mg/Kg	☼	12/28/22 14:47	12/29/22 14:20	1
Thallium	ND		6.2	0.31	mg/Kg	☼	12/28/22 14:47	12/29/22 14:20	1
Vanadium	19.1		0.51	0.11	mg/Kg	☼	12/28/22 14:47	12/29/22 14:20	1
Zinc	98.4		2.1	0.66	mg/Kg	☼	12/28/22 14:47	12/29/22 14:20	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.061		0.021	0.0047	mg/Kg	☼	12/29/22 10:27	12/29/22 13:51	1

Surrogate Summary

Client: Integral Consulting Inc
Project/Site: Integral Consulting - EF1017 - Refractor

Job ID: 480-204989-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(64-126)	(72-126)	(60-140)	(71-125)
480-204989-3	SB2 (0-0.5)	106	83	103	105
480-204989-4	SB2 (0.5-1)	106	93	102	95
480-204989-5	SB2 (1-2)	106	80	99	104
480-204989-5 MS	SB2 (1-2)	95	84	100	103
480-204989-5 MSD	SB2 (1-2)	94	80	100	108
480-204989-6	SB2 (20.4-22.4)	107	95	103	96
480-204989-7	FDUP_122122	117	73	111	122
LCS 480-654699/1-A	Lab Control Sample	100	93	97	96
MB 480-654699/2-A	Method Blank	103	95	101	94

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-204989-1	FB_122122	106	93	100	90
480-204989-2	TB_122122	107	94	100	92
LCS 480-654333/5	Lab Control Sample	113	96	98	91
LCSD 480-654333/6	Lab Control Sample Dup	111	98	98	91
MB 480-654333/8	Method Blank	105	96	97	91

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(54-120)	(60-120)	(52-120)	(53-120)	(54-120)	(79-130)
480-204989-3	SB2 (0-0.5)	78	80	68	69	69	99
480-204989-4	SB2 (0.5-1)	77	84	72	70	71	97
480-204989-5	SB2 (1-2)	0 S1-	74	0 S1-	0 S1-	0 S1-	94
480-204989-5 MS	SB2 (1-2)	0 S1-	83	0 S1-	86	81	109
480-204989-5 MSD	SB2 (1-2)	0 S1-	63	74	74	62	81
480-204989-6	SB2 (20.4-22.4)	92	97	83	92	87	130
480-204989-7	FDUP_122122	0 S1-	86	0 S1-	0 S1-	0 S1-	104
LCS 480-654928/2-A	Lab Control Sample	111	90	71	79	73	117
MB 480-654928/1-A	Method Blank	68	78	70	72	72	111

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)

Surrogate Summary

Client: Integral Consulting Inc
Job ID: 480-204989-1
Project/Site: Integral Consulting - EF1017 - Refractor

FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(41-120)	(48-120)	(35-120)	(46-120)	(22-120)	(60-148)
480-204989-1	FB_122122	80	121 S1+	65	97	39	108
LCS 480-654335/2-A	Lab Control Sample	101	108	68	90	55	108
LCSD 480-654335/3-A	Lab Control Sample Dup	108	123 S1+	76	92	59	103
MB 480-654335/1-A	Method Blank	72	119	63	99	42	114

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Isotope Dilution Summary

Client: Integral Consulting Inc
Job ID: 480-204989-1
Project/Site: Integral Consulting - EF1017 - Refractor

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	DXE (15-110)
480-204989-1	FB_122122	31
LCS 480-654366/2-A	Lab Control Sample	38
LCSD 480-654366/3-A	Lab Control Sample Dup	35
MB 480-654366/1-A	Method Blank	39

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 537 IDA - EPA 537 Isotope Dilution

Matrix: Solid **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFHxS (50-150)	C4PFHA (50-150)	PFOA (50-150)	PFOS (50-150)	PFNA (50-150)	PFBA (50-150)	PFHxA (50-150)	PFDA (50-150)
480-204989-5	SB2 (1-2)	84	93	94	83	96	85	89	97
480-204989-5 MS	SB2 (1-2)	83	90	93	81	95	85	91	101
480-204989-5 MSD	SB2 (1-2)	86	90	95	84	100	84	91	100
480-204989-7	FDUP_122122	83	88	92	80	93	84	85	101
LCS 200-187189/2-A	Lab Control Sample	86	88	87	86	92	80	84	96
MB 200-187189/1-A	Method Blank	83	86	85	78	88	74	81	92

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFUnA (50-150)	PFDoA (50-150)	PFOSA (50-150)	PFPeA (50-150)	PFTDA (50-150)	d3NMFOS (50-150)	d5NEFOS (50-150)	M262FTS (50-150)
480-204989-5	SB2 (1-2)	100	97	75	86	109	88	92	95
480-204989-5 MS	SB2 (1-2)	103	100	78	84	109	87	91	100
480-204989-5 MSD	SB2 (1-2)	95	99	77	86	104	86	90	103
480-204989-7	FDUP_122122	101	95	77	86	106	89	92	102
LCS 200-187189/2-A	Lab Control Sample	91	78	85	79	75	89	82	99
MB 200-187189/1-A	Method Blank	90	82	76	75	74	81	81	94

		Percent Isotope Dilution Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	M282FTS (50-150)	C3PFBS (50-150)
480-204989-5	SB2 (1-2)	92	82
480-204989-5 MS	SB2 (1-2)	99	81
480-204989-5 MSD	SB2 (1-2)	97	83
480-204989-7	FDUP_122122	106	82
LCS 200-187189/2-A	Lab Control Sample	96	82
MB 200-187189/1-A	Method Blank	87	79

Surrogate Legend

PFHxS = 18O2 PFHxS
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFOS = 13C4 PFOS
PFNA = 13C5 PFNA
PFBA = 13C4 PFBA
PFHxA = 13C2 PFHxA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA

Isotope Dilution Summary

Client: Integral Consulting Inc
Job ID: 480-204989-1
Project/Site: Integral Consulting - EF1017 - Refractor

PFOSA = 13C8 FOSA
PFPeA = 13C5 PFPeA
PFTDA = 13C2 PFTeDA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
C3PFBS = 13C3 PFBS

Method: 537 IDA - EPA 537 Isotope Dilution

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFHxS	C4PFHA	PFOA	PFOS	PFNA	PFBA	PFHxA	PFDA
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)
480-204989-1	FB_122122	93	93	94	96	100	84	93	104
LCS 200-187194/2-A	Lab Control Sample	94	96	96	95	98	89	91	105
LCSD 200-187194/3-A	Lab Control Sample Dup	93	89	96	98	99	87	92	101
MB 200-187194/1-A	Method Blank	91	94	93	94	98	88	89	99

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		PFUnA	PFDoA	PFOSA	PFPeA	PFTDA	d3NMFOS	d5NEFOS	M262FTS
Lab Sample ID	Client Sample ID	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)	(50-150)
480-204989-1	FB_122122	90	86	66	84	94	83	81	108
LCS 200-187194/2-A	Lab Control Sample	89	64	64	85	67	82	73	107
LCSD 200-187194/3-A	Lab Control Sample Dup	90	77	68	83	73	88	79	108
MB 200-187194/1-A	Method Blank	75	60	58	82	62	75	64	110

		Percent Isotope Dilution Recovery (Acceptance Limits)							
		M282FTS	C3PFBS						
Lab Sample ID	Client Sample ID	(50-150)	(50-150)						
480-204989-1	FB_122122	102	90						
LCS 200-187194/2-A	Lab Control Sample	98	90						
LCSD 200-187194/3-A	Lab Control Sample Dup	103	91						
MB 200-187194/1-A	Method Blank	97	86						

Surrogate Legend

PFHxS = 18O2 PFHxS
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFOS = 13C4 PFOS
PFNA = 13C5 PFNA
PFBA = 13C4 PFBA
PFHxA = 13C2 PFHxA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFOSA = 13C8 FOSA
PFPeA = 13C5 PFPeA
PFTDA = 13C2 PFTeDA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
C3PFBS = 13C3 PFBS

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-654333/8
Matrix: Water
Analysis Batch: 654333

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			12/22/22 13:01	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			12/22/22 13:01	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			12/22/22 13:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			12/22/22 13:01	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			12/22/22 13:01	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			12/22/22 13:01	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			12/22/22 13:01	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			12/22/22 13:01	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			12/22/22 13:01	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			12/22/22 13:01	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			12/22/22 13:01	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			12/22/22 13:01	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			12/22/22 13:01	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			12/22/22 13:01	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			12/22/22 13:01	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			12/22/22 13:01	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			12/22/22 13:01	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			12/22/22 13:01	1
2-Butanone (MEK)	ND		10	1.3	ug/L			12/22/22 13:01	1
2-Hexanone	ND		5.0	1.2	ug/L			12/22/22 13:01	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			12/22/22 13:01	1
Acetone	ND		10	3.0	ug/L			12/22/22 13:01	1
Benzene	ND		1.0	0.41	ug/L			12/22/22 13:01	1
Bromodichloromethane	ND		1.0	0.39	ug/L			12/22/22 13:01	1
Bromoform	ND		1.0	0.26	ug/L			12/22/22 13:01	1
Bromomethane	ND		1.0	0.69	ug/L			12/22/22 13:01	1
Carbon disulfide	ND		1.0	0.19	ug/L			12/22/22 13:01	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			12/22/22 13:01	1
Chlorobenzene	ND		1.0	0.75	ug/L			12/22/22 13:01	1
Chloroethane	ND		1.0	0.32	ug/L			12/22/22 13:01	1
Chloroform	ND		1.0	0.34	ug/L			12/22/22 13:01	1
Chloromethane	ND		1.0	0.35	ug/L			12/22/22 13:01	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			12/22/22 13:01	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			12/22/22 13:01	1
Cyclohexane	ND		1.0	0.18	ug/L			12/22/22 13:01	1
Dibromochloromethane	ND		1.0	0.32	ug/L			12/22/22 13:01	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			12/22/22 13:01	1
Ethylbenzene	ND		1.0	0.74	ug/L			12/22/22 13:01	1
Isopropylbenzene	ND		1.0	0.79	ug/L			12/22/22 13:01	1
m,p-Xylene	ND		2.0	0.66	ug/L			12/22/22 13:01	1
Methyl acetate	ND		2.5	1.3	ug/L			12/22/22 13:01	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			12/22/22 13:01	1
Methylcyclohexane	ND		1.0	0.16	ug/L			12/22/22 13:01	1
Methylene Chloride	ND		1.0	0.44	ug/L			12/22/22 13:01	1
n-Butylbenzene	ND		1.0	0.64	ug/L			12/22/22 13:01	1
N-Propylbenzene	ND		1.0	0.69	ug/L			12/22/22 13:01	1
o-Xylene	ND		1.0	0.76	ug/L			12/22/22 13:01	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			12/22/22 13:01	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-654333/8
Matrix: Water
Analysis Batch: 654333

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0	0.73	ug/L			12/22/22 13:01	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			12/22/22 13:01	1
Tetrachloroethene	ND		1.0	0.36	ug/L			12/22/22 13:01	1
Toluene	ND		1.0	0.51	ug/L			12/22/22 13:01	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			12/22/22 13:01	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			12/22/22 13:01	1
Trichloroethene	ND		1.0	0.46	ug/L			12/22/22 13:01	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			12/22/22 13:01	1
Vinyl chloride	ND		1.0	0.90	ug/L			12/22/22 13:01	1
Xylenes, Total	ND		2.0	0.66	ug/L			12/22/22 13:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*12/22/22 13:01*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*12/22/22 13:01*	*1*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*12/22/22 13:01*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*12/22/22 13:01*	*1*

Lab Sample ID: LCS 480-654333/5
Matrix: Water
Analysis Batch: 654333

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	25.0	24.1		ug/L		97	80 - 120
1,1,1-Trichloroethane	25.0	26.6		ug/L		106	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.9		ug/L		100	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	27.0		ug/L		108	61 - 148
1,1,2-Trichloroethane	25.0	23.8		ug/L		95	76 - 122
1,1-Dichloroethane	25.0	25.7		ug/L		103	77 - 120
1,1-Dichloroethene	25.0	23.9		ug/L		95	66 - 127
1,2,4-Trichlorobenzene	25.0	26.0		ug/L		104	79 - 122
1,2,4-Trimethylbenzene	25.0	25.0		ug/L		100	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	28.7		ug/L		115	56 - 134
1,2-Dibromoethane	25.0	24.0		ug/L		96	77 - 120
1,2-Dichlorobenzene	25.0	23.8		ug/L		95	80 - 124
1,2-Dichloroethane	25.0	26.1		ug/L		105	75 - 120
1,2-Dichloropropane	25.0	24.6		ug/L		99	76 - 120
1,3,5-Trimethylbenzene	25.0	24.8		ug/L		99	77 - 121
1,3-Dichlorobenzene	25.0	23.7		ug/L		95	77 - 120
1,4-Dichlorobenzene	25.0	23.3		ug/L		93	80 - 120
2-Butanone (MEK)	125	261	*+	ug/L		209	57 - 140
2-Hexanone	125	150		ug/L		120	65 - 127
4-Methyl-2-pentanone (MIBK)	125	147		ug/L		118	71 - 125
Acetone	125	144		ug/L		115	56 - 142
Benzene	25.0	23.7		ug/L		95	71 - 124
Bromodichloromethane	25.0	26.5		ug/L		106	80 - 122
Bromoform	25.0	29.9		ug/L		120	61 - 132
Bromomethane	25.0	25.7		ug/L		103	55 - 144
Carbon disulfide	25.0	26.3		ug/L		105	59 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-654333/5
Matrix: Water
Analysis Batch: 654333

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon tetrachloride	25.0	27.7		ug/L		111	72 - 134
Chlorobenzene	25.0	22.8		ug/L		91	80 - 120
Chloroethane	25.0	24.2		ug/L		97	69 - 136
Chloroform	25.0	24.6		ug/L		98	73 - 127
Chloromethane	25.0	28.8		ug/L		115	68 - 124
cis-1,2-Dichloroethene	25.0	24.0		ug/L		96	74 - 124
cis-1,3-Dichloropropene	25.0	26.3		ug/L		105	74 - 124
Cyclohexane	25.0	27.2		ug/L		109	59 - 135
Dibromochloromethane	25.0	26.4		ug/L		106	75 - 125
Dichlorodifluoromethane	25.0	32.2		ug/L		129	59 - 135
Ethylbenzene	25.0	23.8		ug/L		95	77 - 123
Isopropylbenzene	25.0	23.7		ug/L		95	77 - 122
m,p-Xylene	25.0	23.4		ug/L		94	76 - 122
Methyl acetate	50.0	64.9		ug/L		130	74 - 133
Methyl tert-butyl ether	25.0	25.2		ug/L		101	77 - 120
Methylcyclohexane	25.0	25.5		ug/L		102	68 - 134
Methylene Chloride	25.0	25.4		ug/L		102	75 - 124
n-Butylbenzene	25.0	25.7		ug/L		103	71 - 128
N-Propylbenzene	25.0	24.6		ug/L		98	75 - 127
o-Xylene	25.0	23.6		ug/L		94	76 - 122
sec-Butylbenzene	25.0	24.9		ug/L		100	74 - 127
Styrene	25.0	23.2		ug/L		93	80 - 120
tert-Butylbenzene	25.0	24.2		ug/L		97	75 - 123
Tetrachloroethene	25.0	25.2		ug/L		101	74 - 122
Toluene	25.0	23.1		ug/L		92	80 - 122
trans-1,2-Dichloroethene	25.0	24.4		ug/L		98	73 - 127
trans-1,3-Dichloropropene	25.0	25.7		ug/L		103	80 - 120
Trichloroethene	25.0	24.2		ug/L		97	74 - 123
Trichlorofluoromethane	25.0	30.6		ug/L		122	62 - 150
Vinyl chloride	25.0	26.5		ug/L		106	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*113*		*77 - 120*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*
Dibromofluoromethane (Surr)	*98*		*75 - 123*
Toluene-d8 (Surr)	*91*		*80 - 120*

Lab Sample ID: LCSD 480-654333/6
Matrix: Water
Analysis Batch: 654333

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	25.0	23.5		ug/L		94	80 - 120	3	20
1,1,1-Trichloroethane	25.0	25.1		ug/L		101	73 - 126	6	15
1,1,2,2-Tetrachloroethane	25.0	24.9		ug/L		100	76 - 120	0	15
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	25.8		ug/L		103	61 - 148	5	20
1,1,2-Trichloroethane	25.0	24.1		ug/L		96	76 - 122	1	15
1,1-Dichloroethane	25.0	24.8		ug/L		99	77 - 120	4	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 480-654333/6
Matrix: Water
Analysis Batch: 654333

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1-Dichloroethene	25.0	23.0		ug/L		92	66 - 127	4	16
1,2,4-Trichlorobenzene	25.0	25.8		ug/L		103	79 - 122	1	20
1,2,4-Trimethylbenzene	25.0	24.3		ug/L		97	76 - 121	3	20
1,2-Dibromo-3-Chloropropane	25.0	29.0		ug/L		116	56 - 134	1	15
1,2-Dibromoethane	25.0	24.0		ug/L		96	77 - 120	0	15
1,2-Dichlorobenzene	25.0	23.4		ug/L		93	80 - 124	2	20
1,2-Dichloroethane	25.0	25.5		ug/L		102	75 - 120	2	20
1,2-Dichloropropane	25.0	23.9		ug/L		96	76 - 120	3	20
1,3,5-Trimethylbenzene	25.0	23.8		ug/L		95	77 - 121	4	20
1,3-Dichlorobenzene	25.0	22.6		ug/L		91	77 - 120	5	20
1,4-Dichlorobenzene	25.0	22.9		ug/L		92	80 - 120	2	20
2-Butanone (MEK)	125	259	*+	ug/L		207	57 - 140	1	20
2-Hexanone	125	150		ug/L		120	65 - 127	0	15
4-Methyl-2-pentanone (MIBK)	125	148		ug/L		118	71 - 125	1	35
Acetone	125	144		ug/L		115	56 - 142	0	15
Benzene	25.0	22.6		ug/L		91	71 - 124	5	13
Bromodichloromethane	25.0	26.0		ug/L		104	80 - 122	2	15
Bromoform	25.0	30.1		ug/L		120	61 - 132	1	15
Bromomethane	25.0	24.2		ug/L		97	55 - 144	6	15
Carbon disulfide	25.0	25.2		ug/L		101	59 - 134	4	15
Carbon tetrachloride	25.0	26.4		ug/L		106	72 - 134	5	15
Chlorobenzene	25.0	22.1		ug/L		88	80 - 120	3	25
Chloroethane	25.0	23.3		ug/L		93	69 - 136	4	15
Chloroform	25.0	23.8		ug/L		95	73 - 127	4	20
Chloromethane	25.0	26.6		ug/L		107	68 - 124	8	15
cis-1,2-Dichloroethene	25.0	23.7		ug/L		95	74 - 124	1	15
cis-1,3-Dichloropropene	25.0	25.4		ug/L		101	74 - 124	4	15
Cyclohexane	25.0	26.1		ug/L		105	59 - 135	4	20
Dibromochloromethane	25.0	26.5		ug/L		106	75 - 125	0	15
Dichlorodifluoromethane	25.0	29.9		ug/L		120	59 - 135	7	20
Ethylbenzene	25.0	23.0		ug/L		92	77 - 123	3	15
Isopropylbenzene	25.0	22.8		ug/L		91	77 - 122	4	20
m,p-Xylene	25.0	22.4		ug/L		89	76 - 122	5	16
Methyl acetate	50.0	61.8		ug/L		124	74 - 133	5	20
Methyl tert-butyl ether	25.0	25.2		ug/L		101	77 - 120	0	37
Methylcyclohexane	25.0	24.1		ug/L		97	68 - 134	5	20
Methylene Chloride	25.0	24.5		ug/L		98	75 - 124	4	15
n-Butylbenzene	25.0	24.8		ug/L		99	71 - 128	4	15
N-Propylbenzene	25.0	23.7		ug/L		95	75 - 127	4	15
o-Xylene	25.0	23.3		ug/L		93	76 - 122	1	16
sec-Butylbenzene	25.0	23.8		ug/L		95	74 - 127	5	15
Styrene	25.0	22.9		ug/L		92	80 - 120	2	20
tert-Butylbenzene	25.0	23.1		ug/L		92	75 - 123	5	15
Tetrachloroethene	25.0	24.6		ug/L		98	74 - 122	2	20
Toluene	25.0	22.2		ug/L		89	80 - 122	4	15
trans-1,2-Dichloroethene	25.0	23.2		ug/L		93	73 - 127	5	20
trans-1,3-Dichloropropene	25.0	25.4		ug/L		101	80 - 120	2	15
Trichloroethene	25.0	23.8		ug/L		95	74 - 123	2	16
Trichlorofluoromethane	25.0	29.3		ug/L		117	62 - 150	4	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 480-654333/6
Matrix: Water
Analysis Batch: 654333

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Vinyl chloride			25.0	24.9		ug/L		100	65 - 133	6	15

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*111*		*77 - 120*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*
Dibromofluoromethane (Surr)	*98*		*75 - 123*
Toluene-d8 (Surr)	*91*		*80 - 120*

Lab Sample ID: MB 480-654699/2-A
Matrix: Solid
Analysis Batch: 654942

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 654699

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.50	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
1,2,3-Trimethylbenzene	ND		5.0	1.0	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
2-Hexanone	ND		25	2.5	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
Acetone	ND		25	4.2	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
Benzene	ND		5.0	0.25	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
Bromoform	ND		5.0	2.5	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
Bromomethane	ND		5.0	0.45	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
Chloroethane	ND		5.0	1.1	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
Chloroform	0.535	J	5.0	0.31	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
Chloromethane	ND		5.0	0.30	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
Cyclohexane	ND		5.0	0.70	ug/Kg		12/29/22 12:26	01/03/23 21:23	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-654699/2-A
Matrix: Solid
Analysis Batch: 654942

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 654699

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	ND		5.0	0.64	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
m,p-Xylene	ND		10	0.84	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
Methyl acetate	ND		25	3.0	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
o-Xylene	ND		5.0	0.65	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
Styrene	ND		5.0	0.25	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
Tetrachloroethene	1.82	J	5.0	0.67	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
Toluene	ND		5.0	0.38	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
Trichloroethene	ND		5.0	1.1	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		12/29/22 12:26	01/03/23 21:23	1
Xylenes, Total	ND		10	0.84	ug/Kg		12/29/22 12:26	01/03/23 21:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*64 - 126*	*12/29/22 12:26*	*01/03/23 21:23*	*1*
4-Bromofluorobenzene (Surr)	*95*		*72 - 126*	*12/29/22 12:26*	*01/03/23 21:23*	*1*
Dibromofluoromethane (Surr)	*101*		*60 - 140*	*12/29/22 12:26*	*01/03/23 21:23*	*1*
Toluene-d8 (Surr)	*94*		*71 - 125*	*12/29/22 12:26*	*01/03/23 21:23*	*1*

Lab Sample ID: LCS 480-654699/1-A
Matrix: Solid
Analysis Batch: 654942

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654699

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	41.5		ug/Kg		83	74 - 127
1,1,1-Trichloroethane	50.0	49.1		ug/Kg		98	77 - 121
1,1,2,2-Tetrachloroethane	50.0	50.7		ug/Kg		101	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	51.0		ug/Kg		102	60 - 140
1,1,2-Trichloroethane	50.0	47.7		ug/Kg		95	78 - 122
1,1-Dichloroethane	50.0	53.1		ug/Kg		106	73 - 126
1,1-Dichloroethene	50.0	49.2		ug/Kg		98	59 - 125
1,2,4-Trichlorobenzene	50.0	46.8		ug/Kg		94	64 - 120
1,2,4-Trimethylbenzene	50.0	51.9		ug/Kg		104	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	44.3		ug/Kg		89	63 - 124
1,2-Dibromoethane	50.0	47.4		ug/Kg		95	78 - 120
1,2-Dichlorobenzene	50.0	49.1		ug/Kg		98	75 - 120
1,2-Dichloroethane	50.0	51.8		ug/Kg		104	77 - 122

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-654699/1-A
Matrix: Solid
Analysis Batch: 654942

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654699

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,2-Dichloropropane	50.0	52.7		ug/Kg		105	75 - 124
1,3,5-Trimethylbenzene	50.0	52.5		ug/Kg		105	74 - 120
1,3-Dichlorobenzene	50.0	49.9		ug/Kg		100	74 - 120
1,4-Dichlorobenzene	50.0	48.8		ug/Kg		98	73 - 120
2-Butanone (MEK)	250	261		ug/Kg		104	70 - 134
2-Hexanone	250	260		ug/Kg		104	59 - 130
4-Methyl-2-pentanone (MIBK)	250	261		ug/Kg		104	65 - 133
Acetone	250	221		ug/Kg		88	61 - 137
Benzene	50.0	52.5		ug/Kg		105	79 - 127
Bromodichloromethane	50.0	50.4		ug/Kg		101	80 - 122
Bromoform	50.0	38.6		ug/Kg		77	68 - 126
Bromomethane	50.0	52.1		ug/Kg		104	37 - 149
Carbon disulfide	50.0	50.0		ug/Kg		100	64 - 131
Carbon tetrachloride	50.0	44.1		ug/Kg		88	75 - 135
Chlorobenzene	50.0	49.0		ug/Kg		98	76 - 124
Chloroethane	50.0	56.8		ug/Kg		114	69 - 135
Chloroform	50.0	48.5		ug/Kg		97	80 - 120
Chloromethane	50.0	47.2		ug/Kg		94	63 - 127
cis-1,2-Dichloroethene	50.0	49.5		ug/Kg		99	81 - 120
cis-1,3-Dichloropropene	50.0	51.2		ug/Kg		102	80 - 120
Cyclohexane	50.0	55.4		ug/Kg		111	65 - 120
Dibromochloromethane	50.0	43.6		ug/Kg		87	76 - 125
Dichlorodifluoromethane	50.0	44.3		ug/Kg		89	57 - 142
Ethylbenzene	50.0	50.3		ug/Kg		101	80 - 120
Isopropylbenzene	50.0	53.3		ug/Kg		107	72 - 120
m,p-Xylene	50.0	49.1		ug/Kg		98	70 - 130
Methyl acetate	100	101		ug/Kg		101	55 - 136
Methyl tert-butyl ether	50.0	48.7		ug/Kg		97	63 - 125
Methylcyclohexane	50.0	52.5		ug/Kg		105	60 - 140
Methylene Chloride	50.0	52.2		ug/Kg		104	61 - 127
n-Butylbenzene	50.0	54.7		ug/Kg		109	70 - 120
N-Propylbenzene	50.0	54.3		ug/Kg		109	70 - 130
o-Xylene	50.0	48.2		ug/Kg		96	70 - 130
sec-Butylbenzene	50.0	54.2		ug/Kg		108	74 - 120
Styrene	50.0	48.3		ug/Kg		97	80 - 120
tert-Butylbenzene	50.0	53.6		ug/Kg		107	73 - 120
Tetrachloroethene	50.0	50.2		ug/Kg		100	74 - 122
Toluene	50.0	50.1		ug/Kg		100	74 - 128
trans-1,2-Dichloroethene	50.0	49.7		ug/Kg		99	78 - 126
trans-1,3-Dichloropropene	50.0	47.5		ug/Kg		95	73 - 123
Trichloroethene	50.0	52.6		ug/Kg		105	77 - 129
Trichlorofluoromethane	50.0	53.5		ug/Kg		107	65 - 146
Vinyl chloride	50.0	59.0		ug/Kg		118	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*64 - 126*
4-Bromofluorobenzene (Surr)	*93*		*72 - 126*
Dibromofluoromethane (Surr)	*97*		*60 - 140*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-654699/1-A
Matrix: Solid
Analysis Batch: 654942

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654699

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	96		71 - 125

Lab Sample ID: 480-204989-5 MS
Matrix: Solid
Analysis Batch: 654942

Client Sample ID: SB2 (1-2)
Prep Type: Total/NA
Prep Batch: 654699

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	ND		38.8	32.6		ug/Kg	☼	84	74 - 127
1,1,1-Trichloroethane	ND		38.8	40.9		ug/Kg	☼	105	77 - 121
1,1,2,2-Tetrachloroethane	ND		38.8	39.5		ug/Kg	☼	102	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		38.8	41.3		ug/Kg	☼	106	60 - 140
1,1,2-Trichloroethane	ND		38.8	35.2		ug/Kg	☼	91	78 - 122
1,1-Dichloroethane	ND		38.8	45.4		ug/Kg	☼	117	73 - 126
1,1-Dichloroethene	ND		38.8	40.6		ug/Kg	☼	105	59 - 125
1,2,4-Trichlorobenzene	ND	F1	38.8	18.8	F1	ug/Kg	☼	48	64 - 120
1,2,4-Trimethylbenzene	ND		38.8	45.2		ug/Kg	☼	117	74 - 120
1,2-Dibromo-3-Chloropropane	ND		38.8	26.1		ug/Kg	☼	67	63 - 124
1,2-Dibromoethane	ND		38.8	30.6		ug/Kg	☼	79	78 - 120
1,2-Dichlorobenzene	ND	F1	38.8	34.3		ug/Kg	☼	88	75 - 120
1,2-Dichloroethane	ND		38.8	38.5		ug/Kg	☼	99	77 - 122
1,2-Dichloropropane	ND		38.8	42.0		ug/Kg	☼	108	75 - 124
1,3,5-Trimethylbenzene	ND	F1	38.8	46.8	F1	ug/Kg	☼	121	74 - 120
1,3-Dichlorobenzene	ND		38.8	35.6		ug/Kg	☼	92	74 - 120
1,4-Dichlorobenzene	ND	F1	38.8	33.0		ug/Kg	☼	85	73 - 120
2-Butanone (MEK)	ND		194	143		ug/Kg	☼	74	70 - 134
2-Hexanone	ND		194	145		ug/Kg	☼	75	59 - 130
4-Methyl-2-pentanone (MIBK)	ND		194	163		ug/Kg	☼	84	65 - 133
Acetone	ND		194	127		ug/Kg	☼	65	61 - 137
Benzene	ND		38.8	42.6		ug/Kg	☼	110	79 - 127
Bromodichloromethane	ND		38.8	36.6		ug/Kg	☼	94	80 - 122
Bromoform	ND	F1	38.8	21.6	F1	ug/Kg	☼	56	68 - 126
Bromomethane	ND		38.8	46.9		ug/Kg	☼	121	37 - 149
Carbon disulfide	ND		38.8	37.4		ug/Kg	☼	96	64 - 131
Carbon tetrachloride	ND		38.8	34.3		ug/Kg	☼	88	75 - 135
Chlorobenzene	ND		38.8	35.9		ug/Kg	☼	93	76 - 124
Chloroethane	ND		38.8	48.1		ug/Kg	☼	124	69 - 135
Chloroform	0.37	J B	38.8	40.8		ug/Kg	☼	104	80 - 120
Chloromethane	ND		38.8	39.2		ug/Kg	☼	101	63 - 127
cis-1,2-Dichloroethene	ND		38.8	40.7		ug/Kg	☼	105	80 - 120
cis-1,3-Dichloropropene	ND		38.8	33.9		ug/Kg	☼	87	80 - 120
Cyclohexane	ND		38.8	42.0		ug/Kg	☼	108	65 - 120
Dibromochloromethane	ND	F1	38.8	29.7		ug/Kg	☼	77	76 - 125
Dichlorodifluoromethane	ND		38.8	37.2		ug/Kg	☼	96	57 - 142
Ethylbenzene	ND		38.8	39.7		ug/Kg	☼	102	80 - 120
Isopropylbenzene	ND	F1	38.8	51.3	F1	ug/Kg	☼	132	72 - 120
m,p-Xylene	ND		38.8	37.3		ug/Kg	☼	96	70 - 130
Methyl acetate	ND		77.6	76.7		ug/Kg	☼	99	55 - 136
Methyl tert-butyl ether	ND		38.8	36.3		ug/Kg	☼	94	63 - 125

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-204989-5 MS
Matrix: Solid
Analysis Batch: 654942

Client Sample ID: SB2 (1-2)
Prep Type: Total/NA
Prep Batch: 654699

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Methylcyclohexane	ND	F1 F2	38.8	34.6		ug/Kg	☼	89	60 - 140
Methylene Chloride	ND		38.8	43.2		ug/Kg	☼	111	61 - 127
n-Butylbenzene	ND	F1	38.8	35.7		ug/Kg	☼	92	70 - 120
N-Propylbenzene	ND		38.8	47.2		ug/Kg	☼	122	70 - 130
o-Xylene	ND		38.8	37.7		ug/Kg	☼	97	70 - 130
sec-Butylbenzene	ND		38.8	43.4		ug/Kg	☼	112	74 - 120
Styrene	ND	F1	38.8	32.5		ug/Kg	☼	84	80 - 120
tert-Butylbenzene	ND	F1	38.8	46.9	F1	ug/Kg	☼	121	73 - 120
Tetrachloroethene	1.7	J B	38.8	38.2		ug/Kg	☼	94	74 - 122
Toluene	ND		38.8	40.9		ug/Kg	☼	105	74 - 128
trans-1,2-Dichloroethene	ND		38.8	39.6		ug/Kg	☼	102	78 - 126
trans-1,3-Dichloropropene	ND		38.8	30.2		ug/Kg	☼	78	73 - 123
Trichloroethene	ND		38.8	40.1		ug/Kg	☼	103	77 - 129
Trichlorofluoromethane	ND		38.8	44.7		ug/Kg	☼	115	65 - 146
Vinyl chloride	ND		38.8	48.5		ug/Kg	☼	125	61 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*64 - 126*
4-Bromofluorobenzene (Surr)	*84*		*72 - 126*
Dibromofluoromethane (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*103*		*71 - 125*

Lab Sample ID: 480-204989-5 MSD
Matrix: Solid
Analysis Batch: 654942

Client Sample ID: SB2 (1-2)
Prep Type: Total/NA
Prep Batch: 654699

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		46.2	35.9		ug/Kg	☼	78	74 - 127	10	30
1,1,1-Trichloroethane	ND		46.2	41.6		ug/Kg	☼	90	77 - 121	2	30
1,1,2,2-Tetrachloroethane	ND		46.2	50.6		ug/Kg	☼	110	80 - 120	25	30
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		46.2	39.2		ug/Kg	☼	85	60 - 140	5	30
1,1,2-Trichloroethane	ND		46.2	41.6		ug/Kg	☼	90	78 - 122	17	30
1,1-Dichloroethane	ND		46.2	48.1		ug/Kg	☼	104	73 - 126	6	30
1,1-Dichloroethene	ND		46.2	41.3		ug/Kg	☼	89	59 - 125	2	30
1,2,4-Trichlorobenzene	ND	F1	46.2	14.4	F1	ug/Kg	☼	31	64 - 120	26	30
1,2,4-Trimethylbenzene	ND		46.2	44.7		ug/Kg	☼	97	74 - 120	1	30
1,2-Dibromo-3-Chloropropane	ND		46.2	32.3		ug/Kg	☼	70	63 - 124	21	30
1,2-Dibromoethane	ND		46.2	36.5		ug/Kg	☼	79	78 - 120	18	30
1,2-Dichlorobenzene	ND	F1	46.2	33.7	F1	ug/Kg	☼	73	75 - 120	2	30
1,2-Dichloroethane	ND		46.2	43.4		ug/Kg	☼	94	77 - 122	12	30
1,2-Dichloropropane	ND		46.2	45.9		ug/Kg	☼	99	75 - 124	9	30
1,3,5-Trimethylbenzene	ND	F1	46.2	46.6		ug/Kg	☼	101	74 - 120	0	30
1,3-Dichlorobenzene	ND		46.2	34.3		ug/Kg	☼	74	74 - 120	4	30
1,4-Dichlorobenzene	ND	F1	46.2	32.8	F1	ug/Kg	☼	71	73 - 120	1	30
2-Butanone (MEK)	ND		231	173		ug/Kg	☼	75	70 - 134	19	30
2-Hexanone	ND		231	188		ug/Kg	☼	82	59 - 130	26	30
4-Methyl-2-pentanone (MIBK)	ND		231	208		ug/Kg	☼	90	65 - 133	24	30
Acetone	ND		231	151		ug/Kg	☼	65	61 - 137	17	30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-204989-5 MSD
Matrix: Solid
Analysis Batch: 654942

Client Sample ID: SB2 (1-2)
Prep Type: Total/NA
Prep Batch: 654699

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		46.2	45.0		ug/Kg	☼	97	79 - 127	5	30
Bromodichloromethane	ND		46.2	41.2		ug/Kg	☼	89	80 - 122	12	30
Bromoform	ND	F1	46.2	26.0	F1	ug/Kg	☼	56	68 - 126	18	30
Bromomethane	ND		46.2	50.6		ug/Kg	☼	110	37 - 149	8	30
Carbon disulfide	ND		46.2	37.0		ug/Kg	☼	80	64 - 131	1	30
Carbon tetrachloride	ND		46.2	34.6		ug/Kg	☼	75	75 - 135	1	30
Chlorobenzene	ND		46.2	37.2		ug/Kg	☼	81	76 - 124	3	30
Chloroethane	ND		46.2	51.2		ug/Kg	☼	111	69 - 135	6	30
Chloroform	0.37	J B	46.2	43.4		ug/Kg	☼	93	80 - 120	6	30
Chloromethane	ND		46.2	41.9		ug/Kg	☼	91	63 - 127	7	30
cis-1,2-Dichloroethene	ND		46.2	42.3		ug/Kg	☼	92	80 - 120	4	30
cis-1,3-Dichloropropene	ND		46.2	38.4		ug/Kg	☼	83	80 - 120	12	30
Cyclohexane	ND		46.2	37.5		ug/Kg	☼	81	65 - 120	11	30
Dibromochloromethane	ND	F1	46.2	34.7	F1	ug/Kg	☼	75	76 - 125	15	30
Dichlorodifluoromethane	ND		46.2	39.7		ug/Kg	☼	86	57 - 142	6	30
Ethylbenzene	ND		46.2	40.5		ug/Kg	☼	88	80 - 120	2	30
Isopropylbenzene	ND	F1	46.2	53.9		ug/Kg	☼	117	72 - 120	5	30
m,p-Xylene	ND		46.2	37.9		ug/Kg	☼	82	70 - 130	2	30
Methyl acetate	ND		92.3	95.6		ug/Kg	☼	104	55 - 136	22	30
Methyl tert-butyl ether	ND		46.2	42.2		ug/Kg	☼	91	63 - 125	15	30
Methylcyclohexane	ND	F1 F2	46.2	25.3	F1 F2	ug/Kg	☼	55	60 - 140	31	30
Methylene Chloride	ND		46.2	46.5		ug/Kg	☼	101	61 - 127	7	30
n-Butylbenzene	ND	F1	46.2	27.7	F1	ug/Kg	☼	60	70 - 120	25	30
N-Propylbenzene	ND		46.2	47.1		ug/Kg	☼	102	70 - 130	0	30
o-Xylene	ND		46.2	37.7		ug/Kg	☼	82	70 - 130	0	30
sec-Butylbenzene	ND		46.2	37.9		ug/Kg	☼	82	74 - 120	13	30
Styrene	ND	F1	46.2	32.4	F1	ug/Kg	☼	70	80 - 120	0	30
tert-Butylbenzene	ND	F1	46.2	44.1		ug/Kg	☼	95	73 - 120	6	30
Tetrachloroethene	1.7	J B	46.2	38.3		ug/Kg	☼	79	74 - 122	0	30
Toluene	ND		46.2	44.7		ug/Kg	☼	97	74 - 128	9	30
trans-1,2-Dichloroethene	ND		46.2	40.0		ug/Kg	☼	87	78 - 126	1	30
trans-1,3-Dichloropropene	ND		46.2	36.0		ug/Kg	☼	78	73 - 123	18	30
Trichloroethene	ND		46.2	40.2		ug/Kg	☼	87	77 - 129	0	30
Trichlorofluoromethane	ND		46.2	45.1		ug/Kg	☼	98	65 - 146	1	30
Vinyl chloride	ND		46.2	49.5		ug/Kg	☼	107	61 - 133	2	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*64 - 126*
4-Bromofluorobenzene (Surr)	*80*		*72 - 126*
Dibromofluoromethane (Surr)	*100*		*60 - 140*
Toluene-d8 (Surr)	*108*		*71 - 125*

Client: Integral Consulting Inc
Project/Site: Integral Consulting - EF1017 - Refractor

Job ID: 480-204989-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-654335/1-A
Matrix: Water
Analysis Batch: 654446

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 654335

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		12/22/22 09:17	12/27/22 13:23	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		12/22/22 09:17	12/27/22 13:23	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		12/22/22 09:17	12/27/22 13:23	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		12/22/22 09:17	12/27/22 13:23	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		12/22/22 09:17	12/27/22 13:23	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		12/22/22 09:17	12/27/22 13:23	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		12/22/22 09:17	12/27/22 13:23	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		12/22/22 09:17	12/27/22 13:23	1
2-Chlorophenol	ND		5.0	0.53	ug/L		12/22/22 09:17	12/27/22 13:23	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		12/22/22 09:17	12/27/22 13:23	1
2-Methylphenol	ND		5.0	0.40	ug/L		12/22/22 09:17	12/27/22 13:23	1
2-Nitroaniline	ND		10	0.42	ug/L		12/22/22 09:17	12/27/22 13:23	1
2-Nitrophenol	ND		5.0	0.48	ug/L		12/22/22 09:17	12/27/22 13:23	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		12/22/22 09:17	12/27/22 13:23	1
3-Nitroaniline	ND		10	0.48	ug/L		12/22/22 09:17	12/27/22 13:23	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		12/22/22 09:17	12/27/22 13:23	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		12/22/22 09:17	12/27/22 13:23	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		12/22/22 09:17	12/27/22 13:23	1
4-Chloroaniline	ND		5.0	0.59	ug/L		12/22/22 09:17	12/27/22 13:23	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		12/22/22 09:17	12/27/22 13:23	1
4-Methylphenol	ND		10	0.36	ug/L		12/22/22 09:17	12/27/22 13:23	1
4-Nitroaniline	ND		10	0.25	ug/L		12/22/22 09:17	12/27/22 13:23	1
4-Nitrophenol	ND		10	1.5	ug/L		12/22/22 09:17	12/27/22 13:23	1
Acenaphthene	ND		5.0	0.41	ug/L		12/22/22 09:17	12/27/22 13:23	1
Acenaphthylene	ND		5.0	0.38	ug/L		12/22/22 09:17	12/27/22 13:23	1
Acetophenone	ND		5.0	0.54	ug/L		12/22/22 09:17	12/27/22 13:23	1
Anthracene	ND		5.0	0.28	ug/L		12/22/22 09:17	12/27/22 13:23	1
Atrazine	ND		5.0	0.46	ug/L		12/22/22 09:17	12/27/22 13:23	1
Benzaldehyde	ND		5.0	0.27	ug/L		12/22/22 09:17	12/27/22 13:23	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		12/22/22 09:17	12/27/22 13:23	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		12/22/22 09:17	12/27/22 13:23	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		12/22/22 09:17	12/27/22 13:23	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		12/22/22 09:17	12/27/22 13:23	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		12/22/22 09:17	12/27/22 13:23	1
Biphenyl	ND		5.0	0.65	ug/L		12/22/22 09:17	12/27/22 13:23	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		12/22/22 09:17	12/27/22 13:23	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		12/22/22 09:17	12/27/22 13:23	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		12/22/22 09:17	12/27/22 13:23	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		12/22/22 09:17	12/27/22 13:23	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		12/22/22 09:17	12/27/22 13:23	1
Caprolactam	ND		5.0	2.2	ug/L		12/22/22 09:17	12/27/22 13:23	1
Carbazole	ND		5.0	0.30	ug/L		12/22/22 09:17	12/27/22 13:23	1
Chrysene	ND		5.0	0.33	ug/L		12/22/22 09:17	12/27/22 13:23	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		12/22/22 09:17	12/27/22 13:23	1
Dibenzofuran	ND		10	0.51	ug/L		12/22/22 09:17	12/27/22 13:23	1
Diethyl phthalate	ND		5.0	0.22	ug/L		12/22/22 09:17	12/27/22 13:23	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		12/22/22 09:17	12/27/22 13:23	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		12/22/22 09:17	12/27/22 13:23	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-654335/1-A
Matrix: Water
Analysis Batch: 654446

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 654335

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		12/22/22 09:17	12/27/22 13:23	1
Fluoranthene	ND		5.0	0.40	ug/L		12/22/22 09:17	12/27/22 13:23	1
Fluorene	ND		5.0	0.36	ug/L		12/22/22 09:17	12/27/22 13:23	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		12/22/22 09:17	12/27/22 13:23	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		12/22/22 09:17	12/27/22 13:23	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		12/22/22 09:17	12/27/22 13:23	1
Hexachloroethane	ND		5.0	0.59	ug/L		12/22/22 09:17	12/27/22 13:23	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		12/22/22 09:17	12/27/22 13:23	1
Isophorone	ND		5.0	0.43	ug/L		12/22/22 09:17	12/27/22 13:23	1
Naphthalene	ND		5.0	0.76	ug/L		12/22/22 09:17	12/27/22 13:23	1
Nitrobenzene	ND		5.0	0.29	ug/L		12/22/22 09:17	12/27/22 13:23	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		12/22/22 09:17	12/27/22 13:23	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		12/22/22 09:17	12/27/22 13:23	1
Pentachlorophenol	ND		10	2.2	ug/L		12/22/22 09:17	12/27/22 13:23	1
Phenanthrene	ND		5.0	0.44	ug/L		12/22/22 09:17	12/27/22 13:23	1
Phenol	ND		5.0	0.39	ug/L		12/22/22 09:17	12/27/22 13:23	1
Pyrene	ND		5.0	0.34	ug/L		12/22/22 09:17	12/27/22 13:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*72*		*41 - 120*	*12/22/22 09:17*	*12/27/22 13:23*	*1*
2-Fluorobiphenyl (Surr)	*119*		*48 - 120*	*12/22/22 09:17*	*12/27/22 13:23*	*1*
2-Fluorophenol (Surr)	*63*		*35 - 120*	*12/22/22 09:17*	*12/27/22 13:23*	*1*
Nitrobenzene-d5 (Surr)	*99*		*46 - 120*	*12/22/22 09:17*	*12/27/22 13:23*	*1*
Phenol-d5 (Surr)	*42*		*22 - 120*	*12/22/22 09:17*	*12/27/22 13:23*	*1*
p-Terphenyl-d14 (Surr)	*114*		*60 - 148*	*12/22/22 09:17*	*12/27/22 13:23*	*1*

Lab Sample ID: LCS 480-654335/2-A
Matrix: Water
Analysis Batch: 654446

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654335

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	32.0	26.3		ug/L		82	65 - 126
2,4,6-Trichlorophenol	32.0	31.4		ug/L		98	64 - 120
2,4-Dichlorophenol	32.0	29.6		ug/L		93	63 - 120
2,4-Dimethylphenol	32.0	28.2		ug/L		88	47 - 120
2,4-Dinitrophenol	64.0	65.7		ug/L		103	31 - 137
2,4-Dinitrotoluene	32.0	33.6		ug/L		105	69 - 120
2,6-Dinitrotoluene	32.0	31.1		ug/L		97	68 - 120
2-Chloronaphthalene	32.0	33.2		ug/L		104	58 - 120
2-Chlorophenol	32.0	28.3		ug/L		89	48 - 120
2-Methylnaphthalene	32.0	28.5		ug/L		89	59 - 120
2-Methylphenol	32.0	27.9		ug/L		87	39 - 120
2-Nitroaniline	32.0	31.9		ug/L		100	54 - 127
2-Nitrophenol	32.0	26.6		ug/L		83	52 - 125
3,3'-Dichlorobenzidine	64.0	56.0		ug/L		87	49 - 135
3-Nitroaniline	32.0	22.8		ug/L		71	51 - 120
4,6-Dinitro-2-methylphenol	64.0	70.9		ug/L		111	46 - 136
4-Bromophenyl phenyl ether	32.0	33.2		ug/L		104	65 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-654335/2-A
Client Sample ID: Lab Control Sample
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 654446
Prep Batch: 654335

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4-Chloro-3-methylphenol	32.0	28.8		ug/L		90	61 - 123
4-Chloroaniline	32.0	21.5		ug/L		67	30 - 120
4-Chlorophenyl phenyl ether	32.0	34.9		ug/L		109	62 - 120
4-Methylphenol	32.0	26.6		ug/L		83	29 - 131
4-Nitroaniline	32.0	30.7		ug/L		96	65 - 120
4-Nitrophenol	64.0	56.0		ug/L		88	45 - 120
Acenaphthene	32.0	31.4		ug/L		98	60 - 120
Acenaphthylene	32.0	31.1		ug/L		97	63 - 120
Acetophenone	32.0	31.1		ug/L		97	45 - 120
Anthracene	32.0	30.4		ug/L		95	67 - 120
Atrazine	64.0	84.9	*+	ug/L		133	71 - 130
Benzaldehyde	64.0	60.9		ug/L		95	10 - 140
Benzo[a]anthracene	32.0	31.0		ug/L		97	70 - 121
Benzo[a]pyrene	32.0	30.3		ug/L		95	60 - 123
Benzo[b]fluoranthene	32.0	30.8		ug/L		96	66 - 126
Benzo[g,h,i]perylene	32.0	31.0		ug/L		97	66 - 150
Benzo[k]fluoranthene	32.0	30.3		ug/L		95	65 - 124
Biphenyl	32.0	31.3		ug/L		98	59 - 120
bis (2-chloroisopropyl) ether	32.0	26.3		ug/L		82	21 - 136
Bis(2-chloroethoxy)methane	32.0	24.8		ug/L		77	50 - 128
Bis(2-chloroethyl)ether	32.0	26.6		ug/L		83	44 - 120
Bis(2-ethylhexyl) phthalate	32.0	28.5		ug/L		89	63 - 139
Butyl benzyl phthalate	32.0	31.9		ug/L		100	70 - 129
Caprolactam	64.0	20.9		ug/L		33	22 - 120
Carbazole	32.0	33.1		ug/L		103	66 - 123
Chrysene	32.0	30.2		ug/L		95	69 - 120
Dibenz(a,h)anthracene	32.0	30.5		ug/L		95	65 - 135
Dibenzofuran	32.0	31.3		ug/L		98	66 - 120
Diethyl phthalate	32.0	36.6		ug/L		114	59 - 127
Dimethyl phthalate	32.0	33.6		ug/L		105	68 - 120
Di-n-butyl phthalate	32.0	31.3		ug/L		98	69 - 131
Di-n-octyl phthalate	32.0	28.4		ug/L		89	63 - 140
Fluoranthene	32.0	33.2		ug/L		104	69 - 126
Fluorene	32.0	33.0		ug/L		103	66 - 120
Hexachlorobenzene	32.0	33.4		ug/L		104	61 - 120
Hexachlorobutadiene	32.0	27.0		ug/L		84	35 - 120
Hexachlorocyclopentadiene	32.0	21.0		ug/L		66	31 - 120
Hexachloroethane	32.0	25.9		ug/L		81	43 - 120
Indeno[1,2,3-cd]pyrene	32.0	32.6		ug/L		102	69 - 146
Isophorone	32.0	26.5		ug/L		83	55 - 120
Naphthalene	32.0	26.4		ug/L		82	57 - 120
Nitrobenzene	32.0	27.7		ug/L		86	53 - 123
N-Nitrosodi-n-propylamine	32.0	31.7		ug/L		99	32 - 140
N-Nitrosodiphenylamine	32.0	29.9		ug/L		93	61 - 120
Pentachlorophenol	64.0	54.3		ug/L		85	29 - 136
Phenanthrene	32.0	30.6		ug/L		96	68 - 120
Phenol	32.0	19.1		ug/L		60	17 - 120
Pyrene	32.0	33.5		ug/L		105	70 - 125

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-654335/2-A
Matrix: Water
Analysis Batch: 654446

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654335

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	101		41 - 120
2-Fluorobiphenyl (Surr)	108		48 - 120
2-Fluorophenol (Surr)	68		35 - 120
Nitrobenzene-d5 (Surr)	90		46 - 120
Phenol-d5 (Surr)	55		22 - 120
p-Terphenyl-d14 (Surr)	108		60 - 148

Lab Sample ID: LCSD 480-654335/3-A
Matrix: Water
Analysis Batch: 654446

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 654335

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4,5-Trichlorophenol			32.0	36.9	*1	ug/L		115	65 - 126	34	18
2,4,6-Trichlorophenol			32.0	35.1		ug/L		110	64 - 120	11	19
2,4-Dichlorophenol			32.0	32.1		ug/L		100	63 - 120	8	19
2,4-Dimethylphenol			32.0	31.1		ug/L		97	47 - 120	10	42
2,4-Dinitrophenol			64.0	72.9		ug/L		114	31 - 137	10	22
2,4-Dinitrotoluene			32.0	36.9		ug/L		115	69 - 120	9	20
2,6-Dinitrotoluene			32.0	34.7		ug/L		108	68 - 120	11	15
2-Chloronaphthalene			32.0	36.3		ug/L		113	58 - 120	9	21
2-Chlorophenol			32.0	29.5		ug/L		92	48 - 120	4	25
2-Methylnaphthalene			32.0	30.2		ug/L		94	59 - 120	6	21
2-Methylphenol			32.0	28.1		ug/L		88	39 - 120	1	27
2-Nitroaniline			32.0	32.7		ug/L		102	54 - 127	3	15
2-Nitrophenol			32.0	31.5		ug/L		99	52 - 125	17	18
3,3'-Dichlorobenzidine			64.0	58.9		ug/L		92	49 - 135	5	25
3-Nitroaniline			32.0	26.7		ug/L		83	51 - 120	16	19
4,6-Dinitro-2-methylphenol			64.0	82.4		ug/L		129	46 - 136	15	15
4-Bromophenyl phenyl ether			32.0	33.7		ug/L		105	65 - 120	2	15
4-Chloro-3-methylphenol			32.0	31.2		ug/L		97	61 - 123	8	27
4-Chloroaniline			32.0	26.0		ug/L		81	30 - 120	19	22
4-Chlorophenyl phenyl ether			32.0	37.9		ug/L		118	62 - 120	8	16
4-Methylphenol			32.0	27.9		ug/L		87	29 - 131	5	24
4-Nitroaniline			32.0	36.0		ug/L		112	65 - 120	16	24
4-Nitrophenol			64.0	60.3		ug/L		94	45 - 120	7	48
Acenaphthene			32.0	34.5		ug/L		108	60 - 120	9	24
Acenaphthylene			32.0	35.0		ug/L		109	63 - 120	12	18
Acetophenone			32.0	30.6		ug/L		96	45 - 120	2	20
Anthracene			32.0	33.3		ug/L		104	67 - 120	9	15
Atrazine			64.0	89.7	*+	ug/L		140	71 - 130	5	20
Benzaldehyde			64.0	61.2		ug/L		96	10 - 140	0	20
Benzo[a]anthracene			32.0	32.4		ug/L		101	70 - 121	4	15
Benzo[a]pyrene			32.0	33.4		ug/L		104	60 - 123	10	15
Benzo[b]fluoranthene			32.0	33.6		ug/L		105	66 - 126	9	15
Benzo[g,h,i]perylene			32.0	34.3		ug/L		107	66 - 150	10	15
Benzo[k]fluoranthene			32.0	33.8		ug/L		106	65 - 124	11	22
Biphenyl			32.0	34.5		ug/L		108	59 - 120	10	20
bis (2-chloroisopropyl) ether			32.0	24.7		ug/L		77	21 - 136	6	24

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-654335/3-A
Client Sample ID: Lab Control Sample Dup
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 654446
Prep Batch: 654335

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bis(2-chloroethoxy)methane			32.0	25.5		ug/L		80	50 - 128	3	17
Bis(2-chloroethyl)ether			32.0	26.9		ug/L		84	44 - 120	1	21
Bis(2-ethylhexyl) phthalate			32.0	30.1		ug/L		94	63 - 139	5	15
Butyl benzyl phthalate			32.0	31.1		ug/L		97	70 - 129	2	16
Caprolactam			64.0	22.8		ug/L		36	22 - 120	9	20
Carbazole			32.0	36.4		ug/L		114	66 - 123	9	20
Chrysene			32.0	31.4		ug/L		98	69 - 120	4	15
Dibenz(a,h)anthracene			32.0	34.1		ug/L		107	65 - 135	11	15
Dibenzofuran			32.0	33.9		ug/L		106	66 - 120	8	15
Diethyl phthalate			32.0	39.8		ug/L		125	59 - 127	9	15
Dimethyl phthalate			32.0	38.0		ug/L		119	68 - 120	12	15
Di-n-butyl phthalate			32.0	33.6		ug/L		105	69 - 131	7	15
Di-n-octyl phthalate			32.0	31.3		ug/L		98	63 - 140	10	16
Fluoranthene			32.0	35.9		ug/L		112	69 - 126	8	15
Fluorene			32.0	37.2		ug/L		116	66 - 120	12	15
Hexachlorobenzene			32.0	34.8		ug/L		109	61 - 120	4	15
Hexachlorobutadiene			32.0	28.6		ug/L		89	35 - 120	6	44
Hexachlorocyclopentadiene			32.0	25.5		ug/L		80	31 - 120	19	49
Hexachloroethane			32.0	24.5		ug/L		77	43 - 120	6	46
Indeno[1,2,3-cd]pyrene			32.0	36.0		ug/L		113	69 - 146	10	15
Isophorone			32.0	28.9		ug/L		90	55 - 120	9	17
Naphthalene			32.0	29.5		ug/L		92	57 - 120	11	29
Nitrobenzene			32.0	28.2		ug/L		88	53 - 123	2	24
N-Nitrosodi-n-propylamine			32.0	29.8		ug/L		93	32 - 140	6	31
N-Nitrosodiphenylamine			32.0	32.1		ug/L		100	61 - 120	7	15
Pentachlorophenol			64.0	62.5		ug/L		98	29 - 136	14	37
Phenanthrene			32.0	34.1		ug/L		107	68 - 120	11	15
Phenol			32.0	20.1		ug/L		63	17 - 120	5	34
Pyrene			32.0	33.8		ug/L		106	70 - 125	1	19

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*108*		*41 - 120*
2-Fluorobiphenyl (Surr)	*123*	*S1+*	*48 - 120*
2-Fluorophenol (Surr)	*76*		*35 - 120*
Nitrobenzene-d5 (Surr)	*92*		*46 - 120*
Phenol-d5 (Surr)	*59*		*22 - 120*
p-Terphenyl-d14 (Surr)	*103*		*60 - 148*

Lab Sample ID: MB 480-654928/1-A
Client Sample ID: Method Blank
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 654983
Prep Batch: 654928

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		97	53	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
2,4,5-Trichlorophenol	ND		170	45	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
2,4,6-Trichlorophenol	ND		170	33	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
2,4-Dichlorophenol	ND		170	17	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
2,4-Dimethylphenol	ND		170	40	ug/Kg		01/03/23 15:42	01/04/23 15:11	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-654928/1-A
Matrix: Solid
Analysis Batch: 654983

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 654928

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dinitrophenol	ND		1600	760	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
2,4-Dinitrotoluene	ND		170	34	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
2,6-Dinitrotoluene	ND		170	19	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
2-Chloronaphthalene	ND		170	27	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
2-Chlorophenol	ND		320	30	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
2-Methylnaphthalene	ND		170	33	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
2-Methylphenol	ND		170	19	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
2-Nitroaniline	ND		320	24	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
2-Nitrophenol	ND		170	47	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
3,3'-Dichlorobenzidine	ND		320	190	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
3-Nitroaniline	ND		320	46	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
4,6-Dinitro-2-methylphenol	ND		320	170	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
4-Bromophenyl phenyl ether	ND		170	23	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
4-Chloro-3-methylphenol	ND		170	41	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
4-Chloroaniline	ND		170	41	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
4-Chlorophenyl phenyl ether	ND		170	20	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
4-Methylphenol	ND		320	19	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
4-Nitroaniline	ND		320	86	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
4-Nitrophenol	ND		320	120	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Acenaphthene	ND		170	24	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Acenaphthylene	ND		170	21	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Acetophenone	ND		170	22	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Anthracene	ND		170	41	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Atrazine	ND		170	57	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Benzaldehyde	ND		170	130	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Benzo[a]anthracene	ND		170	17	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Benzo[a]pyrene	ND		170	24	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Benzo[b]fluoranthene	ND		170	26	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Benzo[g,h,i]perylene	ND		170	17	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Benzo[k]fluoranthene	ND		170	21	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Biphenyl	ND		170	24	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
bis (2-chloroisopropyl) ether	ND		170	33	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Bis(2-chloroethoxy)methane	ND		170	35	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Bis(2-chloroethyl)ether	ND		170	21	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Bis(2-ethylhexyl) phthalate	ND		170	56	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Butyl benzyl phthalate	ND		170	27	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Caprolactam	ND		170	50	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Carbazole	ND		170	19	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Chrysene	ND		170	37	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Dibenz(a,h)anthracene	ND		170	29	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Dibenzofuran	ND		170	19	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Diethyl phthalate	ND		170	21	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Dimethyl phthalate	ND		170	19	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Di-n-butyl phthalate	ND		170	28	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Di-n-octyl phthalate	ND		170	19	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Fluoranthene	ND		170	17	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Fluorene	ND		170	19	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Hexachlorobenzene	ND		170	22	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Hexachlorobutadiene	ND		170	24	ug/Kg		01/03/23 15:42	01/04/23 15:11	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-654928/1-A
Matrix: Solid
Analysis Batch: 654983

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 654928

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorocyclopentadiene	ND		170	22	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Hexachloroethane	ND		170	21	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Indeno[1,2,3-cd]pyrene	ND		170	20	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Isophorone	ND		170	35	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Naphthalene	ND		170	21	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Nitrobenzene	ND		170	18	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
N-Nitrosodi-n-propylamine	ND		170	28	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
N-Nitrosodiphenylamine	ND		170	130	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Pentachlorophenol	ND		320	170	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Phenanthrene	ND		170	24	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Phenol	ND		170	25	ug/Kg		01/03/23 15:42	01/04/23 15:11	1
Pyrene	ND		170	19	ug/Kg		01/03/23 15:42	01/04/23 15:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*68*		*54 - 120*	*01/03/23 15:42*	*01/04/23 15:11*	*1*
2-Fluorobiphenyl (Surr)	*78*		*60 - 120*	*01/03/23 15:42*	*01/04/23 15:11*	*1*
2-Fluorophenol (Surr)	*70*		*52 - 120*	*01/03/23 15:42*	*01/04/23 15:11*	*1*
Nitrobenzene-d5 (Surr)	*72*		*53 - 120*	*01/03/23 15:42*	*01/04/23 15:11*	*1*
Phenol-d5 (Surr)	*72*		*54 - 120*	*01/03/23 15:42*	*01/04/23 15:11*	*1*
p-Terphenyl-d14 (Surr)	*111*		*79 - 130*	*01/03/23 15:42*	*01/04/23 15:11*	*1*

Lab Sample ID: LCS 480-654928/2-A
Matrix: Solid
Analysis Batch: 654983

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654928

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	1630	644		ug/Kg		39	23 - 120
2,4,5-Trichlorophenol	1630	1600		ug/Kg		98	59 - 126
2,4,6-Trichlorophenol	1630	1570		ug/Kg		96	59 - 123
2,4-Dichlorophenol	1630	1290		ug/Kg		79	61 - 120
2,4-Dimethylphenol	1630	1320		ug/Kg		81	59 - 120
2,4-Dinitrophenol	3260	3650		ug/Kg		112	41 - 146
2,4-Dinitrotoluene	1630	1730		ug/Kg		106	63 - 120
2,6-Dinitrotoluene	1630	1610		ug/Kg		99	66 - 120
2-Chloronaphthalene	1630	1430		ug/Kg		88	57 - 120
2-Chlorophenol	1630	1180		ug/Kg		72	53 - 120
2-Methylnaphthalene	1630	1250		ug/Kg		76	59 - 120
2-Methylphenol	1630	1200		ug/Kg		74	54 - 120
2-Nitroaniline	1630	1510		ug/Kg		93	61 - 120
2-Nitrophenol	1630	1510		ug/Kg		93	56 - 120
3,3'-Dichlorobenzidine	3260	2780		ug/Kg		85	54 - 120
3-Nitroaniline	1630	1270		ug/Kg		78	48 - 120
4,6-Dinitro-2-methylphenol	3260	3580		ug/Kg		110	49 - 122
4-Bromophenyl phenyl ether	1630	1540		ug/Kg		94	58 - 120
4-Chloro-3-methylphenol	1630	1390		ug/Kg		85	61 - 120
4-Chloroaniline	1630	1080		ug/Kg		66	38 - 120
4-Chlorophenyl phenyl ether	1630	1440		ug/Kg		89	63 - 124
4-Methylphenol	1630	1260		ug/Kg		77	55 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-654928/2-A
Matrix: Solid
Analysis Batch: 654983

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654928

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
4-Nitroaniline	1630	1510		ug/Kg		92	56 - 120
4-Nitrophenol	3260	3260		ug/Kg		100	43 - 147
Acenaphthene	1630	1420		ug/Kg		87	62 - 120
Acenaphthylene	1630	1450		ug/Kg		89	58 - 121
Acetophenone	1630	1230		ug/Kg		75	54 - 120
Anthracene	1630	1510		ug/Kg		93	62 - 120
Atrazine	3260	2890		ug/Kg		88	60 - 127
Benzaldehyde	3260	2180		ug/Kg		67	10 - 150
Benzo[a]anthracene	1630	1520		ug/Kg		93	65 - 120
Benzo[a]pyrene	1630	1540		ug/Kg		95	64 - 120
Benzo[b]fluoranthene	1630	1560		ug/Kg		96	64 - 120
Benzo[g,h,i]perylene	1630	1610		ug/Kg		99	45 - 145
Benzo[k]fluoranthene	1630	1730		ug/Kg		106	65 - 120
Biphenyl	1630	1390		ug/Kg		85	59 - 120
bis (2-chloroisopropyl) ether	1630	1060		ug/Kg		65	44 - 120
Bis(2-chloroethoxy)methane	1630	1220		ug/Kg		75	55 - 120
Bis(2-chloroethyl)ether	1630	1120		ug/Kg		68	45 - 120
Bis(2-ethylhexyl) phthalate	1630	1590		ug/Kg		97	61 - 133
Butyl benzyl phthalate	1630	1660		ug/Kg		102	61 - 129
Caprolactam	3260	2740		ug/Kg		84	47 - 120
Carbazole	1630	1460		ug/Kg		89	65 - 120
Chrysene	1630	1480		ug/Kg		91	64 - 120
Dibenz(a,h)anthracene	1630	1580		ug/Kg		97	54 - 132
Dibenzofuran	1630	1460		ug/Kg		89	63 - 120
Diethyl phthalate	1630	1490		ug/Kg		92	66 - 120
Dimethyl phthalate	1630	1530		ug/Kg		94	65 - 124
Di-n-butyl phthalate	1630	1540		ug/Kg		95	58 - 130
Di-n-octyl phthalate	1630	1530		ug/Kg		94	57 - 133
Fluoranthene	1630	1400		ug/Kg		86	62 - 120
Fluorene	1630	1460		ug/Kg		90	63 - 120
Hexachlorobenzene	1630	1560		ug/Kg		96	60 - 120
Hexachlorobutadiene	1630	1210		ug/Kg		74	45 - 120
Hexachlorocyclopentadiene	1630	1320		ug/Kg		81	47 - 120
Hexachloroethane	1630	1110		ug/Kg		68	41 - 120
Indeno[1,2,3-cd]pyrene	1630	1660		ug/Kg		102	56 - 134
Isophorone	1630	1250		ug/Kg		76	56 - 120
Naphthalene	1630	1250		ug/Kg		77	55 - 120
Nitrobenzene	1630	1260		ug/Kg		77	54 - 120
N-Nitrosodi-n-propylamine	1630	1150		ug/Kg		71	52 - 120
N-Nitrosodiphenylamine	1630	1550		ug/Kg		95	51 - 128
Pentachlorophenol	3260	3090		ug/Kg		95	51 - 120
Phenanthrene	1630	1530		ug/Kg		94	60 - 120
Phenol	1630	1190		ug/Kg		73	53 - 120
Pyrene	1630	1800		ug/Kg		110	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*111*		*54 - 120*
2-Fluorobiphenyl (Surr)	*90*		*60 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-654928/2-A
Matrix: Solid
Analysis Batch: 654983

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654928

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorophenol (Surr)	*71*		*52 - 120*
Nitrobenzene-d5 (Surr)	*79*		*53 - 120*
Phenol-d5 (Surr)	*73*		*54 - 120*
p-Terphenyl-d14 (Surr)	*117*		*79 - 130*

Lab Sample ID: 480-204989-5 MS
Matrix: Solid
Analysis Batch: 654983

Client Sample ID: SB2 (1-2)
Prep Type: Total/NA
Prep Batch: 654928

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	ND		1800	ND		ug/Kg	☼	NC	13 - 120
2,4,5-Trichlorophenol	ND		1800	ND		ug/Kg	☼	NC	46 - 120
2,4,6-Trichlorophenol	ND		1800	ND		ug/Kg	☼	NC	41 - 123
2,4-Dichlorophenol	ND		1800	ND		ug/Kg	☼	NC	45 - 120
2,4-Dimethylphenol	ND		1800	ND		ug/Kg	☼	NC	52 - 120
2,4-Dinitrophenol	ND		3610	ND		ug/Kg	☼	NC	41 - 146
2,4-Dinitrotoluene	ND		1800	ND		ug/Kg	☼	NC	63 - 125
2,6-Dinitrotoluene	ND		1800	4140	J	ug/Kg	☼	NC	66 - 120
2-Chloronaphthalene	ND		1800	ND		ug/Kg	☼	NC	57 - 120
2-Chlorophenol	ND		1800	ND		ug/Kg	☼	NC	43 - 120
2-Methylnaphthalene	ND		1800	ND		ug/Kg	☼	NC	55 - 120
2-Methylphenol	ND		1800	ND		ug/Kg	☼	NC	48 - 120
2-Nitroaniline	ND		1800	ND		ug/Kg	☼	NC	61 - 120
2-Nitrophenol	ND		1800	ND		ug/Kg	☼	NC	37 - 120
3,3'-Dichlorobenzidine	ND		3610	ND		ug/Kg	☼	NC	37 - 126
3-Nitroaniline	ND		1800	ND		ug/Kg	☼	NC	48 - 120
4,6-Dinitro-2-methylphenol	ND		3610	ND		ug/Kg	☼	NC	23 - 149
4-Bromophenyl phenyl ether	ND		1800	ND		ug/Kg	☼	NC	58 - 120
4-Chloro-3-methylphenol	ND		1800	ND		ug/Kg	☼	NC	49 - 125
4-Chloroaniline	ND		1800	ND		ug/Kg	☼	NC	38 - 120
4-Chlorophenyl phenyl ether	ND		1800	ND		ug/Kg	☼	NC	63 - 124
4-Methylphenol	ND		1800	ND		ug/Kg	☼	NC	50 - 120
4-Nitroaniline	ND		1800	ND		ug/Kg	☼	NC	47 - 120
4-Nitrophenol	ND		3610	ND		ug/Kg	☼	NC	31 - 147
Acenaphthene	ND		1800	ND		ug/Kg	☼	NC	60 - 120
Acenaphthylene	ND		1800	ND		ug/Kg	☼	NC	58 - 121
Acetophenone	ND		1800	ND		ug/Kg	☼	NC	47 - 120
Anthracene	ND		1800	ND		ug/Kg	☼	NC	62 - 120
Atrazine	ND		3610	ND		ug/Kg	☼	NC	60 - 150
Benzaldehyde	ND		3610	ND		ug/Kg	☼	NC	10 - 150
Benzo[a]anthracene	ND	F1	1800	4930	J F1	ug/Kg	☼	274	65 - 120
Benzo[a]pyrene	ND		1800	5350	J	ug/Kg	☼	NC	64 - 120
Benzo[b]fluoranthene	ND		1800	5910	J	ug/Kg	☼	NC	10 - 150
Benzo[g,h,i]perylene	ND	F2	1800	4740	J	ug/Kg	☼	NC	45 - 145
Benzo[k]fluoranthene	ND	F2	1800	4780	J	ug/Kg	☼	NC	23 - 150
Biphenyl	ND		1800	ND		ug/Kg	☼	NC	58 - 120
bis (2-chloroisopropyl) ether	ND		1800	ND		ug/Kg	☼	NC	31 - 120
Bis(2-chloroethoxy)methane	ND		1800	ND		ug/Kg	☼	NC	52 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-204989-5 MS
Matrix: Solid
Analysis Batch: 654983

Client Sample ID: SB2 (1-2)
Prep Type: Total/NA
Prep Batch: 654928

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Bis(2-chloroethyl)ether	ND		1800	ND		ug/Kg	☼	NC	45 - 120
Bis(2-ethylhexyl) phthalate	ND		1800	ND		ug/Kg	☼	NC	61 - 133
Butyl benzyl phthalate	ND		1800	ND		ug/Kg	☼	NC	61 - 120
Caprolactam	ND		3610	ND		ug/Kg	☼	NC	37 - 133
Carbazole	ND		1800	ND		ug/Kg	☼	NC	59 - 120
Chrysene	ND		1800	5990	J	ug/Kg	☼	NC	64 - 120
Dibenz(a,h)anthracene	ND		1800	3290	J	ug/Kg	☼	NC	54 - 132
Dibenzofuran	ND		1800	ND		ug/Kg	☼	NC	62 - 120
Diethyl phthalate	ND		1800	ND		ug/Kg	☼	NC	66 - 120
Dimethyl phthalate	ND		1800	ND		ug/Kg	☼	NC	65 - 124
Di-n-butyl phthalate	ND		1800	ND		ug/Kg	☼	NC	58 - 130
Di-n-octyl phthalate	ND		1800	ND		ug/Kg	☼	NC	57 - 133
Fluoranthene	3300	J F1	1800	8790	J F1	ug/Kg	☼	306	62 - 120
Fluorene	ND		1800	ND		ug/Kg	☼	NC	63 - 120
Hexachlorobenzene	ND		1800	ND		ug/Kg	☼	NC	60 - 120
Hexachlorobutadiene	ND		1800	ND		ug/Kg	☼	NC	45 - 120
Hexachlorocyclopentadiene	ND		1800	ND		ug/Kg	☼	NC	31 - 120
Hexachloroethane	ND		1800	ND		ug/Kg	☼	NC	21 - 120
Indeno[1,2,3-cd]pyrene	ND		1800	4890	J	ug/Kg	☼	NC	56 - 134
Isophorone	ND		1800	ND		ug/Kg	☼	NC	56 - 120
Naphthalene	ND		1800	ND		ug/Kg	☼	NC	46 - 120
Nitrobenzene	ND		1800	ND		ug/Kg	☼	NC	49 - 120
N-Nitrosodi-n-propylamine	ND		1800	ND		ug/Kg	☼	NC	46 - 120
Pentachlorophenol	ND		3610	ND		ug/Kg	☼	NC	25 - 136
Phenanthrene	ND	F2	1800	6060	J	ug/Kg	☼	NC	60 - 122
Phenol	ND		1800	ND		ug/Kg	☼	NC	50 - 120
Pyrene	2800	J F1	1800	7170	J F1	ug/Kg	☼	244	61 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*0*	*S1-*	*54 - 120*
2-Fluorobiphenyl (Surr)	*83*		*60 - 120*
2-Fluorophenol (Surr)	*0*	*S1-*	*52 - 120*
Nitrobenzene-d5 (Surr)	*86*		*53 - 120*
Phenol-d5 (Surr)	*81*		*54 - 120*
p-Terphenyl-d14 (Surr)	*109*		*79 - 130*

Lab Sample ID: 480-204989-5 MSD
Matrix: Solid
Analysis Batch: 654983

Client Sample ID: SB2 (1-2)
Prep Type: Total/NA
Prep Batch: 654928

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	ND		1790	ND		ug/Kg	☼	NC	13 - 120	NC	50
2,4,5-Trichlorophenol	ND		1790	ND		ug/Kg	☼	NC	46 - 120	NC	18
2,4,6-Trichlorophenol	ND		1790	ND		ug/Kg	☼	NC	41 - 123	NC	19
2,4-Dichlorophenol	ND		1790	ND		ug/Kg	☼	NC	45 - 120	NC	19
2,4-Dimethylphenol	ND		1790	ND		ug/Kg	☼	NC	52 - 120	NC	42
2,4-Dinitrophenol	ND		3580	ND		ug/Kg	☼	NC	41 - 146	NC	22
2,4-Dinitrotoluene	ND		1790	ND		ug/Kg	☼	NC	63 - 125	NC	20

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-204989-5 MSD
Client Sample ID: SB2 (1-2)
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 654983
Prep Batch: 654928

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,6-Dinitrotoluene	ND		1790	ND		ug/Kg	☼	NC	66 - 120	NC	15
2-Chloronaphthalene	ND		1790	ND		ug/Kg	☼	NC	57 - 120	NC	21
2-Chlorophenol	ND		1790	ND		ug/Kg	☼	NC	43 - 120	NC	25
2-Methylnaphthalene	ND		1790	ND		ug/Kg	☼	NC	55 - 120	NC	21
2-Methylphenol	ND		1790	ND		ug/Kg	☼	NC	48 - 120	NC	27
2-Nitroaniline	ND		1790	ND		ug/Kg	☼	NC	61 - 120	NC	15
2-Nitrophenol	ND		1790	ND		ug/Kg	☼	NC	37 - 120	NC	18
3,3'-Dichlorobenzidine	ND		3580	ND		ug/Kg	☼	NC	37 - 126	NC	25
3-Nitroaniline	ND		1790	ND		ug/Kg	☼	NC	48 - 120	NC	19
4,6-Dinitro-2-methylphenol	ND		3580	ND		ug/Kg	☼	NC	23 - 149	NC	15
4-Bromophenyl phenyl ether	ND		1790	ND		ug/Kg	☼	NC	58 - 120	NC	15
4-Chloro-3-methylphenol	ND		1790	ND		ug/Kg	☼	NC	49 - 125	NC	27
4-Chloroaniline	ND		1790	ND		ug/Kg	☼	NC	38 - 120	NC	22
4-Chlorophenyl phenyl ether	ND		1790	ND		ug/Kg	☼	NC	63 - 124	NC	16
4-Methylphenol	ND		1790	ND		ug/Kg	☼	NC	50 - 120	NC	24
4-Nitroaniline	ND		1790	ND		ug/Kg	☼	NC	47 - 120	NC	24
4-Nitrophenol	ND		3580	ND		ug/Kg	☼	NC	31 - 147	NC	25
Acenaphthene	ND		1790	ND		ug/Kg	☼	NC	60 - 120	NC	35
Acenaphthylene	ND		1790	ND		ug/Kg	☼	NC	58 - 121	NC	18
Acetophenone	ND		1790	ND		ug/Kg	☼	NC	47 - 120	NC	20
Anthracene	ND		1790	ND		ug/Kg	☼	NC	62 - 120	NC	15
Atrazine	ND		3580	ND		ug/Kg	☼	NC	60 - 150	NC	20
Benzaldehyde	ND		3580	ND		ug/Kg	☼	NC	10 - 150	NC	20
Benzo[a]anthracene	ND	F1	1790	4830	J	ug/Kg	☼	NC	65 - 120	2	15
Benzo[a]pyrene	ND		1790	5390	J	ug/Kg	☼	NC	64 - 120	1	15
Benzo[b]fluoranthene	ND		1790	6170	J	ug/Kg	☼	NC	10 - 150	4	15
Benzo[g,h,i]perylene	ND	F2	1790	3970	J F2	ug/Kg	☼	NC	45 - 145	17	15
Benzo[k]fluoranthene	ND	F2	1790	3780	J F2	ug/Kg	☼	NC	23 - 150	23	22
Biphenyl	ND		1790	ND		ug/Kg	☼	NC	58 - 120	NC	20
bis (2-chloroisopropyl) ether	ND		1790	ND		ug/Kg	☼	NC	31 - 120	NC	24
Bis(2-chloroethoxy)methane	ND		1790	ND		ug/Kg	☼	NC	52 - 120	NC	17
Bis(2-chloroethyl)ether	ND		1790	ND		ug/Kg	☼	NC	45 - 120	NC	21
Bis(2-ethylhexyl) phthalate	ND		1790	ND		ug/Kg	☼	NC	61 - 133	NC	15
Butyl benzyl phthalate	ND		1790	ND		ug/Kg	☼	NC	61 - 120	NC	16
Caprolactam	ND		3580	ND		ug/Kg	☼	NC	37 - 133	NC	20
Carbazole	ND		1790	ND		ug/Kg	☼	NC	59 - 120	NC	20
Chrysene	ND		1790	5260	J	ug/Kg	☼	NC	64 - 120	13	15
Dibenz(a,h)anthracene	ND		1790	ND		ug/Kg	☼	NC	54 - 132	NC	15
Dibenzofuran	ND		1790	ND		ug/Kg	☼	NC	62 - 120	NC	15
Diethyl phthalate	ND		1790	ND		ug/Kg	☼	NC	66 - 120	NC	15
Dimethyl phthalate	ND		1790	ND		ug/Kg	☼	NC	65 - 124	NC	15
Di-n-butyl phthalate	ND		1790	ND		ug/Kg	☼	NC	58 - 130	NC	15
Di-n-octyl phthalate	ND		1790	ND		ug/Kg	☼	NC	57 - 133	NC	16
Fluoranthene	3300	J F1	1790	7620	J F1	ug/Kg	☼	243	62 - 120	14	15
Fluorene	ND		1790	ND		ug/Kg	☼	NC	63 - 120	NC	15
Hexachlorobenzene	ND		1790	ND		ug/Kg	☼	NC	60 - 120	NC	15
Hexachlorobutadiene	ND		1790	ND		ug/Kg	☼	NC	45 - 120	NC	44
Hexachlorocyclopentadiene	ND		1790	ND		ug/Kg	☼	NC	31 - 120	NC	49
Hexachloroethane	ND		1790	ND		ug/Kg	☼	NC	21 - 120	NC	46

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-204989-5 MSD
Matrix: Solid
Analysis Batch: 654983

Client Sample ID: SB2 (1-2)
Prep Type: Total/NA
Prep Batch: 654928

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Indeno[1,2,3-cd]pyrene	ND		1790	4210	J	ug/Kg	☼	NC	56 - 134	15	15
Isophorone	ND		1790	ND		ug/Kg	☼	NC	56 - 120	NC	17
Naphthalene	ND		1790	ND		ug/Kg	☼	NC	46 - 120	NC	29
Nitrobenzene	ND		1790	ND		ug/Kg	☼	NC	49 - 120	NC	24
N-Nitrosodi-n-propylamine	ND		1790	ND		ug/Kg	☼	NC	46 - 120	NC	31
Pentachlorophenol	ND		3580	ND		ug/Kg	☼	NC	25 - 136	NC	35
Phenanthrene	ND	F2	1790	3880	J F2	ug/Kg	☼	NC	60 - 122	44	15
Phenol	ND		1790	ND		ug/Kg	☼	NC	50 - 120	NC	35
Pyrene	2800	J F1	1790	6730	J F1	ug/Kg	☼	221	61 - 133	6	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*0*	*S1-*	*54 - 120*
2-Fluorobiphenyl (Surr)	*63*		*60 - 120*
2-Fluorophenol (Surr)	*74*		*52 - 120*
Nitrobenzene-d5 (Surr)	*74*		*53 - 120*
Phenol-d5 (Surr)	*62*		*54 - 120*
p-Terphenyl-d14 (Surr)	*81*		*79 - 130*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-654366/1-A
Matrix: Water
Analysis Batch: 654320

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 654366

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		12/22/22 10:54	12/27/22 11:08	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*39*		*15 - 110*	*12/22/22 10:54*	*12/27/22 11:08*	*1*

Lab Sample ID: LCS 480-654366/2-A
Matrix: Water
Analysis Batch: 654320

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654366

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			2.00	2.04		ug/L		102	40 - 140		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*38*		*15 - 110*

Lab Sample ID: LCSD 480-654366/3-A
Matrix: Water
Analysis Batch: 654320

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 654366

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane			2.00	2.04		ug/L		102	40 - 140	0	20

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,4-Dioxane-d8	*35*		*15 - 110*

Method: 537 IDA - EPA 537 Isotope Dilution

Lab Sample ID: MB 200-187189/1-A
Matrix: Solid
Analysis Batch: 187284

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 187189

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		0.50	0.33	ug/Kg		01/03/23 09:24	01/05/23 16:11	1
Perfluoropentanoic acid (PFPeA)	ND		0.20	0.055	ug/Kg		01/03/23 09:24	01/05/23 16:11	1
Perfluorohexanoic acid (PFHxA)	ND		0.20	0.046	ug/Kg		01/03/23 09:24	01/05/23 16:11	1
Perfluoroheptanoic acid (PFHpA)	ND		0.20	0.039	ug/Kg		01/03/23 09:24	01/05/23 16:11	1
Perfluorooctanoic acid (PFOA)	ND		0.20	0.058	ug/Kg		01/03/23 09:24	01/05/23 16:11	1
Perfluorononanoic acid (PFNA)	ND		0.20	0.034	ug/Kg		01/03/23 09:24	01/05/23 16:11	1
Perfluorodecanoic acid (PFDA)	ND		0.20	0.028	ug/Kg		01/03/23 09:24	01/05/23 16:11	1
Perfluoroundecanoic acid (PFUnA)	ND		0.20	0.027	ug/Kg		01/03/23 09:24	01/05/23 16:11	1
Perfluorododecanoic acid (PFDoA)	ND		0.20	0.025	ug/Kg		01/03/23 09:24	01/05/23 16:11	1
Perfluorotridecanoic acid (PFTriA)	ND		0.20	0.025	ug/Kg		01/03/23 09:24	01/05/23 16:11	1
Perfluorotetradecanoic acid (PFTeA)	ND		0.20	0.026	ug/Kg		01/03/23 09:24	01/05/23 16:11	1
Perfluorobutanesulfonic acid (PFBS)	ND		0.20	0.033	ug/Kg		01/03/23 09:24	01/05/23 16:11	1
Perfluorohexanesulfonic acid (PFHxS)	ND		0.20	0.041	ug/Kg		01/03/23 09:24	01/05/23 16:11	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		0.20	0.023	ug/Kg		01/03/23 09:24	01/05/23 16:11	1
Perfluorooctanesulfonic acid (PFOS)	ND		0.20	0.11	ug/Kg		01/03/23 09:24	01/05/23 16:11	1
Perfluorodecanesulfonic acid (PFDS)	ND		0.20	0.019	ug/Kg		01/03/23 09:24	01/05/23 16:11	1
Perfluorooctanesulfonamide (PFOSA)	ND		0.20	0.034	ug/Kg		01/03/23 09:24	01/05/23 16:11	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.0	0.11	ug/Kg		01/03/23 09:24	01/05/23 16:11	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.0	0.083	ug/Kg		01/03/23 09:24	01/05/23 16:11	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.0	0.057	ug/Kg		01/03/23 09:24	01/05/23 16:11	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.0	0.037	ug/Kg		01/03/23 09:24	01/05/23 16:11	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*83*		*50 - 150*	*01/03/23 09:24*	*01/05/23 16:11*	*1*
13C4 PFHpA	*86*		*50 - 150*	*01/03/23 09:24*	*01/05/23 16:11*	*1*
13C4 PFOA	*85*		*50 - 150*	*01/03/23 09:24*	*01/05/23 16:11*	*1*
13C4 PFOS	*78*		*50 - 150*	*01/03/23 09:24*	*01/05/23 16:11*	*1*
13C5 PFNA	*88*		*50 - 150*	*01/03/23 09:24*	*01/05/23 16:11*	*1*
13C4 PFBA	*74*		*50 - 150*	*01/03/23 09:24*	*01/05/23 16:11*	*1*
13C2 PFHxA	*81*		*50 - 150*	*01/03/23 09:24*	*01/05/23 16:11*	*1*
13C2 PFDA	*92*		*50 - 150*	*01/03/23 09:24*	*01/05/23 16:11*	*1*
13C2 PFUnA	*90*		*50 - 150*	*01/03/23 09:24*	*01/05/23 16:11*	*1*
13C2 PFDoA	*82*		*50 - 150*	*01/03/23 09:24*	*01/05/23 16:11*	*1*
13C8 FOSA	*76*		*50 - 150*	*01/03/23 09:24*	*01/05/23 16:11*	*1*
13C5 PFPeA	*75*		*50 - 150*	*01/03/23 09:24*	*01/05/23 16:11*	*1*
13C2 PFTeDA	*74*		*50 - 150*	*01/03/23 09:24*	*01/05/23 16:11*	*1*
d3-NMeFOSAA	*81*		*50 - 150*	*01/03/23 09:24*	*01/05/23 16:11*	*1*
d5-NEtFOSAA	*81*		*50 - 150*	*01/03/23 09:24*	*01/05/23 16:11*	*1*
M2-6:2 FTS	*94*		*50 - 150*	*01/03/23 09:24*	*01/05/23 16:11*	*1*
M2-8:2 FTS	*87*		*50 - 150*	*01/03/23 09:24*	*01/05/23 16:11*	*1*
13C3 PFBS	*79*		*50 - 150*	*01/03/23 09:24*	*01/05/23 16:11*	*1*

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 200-187189/2-A
Client Sample ID: Lab Control Sample
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 187284
Prep Batch: 187189

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	2.00	1.90		ug/Kg		95	60 - 140
Perfluoropentanoic acid (PFPeA)	2.00	1.90		ug/Kg		95	60 - 140
Perfluorohexanoic acid (PFHxA)	2.00	1.93		ug/Kg		97	60 - 140
Perfluoroheptanoic acid (PFHpA)	2.00	1.87		ug/Kg		93	60 - 140
Perfluorooctanoic acid (PFOA)	2.00	1.96		ug/Kg		98	60 - 140
Perfluorononanoic acid (PFNA)	2.00	1.92		ug/Kg		96	60 - 140
Perfluorodecanoic acid (PFDA)	2.00	1.91		ug/Kg		96	60 - 140
Perfluoroundecanoic acid (PFUnA)	2.00	1.87		ug/Kg		94	60 - 140
Perfluorododecanoic acid (PFDoA)	2.00	1.90		ug/Kg		95	60 - 140
Perfluorotridecanoic acid (PFTriA)	2.00	1.79		ug/Kg		90	60 - 140
Perfluorotetradecanoic acid (PFTeA)	2.00	1.79		ug/Kg		89	60 - 140
Perfluorobutanesulfonic acid (PFBS)	1.77	1.66		ug/Kg		94	60 - 140
Perfluorohexanesulfonic acid (PFHxS)	1.82	1.70		ug/Kg		94	60 - 140
Perfluoroheptanesulfonic acid (PFHpS)	1.90	1.82		ug/Kg		96	60 - 140
Perfluorooctanesulfonic acid (PFOS)	1.86	1.70		ug/Kg		91	60 - 140
Perfluorodecanesulfonic acid (PFDS)	1.93	1.60		ug/Kg		83	60 - 140
Perfluorooctanesulfonamide (PFOSA)	2.00	1.86		ug/Kg		93	60 - 140
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2.00	2.03		ug/Kg		101	60 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2.00	1.95	J	ug/Kg		97	60 - 140
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	1.90	1.98	J	ug/Kg		105	50 - 150
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	1.92	2.06		ug/Kg		108	60 - 140

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
18O2 PFHxS	*86*		*50 - 150*
13C4 PFHpA	*88*		*50 - 150*
13C4 PFOA	*87*		*50 - 150*
13C4 PFOS	*86*		*50 - 150*
13C5 PFNA	*92*		*50 - 150*
13C4 PFBA	*80*		*50 - 150*
13C2 PFHxA	*84*		*50 - 150*
13C2 PFDA	*96*		*50 - 150*
13C2 PFUnA	*91*		*50 - 150*
13C2 PFDoA	*78*		*50 - 150*
13C8 FOSA	*85*		*50 - 150*
13C5 PFPeA	*79*		*50 - 150*
13C2 PFTeDA	*75*		*50 - 150*
d3-NMeFOSAA	*89*		*50 - 150*
d5-NEtFOSAA	*82*		*50 - 150*

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 200-187189/2-A
Matrix: Solid
Analysis Batch: 187284

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 187189

Isotope Dilution	LCS %Recovery	LCS Qualifier	Limits
M2-6:2 FTS	99		50 - 150
M2-8:2 FTS	96		50 - 150
13C3 PFBS	82		50 - 150

Lab Sample ID: 480-204989-5 MS
Matrix: Solid
Analysis Batch: 187284

Client Sample ID: SB2 (1-2)
Prep Type: Total/NA
Prep Batch: 187189

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	ND		2.09	2.13		ug/Kg	☼	102	60 - 140
Perfluoropentanoic acid (PFPeA)	ND		2.09	2.16		ug/Kg	☼	103	60 - 140
Perfluorohexanoic acid (PFHxA)	ND		2.09	1.99		ug/Kg	☼	95	60 - 140
Perfluoroheptanoic acid (PFHpA)	ND		2.09	1.97		ug/Kg	☼	94	60 - 140
Perfluorooctanoic acid (PFOA)	0.070	J	2.09	2.13		ug/Kg	☼	99	60 - 140
Perfluorononanoic acid (PFNA)	0.051	J	2.09	2.02		ug/Kg	☼	94	60 - 140
Perfluorodecanoic acid (PFDA)	ND		2.09	2.06		ug/Kg	☼	99	60 - 140
Perfluoroundecanoic acid (PFUnA)	ND		2.09	1.96		ug/Kg	☼	94	60 - 140
Perfluorododecanoic acid (PFDoA)	ND		2.09	1.97		ug/Kg	☼	94	60 - 140
Perfluorotridecanoic acid (PFTriA)	ND		2.09	2.16		ug/Kg	☼	103	60 - 140
Perfluorotetradecanoic acid (PFTeA)	ND		2.09	1.90		ug/Kg	☼	91	60 - 140
Perfluorobutanesulfonic acid (PFBS)	ND		1.85	1.79		ug/Kg	☼	97	60 - 140
Perfluorohexanesulfonic acid (PFHxS)	ND		1.90	1.87		ug/Kg	☼	98	60 - 140
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.99	1.99		ug/Kg	☼	100	60 - 140
Perfluorooctanesulfonic acid (PFOS)	0.20	J	1.94	2.02		ug/Kg	☼	94	60 - 140
Perfluorodecanesulfonic acid (PFDS)	ND		2.01	1.84		ug/Kg	☼	91	60 - 140
Perfluorooctanesulfonamide (PFOSA)	ND		2.09	2.00		ug/Kg	☼	96	60 - 140
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.09	2.20		ug/Kg	☼	105	60 - 140
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.09	2.09	J	ug/Kg	☼	100	60 - 140
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		1.98	2.10		ug/Kg	☼	106	50 - 150
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.00	2.14		ug/Kg	☼	107	60 - 140

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
18O2 PFHxS	83		50 - 150
13C4 PFHpA	90		50 - 150
13C4 PFOA	93		50 - 150
13C4 PFOS	81		50 - 150
13C5 PFNA	95		50 - 150
13C4 PFBA	85		50 - 150

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: 480-204989-5 MS
Matrix: Solid
Analysis Batch: 187284

Client Sample ID: SB2 (1-2)
Prep Type: Total/NA
Prep Batch: 187189

Isotope Dilution	MS %Recovery	MS Qualifier	Limits
13C2 PFHxA	91		50 - 150
13C2 PFDA	101		50 - 150
13C2 PFUnA	103		50 - 150
13C2 PFDoA	100		50 - 150
13C8 FOSA	78		50 - 150
13C5 PFPeA	84		50 - 150
13C2 PFTeDA	109		50 - 150
d3-NMeFOSAA	87		50 - 150
d5-NEtFOSAA	91		50 - 150
M2-6:2 FTS	100		50 - 150
M2-8:2 FTS	99		50 - 150
13C3 PFBS	81		50 - 150

Lab Sample ID: 480-204989-5 MSD
Matrix: Solid
Analysis Batch: 187284

Client Sample ID: SB2 (1-2)
Prep Type: Total/NA
Prep Batch: 187189

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	ND		2.12	2.17		ug/Kg	☼	103	60 - 140	2	30
Perfluoropentanoic acid (PFPeA)	ND		2.12	2.12		ug/Kg	☼	100	60 - 140	2	30
Perfluorohexanoic acid (PFHxA)	ND		2.12	2.16		ug/Kg	☼	102	60 - 140	8	30
Perfluoroheptanoic acid (PFHpA)	ND		2.12	1.97		ug/Kg	☼	93	60 - 140	0	30
Perfluorooctanoic acid (PFOA)	0.070	J	2.12	2.15		ug/Kg	☼	98	60 - 140	1	30
Perfluorononanoic acid (PFNA)	0.051	J	2.12	2.10		ug/Kg	☼	97	60 - 140	4	30
Perfluorodecanoic acid (PFDA)	ND		2.12	2.14		ug/Kg	☼	101	60 - 140	4	30
Perfluoroundecanoic acid (PFUnA)	ND		2.12	2.22		ug/Kg	☼	105	60 - 140	13	30
Perfluorododecanoic acid (PFDoA)	ND		2.12	1.97		ug/Kg	☼	93	60 - 140	0	30
Perfluorotridecanoic acid (PFTriA)	ND		2.12	2.18		ug/Kg	☼	103	60 - 140	1	30
Perfluorotetradecanoic acid (PFTeA)	ND		2.12	1.98		ug/Kg	☼	94	60 - 140	4	30
Perfluorobutanesulfonic acid (PFBS)	ND		1.87	1.82		ug/Kg	☼	97	60 - 140	2	30
Perfluorohexanesulfonic acid (PFHxS)	ND		1.93	1.84		ug/Kg	☼	96	60 - 140	2	30
Perfluoroheptanesulfonic acid (PFHpS)	ND		2.02	2.00		ug/Kg	☼	99	60 - 140	0	30
Perfluorooctanesulfonic acid (PFOS)	0.20	J	1.97	2.02		ug/Kg	☼	93	60 - 140	0	30
Perfluorodecanesulfonic acid (PFDS)	ND		2.04	1.89		ug/Kg	☼	93	60 - 140	3	30
Perfluorooctanesulfonamide (PFOSA)	ND		2.12	2.11		ug/Kg	☼	99	60 - 140	5	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		2.12	2.33		ug/Kg	☼	110	60 - 140	6	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		2.12	2.16		ug/Kg	☼	102	60 - 140	3	30
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		2.01	2.07	J	ug/Kg	☼	103	50 - 150	1	30

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: 480-204989-5 MSD
Matrix: Solid
Analysis Batch: 187284

Client Sample ID: SB2 (1-2)
Prep Type: Total/NA
Prep Batch: 187189

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.03	2.19		ug/Kg	☼	108	60 - 140	3	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
18O2 PFHxS	*86*		*50 - 150*
13C4 PFHpA	*90*		*50 - 150*
13C4 PFOA	*95*		*50 - 150*
13C4 PFOS	*84*		*50 - 150*
13C5 PFNA	*100*		*50 - 150*
13C4 PFBA	*84*		*50 - 150*
13C2 PFHxA	*91*		*50 - 150*
13C2 PFDA	*100*		*50 - 150*
13C2 PFUnA	*95*		*50 - 150*
13C2 PFDoA	*99*		*50 - 150*
13C8 FOSA	*77*		*50 - 150*
13C5 PFPeA	*86*		*50 - 150*
13C2 PFTeDA	*104*		*50 - 150*
d3-NMeFOSAA	*86*		*50 - 150*
d5-NEtFOSAA	*90*		*50 - 150*
M2-6:2 FTS	*103*		*50 - 150*
M2-8:2 FTS	*97*		*50 - 150*
13C3 PFBS	*83*		*50 - 150*

Lab Sample ID: MB 200-187194/1-A
Matrix: Water
Analysis Batch: 187252

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 187194

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		5.0	1.2	ng/L		01/03/23 10:54	01/04/23 15:42	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.68	ng/L		01/03/23 10:54	01/04/23 15:42	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.65	ng/L		01/03/23 10:54	01/04/23 15:42	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.54	ng/L		01/03/23 10:54	01/04/23 15:42	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.76	ng/L		01/03/23 10:54	01/04/23 15:42	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.49	ng/L		01/03/23 10:54	01/04/23 15:42	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.46	ng/L		01/03/23 10:54	01/04/23 15:42	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.55	ng/L		01/03/23 10:54	01/04/23 15:42	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.49	ng/L		01/03/23 10:54	01/04/23 15:42	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.48	ng/L		01/03/23 10:54	01/04/23 15:42	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.64	ng/L		01/03/23 10:54	01/04/23 15:42	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.62	ng/L		01/03/23 10:54	01/04/23 15:42	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.55	ng/L		01/03/23 10:54	01/04/23 15:42	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		2.0	0.41	ng/L		01/03/23 10:54	01/04/23 15:42	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.85	ng/L		01/03/23 10:54	01/04/23 15:42	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.40	ng/L		01/03/23 10:54	01/04/23 15:42	1
Perfluorooctanesulfonamide (PFOSA)	ND		2.0	0.92	ng/L		01/03/23 10:54	01/04/23 15:42	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		5.0	1.9	ng/L		01/03/23 10:54	01/04/23 15:42	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		5.0	1.6	ng/L		01/03/23 10:54	01/04/23 15:42	1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: MB 200-187194/1-A
Matrix: Water
Analysis Batch: 187252

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 187194

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		5.0	1.3	ng/L		01/03/23 10:54	01/04/23 15:42	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.0	0.77	ng/L		01/03/23 10:54	01/04/23 15:42	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*91*		*50 - 150*	*01/03/23 10:54*	*01/04/23 15:42*	*1*
13C4 PFHpA	*94*		*50 - 150*	*01/03/23 10:54*	*01/04/23 15:42*	*1*
13C4 PFOA	*93*		*50 - 150*	*01/03/23 10:54*	*01/04/23 15:42*	*1*
13C4 PFOS	*94*		*50 - 150*	*01/03/23 10:54*	*01/04/23 15:42*	*1*
13C5 PFNA	*98*		*50 - 150*	*01/03/23 10:54*	*01/04/23 15:42*	*1*
13C4 PFBA	*88*		*50 - 150*	*01/03/23 10:54*	*01/04/23 15:42*	*1*
13C2 PFHxA	*89*		*50 - 150*	*01/03/23 10:54*	*01/04/23 15:42*	*1*
13C2 PFDA	*99*		*50 - 150*	*01/03/23 10:54*	*01/04/23 15:42*	*1*
13C2 PFUnA	*75*		*50 - 150*	*01/03/23 10:54*	*01/04/23 15:42*	*1*
13C2 PFDoA	*60*		*50 - 150*	*01/03/23 10:54*	*01/04/23 15:42*	*1*
13C8 FOSA	*58*		*50 - 150*	*01/03/23 10:54*	*01/04/23 15:42*	*1*
13C5 PFPeA	*82*		*50 - 150*	*01/03/23 10:54*	*01/04/23 15:42*	*1*
13C2 PFTeDA	*62*		*50 - 150*	*01/03/23 10:54*	*01/04/23 15:42*	*1*
d3-NMeFOSAA	*75*		*50 - 150*	*01/03/23 10:54*	*01/04/23 15:42*	*1*
d5-NEtFOSAA	*64*		*50 - 150*	*01/03/23 10:54*	*01/04/23 15:42*	*1*
M2-6:2 FTS	*110*		*50 - 150*	*01/03/23 10:54*	*01/04/23 15:42*	*1*
M2-8:2 FTS	*97*		*50 - 150*	*01/03/23 10:54*	*01/04/23 15:42*	*1*
13C3 PFBS	*86*		*50 - 150*	*01/03/23 10:54*	*01/04/23 15:42*	*1*

Lab Sample ID: LCS 200-187194/2-A
Matrix: Water
Analysis Batch: 187252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 187194

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	40.0	41.0		ng/L		102	70 - 130
Perfluoropentanoic acid (PFPeA)	40.0	40.6		ng/L		102	70 - 130
Perfluorohexanoic acid (PFHxA)	40.0	39.4		ng/L		99	70 - 130
Perfluoroheptanoic acid (PFHpA)	40.0	37.7		ng/L		94	70 - 130
Perfluorooctanoic acid (PFOA)	40.0	41.1		ng/L		103	70 - 130
Perfluorononanoic acid (PFNA)	40.0	40.9		ng/L		102	70 - 130
Perfluorodecanoic acid (PFDA)	40.0	39.5		ng/L		99	70 - 130
Perfluoroundecanoic acid (PFUnA)	40.0	41.5		ng/L		104	70 - 130
Perfluorododecanoic acid (PFDoA)	40.0	39.3		ng/L		98	70 - 130
Perfluorotridecanoic acid (PFTriA)	40.0	36.4		ng/L		91	70 - 130
Perfluorotetradecanoic acid (PFTeA)	40.0	36.2		ng/L		90	70 - 130
Perfluorobutanesulfonic acid (PFBS)	35.4	35.2		ng/L		99	70 - 130
Perfluorohexanesulfonic acid (PFHxS)	36.4	36.7		ng/L		101	70 - 130
Perfluoroheptanesulfonic acid (PFHpS)	38.1	38.8		ng/L		102	70 - 130

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCS 200-187194/2-A
Matrix: Water
Analysis Batch: 187252

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 187194

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorooctanesulfonic acid (PFOS)	37.1	34.5		ng/L		93	70 - 130
Perfluorodecanesulfonic acid (PFDS)	38.6	29.2		ng/L		76	70 - 130
Perfluorooctanesulfonamide (PFOSA)	40.0	34.6		ng/L		86	70 - 130
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	40.0	42.2		ng/L		105	70 - 130
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	40.0	40.2		ng/L		100	70 - 130
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	37.9	42.7		ng/L		113	60 - 140
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	38.3	42.3		ng/L		110	70 - 130

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
18O2 PFHxS	*94*		*50 - 150*
13C4 PFHpA	*96*		*50 - 150*
13C4 PFOA	*96*		*50 - 150*
13C4 PFOS	*95*		*50 - 150*
13C5 PFNA	*98*		*50 - 150*
13C4 PFBA	*89*		*50 - 150*
13C2 PFHxA	*91*		*50 - 150*
13C2 PFDA	*105*		*50 - 150*
13C2 PFUnA	*89*		*50 - 150*
13C2 PFDoA	*64*		*50 - 150*
13C8 FOSA	*64*		*50 - 150*
13C5 PFPeA	*85*		*50 - 150*
13C2 PFTeDA	*67*		*50 - 150*
d3-NMeFOSAA	*82*		*50 - 150*
d5-NEtFOSAA	*73*		*50 - 150*
M2-6:2 FTS	*107*		*50 - 150*
M2-8:2 FTS	*98*		*50 - 150*
13C3 PFBS	*90*		*50 - 150*

Lab Sample ID: LCSD 200-187194/3-A
Matrix: Water
Analysis Batch: 187252

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 187194

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)	40.0	41.2		ng/L		103	70 - 130	1	30
Perfluoropentanoic acid (PFPeA)	40.0	42.1		ng/L		105	70 - 130	4	30
Perfluorohexanoic acid (PFHxA)	40.0	39.8		ng/L		100	70 - 130	1	30
Perfluoroheptanoic acid (PFHpA)	40.0	43.2		ng/L		108	70 - 130	14	30
Perfluorooctanoic acid (PFOA)	40.0	42.0		ng/L		105	70 - 130	2	30
Perfluorononanoic acid (PFNA)	40.0	40.7		ng/L		102	70 - 130	0	30
Perfluorodecanoic acid (PFDA)	40.0	42.4		ng/L		106	70 - 130	7	30
Perfluoroundecanoic acid (PFUnA)	40.0	41.7		ng/L		104	70 - 130	0	30
Perfluorododecanoic acid (PFDoA)	40.0	38.1		ng/L		95	70 - 130	3	30

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LCSD 200-187194/3-A
Client Sample ID: Lab Control Sample Dup
Matrix: Water
Prep Type: Total/NA
Analysis Batch: 187252
Prep Batch: 187194

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorotridecanoic acid (PFTriA)			40.0	36.5		ng/L		91	70 - 130	0	30
Perfluorotetradecanoic acid (PFTeA)			40.0	37.7		ng/L		94	70 - 130	4	30
Perfluorobutanesulfonic acid (PFBS)			35.4	34.0		ng/L		96	70 - 130	4	30
Perfluorohexanesulfonic acid (PFHxS)			36.4	37.8		ng/L		104	70 - 130	3	30
Perfluoroheptanesulfonic acid (PFHpS)			38.1	38.1		ng/L		100	70 - 130	2	30
Perfluorooctanesulfonic acid (PFOS)			37.1	35.0		ng/L		94	70 - 130	1	30
Perfluorodecanesulfonic acid (PFDS)			38.6	32.2		ng/L		83	70 - 130	10	30
Perfluorooctanesulfonamide (PFOSA)			40.0	36.5		ng/L		91	70 - 130	6	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)			40.0	43.7		ng/L		109	70 - 130	4	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			40.0	41.0		ng/L		103	70 - 130	2	30
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)			37.9	44.4		ng/L		117	60 - 140	4	30
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)			38.3	45.2		ng/L		118	70 - 130	7	30

Isotope Dilution	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
18O2 PFHxS	*93*		*50 - 150*
13C4 PFHpA	*89*		*50 - 150*
13C4 PFOA	*96*		*50 - 150*
13C4 PFOS	*98*		*50 - 150*
13C5 PFNA	*99*		*50 - 150*
13C4 PFBA	*87*		*50 - 150*
13C2 PFHxA	*92*		*50 - 150*
13C2 PFDA	*101*		*50 - 150*
13C2 PFUnA	*90*		*50 - 150*
13C2 PFDoA	*77*		*50 - 150*
13C8 FOSA	*68*		*50 - 150*
13C5 PFPeA	*83*		*50 - 150*
13C2 PFTeDA	*73*		*50 - 150*
d3-NMeFOSAA	*88*		*50 - 150*
d5-NEtFOSAA	*79*		*50 - 150*
M2-6:2 FTS	*108*		*50 - 150*
M2-8:2 FTS	*103*		*50 - 150*
13C3 PFBS	*91*		*50 - 150*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-654412/1-A
Matrix: Water
Analysis Batch: 654667

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 654412

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		12/27/22 09:25	12/29/22 00:01	1
Antimony	ND		0.020	0.0068	mg/L		12/27/22 09:25	12/29/22 00:01	1
Arsenic	ND		0.015	0.0056	mg/L		12/27/22 09:25	12/29/22 00:01	1
Barium	ND		0.0020	0.00070	mg/L		12/27/22 09:25	12/29/22 00:01	1
Beryllium	ND		0.0020	0.00030	mg/L		12/27/22 09:25	12/29/22 00:01	1
Cadmium	ND		0.0020	0.00050	mg/L		12/27/22 09:25	12/29/22 00:01	1
Calcium	ND		0.50	0.10	mg/L		12/27/22 09:25	12/29/22 00:01	1
Chromium	ND		0.0040	0.0010	mg/L		12/27/22 09:25	12/29/22 00:01	1
Cobalt	ND		0.0040	0.00063	mg/L		12/27/22 09:25	12/29/22 00:01	1
Copper	ND		0.010	0.0016	mg/L		12/27/22 09:25	12/29/22 00:01	1
Iron	ND		0.050	0.019	mg/L		12/27/22 09:25	12/29/22 00:01	1
Lead	ND		0.010	0.0030	mg/L		12/27/22 09:25	12/29/22 00:01	1
Magnesium	ND		0.20	0.043	mg/L		12/27/22 09:25	12/29/22 00:01	1
Manganese	0.000460	J	0.0030	0.00040	mg/L		12/27/22 09:25	12/29/22 00:01	1
Nickel	0.00315	J	0.010	0.0013	mg/L		12/27/22 09:25	12/29/22 00:01	1
Potassium	ND		0.50	0.10	mg/L		12/27/22 09:25	12/29/22 00:01	1
Selenium	ND		0.025	0.0087	mg/L		12/27/22 09:25	12/29/22 00:01	1
Silver	ND		0.0060	0.0017	mg/L		12/27/22 09:25	12/29/22 00:01	1
Sodium	ND		1.0	0.32	mg/L		12/27/22 09:25	12/29/22 00:01	1
Thallium	ND		0.020	0.010	mg/L		12/27/22 09:25	12/29/22 00:01	1
Vanadium	ND		0.0050	0.0015	mg/L		12/27/22 09:25	12/29/22 00:01	1
Zinc	ND		0.010	0.0015	mg/L		12/27/22 09:25	12/29/22 00:01	1

Lab Sample ID: LCS 480-654412/2-A
Matrix: Water
Analysis Batch: 654667

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654412

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	10.0	10.22		mg/L		102	80 - 120
Antimony	0.200	0.213		mg/L		107	80 - 120
Arsenic	0.200	0.201		mg/L		101	80 - 120
Barium	0.200	0.201		mg/L		101	80 - 120
Beryllium	0.200	0.211		mg/L		105	80 - 120
Cadmium	0.200	0.205		mg/L		103	80 - 120
Calcium	10.0	10.0		mg/L		100	80 - 120
Chromium	0.200	0.203		mg/L		101	80 - 120
Cobalt	0.200	0.194		mg/L		97	80 - 120
Copper	0.200	0.197		mg/L		99	80 - 120
Iron	10.0	10.24		mg/L		102	80 - 120
Lead	0.200	0.200		mg/L		100	80 - 120
Magnesium	10.0	10.14		mg/L		101	80 - 120
Manganese	0.200	0.202		mg/L		101	80 - 120
Nickel	0.200	0.196		mg/L		98	80 - 120
Potassium	10.0	9.93		mg/L		99	80 - 120
Selenium	0.200	0.195		mg/L		98	80 - 120
Silver	0.0500	0.0497		mg/L		99	80 - 120
Sodium	10.0	10.00		mg/L		100	80 - 120
Thallium	0.200	0.206		mg/L		103	80 - 120
Vanadium	0.200	0.206		mg/L		103	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-654412/2-A
Matrix: Water
Analysis Batch: 654667

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654412

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	0.200	0.206		mg/L		103	80 - 120

Lab Sample ID: MB 480-654477/1-A
Matrix: Solid
Analysis Batch: 654754

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 654477

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	5.36	J	9.5	4.2	mg/Kg		12/28/22 14:47	12/29/22 12:28	1
Antimony	ND		14.2	0.38	mg/Kg		12/28/22 14:47	12/29/22 12:28	1
Arsenic	ND		1.9	0.38	mg/Kg		12/28/22 14:47	12/29/22 12:28	1
Barium	ND		0.47	0.10	mg/Kg		12/28/22 14:47	12/29/22 12:28	1
Beryllium	ND		0.19	0.027	mg/Kg		12/28/22 14:47	12/29/22 12:28	1
Cadmium	ND		0.19	0.028	mg/Kg		12/28/22 14:47	12/29/22 12:28	1
Calcium	3.34	J	47.4	3.1	mg/Kg		12/28/22 14:47	12/29/22 12:28	1
Chromium	ND		0.47	0.19	mg/Kg		12/28/22 14:47	12/29/22 12:28	1
Cobalt	ND		0.47	0.047	mg/Kg		12/28/22 14:47	12/29/22 12:28	1
Copper	ND		0.95	0.20	mg/Kg		12/28/22 14:47	12/29/22 12:28	1
Iron	6.80	J	9.5	3.3	mg/Kg		12/28/22 14:47	12/29/22 12:28	1
Lead	ND		0.95	0.23	mg/Kg		12/28/22 14:47	12/29/22 12:28	1
Magnesium	1.78	J	18.9	0.88	mg/Kg		12/28/22 14:47	12/29/22 12:28	1
Manganese	0.145	J	0.19	0.030	mg/Kg		12/28/22 14:47	12/29/22 12:28	1
Nickel	ND		4.7	0.22	mg/Kg		12/28/22 14:47	12/29/22 12:28	1
Potassium	ND		28.4	18.9	mg/Kg		12/28/22 14:47	12/29/22 12:28	1
Selenium	ND		3.8	0.38	mg/Kg		12/28/22 14:47	12/29/22 12:28	1
Silver	ND		0.57	0.19	mg/Kg		12/28/22 14:47	12/29/22 12:28	1
Sodium	ND		133	12.3	mg/Kg		12/28/22 14:47	12/29/22 12:28	1
Thallium	ND		5.7	0.28	mg/Kg		12/28/22 14:47	12/29/22 12:28	1
Vanadium	ND		0.47	0.10	mg/Kg		12/28/22 14:47	12/29/22 12:28	1
Zinc	ND		1.9	0.61	mg/Kg		12/28/22 14:47	12/29/22 12:28	1

Lab Sample ID: LCDSRM 480-654477/3-A
Matrix: Solid
Analysis Batch: 654754

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 654477

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	10100	9073		mg/Kg		89.8	37.5 - 114.9	4	20
Antimony	234	84.53		mg/Kg		36.1	10.0 - 120.1	9	20
Arsenic	129	107.5		mg/Kg		83.4	60.9 - 113.2	3	20
Barium	169	138.4		mg/Kg		81.9	68.6 - 114.2	7	20
Beryllium	137	104.8		mg/Kg		76.5	66.3 - 110.2	16	20
Cadmium	227	171.6		mg/Kg		75.6	64.8 - 110.1	13	20
Calcium	5190	4080		mg/Kg		78.6	64.0 - 112.9	8	20
Chromium	115	90.27		mg/Kg		78.5	62.4 - 115.7	12	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCDSRM 480-654477/3-A
Client Sample ID: Lab Control Sample Dup
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 654754
Prep Batch: 654477

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cobalt	50.0	46.45		mg/Kg		92.9	69.6 - 115.8	9	20
Copper	76.0	61.33		mg/Kg		80.7	69.5 - 115.8	7	20
Iron	15000	15070		mg/Kg		100.5	29.9 - 149.3	3	20
Lead	74.8	81.75		mg/Kg		109.3	67.0 - 128.9	2	20
Magnesium	2570	2304		mg/Kg		89.7	53.7 - 121.0	2	20
Manganese	400	340.2		mg/Kg		85.0	70.5 - 115.8	6	20
Nickel	282	247.9		mg/Kg		87.9	62.1 - 114.9	11	20
Potassium	2420	2188		mg/Kg		90.4	46.7 - 113.2	3	20
Selenium	246	193.0		mg/Kg		78.5	60.2 - 114.6	9	20
Silver	87.5	70.61		mg/Kg		80.7	63.7 - 115.4	5	20
Sodium	161	142.7		mg/Kg		88.6	28.6 - 136.0	5	20
Thallium	77.4	74.43		mg/Kg		96.2	55.0 - 120.0	5	20
Vanadium	201	158.9		mg/Kg		79.0	64.7 - 111.4	7	20
Zinc	401	290.3		mg/Kg		72.4	62.8 - 116.7	8	20

Lab Sample ID: LCSSRM 480-654477/2-A
Client Sample ID: Lab Control Sample
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 654754
Prep Batch: 654477

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	10100	9403		mg/Kg		93.1	37.5 - 114.9
Antimony	234	92.75		mg/Kg		39.6	10.0 - 120.1
Arsenic	129	110.7		mg/Kg		85.8	60.9 - 113.2
Barium	169	148.2		mg/Kg		87.7	68.6 - 114.2
Beryllium	137	122.8		mg/Kg		89.6	66.3 - 110.2
Cadmium	227	195.0		mg/Kg		85.9	64.8 - 110.1
Calcium	5190	4436		mg/Kg		85.5	64.0 - 112.9
Chromium	115	101.8		mg/Kg		88.6	62.4 - 115.7
Cobalt	50.0	50.93		mg/Kg		101.9	69.6 - 115.8
Copper	76.0	65.94		mg/Kg		86.8	69.5 - 115.8

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-654477/2-A
Client Sample ID: Lab Control Sample
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 654754
Prep Batch: 654477

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Iron	15000	14660		mg/Kg		97.8	29.9 - 149.3
Lead	74.8	80.06		mg/Kg		107.0	67.0 - 128.9
Magnesium	2570	2360		mg/Kg		91.8	53.7 - 121.0
Manganese	400	362.0		mg/Kg		90.5	70.5 - 115.8
Nickel	282	277.2		mg/Kg		98.3	62.1 - 114.9
Potassium	2420	2257		mg/Kg		93.3	46.7 - 113.2
Selenium	246	211.8		mg/Kg		86.1	60.2 - 114.6
Silver	87.5	74.02		mg/Kg		84.6	63.7 - 115.4
Sodium	161	150.7		mg/Kg		93.6	28.6 - 136.0
Thallium	77.4	77.96		mg/Kg		100.7	55.0 - 120.0
Vanadium	201	171.3		mg/Kg		85.2	64.7 - 111.4
Zinc	401	315.2		mg/Kg		78.6	62.8 - 116.7

Lab Sample ID: 480-204989-5 MS
Client Sample ID: SB2 (1-2)
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 654754
Prep Batch: 654477

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	8640	B F1	2220	16400	F1	mg/Kg	☼	350	75 - 125
Arsenic	14.2	F2	44.4	61.08		mg/Kg	☼	106	75 - 125
Barium	79.8	F1 F2	44.4	203.1	F1	mg/Kg	☼	278	75 - 125
Beryllium	0.50		44.4	42.94		mg/Kg	☼	96	75 - 125
Calcium	2730	B F1	2220	4256	F1	mg/Kg	☼	69	75 - 125
Chromium	16.2		44.4	61.34		mg/Kg	☼	102	75 - 125
Cobalt	7.8		44.4	56.13		mg/Kg	☼	109	75 - 125
Copper	60.6	F1	44.4	71.08	F1	mg/Kg	☼	24	75 - 125
Magnesium	2570	B F1	2220	4870		mg/Kg	☼	104	75 - 125
Manganese	610	B	44.4	477.6	4	mg/Kg	☼	-299	75 - 125
Potassium	1380	F1 F2	2220	5318	F1	mg/Kg	☼	177	75 - 125
Selenium	1.9	J	44.4	43.02		mg/Kg	☼	93	75 - 125
Sodium	92.8	J	2220	2152		mg/Kg	☼	93	75 - 125
Thallium	ND		44.4	46.34		mg/Kg	☼	104	75 - 125
Zinc	89.4	F1 F2	44.4	159.6	F1	mg/Kg	☼	158	75 - 125

Lab Sample ID: 480-204989-5 MS
Client Sample ID: SB2 (1-2)
Matrix: Solid
Prep Type: Total/NA
Analysis Batch: 655145
Prep Batch: 654477

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	4.1	J F1 F2	44.4	45.80		mg/Kg	☼	94	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-204989-5 MS
Matrix: Solid
Analysis Batch: 655145

Client Sample ID: SB2 (1-2)
Prep Type: Total/NA
Prep Batch: 654477

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cadmium	0.79	F2	44.4	51.82		mg/Kg	☼	115	75 - 125
Iron	84900	B F2	2220	84430	4	mg/Kg	☼	-20	75 - 125
Lead	105	F1 F2	44.4	218.3	F1	mg/Kg	☼	256	75 - 125
Nickel	23.2	F1 F2	44.4	83.90	F1	mg/Kg	☼	137	75 - 125
Silver	ND	F2	11.1	12.49		mg/Kg	☼	113	75 - 125
Vanadium	28.7	F1 F2	44.4	96.81	F1	mg/Kg	☼	154	75 - 125

Lab Sample ID: 480-204989-5 MSD
Matrix: Solid
Analysis Batch: 654754

Client Sample ID: SB2 (1-2)
Prep Type: Total/NA
Prep Batch: 654477

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	8640	B F1	2080	14740	4	mg/Kg	☼	293	75 - 125	11	20
Arsenic	14.2	F2	41.6	49.61	F2	mg/Kg	☼	85	75 - 125	21	20
Barium	79.8	F1 F2	41.6	116.5	F2	mg/Kg	☼	88	75 - 125	54	20
Beryllium	0.50		41.6	40.21		mg/Kg	☼	95	75 - 125	7	20
Calcium	2730	B F1	2080	4149	F1	mg/Kg	☼	68	75 - 125	3	20
Chromium	16.2		41.6	53.20		mg/Kg	☼	89	75 - 125	14	20
Cobalt	7.8		41.6	49.57		mg/Kg	☼	100	75 - 125	12	20
Copper	60.6	F1	41.6	60.91	F1	mg/Kg	☼	0.7	75 - 125	15	20
Magnesium	2570	B F1	2080	5290	F1	mg/Kg	☼	131	75 - 125	8	20
Manganese	610	B	41.6	448.2	4	mg/Kg	☼	-389	75 - 125	6	20
Potassium	1380	F1 F2	2080	4153	F1 F2	mg/Kg	☼	133	75 - 125	25	20
Selenium	1.9	J	41.6	41.05		mg/Kg	☼	94	75 - 125	5	20
Sodium	92.8	J	2080	1977		mg/Kg	☼	90	75 - 125	8	20
Thallium	ND		41.6	41.58		mg/Kg	☼	100	75 - 125	11	20
Zinc	89.4	F1 F2	41.6	113.1	F1 F2	mg/Kg	☼	57	75 - 125	34	20

Lab Sample ID: 480-204989-5 MSD
Matrix: Solid
Analysis Batch: 655145

Client Sample ID: SB2 (1-2)
Prep Type: Total/NA
Prep Batch: 654477

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony	4.1	J F1 F2	41.6	26.63	J F1 F2	mg/Kg	☼	54	75 - 125	53	20
Cadmium	0.79	F2	41.6	38.78	F2	mg/Kg	☼	91	75 - 125	29	20
Iron	84900	B F2	2080	28250	4 F2	mg/Kg	☼	-2719	75 - 125	100	20
Lead	105	F1 F2	41.6	131.8	F1 F2	mg/Kg	☼	65	75 - 125	49	20
Nickel	23.2	F1 F2	41.6	58.47	F2	mg/Kg	☼	85	75 - 125	36	20
Silver	ND	F2	10.4	10.11	F2	mg/Kg	☼	97	75 - 125	21	20
Vanadium	28.7	F1 F2	41.6	63.05	F2	mg/Kg	☼	83	75 - 125	42	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-654840/1-A
Matrix: Water
Analysis Batch: 654936

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 654840

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		01/03/23 11:10	01/03/23 15:31	1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 480-654840/2-A
Matrix: Water
Analysis Batch: 654936

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654840

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00669	0.00617		mg/L		92	80 - 120		

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-654623/1-A
Matrix: Solid
Analysis Batch: 654710

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 654623

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020	0.0046	mg/Kg		12/29/22 10:27	12/29/22 13:25	1

Lab Sample ID: LCDSRM 480-654623/3-A ^10
Matrix: Solid
Analysis Batch: 654710

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 654623

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury			20.7	12.14		mg/Kg		58.6	38.3 - 110.1	0	20

Lab Sample ID: LCSSRM 480-654623/2-A ^10
Matrix: Solid
Analysis Batch: 654710

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 654623

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			20.7	12.19		mg/Kg		58.9	38.3 - 110.1		

Lab Sample ID: 480-204989-5 MS
Matrix: Solid
Analysis Batch: 654710

Client Sample ID: SB2 (1-2)
Prep Type: Total/NA
Prep Batch: 654623

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	0.053		0.359	0.408		mg/Kg	☼	99	80 - 120		

Lab Sample ID: 480-204989-5 MSD
Matrix: Solid
Analysis Batch: 654710

Client Sample ID: SB2 (1-2)
Prep Type: Total/NA
Prep Batch: 654623

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	0.053		0.377	0.431		mg/Kg	☼	100	80 - 120	6	20

GC/MS VOA

Analysis Batch: 654333

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-204989-1	FB_122122	Total/NA	Water	8260C	
480-204989-2	TB_122122	Total/NA	Water	8260C	
MB 480-654333/8	Method Blank	Total/NA	Water	8260C	
LCS 480-654333/5	Lab Control Sample	Total/NA	Water	8260C	
LCSD 480-654333/6	Lab Control Sample Dup	Total/NA	Water	8260C	

Prep Batch: 654699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-204989-3	SB2 (0-0.5)	Total/NA	Solid	5035A_L	
480-204989-4	SB2 (0.5-1)	Total/NA	Solid	5035A_L	
480-204989-5	SB2 (1-2)	Total/NA	Solid	5035A_L	
480-204989-6	SB2 (20.4-22.4)	Total/NA	Solid	5035A_L	
480-204989-7	FDUP_122122	Total/NA	Solid	5035A_L	
MB 480-654699/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-654699/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	
480-204989-5 MS	SB2 (1-2)	Total/NA	Solid	5035A_L	
480-204989-5 MSD	SB2 (1-2)	Total/NA	Solid	5035A_L	

Analysis Batch: 654942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-204989-3	SB2 (0-0.5)	Total/NA	Solid	8260C	654699
480-204989-4	SB2 (0.5-1)	Total/NA	Solid	8260C	654699
480-204989-5	SB2 (1-2)	Total/NA	Solid	8260C	654699
480-204989-6	SB2 (20.4-22.4)	Total/NA	Solid	8260C	654699
480-204989-7	FDUP_122122	Total/NA	Solid	8260C	654699
MB 480-654699/2-A	Method Blank	Total/NA	Solid	8260C	654699
LCS 480-654699/1-A	Lab Control Sample	Total/NA	Solid	8260C	654699
480-204989-5 MS	SB2 (1-2)	Total/NA	Solid	8260C	654699
480-204989-5 MSD	SB2 (1-2)	Total/NA	Solid	8260C	654699

GC/MS Semi VOA

Analysis Batch: 654320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-204989-1	FB_122122	Total/NA	Water	8270D SIM ID	654366
MB 480-654366/1-A	Method Blank	Total/NA	Water	8270D SIM ID	654366
LCS 480-654366/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	654366
LCSD 480-654366/3-A	Lab Control Sample Dup	Total/NA	Water	8270D SIM ID	654366

Prep Batch: 654335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-204989-1	FB_122122	Total/NA	Water	3510C	
MB 480-654335/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-654335/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-654335/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 654366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-204989-1	FB_122122	Total/NA	Water	3510C	
MB 480-654366/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-654366/2-A	Lab Control Sample	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 654366 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 480-654366/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 654446

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-204989-1	FB_122122	Total/NA	Water	8270D	654335
MB 480-654335/1-A	Method Blank	Total/NA	Water	8270D	654335
LCS 480-654335/2-A	Lab Control Sample	Total/NA	Water	8270D	654335
LCSD 480-654335/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	654335

Prep Batch: 654928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-204989-3	SB2 (0-0.5)	Total/NA	Solid	3550C	
480-204989-4	SB2 (0.5-1)	Total/NA	Solid	3550C	
480-204989-5	SB2 (1-2)	Total/NA	Solid	3550C	
480-204989-6	SB2 (20.4-22.4)	Total/NA	Solid	3550C	
480-204989-7	FDUP_122122	Total/NA	Solid	3550C	
MB 480-654928/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-654928/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-204989-5 MS	SB2 (1-2)	Total/NA	Solid	3550C	
480-204989-5 MSD	SB2 (1-2)	Total/NA	Solid	3550C	

Analysis Batch: 654983

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-204989-3	SB2 (0-0.5)	Total/NA	Solid	8270D	654928
480-204989-4	SB2 (0.5-1)	Total/NA	Solid	8270D	654928
480-204989-5	SB2 (1-2)	Total/NA	Solid	8270D	654928
480-204989-6	SB2 (20.4-22.4)	Total/NA	Solid	8270D	654928
480-204989-7	FDUP_122122	Total/NA	Solid	8270D	654928
MB 480-654928/1-A	Method Blank	Total/NA	Solid	8270D	654928
LCS 480-654928/2-A	Lab Control Sample	Total/NA	Solid	8270D	654928
480-204989-5 MS	SB2 (1-2)	Total/NA	Solid	8270D	654928
480-204989-5 MSD	SB2 (1-2)	Total/NA	Solid	8270D	654928

LCMS

Prep Batch: 187189

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-204989-5	SB2 (1-2)	Total/NA	Solid	SHAKE	
480-204989-7	FDUP_122122	Total/NA	Solid	SHAKE	
MB 200-187189/1-A	Method Blank	Total/NA	Solid	SHAKE	
LCS 200-187189/2-A	Lab Control Sample	Total/NA	Solid	SHAKE	
480-204989-5 MS	SB2 (1-2)	Total/NA	Solid	SHAKE	
480-204989-5 MSD	SB2 (1-2)	Total/NA	Solid	SHAKE	

Prep Batch: 187194

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-204989-1	FB_122122	Total/NA	Water	3535	
MB 200-187194/1-A	Method Blank	Total/NA	Water	3535	
LCS 200-187194/2-A	Lab Control Sample	Total/NA	Water	3535	
LCSD 200-187194/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

LCMS

Analysis Batch: 187252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-204989-1	FB_122122	Total/NA	Water	537 IDA	187194
MB 200-187194/1-A	Method Blank	Total/NA	Water	537 IDA	187194
LCS 200-187194/2-A	Lab Control Sample	Total/NA	Water	537 IDA	187194
LCSD 200-187194/3-A	Lab Control Sample Dup	Total/NA	Water	537 IDA	187194

Analysis Batch: 187284

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-204989-5	SB2 (1-2)	Total/NA	Solid	537 IDA	187189
480-204989-7	FDUP_122122	Total/NA	Solid	537 IDA	187189
MB 200-187189/1-A	Method Blank	Total/NA	Solid	537 IDA	187189
LCS 200-187189/2-A	Lab Control Sample	Total/NA	Solid	537 IDA	187189
480-204989-5 MS	SB2 (1-2)	Total/NA	Solid	537 IDA	187189
480-204989-5 MSD	SB2 (1-2)	Total/NA	Solid	537 IDA	187189

Metals

Prep Batch: 654412

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-204989-1	FB_122122	Total/NA	Water	3005A	
MB 480-654412/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-654412/2-A	Lab Control Sample	Total/NA	Water	3005A	

Prep Batch: 654477

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-204989-3	SB2 (0-0.5)	Total/NA	Solid	3050B	
480-204989-4	SB2 (0.5-1)	Total/NA	Solid	3050B	
480-204989-5	SB2 (1-2)	Total/NA	Solid	3050B	
480-204989-6	SB2 (20.4-22.4)	Total/NA	Solid	3050B	
480-204989-7	FDUP_122122	Total/NA	Solid	3050B	
MB 480-654477/1-A	Method Blank	Total/NA	Solid	3050B	
LCDSRM 480-654477/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 480-654477/2-A	Lab Control Sample	Total/NA	Solid	3050B	
480-204989-5 MS	SB2 (1-2)	Total/NA	Solid	3050B	
480-204989-5 MSD	SB2 (1-2)	Total/NA	Solid	3050B	

Prep Batch: 654623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-204989-3	SB2 (0-0.5)	Total/NA	Solid	7471B	
480-204989-4	SB2 (0.5-1)	Total/NA	Solid	7471B	
480-204989-5	SB2 (1-2)	Total/NA	Solid	7471B	
480-204989-6	SB2 (20.4-22.4)	Total/NA	Solid	7471B	
480-204989-7	FDUP_122122	Total/NA	Solid	7471B	
MB 480-654623/1-A	Method Blank	Total/NA	Solid	7471B	
LCDSRM 480-654623/3-A ^1	Lab Control Sample Dup	Total/NA	Solid	7471B	
LCSSRM 480-654623/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	
480-204989-5 MS	SB2 (1-2)	Total/NA	Solid	7471B	
480-204989-5 MSD	SB2 (1-2)	Total/NA	Solid	7471B	

Analysis Batch: 654667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-204989-1	FB_122122	Total/NA	Water	6010C	654412

Metals (Continued)

Analysis Batch: 654667 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-654412/1-A	Method Blank	Total/NA	Water	6010C	654412
LCS 480-654412/2-A	Lab Control Sample	Total/NA	Water	6010C	654412

Analysis Batch: 654710

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-204989-3	SB2 (0-0.5)	Total/NA	Solid	7471B	654623
480-204989-4	SB2 (0.5-1)	Total/NA	Solid	7471B	654623
480-204989-5	SB2 (1-2)	Total/NA	Solid	7471B	654623
480-204989-6	SB2 (20.4-22.4)	Total/NA	Solid	7471B	654623
480-204989-7	FDUP_122122	Total/NA	Solid	7471B	654623
MB 480-654623/1-A	Method Blank	Total/NA	Solid	7471B	654623
LCDSRM 480-654623/3-A ^1	Lab Control Sample Dup	Total/NA	Solid	7471B	654623
LCSSRM 480-654623/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	654623
480-204989-5 MS	SB2 (1-2)	Total/NA	Solid	7471B	654623
480-204989-5 MSD	SB2 (1-2)	Total/NA	Solid	7471B	654623

Analysis Batch: 654754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-204989-3	SB2 (0-0.5)	Total/NA	Solid	6010C	654477
480-204989-4	SB2 (0.5-1)	Total/NA	Solid	6010C	654477
480-204989-5	SB2 (1-2)	Total/NA	Solid	6010C	654477
480-204989-6	SB2 (20.4-22.4)	Total/NA	Solid	6010C	654477
480-204989-7	FDUP_122122	Total/NA	Solid	6010C	654477
MB 480-654477/1-A	Method Blank	Total/NA	Solid	6010C	654477
LCDSRM 480-654477/3-A	Lab Control Sample Dup	Total/NA	Solid	6010C	654477
LCSSRM 480-654477/2-A	Lab Control Sample	Total/NA	Solid	6010C	654477
480-204989-5 MS	SB2 (1-2)	Total/NA	Solid	6010C	654477
480-204989-5 MSD	SB2 (1-2)	Total/NA	Solid	6010C	654477

Prep Batch: 654840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-204989-1	FB_122122	Total/NA	Water	7470A	
MB 480-654840/1-A	Method Blank	Total/NA	Water	7470A	
LCS 480-654840/2-A	Lab Control Sample	Total/NA	Water	7470A	

Analysis Batch: 654936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-204989-1	FB_122122	Total/NA	Water	7470A	654840
MB 480-654840/1-A	Method Blank	Total/NA	Water	7470A	654840
LCS 480-654840/2-A	Lab Control Sample	Total/NA	Water	7470A	654840

Analysis Batch: 655145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-204989-5	SB2 (1-2)	Total/NA	Solid	6010C	654477
480-204989-5 MS	SB2 (1-2)	Total/NA	Solid	6010C	654477
480-204989-5 MSD	SB2 (1-2)	Total/NA	Solid	6010C	654477

QC Association Summary

Client: Integral Consulting Inc
Job ID: 480-204989-1
Project/Site: Integral Consulting - EF1017 - Refractor

General Chemistry

Analysis Batch: 654423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-204989-3	SB2 (0-0.5)	Total/NA	Solid	Moisture	
480-204989-4	SB2 (0.5-1)	Total/NA	Solid	Moisture	
480-204989-5	SB2 (1-2)	Total/NA	Solid	Moisture	
480-204989-6	SB2 (20.4-22.4)	Total/NA	Solid	Moisture	
480-204989-7	FDUP_122122	Total/NA	Solid	Moisture	
480-204989-5 MS	SB2 (1-2)	Total/NA	Solid	Moisture	
480-204989-5 MSD	SB2 (1-2)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Integral Consulting Inc
Job ID: 480-204989-1
Project/Site: Integral Consulting - EF1017 - Refractor

Client Sample ID: FB_122122
Lab Sample ID: 480-204989-1
Date Collected: 12/21/22 09:30
Matrix: Water
Date Received: 12/22/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	654333	AXK	EET BUF	12/22/22 17:08
Total/NA	Prep	3510C			654335	JMP	EET BUF	12/22/22 12:43
Total/NA	Analysis	8270D		1	654446	JMM	EET BUF	12/27/22 16:15
Total/NA	Prep	3510C			654366	SJM	EET BUF	12/22/22 12:40
Total/NA	Analysis	8270D SIM ID		1	654320	JMM	EET BUF	12/27/22 15:34
Total/NA	Prep	3535			187194	KFW	EET BUR	01/03/23 10:54
Total/NA	Analysis	537 IDA		1	187252	ND	EET BUR	01/04/23 16:56
Total/NA	Prep	3005A			654412	NVK	EET BUF	12/27/22 09:25
Total/NA	Analysis	6010C		1	654667	BMB	EET BUF	12/29/22 00:09
Total/NA	Prep	7470A			654840	NVK	EET BUF	01/03/23 11:10
Total/NA	Analysis	7470A		1	654936	NVK	EET BUF	01/03/23 15:48

Client Sample ID: TB_122122
Lab Sample ID: 480-204989-2
Date Collected: 12/21/22 00:00
Matrix: Water
Date Received: 12/22/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	654333	AXK	EET BUF	12/22/22 17:30

Client Sample ID: SB2 (0-0.5)
Lab Sample ID: 480-204989-3
Date Collected: 12/21/22 09:35
Matrix: Solid
Date Received: 12/22/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	654423	KER	EET BUF	12/22/22 16:14

Client Sample ID: SB2 (0-0.5)
Lab Sample ID: 480-204989-3
Date Collected: 12/21/22 09:35
Matrix: Solid
Date Received: 12/22/22 11:00
Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			654699	CDC	EET BUF	12/22/22 12:00
Total/NA	Analysis	8260C		1	654942	CDC	EET BUF	01/03/23 22:36
Total/NA	Prep	3550C			654928	SJM	EET BUF	01/03/23 15:42
Total/NA	Analysis	8270D		5	654983	JMM	EET BUF	01/04/23 17:15
Total/NA	Prep	3050B			654477	NVK	EET BUF	12/28/22 14:47
Total/NA	Analysis	6010C		1	654754	LMH	EET BUF	12/29/22 12:59
Total/NA	Prep	7471B			654623	NVK	EET BUF	12/29/22 10:27
Total/NA	Analysis	7471B		1	654710	NVK	EET BUF	12/29/22 13:39

Lab Chronicle

Client: Integral Consulting Inc
Job ID: 480-204989-1
Project/Site: Integral Consulting - EF1017 - Refractor

Client Sample ID: SB2 (0.5-1)
Lab Sample ID: 480-204989-4
Date Collected: 12/21/22 09:40
Matrix: Solid
Date Received: 12/22/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	654423	KER	EET BUF	12/22/22 16:14

Client Sample ID: SB2 (0.5-1)
Lab Sample ID: 480-204989-4
Date Collected: 12/21/22 09:40
Matrix: Solid
Date Received: 12/22/22 11:00
Percent Solids: 89.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			654699	CDC	EET BUF	12/22/22 12:00
Total/NA	Analysis	8260C		1	654942	CDC	EET BUF	01/03/23 23:00
Total/NA	Prep	3550C			654928	SJM	EET BUF	01/03/23 15:42
Total/NA	Analysis	8270D		5	654983	JMM	EET BUF	01/04/23 17:39
Total/NA	Prep	3050B			654477	NVK	EET BUF	12/28/22 14:47
Total/NA	Analysis	6010C		1	654754	LMH	EET BUF	12/29/22 13:14
Total/NA	Prep	7471B			654623	NVK	EET BUF	12/29/22 10:27
Total/NA	Analysis	7471B		1	654710	NVK	EET BUF	12/29/22 13:41

Client Sample ID: SB2 (1-2)
Lab Sample ID: 480-204989-5
Date Collected: 12/21/22 09:45
Matrix: Solid
Date Received: 12/22/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	654423	KER	EET BUF	12/22/22 16:14

Client Sample ID: SB2 (1-2)
Lab Sample ID: 480-204989-5
Date Collected: 12/21/22 09:45
Matrix: Solid
Date Received: 12/22/22 11:00
Percent Solids: 91.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			654699	CDC	EET BUF	12/22/22 12:00
Total/NA	Analysis	8260C		1	654942	CDC	EET BUF	01/03/23 23:25
Total/NA	Prep	3550C			654928	SJM	EET BUF	01/03/23 15:42
Total/NA	Analysis	8270D		100	654983	JMM	EET BUF	01/04/23 16:50
Total/NA	Prep	SHAKE			187189	KFW	EET BUR	01/03/23 09:24
Total/NA	Analysis	537 IDA		1	187284	ND	EET BUR	01/05/23 18:22
Total/NA	Prep	3050B			654477	NVK	EET BUF	12/28/22 14:47
Total/NA	Analysis	6010C		2	655145	LMH	EET BUF	01/04/23 14:20
Total/NA	Prep	3050B			654477	NVK	EET BUF	12/28/22 14:47
Total/NA	Analysis	6010C		1	654754	LMH	EET BUF	12/29/22 13:57
Total/NA	Prep	7471B			654623	NVK	EET BUF	12/29/22 10:27
Total/NA	Analysis	7471B		1	654710	NVK	EET BUF	12/29/22 13:42

Lab Chronicle

Client: Integral Consulting Inc
Job ID: 480-204989-1
Project/Site: Integral Consulting - EF1017 - Refractor

Client Sample ID: SB2 (20.4-22.4)
Lab Sample ID: 480-204989-6
Date Collected: 12/21/22 11:00
Matrix: Solid
Date Received: 12/22/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	654423	KER	EET BUF	12/22/22 16:14

Client Sample ID: SB2 (20.4-22.4)
Lab Sample ID: 480-204989-6
Date Collected: 12/21/22 11:00
Matrix: Solid
Date Received: 12/22/22 11:00
Percent Solids: 89.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			654699	CDC	EET BUF	12/22/22 12:00
Total/NA	Analysis	8260C		1	654942	CDC	EET BUF	01/03/23 23:49
Total/NA	Prep	3550C			654928	SJM	EET BUF	01/03/23 15:42
Total/NA	Analysis	8270D		1	654983	JMM	EET BUF	01/04/23 18:04
Total/NA	Prep	3050B			654477	NVK	EET BUF	12/28/22 14:47
Total/NA	Analysis	6010C		1	654754	LMH	EET BUF	12/29/22 14:16
Total/NA	Prep	7471B			654623	NVK	EET BUF	12/29/22 10:27
Total/NA	Analysis	7471B		1	654710	NVK	EET BUF	12/29/22 13:47

Client Sample ID: FDUP_122122
Lab Sample ID: 480-204989-7
Date Collected: 12/21/22 00:00
Matrix: Solid
Date Received: 12/22/22 11:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	654423	KER	EET BUF	12/22/22 16:15

Client Sample ID: FDUP_122122
Lab Sample ID: 480-204989-7
Date Collected: 12/21/22 00:00
Matrix: Solid
Date Received: 12/22/22 11:00
Percent Solids: 95.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			654699	CDC	EET BUF	12/22/22 12:00
Total/NA	Analysis	8260C		1	654942	CDC	EET BUF	01/04/23 00:13
Total/NA	Prep	3550C			654928	SJM	EET BUF	01/03/23 15:42
Total/NA	Analysis	8270D		10	654983	JMM	EET BUF	01/04/23 18:29
Total/NA	Prep	SHAKE			187189	KFW	EET BUR	01/03/23 09:24
Total/NA	Analysis	537 IDA		1	187284	ND	EET BUR	01/05/23 18:46
Total/NA	Prep	3050B			654477	NVK	EET BUF	12/28/22 14:47
Total/NA	Analysis	6010C		1	654754	LMH	EET BUF	12/29/22 14:20
Total/NA	Prep	7471B			654623	NVK	EET BUF	12/29/22 10:27
Total/NA	Analysis	7471B		1	654710	NVK	EET BUF	12/29/22 13:51

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: Integral Consulting Inc
Job ID: 480-204989-1
Project/Site: Integral Consulting - EF1017 - Refractor

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	1,2,3-Trimethylbenzene
8260C	5035A_L	Solid	1,2,3-Trimethylbenzene
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Laboratory: Eurofins Burlington

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2336	02-25-23
Connecticut	State	PH-0751	09-30-23
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	05-17-23
Florida	NELAP	E87467	06-30-23
Minnesota	NELAP	050-999-436	12-31-22 *
New Hampshire	NELAP	2006	01-10-23
New Jersey	NELAP	VT972	06-30-23
New York	NELAP	10391	04-01-23
Pennsylvania	NELAP	68-00489	04-30-23
Rhode Island	State	LAO00298	12-30-22 *
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00272	10-30-23
Vermont	State	VT4000	02-10-23
Virginia	NELAP	460209	12-14-23
Wisconsin	State	399133350	08-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Integral Consulting Inc
Job ID: 480-204989-1
Project/Site: Integral Consulting - EF1017 - Refractor

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	EET BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	EET BUF
537 IDA	EPA 537 Isotope Dilution	EPA	EET BUR
6010C	Metals (ICP)	SW846	EET BUF
7470A	Mercury (CVAA)	SW846	EET BUF
7471B	Mercury (CVAA)	SW846	EET BUF
Moisture	Percent Moisture	EPA	EET BUF
3005A	Preparation, Total Metals	SW846	EET BUF
3050B	Preparation, Metals	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
3535	Solid-Phase Extraction (SPE)	SW846	EET BUR
3550C	Ultrasonic Extraction	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF
5035A_L	Closed System Purge and Trap	SW846	EET BUF
7470A	Preparation, Mercury	SW846	EET BUF
7471B	Preparation, Mercury	SW846	EET BUF
SHAKE	Shake Extraction with Ultrasonic Bath Extraction	SW846	EET BUR

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Sample Summary

Client: Integral Consulting Inc
Project/Site: Integral Consulting - EF1017 - Refractor

Job ID: 480-204989-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-204989-1	FB_122122	Water	12/21/22 09:30	12/22/22 11:00
480-204989-2	TB_122122	Water	12/21/22 00:00	12/22/22 11:00
480-204989-3	SB2 (0-0.5)	Solid	12/21/22 09:35	12/22/22 11:00
480-204989-4	SB2 (0.5-1)	Solid	12/21/22 09:40	12/22/22 11:00
480-204989-5	SB2 (1-2)	Solid	12/21/22 09:45	12/22/22 11:00
480-204989-6	SB2 (20.4-22.4)	Solid	12/21/22 11:00	12/22/22 11:00
480-204989-7	FDUP_122122	Solid	12/21/22 00:00	12/22/22 11:00

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing

Syracuse #225

Client Information	Sampler: Integral	Lab PM: Beninati, John	Carrier Tracking No(s):	COC No: 480-179687-37967.2
Client Contact: Mr. Glenn Esler	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Integral Consulting Inc	PWSID:			Job #:
Address: 319 SW Washington Ave Suite 1150	Due Date Requested: per contract			
City: Portland	TAT Requested (days): per contract			
State, Zip: OR, 97204	Compliance Project: Δ Yes Δ No			
Phone: 503-943-3617(Tel)	PO #: Purchase Order not required			
Email: gesler@integral-corp.com	WO #:			
Project Name: EF1017 - Refractories	Project #: 48025298			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs	6010C, 7471B	8270D - TCL SVOCs + 1,4 Dioxane	PFC_IDA - PFAS - NY 21 Analytes	8270D - TCL SVOCs	8270D_SIM_MS_ID - 1,4 Dioxane	6010C, 7470A	8260C - TCL VOCs	8260C - (MOD) TCL VOCs	Total Number of containers	Special Instructions/Note:
Preservation Code:							N	N	N	N	N	N	D	A	A		
FB-122122	12/21/22	9:30	G	Water	N	N	X		X	X	X	X	X				
TB-122122	12/21/22	—	—	Water	N	N	X										
SB2 (0-0.5)	12/21/22	9:35	G	S ~~Water~~	N	N	X	X			X						
SB2 (0.5-1)	12/21/22	9:40	G	S ~~Water~~	N	N	X	X			X						
SB2 (1-2)	12/21/22	9:45	G	S ~~Water~~	N		X	X	X	X							
SB2 (1-2) MS	12/21/22	9:45	G	S ~~Water~~	N		X	X	X	X							
SB2 (1-2) MSD	12/21/22	9:45	G	S	N		X	X	X	X							
SB2 (20.4-22.4)	12/21/22	11:00	G	S	N	N	X	X			X						
FDUP_122122	12/21/22	—	G	S	N	N	X	X	X	X							



Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) per contract

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Cynthia Beninati	12/21/22 16:30	Integral	C Walker	12/22/22 1100	TAS
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: #1 2.6

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Integral Consulting Inc

Job Number: 480-204989-1

Login Number: 204989
List Number: 1
Creator: Stopa, Erik S

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	TERRA CORE FROZEN @ 1200
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	INTEGRAL
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Integral Consulting Inc

Job Number: 480-204989-1

Login Number: 204989
List Number: 2
Creator: Khudaier, Zahraa

List Source: Eurofins Burlington
List Creation: 12/30/22 02:15 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	2059610
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.2ºC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Glenn Esler
Integral Consulting Inc
319 SW Washington Ave
Suite 1150
Portland, Oregon 97204

Generated 1/24/2023 4:01:43 PM Revision 1

JOB DESCRIPTION

EF1017 - Refractories

JOB NUMBER

480-205124-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing Northeast, LLC Buffalo and its client. All questions regarding this report should be directed to the Eurofins Environment Testing Northeast, LLC Buffalo Project Manager or designee who has signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
1/24/2023 4:01:43 PM
Revision 1

Authorized for release by
John Beninati, Project Manager
John.Beninati@et.eurofinsus.com
(716)504-9874

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 6
Detection Summary 8
Client Sample Results 9
Surrogate Summary 22
Isotope Dilution Summary 24
QC Sample Results 26
QC Association Summary 51
Lab Chronicle 54
Certification Summary 56
Method Summary 57
Sample Summary 58
Chain of Custody 59
Receipt Checklists 60

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
E	Result exceeded calibration range.
F2	MS/MSD RPD exceeds control limits
S1+	Surrogate recovery exceeds control limits, high biased.

LCMS

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TNTC	Too Numerous To Count

Job ID: 480-205124-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-205124-1

Comments
No additional comments.

Revision
The report being provided is a revision of the original report sent on 1/18/2023. The report (revision 1) is being revised due to: Mercury hold time flags applied in error.

Receipt
The samples were received on 1/4/2023 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.1º C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-655097 recovered outside acceptance criteria, low biased, for 1,1,1,2-Tetrachloroethane and Dibromochloromethane . A reporting limit (RL) standard was analyzed, and the target analyte is detected. Since the associated sample was non-detect for the analyte, the data is reported. The associated sample is impacted: SB3 (23-25) (480-205124-1).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-655097 recovered above the upper control limit for Vinyl chloride. The sample(s) associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: SB3 (23-25) (480-205124-1).

Method 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 480-655113 recovered outside control limits for the following analytes: Acetone, Bromoform and Carbon tetrachloride. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The associated samples are impacted: EB_010323 (480-205124-2), FB_010323 (480-205124-3) and TB_010323 (480-205124-4).

Method 8260C: The continuing calibration verification (CCV) associated with batch 480-655113 recovered above the upper control limit for Carbon tetrachloride, Vinyl chloride, Chlorodibromomethane, 1,1,2-Trichloro-1,2,2-trifluoroethane and Trichlorofluoromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: EB_010323 (480-205124-2), FB_010323 (480-205124-3) and TB_010323 (480-205124-4).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270D: The continuing calibration verification (CCV) associated with batch 480-655370 recovered outside acceptance criteria, low biased, for 2,4-Dinitrophenol, bis (2-chloroisopropyl) ether, Butyl benzyl phthalate, Nitrobenzene and Pentachlorophenol. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

Method 8270D: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 480-655242 and analytical batch 480-655370 recovered outside control limits for the following analytes: 2,4,5-Trichlorophenol, 2-Chloronaphthalene, 2-Methylphenol, 4-Bromophenyl phenyl ether, 4-Chlorophenyl phenyl ether, Atrazine and Hexachlorobenzene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following samples contained an allowable number of surrogate compounds outside limits: (LCS 480-655242/2-A) and (LCSD 480-655242/3-A). These results have been reported and qualified.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals

Job ID: 480-205124-1 (Continued)

Laboratory: Eurofins Buffalo (Continued)

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

LCMS

Method 3535: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 200-187354.

Method 537 (modified): The RPD of the laboratory control sample (LLCS) and laboratory control sample duplicate (LLCSD) for preparation batch 200-187354 and analytical batch 200-187501 recovered outside control limits for the following analytes: Perfluorotridecanoic acid (PFTriA). All associated samples were non-detect for the affected compound; therefore, the data were reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205124-1

Client Sample ID: SB3 (23-25) — Lab Sample ID: 480-205124-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.6	J	21	3.5	ug/Kg	1	☼	8260C	Total/NA
Chloroform	0.31	J B	4.2	0.26	ug/Kg	1	☼	8260C	Total/NA
Aluminum	8310		10.7	4.7	mg/Kg	1	☼	6010C	Total/NA
Arsenic	7.8		2.1	0.43	mg/Kg	1	☼	6010C	Total/NA
Barium	77.6		0.54	0.12	mg/Kg	1	☼	6010C	Total/NA
Beryllium	0.32		0.21	0.030	mg/Kg	1	☼	6010C	Total/NA
Calcium	898		53.7	3.5	mg/Kg	1	☼	6010C	Total/NA
Chromium	11.4		0.54	0.21	mg/Kg	1	☼	6010C	Total/NA
Cobalt	6.1		0.54	0.054	mg/Kg	1	☼	6010C	Total/NA
Copper	23.2		1.1	0.23	mg/Kg	1	☼	6010C	Total/NA
Iron	21900		10.7	3.8	mg/Kg	1	☼	6010C	Total/NA
Lead	7.6		1.1	0.26	mg/Kg	1	☼	6010C	Total/NA
Magnesium	2420		21.5	1.0	mg/Kg	1	☼	6010C	Total/NA
Manganese	332	B	0.21	0.034	mg/Kg	1	☼	6010C	Total/NA
Nickel	17.3		5.4	0.25	mg/Kg	1	☼	6010C	Total/NA
Potassium	1130		32.2	21.5	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.83	J	4.3	0.43	mg/Kg	1	☼	6010C	Total/NA
Silver	0.52	J	0.64	0.21	mg/Kg	1	☼	6010C	Total/NA
Sodium	46.8	J	150	14.0	mg/Kg	1	☼	6010C	Total/NA
Vanadium	11.4		0.54	0.12	mg/Kg	1	☼	6010C	Total/NA
Zinc	41.6		2.1	0.69	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.0052	J	0.021	0.0048	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: EB_010323 — Lab Sample ID: 480-205124-2

No Detections.

Client Sample ID: FB_010323 — Lab Sample ID: 480-205124-3

No Detections.

Client Sample ID: TB_010323 — Lab Sample ID: 480-205124-4

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205124-1

Client Sample ID: SB3 (23-25)
Date Collected: 01/03/23 14:20
Date Received: 01/04/23 10:00

Lab Sample ID: 480-205124-1
Matrix: Solid
Percent Solids: 91.7

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		4.2	0.42	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
1,1,1-Trichloroethane	ND		4.2	0.30	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
1,1,2,2-Tetrachloroethane	ND		4.2	0.68	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.2	0.95	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
1,1,2-Trichloroethane	ND		4.2	0.54	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
1,1-Dichloroethane	ND		4.2	0.51	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
1,1-Dichloroethene	ND		4.2	0.51	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
1,2,3-Trimethylbenzene	ND		4.2	0.85	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
1,2,4-Trichlorobenzene	ND		4.2	0.25	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
1,2,4-Trimethylbenzene	ND		4.2	0.80	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
1,2-Dibromo-3-Chloropropane	ND		4.2	2.1	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
1,2-Dibromoethane	ND		4.2	0.54	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
1,2-Dichlorobenzene	ND		4.2	0.33	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
1,2-Dichloroethane	ND		4.2	0.21	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
1,2-Dichloropropane	ND		4.2	2.1	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
1,3,5-Trimethylbenzene	ND		4.2	0.27	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
1,3-Dichlorobenzene	ND		4.2	0.21	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
1,4-Dichlorobenzene	ND		4.2	0.58	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
2-Butanone (MEK)	ND		21	1.5	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
2-Hexanone	ND		21	2.1	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
4-Methyl-2-pentanone (MIBK)	ND		21	1.4	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
Acetone	**3.6**	**J**	21	3.5	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
Benzene	ND		4.2	0.20	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
Bromodichloromethane	ND		4.2	0.56	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
Bromoform	ND		4.2	2.1	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
Bromomethane	ND		4.2	0.38	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
Carbon disulfide	ND		4.2	2.1	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
Carbon tetrachloride	ND		4.2	0.40	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
Chlorobenzene	ND		4.2	0.55	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
Chloroethane	ND		4.2	0.94	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
Chloroform	**0.31**	**J B**	4.2	0.26	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
Chloromethane	ND		4.2	0.25	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
cis-1,2-Dichloroethene	ND		4.2	0.53	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
cis-1,3-Dichloropropene	ND		4.2	0.60	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
Cyclohexane	ND		4.2	0.58	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
Dibromochloromethane	ND		4.2	0.53	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
Dichlorodifluoromethane	ND		4.2	0.34	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
Ethylbenzene	ND		4.2	0.29	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
Isopropylbenzene	ND		4.2	0.63	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
m,p-Xylene	ND		8.3	0.70	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
Methyl acetate	ND		21	2.5	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
Methyl tert-butyl ether	ND		4.2	0.41	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
Methylcyclohexane	ND		4.2	0.63	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
Methylene Chloride	ND		4.2	1.9	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
n-Butylbenzene	ND		4.2	0.36	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
N-Propylbenzene	ND		4.2	0.33	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
o-Xylene	ND		4.2	0.55	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
sec-Butylbenzene	ND		4.2	0.36	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
Styrene	ND		4.2	0.21	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1

Client Sample ID: SB3 (23-25)
Date Collected: 01/03/23 14:20
Date Received: 01/04/23 10:00

Lab Sample ID: 480-205124-1
Matrix: Solid
Percent Solids: 91.7

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		4.2	0.43	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
Tetrachloroethene	ND		4.2	0.56	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
Toluene	ND		4.2	0.32	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
trans-1,2-Dichloroethene	ND		4.2	0.43	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
trans-1,3-Dichloropropene	ND		4.2	1.8	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
Trichloroethene	ND		4.2	0.92	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
Trichlorofluoromethane	ND		4.2	0.39	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
Vinyl chloride	ND		4.2	0.51	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1
Xylenes, Total	ND		8.3	0.70	ug/Kg	☼	01/04/23 11:00	01/04/23 22:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*64 - 126*	*01/04/23 11:00*	*01/04/23 22:20*	*1*
4-Bromofluorobenzene (Surr)	*93*		*72 - 126*	*01/04/23 11:00*	*01/04/23 22:20*	*1*
Dibromofluoromethane (Surr)	*97*		*60 - 140*	*01/04/23 11:00*	*01/04/23 22:20*	*1*
Toluene-d8 (Surr)	*94*		*71 - 125*	*01/04/23 11:00*	*01/04/23 22:20*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND	F2	180	50	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
2,4,6-Trichlorophenol	ND	F2	180	37	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
2,4-Dichlorophenol	ND	F2	180	20	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
2,4-Dimethylphenol	ND		180	44	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
2,4-Dinitrophenol	ND	F2	1800	850	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
2,4-Dinitrotoluene	ND		180	38	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
2,6-Dinitrotoluene	ND	F2	180	22	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
2-Chloronaphthalene	ND		180	30	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
2-Chlorophenol	ND		360	34	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
2-Methylnaphthalene	ND	F2	180	37	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
2-Methylphenol	ND		180	22	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
2-Nitroaniline	ND	F2	360	27	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
2-Nitrophenol	ND	F2	180	52	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
3,3'-Dichlorobenzidine	ND		360	220	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
3-Nitroaniline	ND		360	51	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
4,6-Dinitro-2-methylphenol	ND	F2	360	180	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
4-Bromophenyl phenyl ether	ND	F2	180	26	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
4-Chloro-3-methylphenol	ND	F2	180	46	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
4-Chloroaniline	ND	F2	180	46	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
4-Chlorophenyl phenyl ether	ND	F2	180	23	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
4-Methylphenol	ND	F2	360	22	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
4-Nitroaniline	ND		360	96	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
4-Nitrophenol	ND		360	130	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Acenaphthene	ND		180	27	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Acenaphthylene	ND	F2	180	24	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Acetophenone	ND	F2	180	25	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Anthracene	ND	F2	180	46	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Atrazine	ND		180	64	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Benzaldehyde	ND	F2	180	150	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Benzo[a]anthracene	ND	F2	180	18	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Benzo[a]pyrene	ND	F2	180	27	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Benzo[b]fluoranthene	ND	F2	180	29	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205124-1

Client Sample ID: SB3 (23-25)
Date Collected: 01/03/23 14:20
Date Received: 01/04/23 10:00

Lab Sample ID: 480-205124-1
Matrix: Solid
Percent Solids: 91.7

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND	F2	180	20	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Benzo[k]fluoranthene	ND		180	24	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Biphenyl	ND		180	27	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
bis (2-chloroisopropyl) ether	ND		180	37	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Bis(2-chloroethoxy)methane	ND	F2	180	39	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Bis(2-chloroethyl)ether	ND		180	24	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Bis(2-ethylhexyl) phthalate	ND		180	63	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Butyl benzyl phthalate	ND		180	30	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Caprolactam	ND	F2	180	55	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Carbazole	ND		180	22	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Chrysene	ND	F2	180	41	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Dibenz(a,h)anthracene	ND	F2	180	33	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Dibenzofuran	ND	F2	180	22	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Diethyl phthalate	ND	F2	180	24	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Dimethyl phthalate	ND	F2	180	22	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Di-n-butyl phthalate	ND	F2	180	31	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Di-n-octyl phthalate	ND	F2	180	22	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Fluoranthene	ND		180	20	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Fluorene	ND	F2	180	22	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Hexachlorobenzene	ND	F2	180	25	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Hexachlorobutadiene	ND		180	27	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Hexachlorocyclopentadiene	ND		180	25	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Hexachloroethane	ND		180	24	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Indeno[1,2,3-cd]pyrene	ND	F2	180	23	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Isophorone	ND	F2	180	39	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Naphthalene	ND		180	24	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Nitrobenzene	ND		180	21	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
N-Nitrosodi-n-propylamine	ND		180	31	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
N-Nitrosodiphenylamine	ND	F2	180	150	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Pentachlorophenol	ND		360	180	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Phenanthrene	ND	F2	180	27	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Phenol	ND		180	28	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1
Pyrene	ND		180	22	ug/Kg	☼	01/05/23 15:40	01/06/23 12:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*96*		*54 - 120*	*01/05/23 15:40*	*01/06/23 12:57*	*1*
2-Fluorobiphenyl (Surr)	*93*		*60 - 120*	*01/05/23 15:40*	*01/06/23 12:57*	*1*
2-Fluorophenol (Surr)	*80*		*52 - 120*	*01/05/23 15:40*	*01/06/23 12:57*	*1*
Nitrobenzene-d5 (Surr)	*86*		*53 - 120*	*01/05/23 15:40*	*01/06/23 12:57*	*1*
Phenol-d5 (Surr)	*81*		*54 - 120*	*01/05/23 15:40*	*01/06/23 12:57*	*1*
p-Terphenyl-d14 (Surr)	*98*		*79 - 130*	*01/05/23 15:40*	*01/06/23 12:57*	*1*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**8310**		10.7	4.7	mg/Kg	☼	01/05/23 15:12	01/06/23 13:18	1
Antimony	ND		16.1	0.43	mg/Kg	☼	01/05/23 15:12	01/06/23 13:18	1
Arsenic	**7.8**		2.1	0.43	mg/Kg	☼	01/05/23 15:12	01/06/23 13:18	1
Barium	**77.6**		0.54	0.12	mg/Kg	☼	01/05/23 15:12	01/06/23 13:18	1
Beryllium	**0.32**		0.21	0.030	mg/Kg	☼	01/05/23 15:12	01/06/23 13:18	1
Cadmium	ND		0.21	0.032	mg/Kg	☼	01/05/23 15:12	01/06/23 13:18	1

Client Sample ID: SB3 (23-25)

Date Collected: 01/03/23 14:20
Date Received: 01/04/23 10:00

Lab Sample ID: 480-205124-1

Matrix: Solid
Percent Solids: 91.7

Method: SW846 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	898		53.7	3.5	mg/Kg	☼	01/05/23 15:12	01/06/23 13:18	1
Chromium	11.4		0.54	0.21	mg/Kg	☼	01/05/23 15:12	01/06/23 13:18	1
Cobalt	6.1		0.54	0.054	mg/Kg	☼	01/05/23 15:12	01/06/23 13:18	1
Copper	23.2		1.1	0.23	mg/Kg	☼	01/05/23 15:12	01/06/23 13:18	1
Iron	21900		10.7	3.8	mg/Kg	☼	01/05/23 15:12	01/06/23 13:18	1
Lead	7.6		1.1	0.26	mg/Kg	☼	01/05/23 15:12	01/06/23 13:18	1
Magnesium	2420		21.5	1.0	mg/Kg	☼	01/05/23 15:12	01/06/23 13:18	1
Manganese	332	B	0.21	0.034	mg/Kg	☼	01/05/23 15:12	01/06/23 13:18	1
Nickel	17.3		5.4	0.25	mg/Kg	☼	01/05/23 15:12	01/06/23 13:18	1
Potassium	1130		32.2	21.5	mg/Kg	☼	01/05/23 15:12	01/06/23 13:18	1
Selenium	0.83	J	4.3	0.43	mg/Kg	☼	01/05/23 15:12	01/06/23 13:18	1
Silver	0.52	J	0.64	0.21	mg/Kg	☼	01/05/23 15:12	01/06/23 13:18	1
Sodium	46.8	J	150	14.0	mg/Kg	☼	01/05/23 15:12	01/06/23 13:18	1
Thallium	ND		6.4	0.32	mg/Kg	☼	01/05/23 15:12	01/06/23 13:18	1
Vanadium	11.4		0.54	0.12	mg/Kg	☼	01/05/23 15:12	01/06/23 13:18	1
Zinc	41.6		2.1	0.69	mg/Kg	☼	01/05/23 15:12	01/06/23 13:18	1

Method: SW846 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0052	J	0.021	0.0048	mg/Kg	☼	01/11/23 11:13	01/12/23 10:00	1

Client Sample ID: EB_010323

Date Collected: 01/03/23 16:00
Date Received: 01/04/23 10:00

Lab Sample ID: 480-205124-2

Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			01/05/23 16:43	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			01/05/23 16:43	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			01/05/23 16:43	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			01/05/23 16:43	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			01/05/23 16:43	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			01/05/23 16:43	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			01/05/23 16:43	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			01/05/23 16:43	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			01/05/23 16:43	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			01/05/23 16:43	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			01/05/23 16:43	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			01/05/23 16:43	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			01/05/23 16:43	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/05/23 16:43	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			01/05/23 16:43	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			01/05/23 16:43	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			01/05/23 16:43	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			01/05/23 16:43	1
2-Butanone (MEK)	ND		10	1.3	ug/L			01/05/23 16:43	1
2-Hexanone	ND		5.0	1.2	ug/L			01/05/23 16:43	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			01/05/23 16:43	1
Acetone	ND	*+	10	3.0	ug/L			01/05/23 16:43	1
Benzene	ND		1.0	0.41	ug/L			01/05/23 16:43	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205124-1

Client Sample ID: EB_010323

Date Collected: 01/03/23 16:00
Date Received: 01/04/23 10:00

Lab Sample ID: 480-205124-2

Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		1.0	0.39	ug/L			01/05/23 16:43	1
Bromoform	ND	*+	1.0	0.26	ug/L			01/05/23 16:43	1
Bromomethane	ND		1.0	0.69	ug/L			01/05/23 16:43	1
Carbon disulfide	ND		1.0	0.19	ug/L			01/05/23 16:43	1
Carbon tetrachloride	ND	*+	1.0	0.27	ug/L			01/05/23 16:43	1
Chlorobenzene	ND		1.0	0.75	ug/L			01/05/23 16:43	1
Chloroethane	ND		1.0	0.32	ug/L			01/05/23 16:43	1
Chloroform	ND		1.0	0.34	ug/L			01/05/23 16:43	1
Chloromethane	ND		1.0	0.35	ug/L			01/05/23 16:43	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			01/05/23 16:43	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			01/05/23 16:43	1
Cyclohexane	ND		1.0	0.18	ug/L			01/05/23 16:43	1
Dibromochloromethane	ND		1.0	0.32	ug/L			01/05/23 16:43	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			01/05/23 16:43	1
Ethylbenzene	ND		1.0	0.74	ug/L			01/05/23 16:43	1
Isopropylbenzene	ND		1.0	0.79	ug/L			01/05/23 16:43	1
m,p-Xylene	ND		2.0	0.66	ug/L			01/05/23 16:43	1
Methyl acetate	ND		2.5	1.3	ug/L			01/05/23 16:43	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			01/05/23 16:43	1
Methylcyclohexane	ND		1.0	0.16	ug/L			01/05/23 16:43	1
Methylene Chloride	ND		1.0	0.44	ug/L			01/05/23 16:43	1
n-Butylbenzene	ND		1.0	0.64	ug/L			01/05/23 16:43	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/05/23 16:43	1
o-Xylene	ND		1.0	0.76	ug/L			01/05/23 16:43	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			01/05/23 16:43	1
Styrene	ND		1.0	0.73	ug/L			01/05/23 16:43	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			01/05/23 16:43	1
Tetrachloroethene	ND		1.0	0.36	ug/L			01/05/23 16:43	1
Toluene	ND		1.0	0.51	ug/L			01/05/23 16:43	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			01/05/23 16:43	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			01/05/23 16:43	1
Trichloroethene	ND		1.0	0.46	ug/L			01/05/23 16:43	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			01/05/23 16:43	1
Vinyl chloride	ND		1.0	0.90	ug/L			01/05/23 16:43	1
Xylenes, Total	ND		2.0	0.66	ug/L			01/05/23 16:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*77 - 120*		*01/05/23 16:43*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*01/05/23 16:43*	*1*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*01/05/23 16:43*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*01/05/23 16:43*	*1*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.21	0.10	ug/L		01/09/23 08:27	01/10/23 16:26	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*40*		*15 - 110*	*01/09/23 08:27*	*01/10/23 16:26*	*1*

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205124-1

Client Sample ID: EB_010323
Date Collected: 01/03/23 16:00
Date Received: 01/04/23 10:00

Lab Sample ID: 480-205124-2
Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND	*+	5.2	0.50	ug/L		01/06/23 08:17	01/09/23 16:02	1
2,4,6-Trichlorophenol	ND		5.2	0.64	ug/L		01/06/23 08:17	01/09/23 16:02	1
2,4-Dichlorophenol	ND		5.2	0.53	ug/L		01/06/23 08:17	01/09/23 16:02	1
2,4-Dimethylphenol	ND		5.2	0.52	ug/L		01/06/23 08:17	01/09/23 16:02	1
2,4-Dinitrophenol	ND		10	2.3	ug/L		01/06/23 08:17	01/09/23 16:02	1
2,4-Dinitrotoluene	ND		5.2	0.47	ug/L		01/06/23 08:17	01/09/23 16:02	1
2,6-Dinitrotoluene	ND		5.2	0.42	ug/L		01/06/23 08:17	01/09/23 16:02	1
2-Chloronaphthalene	ND	*+	5.2	0.48	ug/L		01/06/23 08:17	01/09/23 16:02	1
2-Chlorophenol	ND		5.2	0.55	ug/L		01/06/23 08:17	01/09/23 16:02	1
2-Methylnaphthalene	ND		5.2	0.63	ug/L		01/06/23 08:17	01/09/23 16:02	1
2-Methylphenol	ND	*+	5.2	0.42	ug/L		01/06/23 08:17	01/09/23 16:02	1
2-Nitroaniline	ND		10	0.44	ug/L		01/06/23 08:17	01/09/23 16:02	1
2-Nitrophenol	ND		5.2	0.50	ug/L		01/06/23 08:17	01/09/23 16:02	1
3,3'-Dichlorobenzidine	ND		5.2	0.42	ug/L		01/06/23 08:17	01/09/23 16:02	1
3-Nitroaniline	ND		10	0.50	ug/L		01/06/23 08:17	01/09/23 16:02	1
4,6-Dinitro-2-methylphenol	ND		10	2.3	ug/L		01/06/23 08:17	01/09/23 16:02	1
4-Bromophenyl phenyl ether	ND	*+	5.2	0.47	ug/L		01/06/23 08:17	01/09/23 16:02	1
4-Chloro-3-methylphenol	ND		5.2	0.47	ug/L		01/06/23 08:17	01/09/23 16:02	1
4-Chloroaniline	ND		5.2	0.61	ug/L		01/06/23 08:17	01/09/23 16:02	1
4-Chlorophenyl phenyl ether	ND	*+	5.2	0.36	ug/L		01/06/23 08:17	01/09/23 16:02	1
4-Methylphenol	ND		10	0.38	ug/L		01/06/23 08:17	01/09/23 16:02	1
4-Nitroaniline	ND		10	0.26	ug/L		01/06/23 08:17	01/09/23 16:02	1
4-Nitrophenol	ND		10	1.6	ug/L		01/06/23 08:17	01/09/23 16:02	1
Acenaphthene	ND		5.2	0.43	ug/L		01/06/23 08:17	01/09/23 16:02	1
Acenaphthylene	ND		5.2	0.40	ug/L		01/06/23 08:17	01/09/23 16:02	1
Acetophenone	ND		5.2	0.56	ug/L		01/06/23 08:17	01/09/23 16:02	1
Anthracene	ND		5.2	0.29	ug/L		01/06/23 08:17	01/09/23 16:02	1
Atrazine	ND	*+	5.2	0.48	ug/L		01/06/23 08:17	01/09/23 16:02	1
Benzaldehyde	ND		5.2	0.28	ug/L		01/06/23 08:17	01/09/23 16:02	1
Benzo[a]anthracene	ND		5.2	0.38	ug/L		01/06/23 08:17	01/09/23 16:02	1
Benzo[a]pyrene	ND		5.2	0.49	ug/L		01/06/23 08:17	01/09/23 16:02	1
Benzo[b]fluoranthene	ND		5.2	0.35	ug/L		01/06/23 08:17	01/09/23 16:02	1
Benzo[g,h,i]perylene	ND		5.2	0.36	ug/L		01/06/23 08:17	01/09/23 16:02	1
Benzo[k]fluoranthene	ND		5.2	0.76	ug/L		01/06/23 08:17	01/09/23 16:02	1
Biphenyl	ND		5.2	0.68	ug/L		01/06/23 08:17	01/09/23 16:02	1
bis (2-chloroisopropyl) ether	ND		5.2	0.54	ug/L		01/06/23 08:17	01/09/23 16:02	1
Bis(2-chloroethoxy)methane	ND		5.2	0.36	ug/L		01/06/23 08:17	01/09/23 16:02	1
Bis(2-chloroethyl)ether	ND		5.2	0.42	ug/L		01/06/23 08:17	01/09/23 16:02	1
Bis(2-ethylhexyl) phthalate	ND		5.2	2.3	ug/L		01/06/23 08:17	01/09/23 16:02	1
Butyl benzyl phthalate	ND		5.2	1.0	ug/L		01/06/23 08:17	01/09/23 16:02	1
Caprolactam	ND		5.2	2.3	ug/L		01/06/23 08:17	01/09/23 16:02	1
Carbazole	ND		5.2	0.31	ug/L		01/06/23 08:17	01/09/23 16:02	1
Chrysene	ND		5.2	0.34	ug/L		01/06/23 08:17	01/09/23 16:02	1
Dibenz(a,h)anthracene	ND		5.2	0.44	ug/L		01/06/23 08:17	01/09/23 16:02	1
Dibenzofuran	ND		10	0.53	ug/L		01/06/23 08:17	01/09/23 16:02	1
Diethyl phthalate	ND		5.2	0.23	ug/L		01/06/23 08:17	01/09/23 16:02	1
Dimethyl phthalate	ND		5.2	0.38	ug/L		01/06/23 08:17	01/09/23 16:02	1
Di-n-butyl phthalate	ND		5.2	0.32	ug/L		01/06/23 08:17	01/09/23 16:02	1
Di-n-octyl phthalate	ND		5.2	0.49	ug/L		01/06/23 08:17	01/09/23 16:02	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205124-1

Client Sample ID: EB_010323
Date Collected: 01/03/23 16:00
Date Received: 01/04/23 10:00

Lab Sample ID: 480-205124-2
Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		5.2	0.42	ug/L		01/06/23 08:17	01/09/23 16:02	1
Fluorene	ND		5.2	0.38	ug/L		01/06/23 08:17	01/09/23 16:02	1
Hexachlorobenzene	ND	*+	5.2	0.53	ug/L		01/06/23 08:17	01/09/23 16:02	1
Hexachlorobutadiene	ND		5.2	0.71	ug/L		01/06/23 08:17	01/09/23 16:02	1
Hexachlorocyclopentadiene	ND		5.2	0.61	ug/L		01/06/23 08:17	01/09/23 16:02	1
Hexachloroethane	ND		5.2	0.61	ug/L		01/06/23 08:17	01/09/23 16:02	1
Indeno[1,2,3-cd]pyrene	ND		5.2	0.49	ug/L		01/06/23 08:17	01/09/23 16:02	1
Isophorone	ND		5.2	0.45	ug/L		01/06/23 08:17	01/09/23 16:02	1
Naphthalene	ND		5.2	0.79	ug/L		01/06/23 08:17	01/09/23 16:02	1
Nitrobenzene	ND		5.2	0.30	ug/L		01/06/23 08:17	01/09/23 16:02	1
N-Nitrosodi-n-propylamine	ND		5.2	0.56	ug/L		01/06/23 08:17	01/09/23 16:02	1
N-Nitrosodiphenylamine	ND		5.2	0.53	ug/L		01/06/23 08:17	01/09/23 16:02	1
Pentachlorophenol	ND		10	2.3	ug/L		01/06/23 08:17	01/09/23 16:02	1
Phenanthrene	ND		5.2	0.46	ug/L		01/06/23 08:17	01/09/23 16:02	1
Phenol	ND		5.2	0.41	ug/L		01/06/23 08:17	01/09/23 16:02	1
Pyrene	ND		5.2	0.35	ug/L		01/06/23 08:17	01/09/23 16:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*96*		*41 - 120*	*01/06/23 08:17*	*01/09/23 16:02*	*1*
2-Fluorobiphenyl (Surr)	*113*		*48 - 120*	*01/06/23 08:17*	*01/09/23 16:02*	*1*
2-Fluorophenol (Surr)	*63*		*35 - 120*	*01/06/23 08:17*	*01/09/23 16:02*	*1*
Nitrobenzene-d5 (Surr)	*82*		*46 - 120*	*01/06/23 08:17*	*01/09/23 16:02*	*1*
Phenol-d5 (Surr)	*50*		*22 - 120*	*01/06/23 08:17*	*01/09/23 16:02*	*1*
p-Terphenyl-d14 (Surr)	*125*		*60 - 148*	*01/06/23 08:17*	*01/09/23 16:02*	*1*

Method: EPA 537 IDA - EPA 537 Isotope Dilution

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		4.7	1.1	ng/L		01/09/23 12:54	01/13/23 17:32	1
Perfluoropentanoic acid (PFPeA)	ND		1.9	0.64	ng/L		01/09/23 12:54	01/13/23 17:32	1
Perfluorohexanoic acid (PFHxA)	ND		1.9	0.61	ng/L		01/09/23 12:54	01/13/23 17:32	1
Perfluoroheptanoic acid (PFHpA)	ND		1.9	0.51	ng/L		01/09/23 12:54	01/13/23 17:32	1
Perfluorooctanoic acid (PFOA)	ND		1.9	0.71	ng/L		01/09/23 12:54	01/13/23 17:32	1
Perfluorononanoic acid (PFNA)	ND		1.9	0.46	ng/L		01/09/23 12:54	01/13/23 17:32	1
Perfluorodecanoic acid (PFDA)	ND		1.9	0.43	ng/L		01/09/23 12:54	01/13/23 17:32	1
Perfluoroundecanoic acid (PFUnA)	ND		1.9	0.52	ng/L		01/09/23 12:54	01/13/23 17:32	1
Perfluorododecanoic acid (PFDoA)	ND		1.9	0.46	ng/L		01/09/23 12:54	01/13/23 17:32	1
Perfluorotridecanoic acid (PFTriA)	ND	*1	1.9	0.45	ng/L		01/09/23 12:54	01/13/23 17:32	1
Perfluorotetradecanoic acid (PFTeA)	ND		1.9	0.60	ng/L		01/09/23 12:54	01/13/23 17:32	1
Perfluorobutanesulfonic acid (PFBS)	ND		1.9	0.58	ng/L		01/09/23 12:54	01/13/23 17:32	1
Perfluorohexanesulfonic acid (PFHxS)	ND		1.9	0.52	ng/L		01/09/23 12:54	01/13/23 17:32	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		1.9	0.38	ng/L		01/09/23 12:54	01/13/23 17:32	1
Perfluorooctanesulfonic acid (PFOS)	ND		1.9	0.80	ng/L		01/09/23 12:54	01/13/23 17:32	1
Perfluorodecanesulfonic acid (PFDS)	ND		1.9	0.37	ng/L		01/09/23 12:54	01/13/23 17:32	1
Perfluorooctanesulfonamide (PFOSA)	ND		1.9	0.86	ng/L		01/09/23 12:54	01/13/23 17:32	1
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		4.7	1.8	ng/L		01/09/23 12:54	01/13/23 17:32	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		4.7	1.5	ng/L		01/09/23 12:54	01/13/23 17:32	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		4.7	1.2	ng/L		01/09/23 12:54	01/13/23 17:32	1

Client Sample ID: EB_010323

Date Collected: 01/03/23 16:00
Date Received: 01/04/23 10:00

Lab Sample ID: 480-205124-2

Matrix: Water

Method: EPA 537 IDA - EPA 537 Isotope Dilution (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		1.9	0.72	ng/L		01/09/23 12:54	01/13/23 17:32	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*87*		*50 - 150*	*01/09/23 12:54*	*01/13/23 17:32*	*1*
13C4 PFHpA	*102*		*50 - 150*	*01/09/23 12:54*	*01/13/23 17:32*	*1*
13C4 PFOA	*88*		*50 - 150*	*01/09/23 12:54*	*01/13/23 17:32*	*1*
13C4 PFOS	*99*		*50 - 150*	*01/09/23 12:54*	*01/13/23 17:32*	*1*
13C5 PFNA	*101*		*50 - 150*	*01/09/23 12:54*	*01/13/23 17:32*	*1*
13C4 PFBA	*87*		*50 - 150*	*01/09/23 12:54*	*01/13/23 17:32*	*1*
13C2 PFHxA	*97*		*50 - 150*	*01/09/23 12:54*	*01/13/23 17:32*	*1*
13C2 PFDA	*94*		*50 - 150*	*01/09/23 12:54*	*01/13/23 17:32*	*1*
13C2 PFUnA	*95*		*50 - 150*	*01/09/23 12:54*	*01/13/23 17:32*	*1*
13C2 PFDoA	*95*		*50 - 150*	*01/09/23 12:54*	*01/13/23 17:32*	*1*
13C8 FOSA	*73*		*50 - 150*	*01/09/23 12:54*	*01/13/23 17:32*	*1*
13C5 PFPeA	*93*		*50 - 150*	*01/09/23 12:54*	*01/13/23 17:32*	*1*
13C2 PFTeDA	*82*		*50 - 150*	*01/09/23 12:54*	*01/13/23 17:32*	*1*
d3-NMeFOSAA	*94*		*50 - 150*	*01/09/23 12:54*	*01/13/23 17:32*	*1*
d5-NEtFOSAA	*86*		*50 - 150*	*01/09/23 12:54*	*01/13/23 17:32*	*1*
M2-6:2 FTS	*117*		*50 - 150*	*01/09/23 12:54*	*01/13/23 17:32*	*1*
M2-8:2 FTS	*110*		*50 - 150*	*01/09/23 12:54*	*01/13/23 17:32*	*1*
13C3 PFBS	*85*		*50 - 150*	*01/09/23 12:54*	*01/13/23 17:32*	*1*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		01/05/23 08:57	01/05/23 17:58	1
Antimony	ND		0.020	0.0068	mg/L		01/05/23 08:57	01/05/23 17:58	1
Arsenic	ND		0.015	0.0056	mg/L		01/05/23 08:57	01/05/23 17:58	1
Barium	ND		0.0020	0.00070	mg/L		01/05/23 08:57	01/05/23 17:58	1
Beryllium	ND		0.0020	0.00030	mg/L		01/05/23 08:57	01/05/23 17:58	1
Cadmium	ND		0.0020	0.00050	mg/L		01/05/23 08:57	01/05/23 17:58	1
Calcium	ND		0.50	0.10	mg/L		01/05/23 08:57	01/05/23 17:58	1
Chromium	ND		0.0040	0.0010	mg/L		01/05/23 08:57	01/05/23 17:58	1
Cobalt	ND		0.0040	0.00063	mg/L		01/05/23 08:57	01/05/23 17:58	1
Copper	ND		0.010	0.0016	mg/L		01/05/23 08:57	01/05/23 17:58	1
Iron	ND		0.050	0.019	mg/L		01/05/23 08:57	01/05/23 17:58	1
Lead	ND		0.010	0.0030	mg/L		01/05/23 08:57	01/05/23 17:58	1
Magnesium	ND		0.20	0.043	mg/L		01/05/23 08:57	01/05/23 17:58	1
Manganese	ND		0.0030	0.00040	mg/L		01/05/23 08:57	01/05/23 17:58	1
Nickel	ND		0.010	0.0013	mg/L		01/05/23 08:57	01/05/23 17:58	1
Potassium	ND		0.50	0.10	mg/L		01/05/23 08:57	01/05/23 17:58	1
Selenium	ND		0.025	0.0087	mg/L		01/05/23 08:57	01/05/23 17:58	1
Silver	ND		0.0060	0.0017	mg/L		01/05/23 08:57	01/05/23 17:58	1
Sodium	ND		1.0	0.32	mg/L		01/05/23 08:57	01/05/23 17:58	1
Thallium	ND		0.020	0.010	mg/L		01/05/23 08:57	01/05/23 17:58	1
Vanadium	ND		0.0050	0.0015	mg/L		01/05/23 08:57	01/05/23 17:58	1
Zinc	ND		0.010	0.0015	mg/L		01/05/23 08:57	01/05/23 17:58	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		01/05/23 11:00	01/05/23 15:01	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205124-1

Client Sample ID: FB_010323
Date Collected: 01/03/23 16:45
Date Received: 01/04/23 10:00

Lab Sample ID: 480-205124-3
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			01/05/23 17:06	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			01/05/23 17:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			01/05/23 17:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			01/05/23 17:06	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			01/05/23 17:06	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			01/05/23 17:06	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			01/05/23 17:06	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			01/05/23 17:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			01/05/23 17:06	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			01/05/23 17:06	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			01/05/23 17:06	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			01/05/23 17:06	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			01/05/23 17:06	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/05/23 17:06	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			01/05/23 17:06	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			01/05/23 17:06	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			01/05/23 17:06	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			01/05/23 17:06	1
2-Butanone (MEK)	ND		10	1.3	ug/L			01/05/23 17:06	1
2-Hexanone	ND		5.0	1.2	ug/L			01/05/23 17:06	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			01/05/23 17:06	1
Acetone	ND	*+	10	3.0	ug/L			01/05/23 17:06	1
Benzene	ND		1.0	0.41	ug/L			01/05/23 17:06	1
Bromodichloromethane	ND		1.0	0.39	ug/L			01/05/23 17:06	1
Bromoform	ND	*+	1.0	0.26	ug/L			01/05/23 17:06	1
Bromomethane	ND		1.0	0.69	ug/L			01/05/23 17:06	1
Carbon disulfide	ND		1.0	0.19	ug/L			01/05/23 17:06	1
Carbon tetrachloride	ND	*+	1.0	0.27	ug/L			01/05/23 17:06	1
Chlorobenzene	ND		1.0	0.75	ug/L			01/05/23 17:06	1
Chloroethane	ND		1.0	0.32	ug/L			01/05/23 17:06	1
Chloroform	ND		1.0	0.34	ug/L			01/05/23 17:06	1
Chloromethane	ND		1.0	0.35	ug/L			01/05/23 17:06	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			01/05/23 17:06	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			01/05/23 17:06	1
Cyclohexane	ND		1.0	0.18	ug/L			01/05/23 17:06	1
Dibromochloromethane	ND		1.0	0.32	ug/L			01/05/23 17:06	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			01/05/23 17:06	1
Ethylbenzene	ND		1.0	0.74	ug/L			01/05/23 17:06	1
Isopropylbenzene	ND		1.0	0.79	ug/L			01/05/23 17:06	1
m,p-Xylene	ND		2.0	0.66	ug/L			01/05/23 17:06	1
Methyl acetate	ND		2.5	1.3	ug/L			01/05/23 17:06	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			01/05/23 17:06	1
Methylcyclohexane	ND		1.0	0.16	ug/L			01/05/23 17:06	1
Methylene Chloride	ND		1.0	0.44	ug/L			01/05/23 17:06	1
n-Butylbenzene	ND		1.0	0.64	ug/L			01/05/23 17:06	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/05/23 17:06	1
o-Xylene	ND		1.0	0.76	ug/L			01/05/23 17:06	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			01/05/23 17:06	1
Styrene	ND		1.0	0.73	ug/L			01/05/23 17:06	1

Client Sample ID: FB_010323
Date Collected: 01/03/23 16:45
Date Received: 01/04/23 10:00

Lab Sample ID: 480-205124-3
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		1.0	0.81	ug/L			01/05/23 17:06	1
Tetrachloroethene	ND		1.0	0.36	ug/L			01/05/23 17:06	1
Toluene	ND		1.0	0.51	ug/L			01/05/23 17:06	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			01/05/23 17:06	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			01/05/23 17:06	1
Trichloroethene	ND		1.0	0.46	ug/L			01/05/23 17:06	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			01/05/23 17:06	1
Vinyl chloride	ND		1.0	0.90	ug/L			01/05/23 17:06	1
Xylenes, Total	ND		2.0	0.66	ug/L			01/05/23 17:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*01/05/23 17:06*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*01/05/23 17:06*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*01/05/23 17:06*	*1*
Toluene-d8 (Surr)	*89*		*80 - 120*		*01/05/23 17:06*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND	*+	5.4	0.52	ug/L		01/06/23 08:17	01/09/23 16:29	1
2,4,6-Trichlorophenol	ND		5.4	0.66	ug/L		01/06/23 08:17	01/09/23 16:29	1
2,4-Dichlorophenol	ND		5.4	0.55	ug/L		01/06/23 08:17	01/09/23 16:29	1
2,4-Dimethylphenol	ND		5.4	0.54	ug/L		01/06/23 08:17	01/09/23 16:29	1
2,4-Dinitrophenol	ND		11	2.4	ug/L		01/06/23 08:17	01/09/23 16:29	1
2,4-Dinitrotoluene	ND		5.4	0.49	ug/L		01/06/23 08:17	01/09/23 16:29	1
2,6-Dinitrotoluene	ND		5.4	0.43	ug/L		01/06/23 08:17	01/09/23 16:29	1
2-Chloronaphthalene	ND	*+	5.4	0.50	ug/L		01/06/23 08:17	01/09/23 16:29	1
2-Chlorophenol	ND		5.4	0.58	ug/L		01/06/23 08:17	01/09/23 16:29	1
2-Methylnaphthalene	ND		5.4	0.65	ug/L		01/06/23 08:17	01/09/23 16:29	1
2-Methylphenol	ND	*+	5.4	0.43	ug/L		01/06/23 08:17	01/09/23 16:29	1
2-Nitroaniline	ND		11	0.46	ug/L		01/06/23 08:17	01/09/23 16:29	1
2-Nitrophenol	ND		5.4	0.52	ug/L		01/06/23 08:17	01/09/23 16:29	1
3,3'-Dichlorobenzidine	ND		5.4	0.43	ug/L		01/06/23 08:17	01/09/23 16:29	1
3-Nitroaniline	ND		11	0.52	ug/L		01/06/23 08:17	01/09/23 16:29	1
4,6-Dinitro-2-methylphenol	ND		11	2.4	ug/L		01/06/23 08:17	01/09/23 16:29	1
4-Bromophenyl phenyl ether	ND	*+	5.4	0.49	ug/L		01/06/23 08:17	01/09/23 16:29	1
4-Chloro-3-methylphenol	ND		5.4	0.49	ug/L		01/06/23 08:17	01/09/23 16:29	1
4-Chloroaniline	ND		5.4	0.64	ug/L		01/06/23 08:17	01/09/23 16:29	1
4-Chlorophenyl phenyl ether	ND	*+	5.4	0.38	ug/L		01/06/23 08:17	01/09/23 16:29	1
4-Methylphenol	ND		11	0.39	ug/L		01/06/23 08:17	01/09/23 16:29	1
4-Nitroaniline	ND		11	0.27	ug/L		01/06/23 08:17	01/09/23 16:29	1
4-Nitrophenol	ND		11	1.7	ug/L		01/06/23 08:17	01/09/23 16:29	1
Acenaphthene	ND		5.4	0.45	ug/L		01/06/23 08:17	01/09/23 16:29	1
Acenaphthylene	ND		5.4	0.41	ug/L		01/06/23 08:17	01/09/23 16:29	1
Acetophenone	ND		5.4	0.59	ug/L		01/06/23 08:17	01/09/23 16:29	1
Anthracene	ND		5.4	0.30	ug/L		01/06/23 08:17	01/09/23 16:29	1
Atrazine	ND	*+	5.4	0.50	ug/L		01/06/23 08:17	01/09/23 16:29	1
Benzaldehyde	ND		5.4	0.29	ug/L		01/06/23 08:17	01/09/23 16:29	1
Benzo[a]anthracene	ND		5.4	0.39	ug/L		01/06/23 08:17	01/09/23 16:29	1
Benzo[a]pyrene	ND		5.4	0.51	ug/L		01/06/23 08:17	01/09/23 16:29	1
Benzo[b]fluoranthene	ND		5.4	0.37	ug/L		01/06/23 08:17	01/09/23 16:29	1

Client Sample ID: FB_010323
Date Collected: 01/03/23 16:45
Date Received: 01/04/23 10:00

Lab Sample ID: 480-205124-3
Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		5.4	0.38	ug/L		01/06/23 08:17	01/09/23 16:29	1
Benzo[k]fluoranthene	ND		5.4	0.79	ug/L		01/06/23 08:17	01/09/23 16:29	1
Biphenyl	ND		5.4	0.71	ug/L		01/06/23 08:17	01/09/23 16:29	1
bis (2-chloroisopropyl) ether	ND		5.4	0.57	ug/L		01/06/23 08:17	01/09/23 16:29	1
Bis(2-chloroethoxy)methane	ND		5.4	0.38	ug/L		01/06/23 08:17	01/09/23 16:29	1
Bis(2-chloroethyl)ether	ND		5.4	0.43	ug/L		01/06/23 08:17	01/09/23 16:29	1
Bis(2-ethylhexyl) phthalate	ND		5.4	2.4	ug/L		01/06/23 08:17	01/09/23 16:29	1
Butyl benzyl phthalate	ND		5.4	1.1	ug/L		01/06/23 08:17	01/09/23 16:29	1
Caprolactam	ND		5.4	2.4	ug/L		01/06/23 08:17	01/09/23 16:29	1
Carbazole	ND		5.4	0.33	ug/L		01/06/23 08:17	01/09/23 16:29	1
Chrysene	ND		5.4	0.36	ug/L		01/06/23 08:17	01/09/23 16:29	1
Dibenz(a,h)anthracene	ND		5.4	0.46	ug/L		01/06/23 08:17	01/09/23 16:29	1
Dibenzofuran	ND		11	0.55	ug/L		01/06/23 08:17	01/09/23 16:29	1
Diethyl phthalate	ND		5.4	0.24	ug/L		01/06/23 08:17	01/09/23 16:29	1
Dimethyl phthalate	ND		5.4	0.39	ug/L		01/06/23 08:17	01/09/23 16:29	1
Di-n-butyl phthalate	ND		5.4	0.34	ug/L		01/06/23 08:17	01/09/23 16:29	1
Di-n-octyl phthalate	ND		5.4	0.51	ug/L		01/06/23 08:17	01/09/23 16:29	1
Fluoranthene	ND		5.4	0.43	ug/L		01/06/23 08:17	01/09/23 16:29	1
Fluorene	ND		5.4	0.39	ug/L		01/06/23 08:17	01/09/23 16:29	1
Hexachlorobenzene	ND	*+	5.4	0.55	ug/L		01/06/23 08:17	01/09/23 16:29	1
Hexachlorobutadiene	ND		5.4	0.74	ug/L		01/06/23 08:17	01/09/23 16:29	1
Hexachlorocyclopentadiene	ND		5.4	0.64	ug/L		01/06/23 08:17	01/09/23 16:29	1
Hexachloroethane	ND		5.4	0.64	ug/L		01/06/23 08:17	01/09/23 16:29	1
Indeno[1,2,3-cd]pyrene	ND		5.4	0.51	ug/L		01/06/23 08:17	01/09/23 16:29	1
Isophorone	ND		5.4	0.47	ug/L		01/06/23 08:17	01/09/23 16:29	1
Naphthalene	ND		5.4	0.83	ug/L		01/06/23 08:17	01/09/23 16:29	1
Nitrobenzene	ND		5.4	0.32	ug/L		01/06/23 08:17	01/09/23 16:29	1
N-Nitrosodi-n-propylamine	ND		5.4	0.59	ug/L		01/06/23 08:17	01/09/23 16:29	1
N-Nitrosodiphenylamine	ND		5.4	0.55	ug/L		01/06/23 08:17	01/09/23 16:29	1
Pentachlorophenol	ND		11	2.4	ug/L		01/06/23 08:17	01/09/23 16:29	1
Phenanthrene	ND		5.4	0.48	ug/L		01/06/23 08:17	01/09/23 16:29	1
Phenol	ND		5.4	0.42	ug/L		01/06/23 08:17	01/09/23 16:29	1
Pyrene	ND		5.4	0.37	ug/L		01/06/23 08:17	01/09/23 16:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*85*		*41 - 120*	*01/06/23 08:17*	*01/09/23 16:29*	*1*
2-Fluorobiphenyl (Surr)	*100*		*48 - 120*	*01/06/23 08:17*	*01/09/23 16:29*	*1*
2-Fluorophenol (Surr)	*56*		*35 - 120*	*01/06/23 08:17*	*01/09/23 16:29*	*1*
Nitrobenzene-d5 (Surr)	*76*		*46 - 120*	*01/06/23 08:17*	*01/09/23 16:29*	*1*
Phenol-d5 (Surr)	*45*		*22 - 120*	*01/06/23 08:17*	*01/09/23 16:29*	*1*
p-Terphenyl-d14 (Surr)	*121*		*60 - 148*	*01/06/23 08:17*	*01/09/23 16:29*	*1*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		01/05/23 08:57	01/05/23 18:02	1
Antimony	ND		0.020	0.0068	mg/L		01/05/23 08:57	01/05/23 18:02	1
Arsenic	ND		0.015	0.0056	mg/L		01/05/23 08:57	01/05/23 18:02	1
Barium	ND		0.0020	0.00070	mg/L		01/05/23 08:57	01/05/23 18:02	1
Beryllium	ND		0.0020	0.00030	mg/L		01/05/23 08:57	01/05/23 18:02	1
Cadmium	ND		0.0020	0.00050	mg/L		01/05/23 08:57	01/05/23 18:02	1

Client Sample ID: FB_010323

Lab Sample ID: 480-205124-3

Date Collected: 01/03/23 16:45

Matrix: Water

Date Received: 01/04/23 10:00

Method: SW846 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	ND		0.50	0.10	mg/L		01/05/23 08:57	01/05/23 18:02	1
Chromium	ND		0.0040	0.0010	mg/L		01/05/23 08:57	01/05/23 18:02	1
Cobalt	ND		0.0040	0.00063	mg/L		01/05/23 08:57	01/05/23 18:02	1
Copper	ND		0.010	0.0016	mg/L		01/05/23 08:57	01/05/23 18:02	1
Iron	ND		0.050	0.019	mg/L		01/05/23 08:57	01/05/23 18:02	1
Lead	ND		0.010	0.0030	mg/L		01/05/23 08:57	01/05/23 18:02	1
Magnesium	ND		0.20	0.043	mg/L		01/05/23 08:57	01/05/23 18:02	1
Manganese	ND		0.0030	0.00040	mg/L		01/05/23 08:57	01/05/23 18:02	1
Nickel	ND		0.010	0.0013	mg/L		01/05/23 08:57	01/05/23 18:02	1
Potassium	ND		0.50	0.10	mg/L		01/05/23 08:57	01/05/23 18:02	1
Selenium	ND		0.025	0.0087	mg/L		01/05/23 08:57	01/05/23 18:02	1
Silver	ND		0.0060	0.0017	mg/L		01/05/23 08:57	01/05/23 18:02	1
Sodium	ND		1.0	0.32	mg/L		01/05/23 08:57	01/05/23 18:02	1
Thallium	ND		0.020	0.010	mg/L		01/05/23 08:57	01/05/23 18:02	1
Vanadium	ND		0.0050	0.0015	mg/L		01/05/23 08:57	01/05/23 18:02	1
Zinc	ND		0.010	0.0015	mg/L		01/05/23 08:57	01/05/23 18:02	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		01/05/23 11:00	01/05/23 15:02	1

Client Sample ID: TB_010323

Lab Sample ID: 480-205124-4

Date Collected: 01/03/23 00:00

Matrix: Water

Date Received: 01/04/23 10:00

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			01/05/23 17:29	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			01/05/23 17:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			01/05/23 17:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			01/05/23 17:29	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			01/05/23 17:29	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			01/05/23 17:29	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			01/05/23 17:29	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			01/05/23 17:29	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			01/05/23 17:29	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			01/05/23 17:29	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			01/05/23 17:29	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			01/05/23 17:29	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			01/05/23 17:29	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/05/23 17:29	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			01/05/23 17:29	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			01/05/23 17:29	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			01/05/23 17:29	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			01/05/23 17:29	1
2-Butanone (MEK)	ND		10	1.3	ug/L			01/05/23 17:29	1
2-Hexanone	ND		5.0	1.2	ug/L			01/05/23 17:29	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			01/05/23 17:29	1
Acetone	ND	*+	10	3.0	ug/L			01/05/23 17:29	1
Benzene	ND		1.0	0.41	ug/L			01/05/23 17:29	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205124-1

Client Sample ID: TB_010323
Date Collected: 01/03/23 00:00
Date Received: 01/04/23 10:00

Lab Sample ID: 480-205124-4
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		1.0	0.39	ug/L			01/05/23 17:29	1
Bromoform	ND	*+	1.0	0.26	ug/L			01/05/23 17:29	1
Bromomethane	ND		1.0	0.69	ug/L			01/05/23 17:29	1
Carbon disulfide	ND		1.0	0.19	ug/L			01/05/23 17:29	1
Carbon tetrachloride	ND	*+	1.0	0.27	ug/L			01/05/23 17:29	1
Chlorobenzene	ND		1.0	0.75	ug/L			01/05/23 17:29	1
Chloroethane	ND		1.0	0.32	ug/L			01/05/23 17:29	1
Chloroform	ND		1.0	0.34	ug/L			01/05/23 17:29	1
Chloromethane	ND		1.0	0.35	ug/L			01/05/23 17:29	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			01/05/23 17:29	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			01/05/23 17:29	1
Cyclohexane	ND		1.0	0.18	ug/L			01/05/23 17:29	1
Dibromochloromethane	ND		1.0	0.32	ug/L			01/05/23 17:29	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			01/05/23 17:29	1
Ethylbenzene	ND		1.0	0.74	ug/L			01/05/23 17:29	1
Isopropylbenzene	ND		1.0	0.79	ug/L			01/05/23 17:29	1
m,p-Xylene	ND		2.0	0.66	ug/L			01/05/23 17:29	1
Methyl acetate	ND		2.5	1.3	ug/L			01/05/23 17:29	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			01/05/23 17:29	1
Methylcyclohexane	ND		1.0	0.16	ug/L			01/05/23 17:29	1
Methylene Chloride	ND		1.0	0.44	ug/L			01/05/23 17:29	1
n-Butylbenzene	ND		1.0	0.64	ug/L			01/05/23 17:29	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/05/23 17:29	1
o-Xylene	ND		1.0	0.76	ug/L			01/05/23 17:29	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			01/05/23 17:29	1
Styrene	ND		1.0	0.73	ug/L			01/05/23 17:29	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			01/05/23 17:29	1
Tetrachloroethene	ND		1.0	0.36	ug/L			01/05/23 17:29	1
Toluene	ND		1.0	0.51	ug/L			01/05/23 17:29	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			01/05/23 17:29	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			01/05/23 17:29	1
Trichloroethene	ND		1.0	0.46	ug/L			01/05/23 17:29	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			01/05/23 17:29	1
Vinyl chloride	ND		1.0	0.90	ug/L			01/05/23 17:29	1
Xylenes, Total	ND		2.0	0.66	ug/L			01/05/23 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*77 - 120*		*01/05/23 17:29*	*1*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*01/05/23 17:29*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*01/05/23 17:29*	*1*
Toluene-d8 (Surr)	*89*		*80 - 120*		*01/05/23 17:29*	*1*

Surrogate Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205124-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(64-126)	(72-126)	(60-140)	(71-125)
480-205124-1	SB3 (23-25)	102	93	97	94
LCS 480-655096/1-A	Lab Control Sample	102	92	98	94
MB 480-655096/2-A	Method Blank	104	93	97	95

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-205124-2	EB_010323	93	98	97	92
480-205124-3	FB_010323	96	98	107	89
480-205124-4	TB_010323	93	94	100	89
LCS 480-655113/5	Lab Control Sample	96	96	107	90
MB 480-655113/8	Method Blank	90	98	99	88

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(54-120)	(60-120)	(52-120)	(53-120)	(54-120)	(79-130)
480-205124-1	SB3 (23-25)	96	93	80	86	81	98
480-205124-1 MS	SB3 (23-25)	94	90	70	78	70	93
480-205124-1 MSD	SB3 (23-25)	116	107	87	95	90	111
LCS 480-655209/2-A	Lab Control Sample	110	99	80	86	85	114
MB 480-655209/1-A	Method Blank	89	88	74	80	77	104

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Surrogate Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205124-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	TBP (41-120)	FBP (48-120)	2FP (35-120)	NBZ (46-120)	PHL (22-120)	TPHd14 (60-148)		
480-205124-2	EB_010323	96	113	63	82	50	125		
480-205124-3	FB_010323	85	100	56	76	45	121		
LCS 480-655242/2-A	Lab Control Sample	130 S1+	112	85	95	75	122		
LCSD 480-655242/3-A	Lab Control Sample Dup	125 S1+	113	78	90	66	123		
MB 480-655242/1-A	Method Blank	95	88	53	64	40	110		

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Isotope Dilution Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205124-1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	DXE (15-110)
480-205124-2	EB_010323	40
LCS 480-655357/2-A	Lab Control Sample	38
MB 480-655357/1-A	Method Blank	38

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 537 IDA - EPA 537 Isotope Dilution

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFHxS (50-150)	C4PFHA (50-150)	PFOA (50-150)	PFOS (50-150)	PFNA (50-150)	PFBA (50-150)	PFHxA (50-150)	PFDA (50-150)
480-205124-2	EB_010323	87	102	88	99	101	87	97	94
LLCS 200-187354/2-A	Lab Control Sample	87	89	93	92	95	89	81	88
LLCSD 200-187354/3-A	Lab Control Sample Dup	87	103	107	97	94	93	92	94
MB 200-187354/1-A	Method Blank	86	99	102	103	97	96	103	90

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFUnA (50-150)	PFDoA (50-150)	PFOSA (50-150)	PFPeA (50-150)	PFTDA (50-150)	d3NMFOS (50-150)	d5NEFOS (50-150)	M262FTS (50-150)
480-205124-2	EB_010323	95	95	73	93	82	94	86	117
LLCS 200-187354/2-A	Lab Control Sample	89	91	72	87	88	89	93	114
LLCSD 200-187354/3-A	Lab Control Sample Dup	92	89	76	88	86	93	91	122
MB 200-187354/1-A	Method Blank	92	96	74	99	92	92	89	126

		Percent Isotope Dilution Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	M282FTS (50-150)	C3PFBS (50-150)
480-205124-2	EB_010323	110	85
LLCS 200-187354/2-A	Lab Control Sample	101	83
LLCSD 200-187354/3-A	Lab Control Sample Dup	109	86
MB 200-187354/1-A	Method Blank	106	92

Surrogate Legend

PFHxS = 18O2 PFHxS
C4PFHA = 13C4 PFHpA
PFOA = 13C4 PFOA
PFOS = 13C4 PFOS
PFNA = 13C5 PFNA
PFBA = 13C4 PFBA
PFHxA = 13C2 PFHxA
PFDA = 13C2 PFDA
PFUnA = 13C2 PFUnA
PFDoA = 13C2 PFDoA
PFOSA = 13C8 FOSA
PFPeA = 13C5 PFPeA
PFTDA = 13C2 PFTeDA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS

Isotope Dilution Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205124-1

C3PFBS = 13C3 PFBS

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-655096/2-A
Matrix: Solid
Analysis Batch: 655097

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 655096

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.50	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
1,2,3-Trimethylbenzene	ND		5.0	1.0	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
2-Hexanone	ND		25	2.5	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
Acetone	ND		25	4.2	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
Benzene	ND		5.0	0.25	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
Bromoform	ND		5.0	2.5	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
Bromomethane	ND		5.0	0.45	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
Chloroethane	ND		5.0	1.1	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
Chloroform	0.472	J	5.0	0.31	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
Chloromethane	ND		5.0	0.30	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
Cyclohexane	ND		5.0	0.70	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
m,p-Xylene	ND		10	0.84	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
Methyl acetate	ND		25	3.0	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
o-Xylene	ND		5.0	0.65	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		01/04/23 17:13	01/04/23 21:08	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-655096/2-A
Matrix: Solid
Analysis Batch: 655097

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 655096

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		5.0	0.25	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
Tetrachloroethene	0.755	J	5.0	0.67	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
Toluene	ND		5.0	0.38	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
Trichloroethene	ND		5.0	1.1	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		01/04/23 17:13	01/04/23 21:08	1
Xylenes, Total	ND		10	0.84	ug/Kg		01/04/23 17:13	01/04/23 21:08	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*64 - 126*	*01/04/23 17:13*	*01/04/23 21:08*	*1*
4-Bromofluorobenzene (Surr)	*93*		*72 - 126*	*01/04/23 17:13*	*01/04/23 21:08*	*1*
Dibromofluoromethane (Surr)	*97*		*60 - 140*	*01/04/23 17:13*	*01/04/23 21:08*	*1*
Toluene-d8 (Surr)	*95*		*71 - 125*	*01/04/23 17:13*	*01/04/23 21:08*	*1*

Lab Sample ID: LCS 480-655096/1-A
Matrix: Solid
Analysis Batch: 655097

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 655096

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	50.0	38.3		ug/Kg		77	74 - 127
1,1,1-Trichloroethane	50.0	46.6		ug/Kg		93	77 - 121
1,1,2,2-Tetrachloroethane	50.0	48.6		ug/Kg		97	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	48.5		ug/Kg		97	60 - 140
1,1,2-Trichloroethane	50.0	48.0		ug/Kg		96	78 - 122
1,1-Dichloroethane	50.0	52.7		ug/Kg		105	73 - 126
1,1-Dichloroethene	50.0	47.7		ug/Kg		95	59 - 125
1,2,4-Trichlorobenzene	50.0	44.2		ug/Kg		88	64 - 120
1,2,4-Trimethylbenzene	50.0	48.4		ug/Kg		97	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	41.9		ug/Kg		84	63 - 124
1,2-Dibromoethane	50.0	45.7		ug/Kg		91	78 - 120
1,2-Dichlorobenzene	50.0	46.7		ug/Kg		93	75 - 120
1,2-Dichloroethane	50.0	52.9		ug/Kg		106	77 - 122
1,2-Dichloropropane	50.0	52.5		ug/Kg		105	75 - 124
1,3,5-Trimethylbenzene	50.0	48.9		ug/Kg		98	74 - 120
1,3-Dichlorobenzene	50.0	47.3		ug/Kg		95	74 - 120
1,4-Dichlorobenzene	50.0	46.1		ug/Kg		92	73 - 120
2-Butanone (MEK)	250	287		ug/Kg		115	70 - 134
2-Hexanone	250	265		ug/Kg		106	59 - 130
4-Methyl-2-pentanone (MIBK)	250	265		ug/Kg		106	65 - 133
Acetone	250	263		ug/Kg		105	61 - 137
Benzene	50.0	51.2		ug/Kg		102	79 - 127
Bromodichloromethane	50.0	48.4		ug/Kg		97	80 - 122
Bromoform	50.0	35.5		ug/Kg		71	68 - 126
Bromomethane	50.0	49.1		ug/Kg		98	37 - 149
Carbon disulfide	50.0	48.0		ug/Kg		96	64 - 131

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-655096/1-A
Matrix: Solid
Analysis Batch: 655097

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 655096

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon tetrachloride	50.0	41.5		ug/Kg		83	75 - 135
Chlorobenzene	50.0	46.2		ug/Kg		92	76 - 124
Chloroethane	50.0	54.2		ug/Kg		108	69 - 135
Chloroform	50.0	48.7		ug/Kg		97	80 - 120
Chloromethane	50.0	44.3		ug/Kg		89	63 - 127
cis-1,2-Dichloroethene	50.0	50.0		ug/Kg		100	81 - 120
cis-1,3-Dichloropropene	50.0	49.5		ug/Kg		99	80 - 120
Cyclohexane	50.0	51.9		ug/Kg		104	65 - 120
Dibromochloromethane	50.0	40.5		ug/Kg		81	76 - 125
Dichlorodifluoromethane	50.0	39.7		ug/Kg		79	57 - 142
Ethylbenzene	50.0	46.8		ug/Kg		94	80 - 120
Isopropylbenzene	50.0	49.0		ug/Kg		98	72 - 120
m,p-Xylene	50.0	45.5		ug/Kg		91	70 - 130
Methyl acetate	100	110		ug/Kg		110	55 - 136
Methyl tert-butyl ether	50.0	49.6		ug/Kg		99	63 - 125
Methylcyclohexane	50.0	50.4		ug/Kg		101	60 - 140
Methylene Chloride	50.0	52.3		ug/Kg		105	61 - 127
n-Butylbenzene	50.0	49.6		ug/Kg		99	70 - 120
N-Propylbenzene	50.0	50.2		ug/Kg		100	70 - 130
o-Xylene	50.0	45.6		ug/Kg		91	70 - 130
sec-Butylbenzene	50.0	49.7		ug/Kg		99	74 - 120
Styrene	50.0	45.9		ug/Kg		92	80 - 120
tert-Butylbenzene	50.0	48.8		ug/Kg		98	73 - 120
Tetrachloroethene	50.0	45.6		ug/Kg		91	74 - 122
Toluene	50.0	47.1		ug/Kg		94	74 - 128
trans-1,2-Dichloroethene	50.0	48.4		ug/Kg		97	78 - 126
trans-1,3-Dichloropropene	50.0	43.7		ug/Kg		87	73 - 123
Trichloroethene	50.0	50.7		ug/Kg		101	77 - 129
Trichlorofluoromethane	50.0	51.0		ug/Kg		102	65 - 146
Vinyl chloride	50.0	55.1		ug/Kg		110	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*64 - 126*
4-Bromofluorobenzene (Surr)	*92*		*72 - 126*
Dibromofluoromethane (Surr)	*98*		*60 - 140*
Toluene-d8 (Surr)	*94*		*71 - 125*

Lab Sample ID: MB 480-655113/8
Matrix: Water
Analysis Batch: 655113

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			01/05/23 10:48	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			01/05/23 10:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			01/05/23 10:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			01/05/23 10:48	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			01/05/23 10:48	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			01/05/23 10:48	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-655113/8
Matrix: Water
Analysis Batch: 655113

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.0	0.29	ug/L			01/05/23 10:48	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			01/05/23 10:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			01/05/23 10:48	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			01/05/23 10:48	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			01/05/23 10:48	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			01/05/23 10:48	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			01/05/23 10:48	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			01/05/23 10:48	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			01/05/23 10:48	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			01/05/23 10:48	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			01/05/23 10:48	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			01/05/23 10:48	1
2-Butanone (MEK)	ND		10	1.3	ug/L			01/05/23 10:48	1
2-Hexanone	ND		5.0	1.2	ug/L			01/05/23 10:48	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			01/05/23 10:48	1
Acetone	ND		10	3.0	ug/L			01/05/23 10:48	1
Benzene	ND		1.0	0.41	ug/L			01/05/23 10:48	1
Bromodichloromethane	ND		1.0	0.39	ug/L			01/05/23 10:48	1
Bromoform	ND		1.0	0.26	ug/L			01/05/23 10:48	1
Bromomethane	ND		1.0	0.69	ug/L			01/05/23 10:48	1
Carbon disulfide	ND		1.0	0.19	ug/L			01/05/23 10:48	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			01/05/23 10:48	1
Chlorobenzene	ND		1.0	0.75	ug/L			01/05/23 10:48	1
Chloroethane	ND		1.0	0.32	ug/L			01/05/23 10:48	1
Chloroform	ND		1.0	0.34	ug/L			01/05/23 10:48	1
Chloromethane	ND		1.0	0.35	ug/L			01/05/23 10:48	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			01/05/23 10:48	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			01/05/23 10:48	1
Cyclohexane	ND		1.0	0.18	ug/L			01/05/23 10:48	1
Dibromochloromethane	ND		1.0	0.32	ug/L			01/05/23 10:48	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			01/05/23 10:48	1
Ethylbenzene	ND		1.0	0.74	ug/L			01/05/23 10:48	1
Isopropylbenzene	ND		1.0	0.79	ug/L			01/05/23 10:48	1
m,p-Xylene	ND		2.0	0.66	ug/L			01/05/23 10:48	1
Methyl acetate	ND		2.5	1.3	ug/L			01/05/23 10:48	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			01/05/23 10:48	1
Methylcyclohexane	ND		1.0	0.16	ug/L			01/05/23 10:48	1
Methylene Chloride	ND		1.0	0.44	ug/L			01/05/23 10:48	1
n-Butylbenzene	ND		1.0	0.64	ug/L			01/05/23 10:48	1
N-Propylbenzene	ND		1.0	0.69	ug/L			01/05/23 10:48	1
o-Xylene	ND		1.0	0.76	ug/L			01/05/23 10:48	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			01/05/23 10:48	1
Styrene	ND		1.0	0.73	ug/L			01/05/23 10:48	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			01/05/23 10:48	1
Tetrachloroethene	ND		1.0	0.36	ug/L			01/05/23 10:48	1
Toluene	ND		1.0	0.51	ug/L			01/05/23 10:48	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			01/05/23 10:48	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			01/05/23 10:48	1
Trichloroethene	ND		1.0	0.46	ug/L			01/05/23 10:48	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-655113/8
Matrix: Water
Analysis Batch: 655113

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		1.0	0.88	ug/L			01/05/23 10:48	1
Vinyl chloride	ND		1.0	0.90	ug/L			01/05/23 10:48	1
Xylenes, Total	ND		2.0	0.66	ug/L			01/05/23 10:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*77 - 120*		*01/05/23 10:48*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*01/05/23 10:48*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*01/05/23 10:48*	*1*
Toluene-d8 (Surr)	*88*		*80 - 120*		*01/05/23 10:48*	*1*

Lab Sample ID: LCS 480-655113/5
Matrix: Water
Analysis Batch: 655113

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	25.0	24.9		ug/L		100	80 - 120
1,1,1-Trichloroethane	25.0	27.7		ug/L		111	73 - 126
1,1,2,2-Tetrachloroethane	25.0	22.8		ug/L		91	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	30.2		ug/L		121	61 - 148
1,1,2-Trichloroethane	25.0	21.7		ug/L		87	76 - 122
1,1-Dichloroethane	25.0	26.3		ug/L		105	77 - 120
1,1-Dichloroethene	25.0	27.5		ug/L		110	66 - 127
1,2,4-Trichlorobenzene	25.0	25.4		ug/L		102	79 - 122
1,2,4-Trimethylbenzene	25.0	23.0		ug/L		92	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	24.7		ug/L		99	56 - 134
1,2-Dibromoethane	25.0	21.9		ug/L		87	77 - 120
1,2-Dichlorobenzene	25.0	24.9		ug/L		100	80 - 124
1,2-Dichloroethane	25.0	27.5		ug/L		110	75 - 120
1,2-Dichloropropane	25.0	26.8		ug/L		107	76 - 120
1,3,5-Trimethylbenzene	25.0	22.3		ug/L		89	77 - 121
1,3-Dichlorobenzene	25.0	24.7		ug/L		99	77 - 120
1,4-Dichlorobenzene	25.0	23.1		ug/L		92	80 - 120
2-Butanone (MEK)	125	156		ug/L		125	57 - 140
2-Hexanone	125	124		ug/L		99	65 - 127
4-Methyl-2-pentanone (MIBK)	125	120		ug/L		96	71 - 125
Acetone	125	179	*+	ug/L		143	56 - 142
Benzene	25.0	25.8		ug/L		103	71 - 124
Bromodichloromethane	25.0	30.0		ug/L		120	80 - 122
Bromoform	25.0	33.8	*+	ug/L		135	61 - 132
Bromomethane	25.0	33.2		ug/L		133	55 - 144
Carbon disulfide	25.0	27.2		ug/L		109	59 - 134
Carbon tetrachloride	25.0	33.9	*+	ug/L		136	72 - 134
Chlorobenzene	25.0	22.4		ug/L		90	80 - 120
Chloroethane	25.0	28.2		ug/L		113	69 - 136
Chloroform	25.0	27.8		ug/L		111	73 - 127
Chloromethane	25.0	25.1		ug/L		100	68 - 124
cis-1,2-Dichloroethene	25.0	28.0		ug/L		112	74 - 124
cis-1,3-Dichloropropene	25.0	26.0		ug/L		104	74 - 124

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-655113/5
Matrix: Water
Analysis Batch: 655113

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyclohexane	25.0	26.7		ug/L		107	59 - 135
Dibromochloromethane	25.0	30.7		ug/L		123	75 - 125
Dichlorodifluoromethane	25.0	29.3		ug/L		117	59 - 135
Ethylbenzene	25.0	23.1		ug/L		93	77 - 123
Isopropylbenzene	25.0	22.6		ug/L		90	77 - 122
m,p-Xylene	25.0	22.5		ug/L		90	76 - 122
Methyl acetate	50.0	58.0		ug/L		116	74 - 133
Methyl tert-butyl ether	25.0	27.1		ug/L		109	77 - 120
Methylcyclohexane	25.0	26.3		ug/L		105	68 - 134
Methylene Chloride	25.0	30.8		ug/L		123	75 - 124
n-Butylbenzene	25.0	22.9		ug/L		92	71 - 128
N-Propylbenzene	25.0	23.1		ug/L		93	75 - 127
o-Xylene	25.0	22.4		ug/L		90	76 - 122
sec-Butylbenzene	25.0	22.4		ug/L		90	74 - 127
Styrene	25.0	21.3		ug/L		85	80 - 120
tert-Butylbenzene	25.0	25.2		ug/L		101	75 - 123
Tetrachloroethene	25.0	23.3		ug/L		93	74 - 122
Toluene	25.0	23.6		ug/L		94	80 - 122
trans-1,2-Dichloroethene	25.0	29.0		ug/L		116	73 - 127
trans-1,3-Dichloropropene	25.0	20.0		ug/L		80	80 - 120
Trichloroethene	25.0	27.5		ug/L		110	74 - 123
Trichlorofluoromethane	25.0	34.4		ug/L		138	62 - 150
Vinyl chloride	25.0	30.3		ug/L		121	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*
Dibromofluoromethane (Surr)	*107*		*75 - 123*
Toluene-d8 (Surr)	*90*		*80 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-655209/1-A
Matrix: Solid
Analysis Batch: 655248

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 655209

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		170	45	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
2,4,6-Trichlorophenol	ND		170	33	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
2,4-Dimethylphenol	ND		170	40	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
2,4-Dinitrophenol	ND		1600	770	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
2,4-Dinitrotoluene	ND		170	34	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
2-Chloronaphthalene	ND		170	27	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
2-Chlorophenol	ND		320	30	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
2-Methylnaphthalene	ND		170	33	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
2-Methylphenol	ND		170	20	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
2-Nitroaniline	ND		320	24	ug/Kg		01/05/23 15:40	01/06/23 10:32	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-655209/1-A
Matrix: Solid
Analysis Batch: 655248

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 655209

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Nitrophenol	ND		170	47	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
3,3'-Dichlorobenzidine	ND		320	200	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
3-Nitroaniline	ND		320	46	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
4,6-Dinitro-2-methylphenol	ND		320	170	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
4-Bromophenyl phenyl ether	ND		170	23	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
4-Chloro-3-methylphenol	ND		170	41	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
4-Chloroaniline	ND		170	41	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
4-Chlorophenyl phenyl ether	ND		170	21	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
4-Methylphenol	ND		320	20	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
4-Nitroaniline	ND		320	87	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
4-Nitrophenol	ND		320	120	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Acenaphthene	ND		170	24	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Acenaphthylene	ND		170	22	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Acetophenone	ND		170	23	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Anthracene	ND		170	41	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Atrazine	ND		170	58	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Benzaldehyde	ND		170	130	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Benzo[a]anthracene	ND		170	17	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Benzo[a]pyrene	ND		170	24	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Benzo[b]fluoranthene	ND		170	26	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Biphenyl	ND		170	24	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
bis (2-chloroisopropyl) ether	ND		170	33	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Bis(2-chloroethoxy)methane	ND		170	35	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Bis(2-chloroethyl)ether	ND		170	22	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Bis(2-ethylhexyl) phthalate	ND		170	57	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Butyl benzyl phthalate	ND		170	27	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Caprolactam	ND		170	50	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Carbazole	ND		170	20	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Chrysene	ND		170	37	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Dibenz(a,h)anthracene	ND		170	29	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Dibenzofuran	ND		170	20	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Diethyl phthalate	ND		170	22	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Dimethyl phthalate	ND		170	20	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Di-n-butyl phthalate	ND		170	28	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Di-n-octyl phthalate	ND		170	20	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Fluoranthene	ND		170	18	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Fluorene	ND		170	20	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Hexachlorobenzene	ND		170	23	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Hexachlorobutadiene	ND		170	24	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Hexachlorocyclopentadiene	ND		170	23	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Hexachloroethane	ND		170	22	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Isophorone	ND		170	35	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Naphthalene	ND		170	22	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Nitrobenzene	ND		170	19	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
N-Nitrosodi-n-propylamine	ND		170	28	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
N-Nitrosodiphenylamine	ND		170	140	ug/Kg		01/05/23 15:40	01/06/23 10:32	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-655209/1-A
Matrix: Solid
Analysis Batch: 655248

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 655209

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	ND		320	170	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Phenanthrene	ND		170	24	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Phenol	ND		170	25	ug/Kg		01/05/23 15:40	01/06/23 10:32	1
Pyrene	ND		170	20	ug/Kg		01/05/23 15:40	01/06/23 10:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*89*		*54 - 120*	*01/05/23 15:40*	*01/06/23 10:32*	*1*
2-Fluorobiphenyl (Surr)	*88*		*60 - 120*	*01/05/23 15:40*	*01/06/23 10:32*	*1*
2-Fluorophenol (Surr)	*74*		*52 - 120*	*01/05/23 15:40*	*01/06/23 10:32*	*1*
Nitrobenzene-d5 (Surr)	*80*		*53 - 120*	*01/05/23 15:40*	*01/06/23 10:32*	*1*
Phenol-d5 (Surr)	*77*		*54 - 120*	*01/05/23 15:40*	*01/06/23 10:32*	*1*
p-Terphenyl-d14 (Surr)	*104*		*79 - 130*	*01/05/23 15:40*	*01/06/23 10:32*	*1*

Lab Sample ID: LCS 480-655209/2-A
Matrix: Solid
Analysis Batch: 655248

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 655209

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	1630	1560		ug/Kg		96	59 - 126
2,4,6-Trichlorophenol	1630	1590		ug/Kg		98	59 - 123
2,4-Dichlorophenol	1630	1450		ug/Kg		89	61 - 120
2,4-Dimethylphenol	1630	1460		ug/Kg		90	59 - 120
2,4-Dinitrophenol	3260	2940		ug/Kg		90	41 - 146
2,4-Dinitrotoluene	1630	1550		ug/Kg		95	63 - 120
2,6-Dinitrotoluene	1630	1530		ug/Kg		94	66 - 120
2-Chloronaphthalene	1630	1470		ug/Kg		91	57 - 120
2-Chlorophenol	1630	1300		ug/Kg		80	53 - 120
2-Methylnaphthalene	1630	1370		ug/Kg		84	59 - 120
2-Methylphenol	1630	1360		ug/Kg		84	54 - 120
2-Nitroaniline	1630	1540		ug/Kg		95	61 - 120
2-Nitrophenol	1630	1400		ug/Kg		86	56 - 120
3,3'-Dichlorobenzidine	3260	3040		ug/Kg		93	54 - 120
3-Nitroaniline	1630	1330		ug/Kg		82	48 - 120
4,6-Dinitro-2-methylphenol	3260	3360		ug/Kg		103	49 - 122
4-Bromophenyl phenyl ether	1630	1710		ug/Kg		105	58 - 120
4-Chloro-3-methylphenol	1630	1440		ug/Kg		88	61 - 120
4-Chloroaniline	1630	1180		ug/Kg		73	38 - 120
4-Chlorophenyl phenyl ether	1630	1480		ug/Kg		91	63 - 124
4-Methylphenol	1630	1360		ug/Kg		84	55 - 120
4-Nitroaniline	1630	1480		ug/Kg		91	56 - 120
4-Nitrophenol	3260	2870		ug/Kg		88	43 - 147
Acenaphthene	1630	1520		ug/Kg		93	62 - 120
Acenaphthylene	1630	1550		ug/Kg		95	58 - 121
Acetophenone	1630	1350		ug/Kg		83	54 - 120
Anthracene	1630	1620		ug/Kg		100	62 - 120
Atrazine	3260	2940		ug/Kg		90	60 - 127
Benzaldehyde	3260	2550		ug/Kg		78	10 - 150
Benzo[a]anthracene	1630	1650		ug/Kg		101	65 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-655209/2-A
Matrix: Solid
Analysis Batch: 655248

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 655209

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzo[a]pyrene	1630	1700		ug/Kg		104	64 - 120
Benzo[b]fluoranthene	1630	1730		ug/Kg		107	64 - 120
Benzo[g,h,i]perylene	1630	1660		ug/Kg		102	45 - 145
Benzo[k]fluoranthene	1630	1630		ug/Kg		100	65 - 120
Biphenyl	1630	1520		ug/Kg		93	59 - 120
bis (2-chloroisopropyl) ether	1630	1280		ug/Kg		79	44 - 120
Bis(2-chloroethoxy)methane	1630	1390		ug/Kg		86	55 - 120
Bis(2-chloroethyl)ether	1630	1270		ug/Kg		78	45 - 120
Bis(2-ethylhexyl) phthalate	1630	1690		ug/Kg		104	61 - 133
Butyl benzyl phthalate	1630	1690		ug/Kg		104	61 - 129
Caprolactam	3260	2890		ug/Kg		89	47 - 120
Carbazole	1630	1620		ug/Kg		99	65 - 120
Chrysene	1630	1550		ug/Kg		95	64 - 120
Dibenz(a,h)anthracene	1630	1700		ug/Kg		104	54 - 132
Dibenzofuran	1630	1510		ug/Kg		93	63 - 120
Diethyl phthalate	1630	1550		ug/Kg		95	66 - 120
Dimethyl phthalate	1630	1560		ug/Kg		96	65 - 124
Di-n-butyl phthalate	1630	1640		ug/Kg		101	58 - 130
Di-n-octyl phthalate	1630	1620		ug/Kg		100	57 - 133
Fluoranthene	1630	1570		ug/Kg		96	62 - 120
Fluorene	1630	1490		ug/Kg		92	63 - 120
Hexachlorobenzene	1630	1640		ug/Kg		101	60 - 120
Hexachlorobutadiene	1630	1320		ug/Kg		81	45 - 120
Hexachlorocyclopentadiene	1630	1500		ug/Kg		92	47 - 120
Hexachloroethane	1630	1220		ug/Kg		75	41 - 120
Indeno[1,2,3-cd]pyrene	1630	1770		ug/Kg		109	56 - 134
Isophorone	1630	1420		ug/Kg		87	56 - 120
Naphthalene	1630	1340		ug/Kg		82	55 - 120
Nitrobenzene	1630	1370		ug/Kg		84	54 - 120
N-Nitrosodi-n-propylamine	1630	1310		ug/Kg		80	52 - 120
N-Nitrosodiphenylamine	1630	1700		ug/Kg		105	51 - 128
Pentachlorophenol	3260	3110		ug/Kg		96	51 - 120
Phenanthrene	1630	1620		ug/Kg		99	60 - 120
Phenol	1630	1330		ug/Kg		82	53 - 120
Pyrene	1630	1800		ug/Kg		110	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*110*		*54 - 120*
2-Fluorobiphenyl (Surr)	*99*		*60 - 120*
2-Fluorophenol (Surr)	*80*		*52 - 120*
Nitrobenzene-d5 (Surr)	*86*		*53 - 120*
Phenol-d5 (Surr)	*85*		*54 - 120*
p-Terphenyl-d14 (Surr)	*114*		*79 - 130*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-205124-1 MS
Matrix: Solid
Analysis Batch: 655248

Client Sample ID: SB3 (23-25)
Prep Type: Total/NA
Prep Batch: 655209

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	ND	F2	1780	1540		ug/Kg	☼	86	46 - 120
2,4,6-Trichlorophenol	ND	F2	1780	1530		ug/Kg	☼	86	41 - 123
2,4-Dichlorophenol	ND	F2	1780	1330		ug/Kg	☼	75	45 - 120
2,4-Dimethylphenol	ND		1780	1370		ug/Kg	☼	77	52 - 120
2,4-Dinitrophenol	ND	F2	3570	2430		ug/Kg	☼	68	41 - 146
2,4-Dinitrotoluene	ND		1780	1540		ug/Kg	☼	87	63 - 125
2,6-Dinitrotoluene	ND	F2	1780	1480		ug/Kg	☼	83	66 - 120
2-Chloronaphthalene	ND		1780	1490		ug/Kg	☼	84	57 - 120
2-Chlorophenol	ND		1780	1250		ug/Kg	☼	70	43 - 120
2-Methylnaphthalene	ND	F2	1780	1300		ug/Kg	☼	73	55 - 120
2-Methylphenol	ND		1780	1220		ug/Kg	☼	68	48 - 120
2-Nitroaniline	ND	F2	1780	1470		ug/Kg	☼	82	61 - 120
2-Nitrophenol	ND	F2	1780	1390		ug/Kg	☼	78	37 - 120
3,3'-Dichlorobenzidine	ND		3570	3210		ug/Kg	☼	90	37 - 126
3-Nitroaniline	ND		1780	1360		ug/Kg	☼	76	48 - 120
4,6-Dinitro-2-methylphenol	ND	F2	3570	2780		ug/Kg	☼	78	23 - 149
4-Bromophenyl phenyl ether	ND	F2	1780	1570		ug/Kg	☼	88	58 - 120
4-Chloro-3-methylphenol	ND	F2	1780	1290		ug/Kg	☼	72	49 - 125
4-Chloroaniline	ND	F2	1780	1060		ug/Kg	☼	59	38 - 120
4-Chlorophenyl phenyl ether	ND	F2	1780	1460		ug/Kg	☼	82	63 - 124
4-Methylphenol	ND	F2	1780	1190		ug/Kg	☼	67	50 - 120
4-Nitroaniline	ND		1780	1530		ug/Kg	☼	86	47 - 120
4-Nitrophenol	ND		3570	3190		ug/Kg	☼	89	31 - 147
Acenaphthene	ND		1780	1520		ug/Kg	☼	85	60 - 120
Acenaphthylene	ND	F2	1780	1550		ug/Kg	☼	87	58 - 121
Acetophenone	ND	F2	1780	1240		ug/Kg	☼	70	47 - 120
Anthracene	ND	F2	1780	1620		ug/Kg	☼	91	62 - 120
Atrazine	ND		3570	3100		ug/Kg	☼	87	60 - 150
Benzaldehyde	ND	F2	3570	2500		ug/Kg	☼	70	10 - 150
Benzo[a]anthracene	ND	F2	1780	1640		ug/Kg	☼	92	65 - 120
Benzo[a]pyrene	ND	F2	1780	1630		ug/Kg	☼	91	64 - 120
Benzo[b]fluoranthene	ND	F2	1780	1650		ug/Kg	☼	93	10 - 150
Benzo[g,h,i]perylene	ND	F2	1780	1730		ug/Kg	☼	97	45 - 145
Benzo[k]fluoranthene	ND		1780	1470		ug/Kg	☼	83	23 - 150
Biphenyl	ND		1780	1540		ug/Kg	☼	86	58 - 120
bis (2-chloroisopropyl) ether	ND		1780	1210		ug/Kg	☼	68	31 - 120
Bis(2-chloroethoxy)methane	ND	F2	1780	1360		ug/Kg	☼	76	52 - 120
Bis(2-chloroethyl)ether	ND		1780	1240		ug/Kg	☼	69	45 - 120
Bis(2-ethylhexyl) phthalate	ND		1780	1650		ug/Kg	☼	92	61 - 133
Butyl benzyl phthalate	ND		1780	1610		ug/Kg	☼	90	61 - 120
Caprolactam	ND	F2	3570	2640		ug/Kg	☼	74	37 - 133
Carbazole	ND		1780	1680		ug/Kg	☼	94	59 - 120
Chrysene	ND	F2	1780	1510		ug/Kg	☼	84	64 - 120
Dibenz(a,h)anthracene	ND	F2	1780	1760		ug/Kg	☼	99	54 - 132
Dibenzofuran	ND	F2	1780	1490		ug/Kg	☼	83	62 - 120
Diethyl phthalate	ND	F2	1780	1480		ug/Kg	☼	83	66 - 120
Dimethyl phthalate	ND	F2	1780	1520		ug/Kg	☼	85	65 - 124
Di-n-butyl phthalate	ND	F2	1780	1610		ug/Kg	☼	90	58 - 130

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-205124-1 MS
Matrix: Solid
Analysis Batch: 655248

Client Sample ID: SB3 (23-25)
Prep Type: Total/NA
Prep Batch: 655209

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Di-n-octyl phthalate	ND	F2	1780	1620		ug/Kg	☼	91	57 - 133
Fluoranthene	ND		1780	1670		ug/Kg	☼	94	62 - 120
Fluorene	ND	F2	1780	1510		ug/Kg	☼	85	63 - 120
Hexachlorobenzene	ND	F2	1780	1510		ug/Kg	☼	85	60 - 120
Hexachlorobutadiene	ND		1780	1360		ug/Kg	☼	76	45 - 120
Hexachlorocyclopentadiene	ND		1780	1460		ug/Kg	☼	82	31 - 120
Hexachloroethane	ND		1780	1220		ug/Kg	☼	68	21 - 120
Indeno[1,2,3-cd]pyrene	ND	F2	1780	1890		ug/Kg	☼	106	56 - 134
Isophorone	ND	F2	1780	1390		ug/Kg	☼	78	56 - 120
Naphthalene	ND		1780	1330		ug/Kg	☼	75	46 - 120
Nitrobenzene	ND		1780	1380		ug/Kg	☼	77	49 - 120
N-Nitrosodi-n-propylamine	ND		1780	1200		ug/Kg	☼	67	46 - 120
N-Nitrosodiphenylamine	ND	F2	1780	1560		ug/Kg	☼	87	20 - 128
Pentachlorophenol	ND		3570	3180		ug/Kg	☼	89	25 - 136
Phenanthrene	ND	F2	1780	1610		ug/Kg	☼	90	60 - 122
Phenol	ND		1780	1210		ug/Kg	☼	68	50 - 120
Pyrene	ND		1780	1620		ug/Kg	☼	91	61 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*94*		*54 - 120*
2-Fluorobiphenyl (Surr)	*90*		*60 - 120*
2-Fluorophenol (Surr)	*70*		*52 - 120*
Nitrobenzene-d5 (Surr)	*78*		*53 - 120*
Phenol-d5 (Surr)	*70*		*54 - 120*
p-Terphenyl-d14 (Surr)	*93*		*79 - 130*

Lab Sample ID: 480-205124-1 MSD
Matrix: Solid
Analysis Batch: 655248

Client Sample ID: SB3 (23-25)
Prep Type: Total/NA
Prep Batch: 655209

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4,5-Trichlorophenol	ND	F2	1800	1900	F2	ug/Kg	☼	106	46 - 120	21	18
2,4,6-Trichlorophenol	ND	F2	1800	1900	F2	ug/Kg	☼	106	41 - 123	21	19
2,4-Dichlorophenol	ND	F2	1800	1680	F2	ug/Kg	☼	94	45 - 120	23	19
2,4-Dimethylphenol	ND		1800	1750		ug/Kg	☼	97	52 - 120	24	42
2,4-Dinitrophenol	ND	F2	3590	3060	F2	ug/Kg	☼	85	41 - 146	23	22
2,4-Dinitrotoluene	ND		1800	1840		ug/Kg	☼	103	63 - 125	18	20
2,6-Dinitrotoluene	ND	F2	1800	1870	F2	ug/Kg	☼	104	66 - 120	23	15
2-Chloronaphthalene	ND		1800	1770		ug/Kg	☼	99	57 - 120	17	21
2-Chlorophenol	ND		1800	1560		ug/Kg	☼	87	43 - 120	22	25
2-Methylnaphthalene	ND	F2	1800	1620	F2	ug/Kg	☼	90	55 - 120	22	21
2-Methylphenol	ND		1800	1590		ug/Kg	☼	89	48 - 120	26	27
2-Nitroaniline	ND	F2	1800	1850	F2	ug/Kg	☼	103	61 - 120	23	15
2-Nitrophenol	ND	F2	1800	1720	F2	ug/Kg	☼	96	37 - 120	21	18
3,3'-Dichlorobenzidine	ND		3590	3840		ug/Kg	☼	107	37 - 126	18	25
3-Nitroaniline	ND		1800	1640		ug/Kg	☼	91	48 - 120	19	19
4,6-Dinitro-2-methylphenol	ND	F2	3590	3590	F2	ug/Kg	☼	100	23 - 149	25	15
4-Bromophenyl phenyl ether	ND	F2	1800	1980	F2	ug/Kg	☼	110	58 - 120	23	15

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-205124-1 MSD
Matrix: Solid
Analysis Batch: 655248

Client Sample ID: SB3 (23-25)
Prep Type: Total/NA
Prep Batch: 655209

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
4-Chloro-3-methylphenol	ND	F2	1800	1700	F2	ug/Kg	☼	95	49 - 125	28	27
4-Chloroaniline	ND	F2	1800	1390	F2	ug/Kg	☼	78	38 - 120	27	22
4-Chlorophenyl phenyl ether	ND	F2	1800	1770	F2	ug/Kg	☼	99	63 - 124	19	16
4-Methylphenol	ND	F2	1800	1570	F2	ug/Kg	☼	88	50 - 120	28	24
4-Nitroaniline	ND		1800	1650		ug/Kg	☼	92	47 - 120	7	24
4-Nitrophenol	ND		3590	3580		ug/Kg	☼	100	31 - 147	11	25
Acenaphthene	ND		1800	1820		ug/Kg	☼	101	60 - 120	18	35
Acenaphthylene	ND	F2	1800	1870	F2	ug/Kg	☼	104	58 - 121	19	18
Acetophenone	ND	F2	1800	1590	F2	ug/Kg	☼	88	47 - 120	24	20
Anthracene	ND	F2	1800	1940	F2	ug/Kg	☼	108	62 - 120	18	15
Atrazine	ND		3590	3570		ug/Kg	☼	99	60 - 150	14	20
Benzaldehyde	ND	F2	3590	3210	E F2	ug/Kg	☼	89	10 - 150	25	20
Benzo[a]anthracene	ND	F2	1800	1990	F2	ug/Kg	☼	111	65 - 120	19	15
Benzo[a]pyrene	ND	F2	1800	2000	F2	ug/Kg	☼	111	64 - 120	20	15
Benzo[b]fluoranthene	ND	F2	1800	1990	F2	ug/Kg	☼	111	10 - 150	18	15
Benzo[g,h,i]perylene	ND	F2	1800	2040	F2	ug/Kg	☼	113	45 - 145	16	15
Benzo[k]fluoranthene	ND		1800	1820		ug/Kg	☼	101	23 - 150	21	22
Biphenyl	ND		1800	1840		ug/Kg	☼	102	58 - 120	17	20
bis (2-chloroisopropyl) ether	ND		1800	1510		ug/Kg	☼	84	31 - 120	22	24
Bis(2-chloroethoxy)methane	ND	F2	1800	1680	F2	ug/Kg	☼	94	52 - 120	21	17
Bis(2-chloroethyl)ether	ND		1800	1530		ug/Kg	☼	85	45 - 120	21	21
Bis(2-ethylhexyl) phthalate	ND		1800	1920		ug/Kg	☼	107	61 - 133	15	15
Butyl benzyl phthalate	ND		1800	1880		ug/Kg	☼	105	61 - 120	15	16
Caprolactam	ND	F2	3590	3380	F2	ug/Kg	☼	94	37 - 133	25	20
Carbazole	ND		1800	1930		ug/Kg	☼	107	59 - 120	14	20
Chrysene	ND	F2	1800	1850	F2	ug/Kg	☼	103	64 - 120	21	15
Dibenz(a,h)anthracene	ND	F2	1800	2080	F2	ug/Kg	☼	116	54 - 132	16	15
Dibenzofuran	ND	F2	1800	1800	F2	ug/Kg	☼	100	62 - 120	19	15
Diethyl phthalate	ND	F2	1800	1850	F2	ug/Kg	☼	103	66 - 120	22	15
Dimethyl phthalate	ND	F2	1800	1860	F2	ug/Kg	☼	104	65 - 124	20	15
Di-n-butyl phthalate	ND	F2	1800	1940	F2	ug/Kg	☼	108	58 - 130	19	15
Di-n-octyl phthalate	ND	F2	1800	1960	F2	ug/Kg	☼	109	57 - 133	19	16
Fluoranthene	ND		1800	1900		ug/Kg	☼	106	62 - 120	13	15
Fluorene	ND	F2	1800	1770	F2	ug/Kg	☼	99	63 - 120	16	15
Hexachlorobenzene	ND	F2	1800	1870	F2	ug/Kg	☼	104	60 - 120	21	15
Hexachlorobutadiene	ND		1800	1580		ug/Kg	☼	88	45 - 120	15	44
Hexachlorocyclopentadiene	ND		1800	1760		ug/Kg	☼	98	31 - 120	18	49
Hexachloroethane	ND		1800	1470		ug/Kg	☼	82	21 - 120	19	46
Indeno[1,2,3-cd]pyrene	ND	F2	1800	2230	F2	ug/Kg	☼	124	56 - 134	17	15
Isophorone	ND	F2	1800	1690	F2	ug/Kg	☼	94	56 - 120	20	17
Naphthalene	ND		1800	1620		ug/Kg	☼	90	46 - 120	20	29
Nitrobenzene	ND		1800	1670		ug/Kg	☼	93	49 - 120	19	24
N-Nitrosodi-n-propylamine	ND		1800	1530		ug/Kg	☼	85	46 - 120	24	31
N-Nitrosodiphenylamine	ND	F2	1800	2010	F2	ug/Kg	☼	112	20 - 128	25	15
Pentachlorophenol	ND		3590	3880		ug/Kg	☼	108	25 - 136	20	35
Phenanthrene	ND	F2	1800	1910	F2	ug/Kg	☼	106	60 - 122	17	15
Phenol	ND		1800	1540		ug/Kg	☼	86	50 - 120	24	35
Pyrene	ND		1800	1940		ug/Kg	☼	108	61 - 133	18	35

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-205124-1 MSD
Matrix: Solid
Analysis Batch: 655248

Client Sample ID: SB3 (23-25)
Prep Type: Total/NA
Prep Batch: 655209

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2,4,6-Tribromophenol (Surr)	116		54 - 120
2-Fluorobiphenyl (Surr)	107		60 - 120
2-Fluorophenol (Surr)	87		52 - 120
Nitrobenzene-d5 (Surr)	95		53 - 120
Phenol-d5 (Surr)	90		54 - 120
p-Terphenyl-d14 (Surr)	111		79 - 130

Lab Sample ID: MB 480-655242/1-A
Matrix: Water
Analysis Batch: 655370

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 655242

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		01/06/23 08:17	01/09/23 13:43	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		01/06/23 08:17	01/09/23 13:43	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		01/06/23 08:17	01/09/23 13:43	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		01/06/23 08:17	01/09/23 13:43	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		01/06/23 08:17	01/09/23 13:43	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		01/06/23 08:17	01/09/23 13:43	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		01/06/23 08:17	01/09/23 13:43	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		01/06/23 08:17	01/09/23 13:43	1
2-Chlorophenol	ND		5.0	0.53	ug/L		01/06/23 08:17	01/09/23 13:43	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		01/06/23 08:17	01/09/23 13:43	1
2-Methylphenol	ND		5.0	0.40	ug/L		01/06/23 08:17	01/09/23 13:43	1
2-Nitroaniline	ND		10	0.42	ug/L		01/06/23 08:17	01/09/23 13:43	1
2-Nitrophenol	ND		5.0	0.48	ug/L		01/06/23 08:17	01/09/23 13:43	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		01/06/23 08:17	01/09/23 13:43	1
3-Nitroaniline	ND		10	0.48	ug/L		01/06/23 08:17	01/09/23 13:43	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		01/06/23 08:17	01/09/23 13:43	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		01/06/23 08:17	01/09/23 13:43	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		01/06/23 08:17	01/09/23 13:43	1
4-Chloroaniline	ND		5.0	0.59	ug/L		01/06/23 08:17	01/09/23 13:43	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		01/06/23 08:17	01/09/23 13:43	1
4-Methylphenol	ND		10	0.36	ug/L		01/06/23 08:17	01/09/23 13:43	1
4-Nitroaniline	ND		10	0.25	ug/L		01/06/23 08:17	01/09/23 13:43	1
4-Nitrophenol	ND		10	1.5	ug/L		01/06/23 08:17	01/09/23 13:43	1
Acenaphthene	ND		5.0	0.41	ug/L		01/06/23 08:17	01/09/23 13:43	1
Acenaphthylene	ND		5.0	0.38	ug/L		01/06/23 08:17	01/09/23 13:43	1
Acetophenone	ND		5.0	0.54	ug/L		01/06/23 08:17	01/09/23 13:43	1
Anthracene	ND		5.0	0.28	ug/L		01/06/23 08:17	01/09/23 13:43	1
Atrazine	ND		5.0	0.46	ug/L		01/06/23 08:17	01/09/23 13:43	1
Benzaldehyde	ND		5.0	0.27	ug/L		01/06/23 08:17	01/09/23 13:43	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		01/06/23 08:17	01/09/23 13:43	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		01/06/23 08:17	01/09/23 13:43	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		01/06/23 08:17	01/09/23 13:43	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		01/06/23 08:17	01/09/23 13:43	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		01/06/23 08:17	01/09/23 13:43	1
Biphenyl	ND		5.0	0.65	ug/L		01/06/23 08:17	01/09/23 13:43	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		01/06/23 08:17	01/09/23 13:43	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-655242/1-A
Matrix: Water
Analysis Batch: 655370

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 655242

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		01/06/23 08:17	01/09/23 13:43	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		01/06/23 08:17	01/09/23 13:43	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		01/06/23 08:17	01/09/23 13:43	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		01/06/23 08:17	01/09/23 13:43	1
Caprolactam	ND		5.0	2.2	ug/L		01/06/23 08:17	01/09/23 13:43	1
Carbazole	ND		5.0	0.30	ug/L		01/06/23 08:17	01/09/23 13:43	1
Chrysene	ND		5.0	0.33	ug/L		01/06/23 08:17	01/09/23 13:43	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		01/06/23 08:17	01/09/23 13:43	1
Dibenzofuran	ND		10	0.51	ug/L		01/06/23 08:17	01/09/23 13:43	1
Diethyl phthalate	ND		5.0	0.22	ug/L		01/06/23 08:17	01/09/23 13:43	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		01/06/23 08:17	01/09/23 13:43	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		01/06/23 08:17	01/09/23 13:43	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		01/06/23 08:17	01/09/23 13:43	1
Fluoranthene	ND		5.0	0.40	ug/L		01/06/23 08:17	01/09/23 13:43	1
Fluorene	ND		5.0	0.36	ug/L		01/06/23 08:17	01/09/23 13:43	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		01/06/23 08:17	01/09/23 13:43	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		01/06/23 08:17	01/09/23 13:43	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		01/06/23 08:17	01/09/23 13:43	1
Hexachloroethane	ND		5.0	0.59	ug/L		01/06/23 08:17	01/09/23 13:43	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		01/06/23 08:17	01/09/23 13:43	1
Isophorone	ND		5.0	0.43	ug/L		01/06/23 08:17	01/09/23 13:43	1
Naphthalene	ND		5.0	0.76	ug/L		01/06/23 08:17	01/09/23 13:43	1
Nitrobenzene	ND		5.0	0.29	ug/L		01/06/23 08:17	01/09/23 13:43	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		01/06/23 08:17	01/09/23 13:43	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		01/06/23 08:17	01/09/23 13:43	1
Pentachlorophenol	ND		10	2.2	ug/L		01/06/23 08:17	01/09/23 13:43	1
Phenanthrene	ND		5.0	0.44	ug/L		01/06/23 08:17	01/09/23 13:43	1
Phenol	ND		5.0	0.39	ug/L		01/06/23 08:17	01/09/23 13:43	1
Pyrene	ND		5.0	0.34	ug/L		01/06/23 08:17	01/09/23 13:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*95*		*41 - 120*	*01/06/23 08:17*	*01/09/23 13:43*	*1*
2-Fluorobiphenyl (Surr)	*88*		*48 - 120*	*01/06/23 08:17*	*01/09/23 13:43*	*1*
2-Fluorophenol (Surr)	*53*		*35 - 120*	*01/06/23 08:17*	*01/09/23 13:43*	*1*
Nitrobenzene-d5 (Surr)	*64*		*46 - 120*	*01/06/23 08:17*	*01/09/23 13:43*	*1*
Phenol-d5 (Surr)	*40*		*22 - 120*	*01/06/23 08:17*	*01/09/23 13:43*	*1*
p-Terphenyl-d14 (Surr)	*110*		*60 - 148*	*01/06/23 08:17*	*01/09/23 13:43*	*1*

Lab Sample ID: LCS 480-655242/2-A
Matrix: Water
Analysis Batch: 655370

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 655242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	32.0	39.3		ug/L		123	65 - 126
2,4,6-Trichlorophenol	32.0	34.3		ug/L		107	64 - 120
2,4-Dichlorophenol	32.0	36.9		ug/L		115	63 - 120
2,4-Dimethylphenol	32.0	31.7		ug/L		99	47 - 120
2,4-Dinitrophenol	64.0	68.2		ug/L		107	31 - 137

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-655242/2-A
Matrix: Water
Analysis Batch: 655370

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 655242

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4-Dinitrotoluene	32.0	32.5		ug/L		102	69 - 120
2,6-Dinitrotoluene	32.0	33.8		ug/L		105	68 - 120
2-Chloronaphthalene	32.0	39.2	*+	ug/L		122	58 - 120
2-Chlorophenol	32.0	34.8		ug/L		109	48 - 120
2-Methylnaphthalene	32.0	32.9		ug/L		103	59 - 120
2-Methylphenol	32.0	38.9	*+	ug/L		122	39 - 120
2-Nitroaniline	32.0	33.0		ug/L		103	54 - 127
2-Nitrophenol	32.0	33.1		ug/L		103	52 - 125
3,3'-Dichlorobenzidine	64.0	66.6		ug/L		104	49 - 135
3-Nitroaniline	32.0	30.2		ug/L		94	51 - 120
4,6-Dinitro-2-methylphenol	64.0	80.1		ug/L		125	46 - 136
4-Bromophenyl phenyl ether	32.0	39.8	*+	ug/L		124	65 - 120
4-Chloro-3-methylphenol	32.0	33.7		ug/L		105	61 - 123
4-Chloroaniline	32.0	28.4		ug/L		89	30 - 120
4-Chlorophenyl phenyl ether	32.0	38.7	*+	ug/L		121	62 - 120
4-Methylphenol	32.0	32.1		ug/L		100	29 - 131
4-Nitroaniline	32.0	33.1		ug/L		103	65 - 120
4-Nitrophenol	64.0	51.6		ug/L		81	45 - 120
Acenaphthene	32.0	32.7		ug/L		102	60 - 120
Acenaphthylene	32.0	33.4		ug/L		104	63 - 120
Acetophenone	32.0	35.2		ug/L		110	45 - 120
Anthracene	32.0	37.3		ug/L		116	67 - 120
Atrazine	64.0	84.6	*+	ug/L		132	71 - 130
Benzaldehyde	64.0	57.3		ug/L		90	10 - 140
Benzo[a]anthracene	32.0	33.1		ug/L		103	70 - 121
Benzo[a]pyrene	32.0	34.0		ug/L		106	60 - 123
Benzo[b]fluoranthene	32.0	37.7		ug/L		118	66 - 126
Benzo[g,h,i]perylene	32.0	36.1		ug/L		113	66 - 150
Benzo[k]fluoranthene	32.0	34.9		ug/L		109	65 - 124
Biphenyl	32.0	32.4		ug/L		101	59 - 120
bis (2-chloroisopropyl) ether	32.0	24.0		ug/L		75	21 - 136
Bis(2-chloroethoxy)methane	32.0	28.2		ug/L		88	50 - 128
Bis(2-chloroethyl)ether	32.0	33.8		ug/L		106	44 - 120
Bis(2-ethylhexyl) phthalate	32.0	27.8		ug/L		87	63 - 139
Butyl benzyl phthalate	32.0	28.7		ug/L		90	70 - 129
Caprolactam	64.0	27.2		ug/L		43	22 - 120
Carbazole	32.0	38.2		ug/L		119	66 - 123
Chrysene	32.0	31.6		ug/L		99	69 - 120
Dibenz(a,h)anthracene	32.0	37.4		ug/L		117	65 - 135
Dibenzofuran	32.0	34.8		ug/L		109	66 - 120
Diethyl phthalate	32.0	35.9		ug/L		112	59 - 127
Dimethyl phthalate	32.0	35.7		ug/L		111	68 - 120
Di-n-butyl phthalate	32.0	33.7		ug/L		105	69 - 131
Di-n-octyl phthalate	32.0	30.0		ug/L		94	63 - 140
Fluoranthene	32.0	35.8		ug/L		112	69 - 126
Fluorene	32.0	36.1		ug/L		113	66 - 120
Hexachlorobenzene	32.0	41.2	*+	ug/L		129	61 - 120
Hexachlorobutadiene	32.0	30.9		ug/L		97	35 - 120
Hexachlorocyclopentadiene	32.0	29.1		ug/L		91	31 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-655242/2-A
Matrix: Water
Analysis Batch: 655370

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 655242

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Hexachloroethane			32.0	26.3		ug/L		82	43 - 120		
Indeno[1,2,3-cd]pyrene			32.0	38.8		ug/L		121	69 - 146		
Isophorone			32.0	27.6		ug/L		86	55 - 120		
Naphthalene			32.0	33.7		ug/L		105	57 - 120		
Nitrobenzene			32.0	28.1		ug/L		88	53 - 123		
N-Nitrosodi-n-propylamine			32.0	31.7		ug/L		99	32 - 140		
N-Nitrosodiphenylamine			32.0	34.3		ug/L		107	61 - 120		
Pentachlorophenol			64.0	61.5		ug/L		96	29 - 136		
Phenanthrene			32.0	33.1		ug/L		104	68 - 120		
Phenol			32.0	24.0		ug/L		75	17 - 120		
Pyrene			32.0	31.6		ug/L		99	70 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*130*	*S1+*	*41 - 120*
2-Fluorobiphenyl (Surr)	*112*		*48 - 120*
2-Fluorophenol (Surr)	*85*		*35 - 120*
Nitrobenzene-d5 (Surr)	*95*		*46 - 120*
Phenol-d5 (Surr)	*75*		*22 - 120*
p-Terphenyl-d14 (Surr)	*122*		*60 - 148*

Lab Sample ID: LCSD 480-655242/3-A
Matrix: Water
Analysis Batch: 655370

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 655242

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4,5-Trichlorophenol			32.0	41.5	*+	ug/L		130	65 - 126	6	18
2,4,6-Trichlorophenol			32.0	35.0		ug/L		109	64 - 120	2	19
2,4-Dichlorophenol			32.0	33.2		ug/L		104	63 - 120	11	19
2,4-Dimethylphenol			32.0	30.3		ug/L		95	47 - 120	5	42
2,4-Dinitrophenol			64.0	69.9		ug/L		109	31 - 137	2	22
2,4-Dinitrotoluene			32.0	35.8		ug/L		112	69 - 120	10	20
2,6-Dinitrotoluene			32.0	34.8		ug/L		109	68 - 120	3	15
2-Chloronaphthalene			32.0	39.0	*+	ug/L		122	58 - 120	1	21
2-Chlorophenol			32.0	30.6		ug/L		96	48 - 120	13	25
2-Methylnaphthalene			32.0	29.6		ug/L		93	59 - 120	11	21
2-Methylphenol			32.0	32.9		ug/L		103	39 - 120	17	27
2-Nitroaniline			32.0	32.4		ug/L		101	54 - 127	2	15
2-Nitrophenol			32.0	31.4		ug/L		98	52 - 125	5	18
3,3'-Dichlorobenzidine			64.0	67.3		ug/L		105	49 - 135	1	25
3-Nitroaniline			32.0	30.5		ug/L		95	51 - 120	1	19
4,6-Dinitro-2-methylphenol			64.0	71.5		ug/L		112	46 - 136	11	15
4-Bromophenyl phenyl ether			32.0	37.9		ug/L		118	65 - 120	5	15
4-Chloro-3-methylphenol			32.0	30.6		ug/L		96	61 - 123	10	27
4-Chloroaniline			32.0	26.1		ug/L		82	30 - 120	8	22
4-Chlorophenyl phenyl ether			32.0	38.1		ug/L		119	62 - 120	2	16
4-Methylphenol			32.0	35.0		ug/L		109	29 - 131	9	24
4-Nitroaniline			32.0	35.5		ug/L		111	65 - 120	7	24
4-Nitrophenol			64.0	57.7		ug/L		90	45 - 120	11	48

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-655242/3-A
Matrix: Water
Analysis Batch: 655370

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 655242

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene			32.0	34.1		ug/L		107	60 - 120	4	24
Acenaphthylene			32.0	33.4		ug/L		104	63 - 120	0	18
Acetophenone			32.0	32.2		ug/L		101	45 - 120	9	20
Anthracene			32.0	36.3		ug/L		114	67 - 120	3	15
Atrazine			64.0	87.4	*+	ug/L		137	71 - 130	3	20
Benzaldehyde			64.0	52.8		ug/L		82	10 - 140	8	20
Benzo[a]anthracene			32.0	33.8		ug/L		106	70 - 121	2	15
Benzo[a]pyrene			32.0	33.6		ug/L		105	60 - 123	1	15
Benzo[b]fluoranthene			32.0	39.8		ug/L		124	66 - 126	6	15
Benzo[g,h,i]perylene			32.0	34.3		ug/L		107	66 - 150	5	15
Benzo[k]fluoranthene			32.0	32.6		ug/L		102	65 - 124	7	22
Biphenyl			32.0	32.6		ug/L		102	59 - 120	1	20
bis (2-chloroisopropyl) ether			32.0	19.8		ug/L		62	21 - 136	19	24
Bis(2-chloroethoxy)methane			32.0	26.7		ug/L		83	50 - 128	5	17
Bis(2-chloroethyl)ether			32.0	32.4		ug/L		101	44 - 120	4	21
Bis(2-ethylhexyl) phthalate			32.0	27.7		ug/L		86	63 - 139	1	15
Butyl benzyl phthalate			32.0	27.5		ug/L		86	70 - 129	4	16
Caprolactam			64.0	27.3		ug/L		43	22 - 120	0	20
Carbazole			32.0	36.1		ug/L		113	66 - 123	6	20
Chrysene			32.0	31.0		ug/L		97	69 - 120	2	15
Dibenz(a,h)anthracene			32.0	37.4		ug/L		117	65 - 135	0	15
Dibenzofuran			32.0	35.8		ug/L		112	66 - 120	3	15
Diethyl phthalate			32.0	35.7		ug/L		112	59 - 127	1	15
Dimethyl phthalate			32.0	35.4		ug/L		111	68 - 120	1	15
Di-n-butyl phthalate			32.0	32.4		ug/L		101	69 - 131	4	15
Di-n-octyl phthalate			32.0	29.6		ug/L		93	63 - 140	1	16
Fluoranthene			32.0	35.7		ug/L		112	69 - 126	0	15
Fluorene			32.0	38.4		ug/L		120	66 - 120	6	15
Hexachlorobenzene			32.0	37.8		ug/L		118	61 - 120	9	15
Hexachlorobutadiene			32.0	29.9		ug/L		93	35 - 120	3	44
Hexachlorocyclopentadiene			32.0	28.2		ug/L		88	31 - 120	3	49
Hexachloroethane			32.0	24.6		ug/L		77	43 - 120	7	46
Indeno[1,2,3-cd]pyrene			32.0	38.6		ug/L		121	69 - 146	1	15
Isophorone			32.0	27.8		ug/L		87	55 - 120	1	17
Naphthalene			32.0	33.4		ug/L		104	57 - 120	1	29
Nitrobenzene			32.0	26.8		ug/L		84	53 - 123	5	24
N-Nitrosodi-n-propylamine			32.0	28.6		ug/L		89	32 - 140	10	31
N-Nitrosodiphenylamine			32.0	32.8		ug/L		102	61 - 120	5	15
Pentachlorophenol			64.0	55.9		ug/L		87	29 - 136	10	37
Phenanthrene			32.0	35.2		ug/L		110	68 - 120	6	15
Phenol			32.0	21.4		ug/L		67	17 - 120	11	34
Pyrene			32.0	31.6		ug/L		99	70 - 125	0	19

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*125*	*S1+*	*41 - 120*
2-Fluorobiphenyl (Surr)	*113*		*48 - 120*
2-Fluorophenol (Surr)	*78*		*35 - 120*
Nitrobenzene-d5 (Surr)	*90*		*46 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 480-655242/3-A
Matrix: Water
Analysis Batch: 655370

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 655242

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Phenol-d5 (Surr)	*66*		*22 - 120*
p-Terphenyl-d14 (Surr)	*123*		*60 - 148*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-655357/1-A
Matrix: Water
Analysis Batch: 655492

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 655357

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		01/09/23 08:27	01/10/23 13:26	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*38*		*15 - 110*	*01/09/23 08:27*	*01/10/23 13:26*	*1*

Lab Sample ID: LCS 480-655357/2-A
Matrix: Water
Analysis Batch: 655492

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 655357

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	2.00	2.05		ug/L		102	40 - 140

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*38*		*15 - 110*

Method: 537 IDA - EPA 537 Isotope Dilution

Lab Sample ID: MB 200-187354/1-A
Matrix: Water
Analysis Batch: 187501

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 187354

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid (PFBA)	ND		5.0	1.2	ng/L		01/09/23 12:54	01/13/23 16:52	1
Perfluoropentanoic acid (PFPeA)	ND		2.0	0.68	ng/L		01/09/23 12:54	01/13/23 16:52	1
Perfluorohexanoic acid (PFHxA)	ND		2.0	0.65	ng/L		01/09/23 12:54	01/13/23 16:52	1
Perfluoroheptanoic acid (PFHpA)	ND		2.0	0.54	ng/L		01/09/23 12:54	01/13/23 16:52	1
Perfluorooctanoic acid (PFOA)	ND		2.0	0.76	ng/L		01/09/23 12:54	01/13/23 16:52	1
Perfluorononanoic acid (PFNA)	ND		2.0	0.49	ng/L		01/09/23 12:54	01/13/23 16:52	1
Perfluorodecanoic acid (PFDA)	ND		2.0	0.46	ng/L		01/09/23 12:54	01/13/23 16:52	1
Perfluoroundecanoic acid (PFUnA)	ND		2.0	0.55	ng/L		01/09/23 12:54	01/13/23 16:52	1
Perfluorododecanoic acid (PFDoA)	ND		2.0	0.49	ng/L		01/09/23 12:54	01/13/23 16:52	1
Perfluorotridecanoic acid (PFTriA)	ND		2.0	0.48	ng/L		01/09/23 12:54	01/13/23 16:52	1
Perfluorotetradecanoic acid (PFTeA)	ND		2.0	0.64	ng/L		01/09/23 12:54	01/13/23 16:52	1
Perfluorobutanesulfonic acid (PFBS)	ND		2.0	0.62	ng/L		01/09/23 12:54	01/13/23 16:52	1
Perfluorohexanesulfonic acid (PFHxS)	ND		2.0	0.55	ng/L		01/09/23 12:54	01/13/23 16:52	1
Perfluoroheptanesulfonic acid (PFHpS)	ND		2.0	0.41	ng/L		01/09/23 12:54	01/13/23 16:52	1
Perfluorooctanesulfonic acid (PFOS)	ND		2.0	0.85	ng/L		01/09/23 12:54	01/13/23 16:52	1
Perfluorodecanesulfonic acid (PFDS)	ND		2.0	0.40	ng/L		01/09/23 12:54	01/13/23 16:52	1
Perfluorooctanesulfonamide (PFOSA)	ND		2.0	0.92	ng/L		01/09/23 12:54	01/13/23 16:52	1

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: MB 200-187354/1-A
Matrix: Water
Analysis Batch: 187501

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 187354

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)	ND		5.0	1.9	ng/L		01/09/23 12:54	01/13/23 16:52	1
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)	ND		5.0	1.6	ng/L		01/09/23 12:54	01/13/23 16:52	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		5.0	1.3	ng/L		01/09/23 12:54	01/13/23 16:52	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		2.0	0.77	ng/L		01/09/23 12:54	01/13/23 16:52	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
18O2 PFHxS	*86*		*50 - 150*	*01/09/23 12:54*	*01/13/23 16:52*	*1*
13C4 PFHpA	*99*		*50 - 150*	*01/09/23 12:54*	*01/13/23 16:52*	*1*
13C4 PFOA	*102*		*50 - 150*	*01/09/23 12:54*	*01/13/23 16:52*	*1*
13C4 PFOS	*103*		*50 - 150*	*01/09/23 12:54*	*01/13/23 16:52*	*1*
13C5 PFNA	*97*		*50 - 150*	*01/09/23 12:54*	*01/13/23 16:52*	*1*
13C4 PFBA	*96*		*50 - 150*	*01/09/23 12:54*	*01/13/23 16:52*	*1*
13C2 PFHxA	*103*		*50 - 150*	*01/09/23 12:54*	*01/13/23 16:52*	*1*
13C2 PFDA	*90*		*50 - 150*	*01/09/23 12:54*	*01/13/23 16:52*	*1*
13C2 PFUnA	*92*		*50 - 150*	*01/09/23 12:54*	*01/13/23 16:52*	*1*
13C2 PFDoA	*96*		*50 - 150*	*01/09/23 12:54*	*01/13/23 16:52*	*1*
13C8 FOSA	*74*		*50 - 150*	*01/09/23 12:54*	*01/13/23 16:52*	*1*
13C5 PFPeA	*99*		*50 - 150*	*01/09/23 12:54*	*01/13/23 16:52*	*1*
13C2 PFTeDA	*92*		*50 - 150*	*01/09/23 12:54*	*01/13/23 16:52*	*1*
d3-NMeFOSAA	*92*		*50 - 150*	*01/09/23 12:54*	*01/13/23 16:52*	*1*
d5-NEtFOSAA	*89*		*50 - 150*	*01/09/23 12:54*	*01/13/23 16:52*	*1*
M2-6:2 FTS	*126*		*50 - 150*	*01/09/23 12:54*	*01/13/23 16:52*	*1*
M2-8:2 FTS	*106*		*50 - 150*	*01/09/23 12:54*	*01/13/23 16:52*	*1*
13C3 PFBS	*92*		*50 - 150*	*01/09/23 12:54*	*01/13/23 16:52*	*1*

Lab Sample ID: LLCS 200-187354/2-A
Matrix: Water
Analysis Batch: 187501

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 187354

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid (PFBA)	10.0	9.11		ng/L		91	50 - 150
Perfluoropentanoic acid (PFPeA)	4.00	4.39		ng/L		110	50 - 150
Perfluorohexanoic acid (PFHxA)	4.00	4.89		ng/L		122	50 - 150
Perfluoroheptanoic acid (PFHpA)	4.00	4.50		ng/L		112	50 - 150
Perfluorooctanoic acid (PFOA)	4.00	4.71		ng/L		118	50 - 150
Perfluorononanoic acid (PFNA)	4.00	3.70		ng/L		93	50 - 150
Perfluorodecanoic acid (PFDA)	4.00	4.01		ng/L		100	50 - 150
Perfluoroundecanoic acid (PFUnA)	4.00	3.49		ng/L		87	50 - 150
Perfluorododecanoic acid (PFDoA)	4.00	3.83		ng/L		96	50 - 150
Perfluorotridecanoic acid (PFTriA)	4.00	3.12		ng/L		78	50 - 150
Perfluorotetradecanoic acid (PFTeA)	4.00	4.19		ng/L		105	50 - 150
Perfluorobutanesulfonic acid (PFBS)	3.54	3.59		ng/L		101	50 - 150

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LLCS 200-187354/2-A
Matrix: Water
Analysis Batch: 187501

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 187354

Analyte			Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Perfluorohexanesulfonic acid (PFHxS)			3.64	3.62		ng/L		99	50 - 150		
Perfluoroheptanesulfonic acid (PFHpS)			3.81	3.77		ng/L		99	50 - 150		
Perfluorooctanesulfonic acid (PFOS)			3.71	3.81		ng/L		103	50 - 150		
Perfluorodecanesulfonic acid (PFDS)			3.86	3.40		ng/L		88	50 - 150		
Perfluorooctanesulfonamide (PFOSA)			4.00	3.45		ng/L		86	50 - 150		
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)			10.0	9.95		ng/L		100	50 - 150		
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			10.0	9.34		ng/L		93	50 - 150		
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)			9.48	9.19		ng/L		97	50 - 150		
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)			3.83	4.11		ng/L		107	50 - 150		

Isotope Dilution	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
18O2 PFHxS	*87*		*50 - 150*
13C4 PFHpA	*89*		*50 - 150*
13C4 PFOA	*93*		*50 - 150*
13C4 PFOS	*92*		*50 - 150*
13C5 PFNA	*95*		*50 - 150*
13C4 PFBA	*89*		*50 - 150*
13C2 PFHxA	*81*		*50 - 150*
13C2 PFDA	*88*		*50 - 150*
13C2 PFUnA	*89*		*50 - 150*
13C2 PFDoA	*91*		*50 - 150*
13C8 FOSA	*72*		*50 - 150*
13C5 PFPeA	*87*		*50 - 150*
13C2 PFTeDA	*88*		*50 - 150*
d3-NMeFOSAA	*89*		*50 - 150*
d5-NEtFOSAA	*93*		*50 - 150*
M2-6:2 FTS	*114*		*50 - 150*
M2-8:2 FTS	*101*		*50 - 150*
13C3 PFBS	*83*		*50 - 150*

Lab Sample ID: LLCSD 200-187354/3-A
Matrix: Water
Analysis Batch: 187501

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 187354

Analyte			Spike Added	LLCSD Result	LLCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid (PFBA)			10.0	10.5		ng/L		105	50 - 150	15	30
Perfluoropentanoic acid (PFPeA)			4.00	5.08		ng/L		127	50 - 150	14	30
Perfluorohexanoic acid (PFHxA)			4.00	4.29		ng/L		107	50 - 150	13	30
Perfluoroheptanoic acid (PFHpA)			4.00	4.42		ng/L		111	50 - 150	2	30
Perfluorooctanoic acid (PFOA)			4.00	3.60		ng/L		90	50 - 150	27	30
Perfluorononanoic acid (PFNA)			4.00	4.57		ng/L		114	50 - 150	21	30
Perfluorodecanoic acid (PFDA)			4.00	3.96		ng/L		99	50 - 150	1	30

Method: 537 IDA - EPA 537 Isotope Dilution (Continued)

Lab Sample ID: LLCSD 200-187354/3-A
Matrix: Water
Analysis Batch: 187501

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 187354

Analyte			Spike Added	LLCSD Result	LLCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluoroundecanoic acid (PFUnA)			4.00	4.36		ng/L		109	50 - 150	22	30
Perfluorododecanoic acid (PFDoA)			4.00	3.42		ng/L		86	50 - 150	11	30
Perfluorotridecanoic acid (PFTriA)			4.00	4.28	*1	ng/L		107	50 - 150	31	30
Perfluorotetradecanoic acid (PFTeA)			4.00	3.84		ng/L		96	50 - 150	9	30
Perfluorobutanesulfonic acid (PFBS)			3.54	4.66		ng/L		132	50 - 150	26	30
Perfluorohexanesulfonic acid (PFHxS)			3.64	3.86		ng/L		106	50 - 150	6	30
Perfluoroheptanesulfonic acid (PFHpS)			3.81	3.75		ng/L		98	50 - 150	0.7	30
Perfluorooctanesulfonic acid (PFOS)			3.71	4.04		ng/L		109	50 - 150	6	30
Perfluorodecanesulfonic acid (PFDS)			3.86	3.24		ng/L		84	50 - 150	5	30
Perfluorooctanesulfonamide (PFOSA)			4.00	3.44		ng/L		86	50 - 150	0.3	30
N-methylperfluorooctanesulfonamidoacetic acid (NMeFOSAA)			10.0	10.2		ng/L		102	50 - 150	3	30
N-ethylperfluorooctanesulfonamidoacetic acid (NEtFOSAA)			10.0	9.68		ng/L		97	50 - 150	4	30
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)			9.48	9.25		ng/L		98	50 - 150	0.7	30
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)			3.83	3.51		ng/L		92	50 - 150	16	30

Isotope Dilution	*LLCSD %Recovery*	*LLCSD Qualifier*	*Limits*
18O2 PFHxS	*87*		*50 - 150*
13C4 PFHpA	*103*		*50 - 150*
13C4 PFOA	*107*		*50 - 150*
13C4 PFOS	*97*		*50 - 150*
13C5 PFNA	*94*		*50 - 150*
13C4 PFBA	*93*		*50 - 150*
13C2 PFHxA	*92*		*50 - 150*
13C2 PFDA	*94*		*50 - 150*
13C2 PFUnA	*92*		*50 - 150*
13C2 PFDoA	*89*		*50 - 150*
13C8 FOSA	*76*		*50 - 150*
13C5 PFPeA	*88*		*50 - 150*
13C2 PFTeDA	*86*		*50 - 150*
d3-NMeFOSAA	*93*		*50 - 150*
d5-NEtFOSAA	*91*		*50 - 150*
M2-6:2 FTS	*122*		*50 - 150*
M2-8:2 FTS	*109*		*50 - 150*
13C3 PFBS	*86*		*50 - 150*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-655063/1-A
Matrix: Water
Analysis Batch: 655265

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 655063

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		01/05/23 08:57	01/05/23 17:43	1
Antimony	ND		0.020	0.0068	mg/L		01/05/23 08:57	01/05/23 17:43	1
Arsenic	ND		0.015	0.0056	mg/L		01/05/23 08:57	01/05/23 17:43	1
Barium	ND		0.0020	0.00070	mg/L		01/05/23 08:57	01/05/23 17:43	1
Beryllium	ND		0.0020	0.00030	mg/L		01/05/23 08:57	01/05/23 17:43	1
Cadmium	ND		0.0020	0.00050	mg/L		01/05/23 08:57	01/05/23 17:43	1
Calcium	ND		0.50	0.10	mg/L		01/05/23 08:57	01/05/23 17:43	1
Chromium	ND		0.0040	0.0010	mg/L		01/05/23 08:57	01/05/23 17:43	1
Cobalt	ND		0.0040	0.00063	mg/L		01/05/23 08:57	01/05/23 17:43	1
Copper	ND		0.010	0.0016	mg/L		01/05/23 08:57	01/05/23 17:43	1
Iron	ND		0.050	0.019	mg/L		01/05/23 08:57	01/05/23 17:43	1
Lead	ND		0.010	0.0030	mg/L		01/05/23 08:57	01/05/23 17:43	1
Magnesium	ND		0.20	0.043	mg/L		01/05/23 08:57	01/05/23 17:43	1
Manganese	ND		0.0030	0.00040	mg/L		01/05/23 08:57	01/05/23 17:43	1
Nickel	ND		0.010	0.0013	mg/L		01/05/23 08:57	01/05/23 17:43	1
Potassium	ND		0.50	0.10	mg/L		01/05/23 08:57	01/05/23 17:43	1
Selenium	ND		0.025	0.0087	mg/L		01/05/23 08:57	01/05/23 17:43	1
Silver	ND		0.0060	0.0017	mg/L		01/05/23 08:57	01/05/23 17:43	1
Sodium	ND		1.0	0.32	mg/L		01/05/23 08:57	01/05/23 17:43	1
Thallium	ND		0.020	0.010	mg/L		01/05/23 08:57	01/05/23 17:43	1
Vanadium	ND		0.0050	0.0015	mg/L		01/05/23 08:57	01/05/23 17:43	1
Zinc	ND		0.010	0.0015	mg/L		01/05/23 08:57	01/05/23 17:43	1

Lab Sample ID: LCS 480-655063/2-A
Matrix: Water
Analysis Batch: 655265

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 655063

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	10.0	9.88		mg/L		99	80 - 120
Antimony	0.200	0.213		mg/L		106	80 - 120
Arsenic	0.200	0.198		mg/L		99	80 - 120
Barium	0.200	0.200		mg/L		100	80 - 120
Beryllium	0.200	0.201		mg/L		101	80 - 120
Cadmium	0.200	0.205		mg/L		103	80 - 120
Calcium	10.0	9.82		mg/L		98	80 - 120
Chromium	0.200	0.196		mg/L		98	80 - 120
Cobalt	0.200	0.191		mg/L		96	80 - 120
Copper	0.200	0.194		mg/L		97	80 - 120
Iron	10.0	9.89		mg/L		99	80 - 120
Lead	0.200	0.196		mg/L		98	80 - 120
Magnesium	10.0	9.64		mg/L		96	80 - 120
Manganese	0.200	0.197		mg/L		99	80 - 120
Nickel	0.200	0.192		mg/L		96	80 - 120
Potassium	10.0	9.75		mg/L		97	80 - 120
Selenium	0.200	0.196		mg/L		98	80 - 120
Silver	0.0500	0.0470		mg/L		94	80 - 120
Sodium	10.0	9.50		mg/L		95	80 - 120
Thallium	0.200	0.196		mg/L		98	80 - 120
Vanadium	0.200	0.198		mg/L		99	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-655063/2-A
Matrix: Water
Analysis Batch: 655265

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 655063

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Zinc	0.200	0.195		mg/L		98	80 - 120

Lab Sample ID: MB 480-655190/1-A
Matrix: Solid
Analysis Batch: 655387

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 655190

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		9.6	4.2	mg/Kg		01/05/23 15:12	01/06/23 12:51	1
Antimony	ND		14.5	0.39	mg/Kg		01/05/23 15:12	01/06/23 12:51	1
Arsenic	ND		1.9	0.39	mg/Kg		01/05/23 15:12	01/06/23 12:51	1
Barium	ND		0.48	0.11	mg/Kg		01/05/23 15:12	01/06/23 12:51	1
Beryllium	ND		0.19	0.027	mg/Kg		01/05/23 15:12	01/06/23 12:51	1
Cadmium	ND		0.19	0.029	mg/Kg		01/05/23 15:12	01/06/23 12:51	1
Calcium	ND		48.2	3.2	mg/Kg		01/05/23 15:12	01/06/23 12:51	1
Chromium	ND		0.48	0.19	mg/Kg		01/05/23 15:12	01/06/23 12:51	1
Cobalt	ND		0.48	0.048	mg/Kg		01/05/23 15:12	01/06/23 12:51	1
Copper	ND		0.96	0.20	mg/Kg		01/05/23 15:12	01/06/23 12:51	1
Iron	ND		9.6	3.4	mg/Kg		01/05/23 15:12	01/06/23 12:51	1
Lead	ND		0.96	0.23	mg/Kg		01/05/23 15:12	01/06/23 12:51	1
Magnesium	ND		19.3	0.89	mg/Kg		01/05/23 15:12	01/06/23 12:51	1
Manganese	0.0444	J	0.19	0.031	mg/Kg		01/05/23 15:12	01/06/23 12:51	1
Nickel	ND		4.8	0.22	mg/Kg		01/05/23 15:12	01/06/23 12:51	1
Potassium	ND		28.9	19.3	mg/Kg		01/05/23 15:12	01/06/23 12:51	1
Selenium	ND		3.9	0.39	mg/Kg		01/05/23 15:12	01/06/23 12:51	1
Silver	ND		0.58	0.19	mg/Kg		01/05/23 15:12	01/06/23 12:51	1
Sodium	ND		135	12.5	mg/Kg		01/05/23 15:12	01/06/23 12:51	1
Thallium	ND		5.8	0.29	mg/Kg		01/05/23 15:12	01/06/23 12:51	1
Vanadium	ND		0.48	0.11	mg/Kg		01/05/23 15:12	01/06/23 12:51	1
Zinc	ND		1.9	0.62	mg/Kg		01/05/23 15:12	01/06/23 12:51	1

Lab Sample ID: LCSSRM 480-655190/2-A
Matrix: Solid
Analysis Batch: 655387

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 655190

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	10100	8970		mg/Kg		88.8	37.5 - 114.9
Antimony	234	82.54		mg/Kg		35.3	10.0 - 120.1
Arsenic	129	105.4		mg/Kg		81.7	60.9 - 113.2
Barium	169	138.3		mg/Kg		81.8	68.6 - 114.2
Beryllium	137	99.42		mg/Kg		72.6	66.3 - 110.2
Cadmium	227	167.1		mg/Kg		73.6	64.8 - 110.1
Calcium	5190	3900		mg/Kg		75.1	64.0 - 112.9
Chromium	115	86.27		mg/Kg		75.0	62.4 - 115.7

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-655190/2-A
Matrix: Solid
Analysis Batch: 655387

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 655190

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits
Cobalt	50.0	46.12		mg/Kg		92.2	69.6 - 115.8
Copper	76.0	60.56		mg/Kg		79.7	69.5 - 115.8
Iron	15000	15310		mg/Kg		102.0	29.9 - 149.3
Lead	74.8	93.13		mg/Kg		124.5	67.0 - 128.9
Magnesium	2570	2193		mg/Kg		85.3	53.7 - 121.0
Manganese	400	344.6		mg/Kg		86.1	70.5 - 115.8
Nickel	282	244.4		mg/Kg		86.7	62.1 - 114.9
Potassium	2420	2138		mg/Kg		88.3	46.7 - 113.2
Selenium	246	187.7		mg/Kg		76.3	60.2 - 114.6
Silver	87.5	70.17		mg/Kg		80.2	63.7 - 115.4
Sodium	161	139.0	J	mg/Kg		86.3	28.6 - 136.0
Thallium	77.4	71.46		mg/Kg		92.3	55.0 - 120.0
Vanadium	201	154.7		mg/Kg		76.9	64.7 - 111.4
Zinc	401	278.2		mg/Kg		69.4	62.8 - 116.7

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-655146/1-A
Matrix: Water
Analysis Batch: 655211

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 655146

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		01/05/23 11:00	01/05/23 14:41	1

Lab Sample ID: LCS 480-655146/2-A
Matrix: Water
Analysis Batch: 655211

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 655146

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Mercury	0.00669	0.00680		mg/L		102	80 - 120

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-655633/1-A
Matrix: Solid
Analysis Batch: 655822

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 655633

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019	0.0045	mg/Kg		01/11/23 11:13	01/12/23 09:26	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205124-1

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: LCSSRM 480-655633/2-A ^10
Matrix: Solid
Analysis Batch: 655822

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 655633

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			20.7	14.48		mg/Kg		69.9	38.3 - 110.1		

QC Association Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205124-1

GC/MS VOA

Prep Batch: 655096

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205124-1	SB3 (23-25)	Total/NA	Solid	5035A_L	
MB 480-655096/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-655096/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

Analysis Batch: 655097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205124-1	SB3 (23-25)	Total/NA	Solid	8260C	655096
MB 480-655096/2-A	Method Blank	Total/NA	Solid	8260C	655096
LCS 480-655096/1-A	Lab Control Sample	Total/NA	Solid	8260C	655096

Analysis Batch: 655113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205124-2	EB_010323	Total/NA	Water	8260C	
480-205124-3	FB_010323	Total/NA	Water	8260C	
480-205124-4	TB_010323	Total/NA	Water	8260C	
MB 480-655113/8	Method Blank	Total/NA	Water	8260C	
LCS 480-655113/5	Lab Control Sample	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 655209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205124-1	SB3 (23-25)	Total/NA	Solid	3550C	
MB 480-655209/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-655209/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-205124-1 MS	SB3 (23-25)	Total/NA	Solid	3550C	
480-205124-1 MSD	SB3 (23-25)	Total/NA	Solid	3550C	

Prep Batch: 655242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205124-2	EB_010323	Total/NA	Water	3510C	
480-205124-3	FB_010323	Total/NA	Water	3510C	
MB 480-655242/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-655242/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-655242/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 655248

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205124-1	SB3 (23-25)	Total/NA	Solid	8270D	655209
MB 480-655209/1-A	Method Blank	Total/NA	Solid	8270D	655209
LCS 480-655209/2-A	Lab Control Sample	Total/NA	Solid	8270D	655209
480-205124-1 MS	SB3 (23-25)	Total/NA	Solid	8270D	655209
480-205124-1 MSD	SB3 (23-25)	Total/NA	Solid	8270D	655209

Prep Batch: 655357

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205124-2	EB_010323	Total/NA	Water	3510C	
MB 480-655357/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-655357/2-A	Lab Control Sample	Total/NA	Water	3510C	

QC Association Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205124-1

GC/MS Semi VOA

Analysis Batch: 655370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205124-2	EB_010323	Total/NA	Water	8270D	655242
480-205124-3	FB_010323	Total/NA	Water	8270D	655242
MB 480-655242/1-A	Method Blank	Total/NA	Water	8270D	655242
LCS 480-655242/2-A	Lab Control Sample	Total/NA	Water	8270D	655242
LCSD 480-655242/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	655242

Analysis Batch: 655492

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205124-2	EB_010323	Total/NA	Water	8270D SIM ID	655357
MB 480-655357/1-A	Method Blank	Total/NA	Water	8270D SIM ID	655357
LCS 480-655357/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	655357

LCMS

Prep Batch: 187354

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205124-2	EB_010323	Total/NA	Water	3535	
MB 200-187354/1-A	Method Blank	Total/NA	Water	3535	
LLCS 200-187354/2-A	Lab Control Sample	Total/NA	Water	3535	
LLCSD 200-187354/3-A	Lab Control Sample Dup	Total/NA	Water	3535	

Analysis Batch: 187501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205124-2	EB_010323	Total/NA	Water	537 IDA	187354
MB 200-187354/1-A	Method Blank	Total/NA	Water	537 IDA	187354
LLCS 200-187354/2-A	Lab Control Sample	Total/NA	Water	537 IDA	187354
LLCSD 200-187354/3-A	Lab Control Sample Dup	Total/NA	Water	537 IDA	187354

Metals

Prep Batch: 655063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205124-2	EB_010323	Total/NA	Water	3005A	
480-205124-3	FB_010323	Total/NA	Water	3005A	
MB 480-655063/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-655063/2-A	Lab Control Sample	Total/NA	Water	3005A	

Prep Batch: 655146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205124-2	EB_010323	Total/NA	Water	7470A	
480-205124-3	FB_010323	Total/NA	Water	7470A	
MB 480-655146/1-A	Method Blank	Total/NA	Water	7470A	
LCS 480-655146/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 655190

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205124-1	SB3 (23-25)	Total/NA	Solid	3050B	
MB 480-655190/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-655190/2-A	Lab Control Sample	Total/NA	Solid	3050B	

QC Association Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205124-1

Metals

Analysis Batch: 655211

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205124-2	EB_010323	Total/NA	Water	7470A	655146
480-205124-3	FB_010323	Total/NA	Water	7470A	655146
MB 480-655146/1-A	Method Blank	Total/NA	Water	7470A	655146
LCS 480-655146/2-A	Lab Control Sample	Total/NA	Water	7470A	655146

Analysis Batch: 655265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205124-2	EB_010323	Total/NA	Water	6010C	655063
480-205124-3	FB_010323	Total/NA	Water	6010C	655063
MB 480-655063/1-A	Method Blank	Total/NA	Water	6010C	655063
LCS 480-655063/2-A	Lab Control Sample	Total/NA	Water	6010C	655063

Analysis Batch: 655387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205124-1	SB3 (23-25)	Total/NA	Solid	6010C	655190
MB 480-655190/1-A	Method Blank	Total/NA	Solid	6010C	655190
LCSSRM 480-655190/2-A	Lab Control Sample	Total/NA	Solid	6010C	655190

Prep Batch: 655633

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205124-1	SB3 (23-25)	Total/NA	Solid	7471B	
MB 480-655633/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-655633/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 655822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205124-1	SB3 (23-25)	Total/NA	Solid	7471B	655633
MB 480-655633/1-A	Method Blank	Total/NA	Solid	7471B	655633
LCSSRM 480-655633/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	655633

General Chemistry

Analysis Batch: 655086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205124-1	SB3 (23-25)	Total/NA	Solid	Moisture	
480-205124-1 DU	SB3 (23-25)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205124-1

Client Sample ID: SB3 (23-25)
Date Collected: 01/03/23 14:20
Date Received: 01/04/23 10:00

Lab Sample ID: 480-205124-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	Moisture		1	655086	JMM	EET BUF	01/04/23 15:48

Client Sample ID: SB3 (23-25)
Date Collected: 01/03/23 14:20
Date Received: 01/04/23 10:00

Lab Sample ID: 480-205124-1
Matrix: Solid
Percent Solids: 91.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035A_L			655096	CDC	EET BUF	01/04/23 11:00
Total/NA	Analysis	8260C		1	655097	CDC	EET BUF	01/04/23 22:20
Total/NA	Prep	3550C			655209	SJM	EET BUF	01/05/23 15:40
Total/NA	Analysis	8270D		1	655248	JMM	EET BUF	01/06/23 12:57
Total/NA	Prep	3050B			655190	NVK	EET BUF	01/05/23 15:12
Total/NA	Analysis	6010C		1	655387	LMH	EET BUF	01/06/23 13:18
Total/NA	Prep	7471B			655633	NVK	EET BUF	01/11/23 11:13
Total/NA	Analysis	7471B		1	655822	NVK	EET BUF	01/12/23 10:00

Client Sample ID: EB_010323
Date Collected: 01/03/23 16:00
Date Received: 01/04/23 10:00

Lab Sample ID: 480-205124-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	655113	LCH	EET BUF	01/05/23 16:43
Total/NA	Prep	3510C			655242	MS	EET BUF	01/06/23 08:17
Total/NA	Analysis	8270D		1	655370	JMM	EET BUF	01/09/23 16:02
Total/NA	Prep	3510C			655357	MS	EET BUF	01/09/23 08:27
Total/NA	Analysis	8270D SIM ID		1	655492	JMM	EET BUF	01/10/23 16:26
Total/NA	Prep	3535			187354	KFW	EET BUR	01/09/23 12:54
Total/NA	Analysis	537 IDA		1	187501	ND	EET BUR	01/13/23 17:32
Total/NA	Prep	3005A			655063	VAK	EET BUF	01/05/23 08:57
Total/NA	Analysis	6010C		1	655265	LMH	EET BUF	01/05/23 17:58
Total/NA	Prep	7470A			655146	NVK	EET BUF	01/05/23 11:00
Total/NA	Analysis	7470A		1	655211	NVK	EET BUF	01/05/23 15:01

Client Sample ID: FB_010323
Date Collected: 01/03/23 16:45
Date Received: 01/04/23 10:00

Lab Sample ID: 480-205124-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	655113	LCH	EET BUF	01/05/23 17:06
Total/NA	Prep	3510C			655242	MS	EET BUF	01/06/23 08:17
Total/NA	Analysis	8270D		1	655370	JMM	EET BUF	01/09/23 16:29
Total/NA	Prep	3005A			655063	VAK	EET BUF	01/05/23 08:57
Total/NA	Analysis	6010C		1	655265	LMH	EET BUF	01/05/23 18:02
Total/NA	Prep	7470A			655146	NVK	EET BUF	01/05/23 11:00
Total/NA	Analysis	7470A		1	655211	NVK	EET BUF	01/05/23 15:02

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205124-1

Client Sample ID: TB_010323

Date Collected: 01/03/23 00:00
Date Received: 01/04/23 10:00

Lab Sample ID: 480-205124-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	655113	LCH	EET BUF	01/05/23 17:29

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205124-1

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	1,2,3-Trimethylbenzene
8260C	5035A_L	Solid	1,2,3-Trimethylbenzene
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Laboratory: Eurofins Burlington

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
ANAB	Dept. of Defense ELAP	L2336	02-25-23
Connecticut	State	PH-0751	09-30-23
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	05-17-23
Florida	NELAP	E87467	06-30-23
Minnesota	NELAP	050-999-436	12-31-22 *
New Hampshire	NELAP	2006	12-18-23
New Jersey	NELAP	VT972	06-30-23
New York	NELAP	10391	04-01-23
Pennsylvania	NELAP	68-00489	04-30-23
Rhode Island	State	LAO00298	12-30-22 *
US Fish & Wildlife	US Federal Programs	058448	07-31-23
USDA	US Federal Programs	P330-17-00272	10-30-23
Vermont	State	VT4000	02-10-23
Virginia	NELAP	460209	12-14-23
Wisconsin	State	399133350	08-31-23

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205124-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	EET BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	EET BUF
537 IDA	EPA 537 Isotope Dilution	EPA	EET BUR
6010C	Metals (ICP)	SW846	EET BUF
7470A	Mercury (CVAA)	SW846	EET BUF
7471B	Mercury (CVAA)	SW846	EET BUF
Moisture	Percent Moisture	EPA	EET BUF
3005A	Preparation, Total Metals	SW846	EET BUF
3050B	Preparation, Metals	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
3535	Solid-Phase Extraction (SPE)	SW846	EET BUR
3550C	Ultrasonic Extraction	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF
5035A_L	Closed System Purge and Trap	SW846	EET BUF
7470A	Preparation, Mercury	SW846	EET BUF
7471B	Preparation, Mercury	SW846	EET BUF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET BUR = Eurofins Burlington, 530 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Sample Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205124-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-205124-1	SB3 (23-25)	Solid	01/03/23 14:20	01/04/23 10:00
480-205124-2	EB_010323	Water	01/03/23 16:00	01/04/23 10:00
480-205124-3	FB_010323	Water	01/03/23 16:45	01/04/23 10:00
480-205124-4	TB_010323	Water	01/03/23 00:00	01/04/23 10:00

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing

Syracuse

#225

Client Information	Sampler: Integral	Lab PM: Beninati, John	Carrier Tracking No(s):	COC No: 480-179687-37967.2
Client Contact: Mr. Glenn Esler	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin:	Page: Page 2 of 2
Company: Integral Consulting Inc	PWSID:			Job #:
Address: 319 SW Washington Ave Suite 1150	Due Date Requested:			
City: Portland	TAT Requested (days): per quote			
State, Zip: OR, 97204	Compliance Project: Δ Yes Δ No			
Phone: 503-943-3617(Tel)	PO #: Purchase Order not required			
Email: gesler@integral-corp.com	WO #:			
Project Name: EF1017 - Refractories	Project #: 48025298			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL VOCs	6010C, 7471B	8270D - TCL SVOCs + 1,4 Dioxane	PFC_IDA - PFAS - NY 21 Analytes	8270D - TCL SVOCs	8270D_SIM_MS_ID - 1,4 Dioxane	6010C, 7470A	8260C - TCL VOCs	8260C - (MOD) TCL VOCs	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N	N	N	N	N	D	A	A		
SB3 (23-25)	1/3/23	1420	G	S ~~Water~~	N	N	X	X			X						
EB_010323		1600	—	Water	N	N				X	X	X	X	X			
FB_010323		1645	G	Water	N	N					X		X	X			
TB_010323	↓	—	—	Water	N	N	X										
				Water													
				Water													

480-205124 Chain of Custody

Possible Hazard Identification

☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) per quote

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: Katelyn Zotwarnicki	Date/Time: 1/3/23 1800	Company: Integral	Received by: [signature] Date/Time: 1/4/23 1000 Company: TAS
Relinquished by:	Date/Time:	Company	Received by: Date/Time: Company
Relinquished by:	Date/Time:	Company	Received by: Date/Time: Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.1

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Integral Consulting Inc

Job Number: 480-205124-1

Login Number: 205124
List Number: 1
Creator: Sabuda, Brendan D

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.1 #1 ICE
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	TERRACORES FROZEN 1/4 1100
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	True	

Login Sample Receipt Checklist

Client: Integral Consulting Inc

Job Number: 480-205124-1

Login Number: 205124
List Number: 2
Creator: Khudaier, Zahraa

List Source: Eurofins Burlington
List Creation: 01/05/23 02:45 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	20596233
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.5ºC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Glenn Esler
Integral Consulting Inc
319 SW Washington Ave
Suite 1150
Portland, Oregon 97204

Generated 2/8/2023 7:57:43 AM

JOB DESCRIPTION

EF1017 - Refractories

JOB NUMBER

480-205868-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing Northeast, LLC Buffalo and its client. All questions regarding this report should be directed to the Eurofins Environment Testing Northeast, LLC Buffalo Project Manager or designee who has signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
2/8/2023 7:57:43 AM

Authorized for release by
John Beninati, Project Manager
John.Beninati@et.eurofinsus.com
(716)504-9874

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Detection Summary 6
Client Sample Results 9
Surrogate Summary 36
Isotope Dilution Summary 37
QC Sample Results 38
QC Association Summary 57
Lab Chronicle 61
Certification Summary 64
Method Summary 65
Sample Summary 66
Chain of Custody 67
Receipt Checklists 68

Definitions/Glossary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-205868-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-205868-1

Comments
No additional comments.

Receipt
The samples were received on 2/1/2023 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.4º C, 1.6º C and 2.1º C.

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 480-657643 recovered above the upper control limit for 2-Butanone (MEK). The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated samples are impacted: MW2-013123 (480-205868-1), FDUP-013123 (480-205868-2), MW3-013123 (480-205868-3), MW5-013123 (480-205868-4), MW1-013123 (480-205868-5), FB_013123 (480-205868-6) and TB_013123 (480-205868-7).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Metals
Method 6010C: The continuing calibration blank (CCB 480-657819/51) contained Total Barium above the reporting limit (RL). All reported samples MW2-013123-MS (480-205868-1[MS]), MW2-013123-MSD (480-205868-1[MSD]), FDUP-013123 (480-205868-2), MW3-013123 (480-205868-3), MW5-013123 (480-205868-4), MW1-013123 (480-205868-5), FB_013123 (480-205868-6), (480-205868-G-1-B PDS) and (480-205868-G-1-B SD ^5) associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

Method 6010C: The recovery of post spike, (480-205868-G-1-B PDS), associated with batch 480-657819, exhibited results outside quality control limits for Total Calcium and Sodium. However, the serial dilution (SD) of this sample was compliant, therefore no corrective action was necessary.

Method 6010C: The recovery of post spike, (480-205868-H-1-A PDS), associated with batch 480-657965, exhibited a result outside quality control limits for Dissolved Calcium. However, the serial dilution (SD) of this sample was compliant, therefore no corrective action was necessary.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-1

Client Sample ID: MW2-013123 — Lab Sample ID: 480-205868-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	0.12	J	0.20	0.060	mg/L	1		6010C	Total/NA
Barium	0.096		0.0020	0.00070	mg/L	1		6010C	Total/NA
Calcium	79.0		0.50	0.10	mg/L	1		6010C	Total/NA
Iron	0.046	J	0.050	0.019	mg/L	1		6010C	Total/NA
Magnesium	15.9		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	0.14	B	0.0030	0.00040	mg/L	1		6010C	Total/NA
Potassium	3.6		0.50	0.10	mg/L	1		6010C	Total/NA
Sodium	53.0		1.0	0.32	mg/L	1		6010C	Total/NA
Barium, Dissolved	0.098		0.0020	0.00070	mg/L	1		6010C	Dissolved
Calcium, Dissolved	80.3		0.50	0.10	mg/L	1		6010C	Dissolved
Iron, Dissolved	0.019	J	0.050	0.019	mg/L	1		6010C	Dissolved
Magnesium, Dissolved	15.6		0.20	0.043	mg/L	1		6010C	Dissolved
Manganese, Dissolved	0.14	B	0.0030	0.00040	mg/L	1		6010C	Dissolved
Potassium, Dissolved	3.5		0.50	0.10	mg/L	1		6010C	Dissolved
Sodium, Dissolved	52.0		1.0	0.32	mg/L	1		6010C	Dissolved

Client Sample ID: FDUP-013123 — Lab Sample ID: 480-205868-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.096	^2	0.0020	0.00070	mg/L	1		6010C	Total/NA
Calcium	77.9		0.50	0.10	mg/L	1		6010C	Total/NA
Iron	0.045	J	0.050	0.019	mg/L	1		6010C	Total/NA
Lead	0.0042	J	0.010	0.0030	mg/L	1		6010C	Total/NA
Magnesium	15.7		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	0.15	B	0.0030	0.00040	mg/L	1		6010C	Total/NA
Potassium	3.6		0.50	0.10	mg/L	1		6010C	Total/NA
Sodium	52.7		1.0	0.32	mg/L	1		6010C	Total/NA
Barium, Dissolved	0.097		0.0020	0.00070	mg/L	1		6010C	Dissolved
Calcium, Dissolved	80.4		0.50	0.10	mg/L	1		6010C	Dissolved
Magnesium, Dissolved	15.5		0.20	0.043	mg/L	1		6010C	Dissolved
Manganese, Dissolved	0.13	B	0.0030	0.00040	mg/L	1		6010C	Dissolved
Potassium, Dissolved	3.4		0.50	0.10	mg/L	1		6010C	Dissolved
Sodium, Dissolved	52.0		1.0	0.32	mg/L	1		6010C	Dissolved
Zinc, Dissolved	0.0049	J	0.010	0.0015	mg/L	1		6010C	Dissolved

Client Sample ID: MW3-013123 — Lab Sample ID: 480-205868-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.14	^2	0.0020	0.00070	mg/L	1		6010C	Total/NA
Calcium	56.7		0.50	0.10	mg/L	1		6010C	Total/NA
Iron	0.019	J	0.050	0.019	mg/L	1		6010C	Total/NA
Magnesium	11.4		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	0.055	B	0.0030	0.00040	mg/L	1		6010C	Total/NA
Potassium	3.8		0.50	0.10	mg/L	1		6010C	Total/NA
Sodium	87.0		1.0	0.32	mg/L	1		6010C	Total/NA
Zinc	0.0015	J	0.010	0.0015	mg/L	1		6010C	Total/NA
Barium, Dissolved	0.14		0.0020	0.00070	mg/L	1		6010C	Dissolved
Calcium, Dissolved	57.5		0.50	0.10	mg/L	1		6010C	Dissolved
Magnesium, Dissolved	11.2		0.20	0.043	mg/L	1		6010C	Dissolved
Manganese, Dissolved	0.046	B	0.0030	0.00040	mg/L	1		6010C	Dissolved
Potassium, Dissolved	3.7		0.50	0.10	mg/L	1		6010C	Dissolved
Sodium, Dissolved	84.9		1.0	0.32	mg/L	1		6010C	Dissolved

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Client Sample ID: MW3-013123 (Continued) — Lab Sample ID: 480-205868-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc, Dissolved	0.0015	J	0.010	0.0015	mg/L	1		6010C	Dissolved

Client Sample ID: MW5-013123 — Lab Sample ID: 480-205868-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.55	J	1.0	0.38	ug/L	1		8260C	Total/NA
Benzene	3.1		1.0	0.41	ug/L	1		8260C	Total/NA
Trichloroethene	0.51	J	1.0	0.46	ug/L	1		8260C	Total/NA
Acenaphthene	0.44	J	5.2	0.43	ug/L	1		8270D	Total/NA
Barium	0.084	^2	0.0020	0.00070	mg/L	1		6010C	Total/NA
Calcium	94.2		0.50	0.10	mg/L	1		6010C	Total/NA
Copper	0.0019	J	0.010	0.0016	mg/L	1		6010C	Total/NA
Iron	0.047	J	0.050	0.019	mg/L	1		6010C	Total/NA
Lead	0.0042	J	0.010	0.0030	mg/L	1		6010C	Total/NA
Magnesium	13.3		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	0.87	B	0.0030	0.00040	mg/L	1		6010C	Total/NA
Nickel	0.0013	J	0.010	0.0013	mg/L	1		6010C	Total/NA
Potassium	5.4		0.50	0.10	mg/L	1		6010C	Total/NA
Selenium	0.0088	J	0.025	0.0087	mg/L	1		6010C	Total/NA
Sodium	36.0		1.0	0.32	mg/L	1		6010C	Total/NA
Zinc	0.0027	J	0.010	0.0015	mg/L	1		6010C	Total/NA
Barium, Dissolved	0.087		0.0020	0.00070	mg/L	1		6010C	Dissolved
Calcium, Dissolved	99.1		0.50	0.10	mg/L	1		6010C	Dissolved
Copper, Dissolved	0.0019	J	0.010	0.0016	mg/L	1		6010C	Dissolved
Iron, Dissolved	0.046	J	0.050	0.019	mg/L	1		6010C	Dissolved
Lead, Dissolved	0.0054	J	0.010	0.0030	mg/L	1		6010C	Dissolved
Magnesium, Dissolved	13.4		0.20	0.043	mg/L	1		6010C	Dissolved
Manganese, Dissolved	0.89	B	0.0030	0.00040	mg/L	1		6010C	Dissolved
Nickel, Dissolved	0.0016	J	0.010	0.0013	mg/L	1		6010C	Dissolved
Potassium, Dissolved	5.4		0.50	0.10	mg/L	1		6010C	Dissolved
Selenium, Dissolved	0.0093	J	0.025	0.0087	mg/L	1		6010C	Dissolved
Sodium, Dissolved	35.5		1.0	0.32	mg/L	1		6010C	Dissolved
Zinc, Dissolved	0.0029	J	0.010	0.0015	mg/L	1		6010C	Dissolved

Client Sample ID: MW1-013123 — Lab Sample ID: 480-205868-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	1.8		1.0	0.46	ug/L	1		8260C	Total/NA
Barium	0.14	^2	0.0020	0.00070	mg/L	1		6010C	Total/NA
Calcium	58.7		0.50	0.10	mg/L	1		6010C	Total/NA
Chromium	0.0010	J	0.0040	0.0010	mg/L	1		6010C	Total/NA
Magnesium	9.5		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	0.36	B	0.0030	0.00040	mg/L	1		6010C	Total/NA
Potassium	4.1		0.50	0.10	mg/L	1		6010C	Total/NA
Sodium	140		1.0	0.32	mg/L	1		6010C	Total/NA
Zinc	0.0023	J	0.010	0.0015	mg/L	1		6010C	Total/NA
Barium, Dissolved	0.15		0.0020	0.00070	mg/L	1		6010C	Dissolved
Calcium, Dissolved	61.5		0.50	0.10	mg/L	1		6010C	Dissolved
Magnesium, Dissolved	9.5		0.20	0.043	mg/L	1		6010C	Dissolved
Manganese, Dissolved	0.36	B	0.0030	0.00040	mg/L	1		6010C	Dissolved
Potassium, Dissolved	4.2		0.50	0.10	mg/L	1		6010C	Dissolved
Sodium, Dissolved	139		1.0	0.32	mg/L	1		6010C	Dissolved

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-1

Client Sample ID: MW1-013123 (Continued) — Lab Sample ID: 480-205868-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc, Dissolved	0.0025	J	0.010	0.0015	mg/L	1		6010C	Dissolved

Client Sample ID: FB_013123 — Lab Sample ID: 480-205868-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Manganese	0.00089	J B	0.0030	0.00040	mg/L	1		6010C	Total/NA

Client Sample ID: TB_013123 — Lab Sample ID: 480-205868-7

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-1

Client Sample ID: MW2-013123
Date Collected: 01/31/23 10:30
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-1
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			02/02/23 10:55	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/02/23 10:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/02/23 10:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			02/02/23 10:55	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/02/23 10:55	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/02/23 10:55	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/02/23 10:55	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/02/23 10:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/02/23 10:55	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/02/23 10:55	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/02/23 10:55	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/02/23 10:55	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/02/23 10:55	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/02/23 10:55	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/02/23 10:55	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/02/23 10:55	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/02/23 10:55	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/02/23 10:55	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/02/23 10:55	1
2-Hexanone	ND		5.0	1.2	ug/L			02/02/23 10:55	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/02/23 10:55	1
Acetone	ND		10	3.0	ug/L			02/02/23 10:55	1
Benzene	ND		1.0	0.41	ug/L			02/02/23 10:55	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/02/23 10:55	1
Bromoform	ND		1.0	0.26	ug/L			02/02/23 10:55	1
Bromomethane	ND		1.0	0.69	ug/L			02/02/23 10:55	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/02/23 10:55	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/02/23 10:55	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/02/23 10:55	1
Chloroethane	ND		1.0	0.32	ug/L			02/02/23 10:55	1
Chloroform	ND		1.0	0.34	ug/L			02/02/23 10:55	1
Chloromethane	ND		1.0	0.35	ug/L			02/02/23 10:55	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/02/23 10:55	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/02/23 10:55	1
Cyclohexane	ND		1.0	0.18	ug/L			02/02/23 10:55	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/02/23 10:55	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/02/23 10:55	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/02/23 10:55	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/02/23 10:55	1
m,p-Xylene	ND		2.0	0.66	ug/L			02/02/23 10:55	1
Methyl acetate	ND		2.5	1.3	ug/L			02/02/23 10:55	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/02/23 10:55	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/02/23 10:55	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/02/23 10:55	1
n-Butylbenzene	ND		1.0	0.64	ug/L			02/02/23 10:55	1
N-Propylbenzene	ND		1.0	0.69	ug/L			02/02/23 10:55	1
o-Xylene	ND		1.0	0.76	ug/L			02/02/23 10:55	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			02/02/23 10:55	1
Styrene	ND		1.0	0.73	ug/L			02/02/23 10:55	1

Client Sample ID: MW2-013123
Date Collected: 01/31/23 10:30
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-1
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		1.0	0.81	ug/L			02/02/23 10:55	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/02/23 10:55	1
Toluene	ND		1.0	0.51	ug/L			02/02/23 10:55	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/02/23 10:55	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/02/23 10:55	1
Trichloroethene	ND		1.0	0.46	ug/L			02/02/23 10:55	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/02/23 10:55	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/02/23 10:55	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/02/23 10:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*		*02/02/23 10:55*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*02/02/23 10:55*	*1*
Dibromofluoromethane (Surr)	*110*		*75 - 123*		*02/02/23 10:55*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*02/02/23 10:55*	*1*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.23	0.11	ug/L		02/02/23 08:12	02/03/23 12:47	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*47*		*15 - 110*	*02/02/23 08:12*	*02/03/23 12:47*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.2	0.50	ug/L		02/02/23 08:19	02/03/23 13:59	1
2,4,6-Trichlorophenol	ND		5.2	0.64	ug/L		02/02/23 08:19	02/03/23 13:59	1
2,4-Dichlorophenol	ND		5.2	0.53	ug/L		02/02/23 08:19	02/03/23 13:59	1
2,4-Dimethylphenol	ND		5.2	0.52	ug/L		02/02/23 08:19	02/03/23 13:59	1
2,4-Dinitrophenol	ND		10	2.3	ug/L		02/02/23 08:19	02/03/23 13:59	1
2,4-Dinitrotoluene	ND		5.2	0.47	ug/L		02/02/23 08:19	02/03/23 13:59	1
2,6-Dinitrotoluene	ND		5.2	0.42	ug/L		02/02/23 08:19	02/03/23 13:59	1
2-Chloronaphthalene	ND		5.2	0.48	ug/L		02/02/23 08:19	02/03/23 13:59	1
2-Chlorophenol	ND		5.2	0.55	ug/L		02/02/23 08:19	02/03/23 13:59	1
2-Methylnaphthalene	ND		5.2	0.63	ug/L		02/02/23 08:19	02/03/23 13:59	1
2-Methylphenol	ND		5.2	0.42	ug/L		02/02/23 08:19	02/03/23 13:59	1
2-Nitroaniline	ND		10	0.44	ug/L		02/02/23 08:19	02/03/23 13:59	1
2-Nitrophenol	ND		5.2	0.50	ug/L		02/02/23 08:19	02/03/23 13:59	1
3,3'-Dichlorobenzidine	ND		5.2	0.42	ug/L		02/02/23 08:19	02/03/23 13:59	1
3-Nitroaniline	ND		10	0.50	ug/L		02/02/23 08:19	02/03/23 13:59	1
4,6-Dinitro-2-methylphenol	ND		10	2.3	ug/L		02/02/23 08:19	02/03/23 13:59	1
4-Bromophenyl phenyl ether	ND		5.2	0.47	ug/L		02/02/23 08:19	02/03/23 13:59	1
4-Chloro-3-methylphenol	ND		5.2	0.47	ug/L		02/02/23 08:19	02/03/23 13:59	1
4-Chloroaniline	ND		5.2	0.61	ug/L		02/02/23 08:19	02/03/23 13:59	1
4-Chlorophenyl phenyl ether	ND		5.2	0.36	ug/L		02/02/23 08:19	02/03/23 13:59	1
4-Methylphenol	ND		10	0.38	ug/L		02/02/23 08:19	02/03/23 13:59	1
4-Nitroaniline	ND		10	0.26	ug/L		02/02/23 08:19	02/03/23 13:59	1
4-Nitrophenol	ND		10	1.6	ug/L		02/02/23 08:19	02/03/23 13:59	1
Acenaphthene	ND		5.2	0.43	ug/L		02/02/23 08:19	02/03/23 13:59	1
Acenaphthylene	ND		5.2	0.40	ug/L		02/02/23 08:19	02/03/23 13:59	1
Acetophenone	ND		5.2	0.56	ug/L		02/02/23 08:19	02/03/23 13:59	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-1

Client Sample ID: MW2-013123
Date Collected: 01/31/23 10:30
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-1
Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Anthracene	ND		5.2	0.29	ug/L		02/02/23 08:19	02/03/23 13:59	1
Atrazine	ND		5.2	0.48	ug/L		02/02/23 08:19	02/03/23 13:59	1
Benzaldehyde	ND		5.2	0.28	ug/L		02/02/23 08:19	02/03/23 13:59	1
Benzo[a]anthracene	ND		5.2	0.38	ug/L		02/02/23 08:19	02/03/23 13:59	1
Benzo[a]pyrene	ND		5.2	0.49	ug/L		02/02/23 08:19	02/03/23 13:59	1
Benzo[b]fluoranthene	ND		5.2	0.35	ug/L		02/02/23 08:19	02/03/23 13:59	1
Benzo[g,h,i]perylene	ND		5.2	0.36	ug/L		02/02/23 08:19	02/03/23 13:59	1
Benzo[k]fluoranthene	ND		5.2	0.76	ug/L		02/02/23 08:19	02/03/23 13:59	1
Biphenyl	ND		5.2	0.68	ug/L		02/02/23 08:19	02/03/23 13:59	1
bis (2-chloroisopropyl) ether	ND		5.2	0.54	ug/L		02/02/23 08:19	02/03/23 13:59	1
Bis(2-chloroethoxy)methane	ND		5.2	0.36	ug/L		02/02/23 08:19	02/03/23 13:59	1
Bis(2-chloroethyl)ether	ND	F1	5.2	0.42	ug/L		02/02/23 08:19	02/03/23 13:59	1
Bis(2-ethylhexyl) phthalate	ND		5.2	2.3	ug/L		02/02/23 08:19	02/03/23 13:59	1
Butyl benzyl phthalate	ND		5.2	1.0	ug/L		02/02/23 08:19	02/03/23 13:59	1
Caprolactam	ND		5.2	2.3	ug/L		02/02/23 08:19	02/03/23 13:59	1
Carbazole	ND		5.2	0.31	ug/L		02/02/23 08:19	02/03/23 13:59	1
Chrysene	ND		5.2	0.34	ug/L		02/02/23 08:19	02/03/23 13:59	1
Dibenz(a,h)anthracene	ND		5.2	0.44	ug/L		02/02/23 08:19	02/03/23 13:59	1
Dibenzofuran	ND		10	0.53	ug/L		02/02/23 08:19	02/03/23 13:59	1
Diethyl phthalate	ND		5.2	0.23	ug/L		02/02/23 08:19	02/03/23 13:59	1
Dimethyl phthalate	ND		5.2	0.38	ug/L		02/02/23 08:19	02/03/23 13:59	1
Di-n-butyl phthalate	ND		5.2	0.32	ug/L		02/02/23 08:19	02/03/23 13:59	1
Di-n-octyl phthalate	ND		5.2	0.49	ug/L		02/02/23 08:19	02/03/23 13:59	1
Fluoranthene	ND		5.2	0.42	ug/L		02/02/23 08:19	02/03/23 13:59	1
Fluorene	ND		5.2	0.38	ug/L		02/02/23 08:19	02/03/23 13:59	1
Hexachlorobenzene	ND		5.2	0.53	ug/L		02/02/23 08:19	02/03/23 13:59	1
Hexachlorobutadiene	ND		5.2	0.71	ug/L		02/02/23 08:19	02/03/23 13:59	1
Hexachlorocyclopentadiene	ND		5.2	0.61	ug/L		02/02/23 08:19	02/03/23 13:59	1
Hexachloroethane	ND		5.2	0.61	ug/L		02/02/23 08:19	02/03/23 13:59	1
Indeno[1,2,3-cd]pyrene	ND		5.2	0.49	ug/L		02/02/23 08:19	02/03/23 13:59	1
Isophorone	ND		5.2	0.45	ug/L		02/02/23 08:19	02/03/23 13:59	1
Naphthalene	ND		5.2	0.79	ug/L		02/02/23 08:19	02/03/23 13:59	1
Nitrobenzene	ND		5.2	0.30	ug/L		02/02/23 08:19	02/03/23 13:59	1
N-Nitrosodi-n-propylamine	ND		5.2	0.56	ug/L		02/02/23 08:19	02/03/23 13:59	1
N-Nitrosodiphenylamine	ND		5.2	0.53	ug/L		02/02/23 08:19	02/03/23 13:59	1
Pentachlorophenol	ND		10	2.3	ug/L		02/02/23 08:19	02/03/23 13:59	1
Phenanthrene	ND		5.2	0.46	ug/L		02/02/23 08:19	02/03/23 13:59	1
Phenol	ND		5.2	0.41	ug/L		02/02/23 08:19	02/03/23 13:59	1
Pyrene	ND		5.2	0.35	ug/L		02/02/23 08:19	02/03/23 13:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*101*		*41 - 120*	*02/02/23 08:19*	*02/03/23 13:59*	*1*
2-Fluorobiphenyl (Surr)	*111*		*48 - 120*	*02/02/23 08:19*	*02/03/23 13:59*	*1*
2-Fluorophenol (Surr)	*84*		*35 - 120*	*02/02/23 08:19*	*02/03/23 13:59*	*1*
Nitrobenzene-d5 (Surr)	*100*		*46 - 120*	*02/02/23 08:19*	*02/03/23 13:59*	*1*
Phenol-d5 (Surr)	*64*		*22 - 120*	*02/02/23 08:19*	*02/03/23 13:59*	*1*
p-Terphenyl-d14 (Surr)	*103*		*60 - 148*	*02/02/23 08:19*	*02/03/23 13:59*	*1*

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-1

Client Sample ID: MW2-013123

Date Collected: 01/31/23 10:30
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-1

Matrix: Water

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.12**	**J**	0.20	0.060	mg/L		02/02/23 09:48	02/02/23 23:07	1
Antimony	ND		0.020	0.0068	mg/L		02/02/23 09:48	02/02/23 23:07	1
Arsenic	ND		0.015	0.0056	mg/L		02/02/23 09:48	02/02/23 23:07	1
Barium	**0.096**		0.0020	0.00070	mg/L		02/02/23 09:48	02/02/23 23:07	1
Beryllium	ND		0.0020	0.00030	mg/L		02/02/23 09:48	02/02/23 23:07	1
Cadmium	ND		0.0020	0.00050	mg/L		02/02/23 09:48	02/02/23 23:07	1
Calcium	**79.0**		0.50	0.10	mg/L		02/02/23 09:48	02/02/23 23:07	1
Chromium	ND		0.0040	0.0010	mg/L		02/02/23 09:48	02/02/23 23:07	1
Cobalt	ND		0.0040	0.00063	mg/L		02/02/23 09:48	02/02/23 23:07	1
Copper	ND		0.010	0.0016	mg/L		02/02/23 09:48	02/02/23 23:07	1
Iron	**0.046**	**J**	0.050	0.019	mg/L		02/02/23 09:48	02/02/23 23:07	1
Lead	ND		0.010	0.0030	mg/L		02/02/23 09:48	02/02/23 23:07	1
Magnesium	**15.9**		0.20	0.043	mg/L		02/02/23 09:48	02/02/23 23:07	1
Manganese	**0.14**	**B**	0.0030	0.00040	mg/L		02/02/23 09:48	02/02/23 23:07	1
Nickel	ND		0.010	0.0013	mg/L		02/02/23 09:48	02/02/23 23:07	1
Potassium	**3.6**		0.50	0.10	mg/L		02/02/23 09:48	02/02/23 23:07	1
Selenium	ND		0.025	0.0087	mg/L		02/02/23 09:48	02/02/23 23:07	1
Silver	ND		0.0060	0.0017	mg/L		02/02/23 09:48	02/02/23 23:07	1
Sodium	**53.0**		1.0	0.32	mg/L		02/02/23 09:48	02/02/23 23:07	1
Thallium	ND		0.020	0.010	mg/L		02/02/23 09:48	02/02/23 23:07	1
Vanadium	ND		0.0050	0.0015	mg/L		02/02/23 09:48	02/02/23 23:07	1
Zinc	ND		0.010	0.0015	mg/L		02/02/23 09:48	02/02/23 23:07	1

Method: SW846 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	ND		0.20	0.060	mg/L		02/02/23 09:47	02/03/23 21:33	1
Antimony, Dissolved	ND		0.020	0.0068	mg/L		02/02/23 09:47	02/03/23 00:39	1
Arsenic, Dissolved	ND		0.015	0.0056	mg/L		02/02/23 09:47	02/03/23 00:39	1
Barium, Dissolved	**0.098**		0.0020	0.00070	mg/L		02/02/23 09:47	02/03/23 21:33	1
Beryllium, Dissolved	ND		0.0020	0.00030	mg/L		02/02/23 09:47	02/03/23 21:33	1
Cadmium, Dissolved	ND		0.0020	0.00050	mg/L		02/02/23 09:47	02/03/23 00:39	1
Calcium, Dissolved	**80.3**		0.50	0.10	mg/L		02/02/23 09:47	02/03/23 21:33	1
Chromium, Dissolved	ND		0.0040	0.0010	mg/L		02/02/23 09:47	02/03/23 00:39	1
Cobalt, Dissolved	ND		0.0040	0.00063	mg/L		02/02/23 09:47	02/03/23 00:39	1
Copper, Dissolved	ND		0.010	0.0016	mg/L		02/02/23 09:47	02/03/23 00:39	1
Iron, Dissolved	**0.019**	**J**	0.050	0.019	mg/L		02/02/23 09:47	02/03/23 21:33	1
Lead, Dissolved	ND		0.010	0.0030	mg/L		02/02/23 09:47	02/03/23 00:39	1
Magnesium, Dissolved	**15.6**		0.20	0.043	mg/L		02/02/23 09:47	02/03/23 00:39	1
Manganese, Dissolved	**0.14**	**B**	0.0030	0.00040	mg/L		02/02/23 09:47	02/03/23 00:39	1
Nickel, Dissolved	ND		0.010	0.0013	mg/L		02/02/23 09:47	02/03/23 00:39	1
Potassium, Dissolved	**3.5**		0.50	0.10	mg/L		02/02/23 09:47	02/03/23 00:39	1
Selenium, Dissolved	ND		0.025	0.0087	mg/L		02/02/23 09:47	02/03/23 00:39	1
Silver, Dissolved	ND		0.0060	0.0017	mg/L		02/02/23 09:47	02/03/23 00:39	1
Sodium, Dissolved	**52.0**		1.0	0.32	mg/L		02/02/23 09:47	02/03/23 00:39	1
Thallium, Dissolved	ND		0.020	0.010	mg/L		02/02/23 09:47	02/03/23 00:39	1
Vanadium, Dissolved	ND		0.0050	0.0015	mg/L		02/02/23 09:47	02/03/23 00:39	1
Zinc, Dissolved	ND		0.010	0.0015	mg/L		02/02/23 09:47	02/03/23 00:39	1

Client Sample ID: MW2-013123

Lab Sample ID: 480-205868-1

Date Collected: 01/31/23 10:30

Matrix: Water

Date Received: 02/01/23 10:30

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		02/02/23 11:30	02/02/23 17:23	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00020	0.000043	mg/L		02/02/23 11:30	02/02/23 17:06	1

Client Sample ID: FDUP-013123

Lab Sample ID: 480-205868-2

Date Collected: 01/31/23 00:00

Matrix: Water

Date Received: 02/01/23 10:30

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			02/02/23 11:19	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/02/23 11:19	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/02/23 11:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			02/02/23 11:19	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/02/23 11:19	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/02/23 11:19	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/02/23 11:19	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/02/23 11:19	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/02/23 11:19	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/02/23 11:19	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/02/23 11:19	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/02/23 11:19	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/02/23 11:19	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/02/23 11:19	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/02/23 11:19	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/02/23 11:19	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/02/23 11:19	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/02/23 11:19	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/02/23 11:19	1
2-Hexanone	ND		5.0	1.2	ug/L			02/02/23 11:19	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/02/23 11:19	1
Acetone	ND		10	3.0	ug/L			02/02/23 11:19	1
Benzene	ND		1.0	0.41	ug/L			02/02/23 11:19	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/02/23 11:19	1
Bromoform	ND		1.0	0.26	ug/L			02/02/23 11:19	1
Bromomethane	ND		1.0	0.69	ug/L			02/02/23 11:19	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/02/23 11:19	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/02/23 11:19	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/02/23 11:19	1
Chloroethane	ND		1.0	0.32	ug/L			02/02/23 11:19	1
Chloroform	ND		1.0	0.34	ug/L			02/02/23 11:19	1
Chloromethane	ND		1.0	0.35	ug/L			02/02/23 11:19	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/02/23 11:19	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/02/23 11:19	1
Cyclohexane	ND		1.0	0.18	ug/L			02/02/23 11:19	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/02/23 11:19	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/02/23 11:19	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/02/23 11:19	1

Client Sample ID: FDUP-013123
Date Collected: 01/31/23 00:00
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-2
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Isopropylbenzene	ND		1.0	0.79	ug/L			02/02/23 11:19	1
m,p-Xylene	ND		2.0	0.66	ug/L			02/02/23 11:19	1
Methyl acetate	ND		2.5	1.3	ug/L			02/02/23 11:19	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/02/23 11:19	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/02/23 11:19	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/02/23 11:19	1
n-Butylbenzene	ND		1.0	0.64	ug/L			02/02/23 11:19	1
N-Propylbenzene	ND		1.0	0.69	ug/L			02/02/23 11:19	1
o-Xylene	ND		1.0	0.76	ug/L			02/02/23 11:19	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			02/02/23 11:19	1
Styrene	ND		1.0	0.73	ug/L			02/02/23 11:19	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			02/02/23 11:19	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/02/23 11:19	1
Toluene	ND		1.0	0.51	ug/L			02/02/23 11:19	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/02/23 11:19	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/02/23 11:19	1
Trichloroethene	ND		1.0	0.46	ug/L			02/02/23 11:19	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/02/23 11:19	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/02/23 11:19	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/02/23 11:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*02/02/23 11:19*	*1*
4-Bromofluorobenzene (Surr)	*96*		*73 - 120*		*02/02/23 11:19*	*1*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*02/02/23 11:19*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*02/02/23 11:19*	*1*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.22	0.11	ug/L		02/02/23 08:12	02/03/23 13:09	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*47*		*15 - 110*	*02/02/23 08:12*	*02/03/23 13:09*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		02/02/23 08:19	02/03/23 14:54	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		02/02/23 08:19	02/03/23 14:54	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		02/02/23 08:19	02/03/23 14:54	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		02/02/23 08:19	02/03/23 14:54	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		02/02/23 08:19	02/03/23 14:54	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		02/02/23 08:19	02/03/23 14:54	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		02/02/23 08:19	02/03/23 14:54	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		02/02/23 08:19	02/03/23 14:54	1
2-Chlorophenol	ND		5.0	0.53	ug/L		02/02/23 08:19	02/03/23 14:54	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		02/02/23 08:19	02/03/23 14:54	1
2-Methylphenol	ND		5.0	0.40	ug/L		02/02/23 08:19	02/03/23 14:54	1
2-Nitroaniline	ND		10	0.42	ug/L		02/02/23 08:19	02/03/23 14:54	1
2-Nitrophenol	ND		5.0	0.48	ug/L		02/02/23 08:19	02/03/23 14:54	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		02/02/23 08:19	02/03/23 14:54	1
3-Nitroaniline	ND		10	0.48	ug/L		02/02/23 08:19	02/03/23 14:54	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-1

Client Sample ID: FDUP-013123
Date Collected: 01/31/23 00:00
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-2
Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		02/02/23 08:19	02/03/23 14:54	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		02/02/23 08:19	02/03/23 14:54	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		02/02/23 08:19	02/03/23 14:54	1
4-Chloroaniline	ND		5.0	0.59	ug/L		02/02/23 08:19	02/03/23 14:54	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		02/02/23 08:19	02/03/23 14:54	1
4-Methylphenol	ND		10	0.36	ug/L		02/02/23 08:19	02/03/23 14:54	1
4-Nitroaniline	ND		10	0.25	ug/L		02/02/23 08:19	02/03/23 14:54	1
4-Nitrophenol	ND		10	1.5	ug/L		02/02/23 08:19	02/03/23 14:54	1
Acenaphthene	ND		5.0	0.41	ug/L		02/02/23 08:19	02/03/23 14:54	1
Acenaphthylene	ND		5.0	0.38	ug/L		02/02/23 08:19	02/03/23 14:54	1
Acetophenone	ND		5.0	0.54	ug/L		02/02/23 08:19	02/03/23 14:54	1
Anthracene	ND		5.0	0.28	ug/L		02/02/23 08:19	02/03/23 14:54	1
Atrazine	ND		5.0	0.46	ug/L		02/02/23 08:19	02/03/23 14:54	1
Benzaldehyde	ND		5.0	0.27	ug/L		02/02/23 08:19	02/03/23 14:54	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		02/02/23 08:19	02/03/23 14:54	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		02/02/23 08:19	02/03/23 14:54	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		02/02/23 08:19	02/03/23 14:54	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		02/02/23 08:19	02/03/23 14:54	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		02/02/23 08:19	02/03/23 14:54	1
Biphenyl	ND		5.0	0.65	ug/L		02/02/23 08:19	02/03/23 14:54	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		02/02/23 08:19	02/03/23 14:54	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		02/02/23 08:19	02/03/23 14:54	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		02/02/23 08:19	02/03/23 14:54	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		02/02/23 08:19	02/03/23 14:54	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		02/02/23 08:19	02/03/23 14:54	1
Caprolactam	ND		5.0	2.2	ug/L		02/02/23 08:19	02/03/23 14:54	1
Carbazole	ND		5.0	0.30	ug/L		02/02/23 08:19	02/03/23 14:54	1
Chrysene	ND		5.0	0.33	ug/L		02/02/23 08:19	02/03/23 14:54	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		02/02/23 08:19	02/03/23 14:54	1
Dibenzofuran	ND		10	0.51	ug/L		02/02/23 08:19	02/03/23 14:54	1
Diethyl phthalate	ND		5.0	0.22	ug/L		02/02/23 08:19	02/03/23 14:54	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		02/02/23 08:19	02/03/23 14:54	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		02/02/23 08:19	02/03/23 14:54	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		02/02/23 08:19	02/03/23 14:54	1
Fluoranthene	ND		5.0	0.40	ug/L		02/02/23 08:19	02/03/23 14:54	1
Fluorene	ND		5.0	0.36	ug/L		02/02/23 08:19	02/03/23 14:54	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		02/02/23 08:19	02/03/23 14:54	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		02/02/23 08:19	02/03/23 14:54	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		02/02/23 08:19	02/03/23 14:54	1
Hexachloroethane	ND		5.0	0.59	ug/L		02/02/23 08:19	02/03/23 14:54	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		02/02/23 08:19	02/03/23 14:54	1
Isophorone	ND		5.0	0.43	ug/L		02/02/23 08:19	02/03/23 14:54	1
Naphthalene	ND		5.0	0.76	ug/L		02/02/23 08:19	02/03/23 14:54	1
Nitrobenzene	ND		5.0	0.29	ug/L		02/02/23 08:19	02/03/23 14:54	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		02/02/23 08:19	02/03/23 14:54	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		02/02/23 08:19	02/03/23 14:54	1
Pentachlorophenol	ND		10	2.2	ug/L		02/02/23 08:19	02/03/23 14:54	1
Phenanthrene	ND		5.0	0.44	ug/L		02/02/23 08:19	02/03/23 14:54	1
Phenol	ND		5.0	0.39	ug/L		02/02/23 08:19	02/03/23 14:54	1

Client Sample ID: FDUP-013123
Date Collected: 01/31/23 00:00
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-2
Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		5.0	0.34	ug/L		02/02/23 08:19	02/03/23 14:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*99*		*41 - 120*	*02/02/23 08:19*	*02/03/23 14:54*	*1*
2-Fluorobiphenyl (Surr)	*107*		*48 - 120*	*02/02/23 08:19*	*02/03/23 14:54*	*1*
2-Fluorophenol (Surr)	*78*		*35 - 120*	*02/02/23 08:19*	*02/03/23 14:54*	*1*
Nitrobenzene-d5 (Surr)	*99*		*46 - 120*	*02/02/23 08:19*	*02/03/23 14:54*	*1*
Phenol-d5 (Surr)	*58*		*22 - 120*	*02/02/23 08:19*	*02/03/23 14:54*	*1*
p-Terphenyl-d14 (Surr)	*92*		*60 - 148*	*02/02/23 08:19*	*02/03/23 14:54*	*1*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		02/02/23 09:48	02/02/23 23:37	1
Antimony	ND		0.020	0.0068	mg/L		02/02/23 09:48	02/02/23 23:37	1
Arsenic	ND		0.015	0.0056	mg/L		02/02/23 09:48	02/02/23 23:37	1
Barium	**0.096**	**^2**	0.0020	0.00070	mg/L		02/02/23 09:48	02/02/23 23:37	1
Beryllium	ND		0.0020	0.00030	mg/L		02/02/23 09:48	02/02/23 23:37	1
Cadmium	ND		0.0020	0.00050	mg/L		02/02/23 09:48	02/02/23 23:37	1
Calcium	**77.9**		0.50	0.10	mg/L		02/02/23 09:48	02/02/23 23:37	1
Chromium	ND		0.0040	0.0010	mg/L		02/02/23 09:48	02/02/23 23:37	1
Cobalt	ND		0.0040	0.00063	mg/L		02/02/23 09:48	02/02/23 23:37	1
Copper	ND		0.010	0.0016	mg/L		02/02/23 09:48	02/02/23 23:37	1
Iron	**0.045**	**J**	0.050	0.019	mg/L		02/02/23 09:48	02/02/23 23:37	1
Lead	**0.0042**	**J**	0.010	0.0030	mg/L		02/02/23 09:48	02/02/23 23:37	1
Magnesium	**15.7**		0.20	0.043	mg/L		02/02/23 09:48	02/02/23 23:37	1
Manganese	**0.15**	**B**	0.0030	0.00040	mg/L		02/02/23 09:48	02/02/23 23:37	1
Nickel	ND		0.010	0.0013	mg/L		02/02/23 09:48	02/02/23 23:37	1
Potassium	**3.6**		0.50	0.10	mg/L		02/02/23 09:48	02/02/23 23:37	1
Selenium	ND		0.025	0.0087	mg/L		02/02/23 09:48	02/02/23 23:37	1
Silver	ND		0.0060	0.0017	mg/L		02/02/23 09:48	02/02/23 23:37	1
Sodium	**52.7**		1.0	0.32	mg/L		02/02/23 09:48	02/02/23 23:37	1
Thallium	ND		0.020	0.010	mg/L		02/02/23 09:48	02/02/23 23:37	1
Vanadium	ND		0.0050	0.0015	mg/L		02/02/23 09:48	02/02/23 23:37	1
Zinc	ND		0.010	0.0015	mg/L		02/02/23 09:48	02/02/23 23:37	1

Method: SW846 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	ND		0.20	0.060	mg/L		02/02/23 09:47	02/03/23 22:03	1
Antimony, Dissolved	ND		0.020	0.0068	mg/L		02/02/23 09:47	02/03/23 01:09	1
Arsenic, Dissolved	ND		0.015	0.0056	mg/L		02/02/23 09:47	02/03/23 01:09	1
Barium, Dissolved	**0.097**		0.0020	0.00070	mg/L		02/02/23 09:47	02/03/23 22:03	1
Beryllium, Dissolved	ND		0.0020	0.00030	mg/L		02/02/23 09:47	02/03/23 22:03	1
Cadmium, Dissolved	ND		0.0020	0.00050	mg/L		02/02/23 09:47	02/03/23 01:09	1
Calcium, Dissolved	**80.4**		0.50	0.10	mg/L		02/02/23 09:47	02/03/23 22:03	1
Chromium, Dissolved	ND		0.0040	0.0010	mg/L		02/02/23 09:47	02/03/23 01:09	1
Cobalt, Dissolved	ND		0.0040	0.00063	mg/L		02/02/23 09:47	02/03/23 01:09	1
Copper, Dissolved	ND		0.010	0.0016	mg/L		02/02/23 09:47	02/03/23 01:09	1
Iron, Dissolved	ND		0.050	0.019	mg/L		02/02/23 09:47	02/03/23 22:03	1
Lead, Dissolved	ND		0.010	0.0030	mg/L		02/02/23 09:47	02/03/23 01:09	1
Magnesium, Dissolved	**15.5**		0.20	0.043	mg/L		02/02/23 09:47	02/03/23 01:09	1

Client Sample ID: FDUP-013123

Lab Sample ID: 480-205868-2

Date Collected: 01/31/23 00:00

Matrix: Water

Date Received: 02/01/23 10:30

Method: SW846 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese, Dissolved	**0.13**	**B**	0.0030	0.00040	mg/L		02/02/23 09:47	02/03/23 01:09	1
Nickel, Dissolved	ND		0.010	0.0013	mg/L		02/02/23 09:47	02/03/23 01:09	1
Potassium, Dissolved	**3.4**		0.50	0.10	mg/L		02/02/23 09:47	02/03/23 01:09	1
Selenium, Dissolved	ND		0.025	0.0087	mg/L		02/02/23 09:47	02/03/23 01:09	1
Silver, Dissolved	ND		0.0060	0.0017	mg/L		02/02/23 09:47	02/03/23 01:09	1
Sodium, Dissolved	**52.0**		1.0	0.32	mg/L		02/02/23 09:47	02/03/23 01:09	1
Thallium, Dissolved	ND		0.020	0.010	mg/L		02/02/23 09:47	02/03/23 01:09	1
Vanadium, Dissolved	ND		0.0050	0.0015	mg/L		02/02/23 09:47	02/03/23 01:09	1
Zinc, Dissolved	**0.0049**	**J**	0.010	0.0015	mg/L		02/02/23 09:47	02/03/23 01:09	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		02/02/23 11:30	02/02/23 17:31	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00020	0.000043	mg/L		02/02/23 11:30	02/02/23 17:11	1

Client Sample ID: MW3-013123

Lab Sample ID: 480-205868-3

Date Collected: 01/31/23 12:10

Matrix: Water

Date Received: 02/01/23 10:30

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			02/02/23 11:42	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/02/23 11:42	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/02/23 11:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			02/02/23 11:42	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/02/23 11:42	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/02/23 11:42	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/02/23 11:42	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/02/23 11:42	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/02/23 11:42	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/02/23 11:42	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/02/23 11:42	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/02/23 11:42	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/02/23 11:42	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/02/23 11:42	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/02/23 11:42	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/02/23 11:42	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/02/23 11:42	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/02/23 11:42	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/02/23 11:42	1
2-Hexanone	ND		5.0	1.2	ug/L			02/02/23 11:42	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/02/23 11:42	1
Acetone	ND		10	3.0	ug/L			02/02/23 11:42	1
Benzene	ND		1.0	0.41	ug/L			02/02/23 11:42	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/02/23 11:42	1
Bromoform	ND		1.0	0.26	ug/L			02/02/23 11:42	1
Bromomethane	ND		1.0	0.69	ug/L			02/02/23 11:42	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-1

Client Sample ID: MW3-013123
Date Collected: 01/31/23 12:10
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-3
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		1.0	0.19	ug/L			02/02/23 11:42	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/02/23 11:42	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/02/23 11:42	1
Chloroethane	ND		1.0	0.32	ug/L			02/02/23 11:42	1
Chloroform	ND		1.0	0.34	ug/L			02/02/23 11:42	1
Chloromethane	ND		1.0	0.35	ug/L			02/02/23 11:42	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/02/23 11:42	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/02/23 11:42	1
Cyclohexane	ND		1.0	0.18	ug/L			02/02/23 11:42	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/02/23 11:42	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/02/23 11:42	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/02/23 11:42	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/02/23 11:42	1
m,p-Xylene	ND		2.0	0.66	ug/L			02/02/23 11:42	1
Methyl acetate	ND		2.5	1.3	ug/L			02/02/23 11:42	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/02/23 11:42	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/02/23 11:42	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/02/23 11:42	1
n-Butylbenzene	ND		1.0	0.64	ug/L			02/02/23 11:42	1
N-Propylbenzene	ND		1.0	0.69	ug/L			02/02/23 11:42	1
o-Xylene	ND		1.0	0.76	ug/L			02/02/23 11:42	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			02/02/23 11:42	1
Styrene	ND		1.0	0.73	ug/L			02/02/23 11:42	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			02/02/23 11:42	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/02/23 11:42	1
Toluene	ND		1.0	0.51	ug/L			02/02/23 11:42	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/02/23 11:42	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/02/23 11:42	1
Trichloroethene	ND		1.0	0.46	ug/L			02/02/23 11:42	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/02/23 11:42	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/02/23 11:42	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/02/23 11:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*02/02/23 11:42*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*02/02/23 11:42*	*1*
Dibromofluoromethane (Surr)	*109*		*75 - 123*		*02/02/23 11:42*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*02/02/23 11:42*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.2	0.50	ug/L		02/02/23 08:19	02/03/23 15:21	1
2,4,6-Trichlorophenol	ND		5.2	0.64	ug/L		02/02/23 08:19	02/03/23 15:21	1
2,4-Dichlorophenol	ND		5.2	0.53	ug/L		02/02/23 08:19	02/03/23 15:21	1
2,4-Dimethylphenol	ND		5.2	0.52	ug/L		02/02/23 08:19	02/03/23 15:21	1
2,4-Dinitrophenol	ND		10	2.3	ug/L		02/02/23 08:19	02/03/23 15:21	1
2,4-Dinitrotoluene	ND		5.2	0.47	ug/L		02/02/23 08:19	02/03/23 15:21	1
2,6-Dinitrotoluene	ND		5.2	0.42	ug/L		02/02/23 08:19	02/03/23 15:21	1
2-Chloronaphthalene	ND		5.2	0.48	ug/L		02/02/23 08:19	02/03/23 15:21	1
2-Chlorophenol	ND		5.2	0.55	ug/L		02/02/23 08:19	02/03/23 15:21	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-1

Client Sample ID: MW3-013123
Date Collected: 01/31/23 12:10
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-3
Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	ND		5.2	0.63	ug/L		02/02/23 08:19	02/03/23 15:21	1
2-Methylphenol	ND		5.2	0.42	ug/L		02/02/23 08:19	02/03/23 15:21	1
2-Nitroaniline	ND		10	0.44	ug/L		02/02/23 08:19	02/03/23 15:21	1
2-Nitrophenol	ND		5.2	0.50	ug/L		02/02/23 08:19	02/03/23 15:21	1
3,3'-Dichlorobenzidine	ND		5.2	0.42	ug/L		02/02/23 08:19	02/03/23 15:21	1
3-Nitroaniline	ND		10	0.50	ug/L		02/02/23 08:19	02/03/23 15:21	1
4,6-Dinitro-2-methylphenol	ND		10	2.3	ug/L		02/02/23 08:19	02/03/23 15:21	1
4-Bromophenyl phenyl ether	ND		5.2	0.47	ug/L		02/02/23 08:19	02/03/23 15:21	1
4-Chloro-3-methylphenol	ND		5.2	0.47	ug/L		02/02/23 08:19	02/03/23 15:21	1
4-Chloroaniline	ND		5.2	0.61	ug/L		02/02/23 08:19	02/03/23 15:21	1
4-Chlorophenyl phenyl ether	ND		5.2	0.36	ug/L		02/02/23 08:19	02/03/23 15:21	1
4-Methylphenol	ND		10	0.38	ug/L		02/02/23 08:19	02/03/23 15:21	1
4-Nitroaniline	ND		10	0.26	ug/L		02/02/23 08:19	02/03/23 15:21	1
4-Nitrophenol	ND		10	1.6	ug/L		02/02/23 08:19	02/03/23 15:21	1
Acenaphthene	ND		5.2	0.43	ug/L		02/02/23 08:19	02/03/23 15:21	1
Acenaphthylene	ND		5.2	0.40	ug/L		02/02/23 08:19	02/03/23 15:21	1
Acetophenone	ND		5.2	0.56	ug/L		02/02/23 08:19	02/03/23 15:21	1
Anthracene	ND		5.2	0.29	ug/L		02/02/23 08:19	02/03/23 15:21	1
Atrazine	ND		5.2	0.48	ug/L		02/02/23 08:19	02/03/23 15:21	1
Benzaldehyde	ND		5.2	0.28	ug/L		02/02/23 08:19	02/03/23 15:21	1
Benzo[a]anthracene	ND		5.2	0.38	ug/L		02/02/23 08:19	02/03/23 15:21	1
Benzo[a]pyrene	ND		5.2	0.49	ug/L		02/02/23 08:19	02/03/23 15:21	1
Benzo[b]fluoranthene	ND		5.2	0.35	ug/L		02/02/23 08:19	02/03/23 15:21	1
Benzo[g,h,i]perylene	ND		5.2	0.36	ug/L		02/02/23 08:19	02/03/23 15:21	1
Benzo[k]fluoranthene	ND		5.2	0.76	ug/L		02/02/23 08:19	02/03/23 15:21	1
Biphenyl	ND		5.2	0.68	ug/L		02/02/23 08:19	02/03/23 15:21	1
bis (2-chloroisopropyl) ether	ND		5.2	0.54	ug/L		02/02/23 08:19	02/03/23 15:21	1
Bis(2-chloroethoxy)methane	ND		5.2	0.36	ug/L		02/02/23 08:19	02/03/23 15:21	1
Bis(2-chloroethyl)ether	ND		5.2	0.42	ug/L		02/02/23 08:19	02/03/23 15:21	1
Bis(2-ethylhexyl) phthalate	ND		5.2	2.3	ug/L		02/02/23 08:19	02/03/23 15:21	1
Butyl benzyl phthalate	ND		5.2	1.0	ug/L		02/02/23 08:19	02/03/23 15:21	1
Caprolactam	ND		5.2	2.3	ug/L		02/02/23 08:19	02/03/23 15:21	1
Carbazole	ND		5.2	0.31	ug/L		02/02/23 08:19	02/03/23 15:21	1
Chrysene	ND		5.2	0.34	ug/L		02/02/23 08:19	02/03/23 15:21	1
Dibenz(a,h)anthracene	ND		5.2	0.44	ug/L		02/02/23 08:19	02/03/23 15:21	1
Dibenzofuran	ND		10	0.53	ug/L		02/02/23 08:19	02/03/23 15:21	1
Diethyl phthalate	ND		5.2	0.23	ug/L		02/02/23 08:19	02/03/23 15:21	1
Dimethyl phthalate	ND		5.2	0.38	ug/L		02/02/23 08:19	02/03/23 15:21	1
Di-n-butyl phthalate	ND		5.2	0.32	ug/L		02/02/23 08:19	02/03/23 15:21	1
Di-n-octyl phthalate	ND		5.2	0.49	ug/L		02/02/23 08:19	02/03/23 15:21	1
Fluoranthene	ND		5.2	0.42	ug/L		02/02/23 08:19	02/03/23 15:21	1
Fluorene	ND		5.2	0.38	ug/L		02/02/23 08:19	02/03/23 15:21	1
Hexachlorobenzene	ND		5.2	0.53	ug/L		02/02/23 08:19	02/03/23 15:21	1
Hexachlorobutadiene	ND		5.2	0.71	ug/L		02/02/23 08:19	02/03/23 15:21	1
Hexachlorocyclopentadiene	ND		5.2	0.61	ug/L		02/02/23 08:19	02/03/23 15:21	1
Hexachloroethane	ND		5.2	0.61	ug/L		02/02/23 08:19	02/03/23 15:21	1
Indeno[1,2,3-cd]pyrene	ND		5.2	0.49	ug/L		02/02/23 08:19	02/03/23 15:21	1
Isophorone	ND		5.2	0.45	ug/L		02/02/23 08:19	02/03/23 15:21	1
Naphthalene	ND		5.2	0.79	ug/L		02/02/23 08:19	02/03/23 15:21	1

Client Sample ID: MW3-013123

Date Collected: 01/31/23 12:10
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-3

Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrobenzene	ND		5.2	0.30	ug/L		02/02/23 08:19	02/03/23 15:21	1
N-Nitrosodi-n-propylamine	ND		5.2	0.56	ug/L		02/02/23 08:19	02/03/23 15:21	1
N-Nitrosodiphenylamine	ND		5.2	0.53	ug/L		02/02/23 08:19	02/03/23 15:21	1
Pentachlorophenol	ND		10	2.3	ug/L		02/02/23 08:19	02/03/23 15:21	1
Phenanthrene	ND		5.2	0.46	ug/L		02/02/23 08:19	02/03/23 15:21	1
Phenol	ND		5.2	0.41	ug/L		02/02/23 08:19	02/03/23 15:21	1
Pyrene	ND		5.2	0.35	ug/L		02/02/23 08:19	02/03/23 15:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*93*		*41 - 120*	*02/02/23 08:19*	*02/03/23 15:21*	*1*
2-Fluorobiphenyl (Surr)	*97*		*48 - 120*	*02/02/23 08:19*	*02/03/23 15:21*	*1*
2-Fluorophenol (Surr)	*71*		*35 - 120*	*02/02/23 08:19*	*02/03/23 15:21*	*1*
Nitrobenzene-d5 (Surr)	*89*		*46 - 120*	*02/02/23 08:19*	*02/03/23 15:21*	*1*
Phenol-d5 (Surr)	*53*		*22 - 120*	*02/02/23 08:19*	*02/03/23 15:21*	*1*
p-Terphenyl-d14 (Surr)	*89*		*60 - 148*	*02/02/23 08:19*	*02/03/23 15:21*	*1*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		02/02/23 09:48	02/02/23 23:41	1
Antimony	ND		0.020	0.0068	mg/L		02/02/23 09:48	02/02/23 23:41	1
Arsenic	ND		0.015	0.0056	mg/L		02/02/23 09:48	02/02/23 23:41	1
Barium	**0.14**	**^2**	0.0020	0.00070	mg/L		02/02/23 09:48	02/02/23 23:41	1
Beryllium	ND		0.0020	0.00030	mg/L		02/02/23 09:48	02/02/23 23:41	1
Cadmium	ND		0.0020	0.00050	mg/L		02/02/23 09:48	02/02/23 23:41	1
Calcium	**56.7**		0.50	0.10	mg/L		02/02/23 09:48	02/02/23 23:41	1
Chromium	ND		0.0040	0.0010	mg/L		02/02/23 09:48	02/02/23 23:41	1
Cobalt	ND		0.0040	0.00063	mg/L		02/02/23 09:48	02/02/23 23:41	1
Copper	ND		0.010	0.0016	mg/L		02/02/23 09:48	02/02/23 23:41	1
Iron	**0.019**	**J**	0.050	0.019	mg/L		02/02/23 09:48	02/02/23 23:41	1
Lead	ND		0.010	0.0030	mg/L		02/02/23 09:48	02/02/23 23:41	1
Magnesium	**11.4**		0.20	0.043	mg/L		02/02/23 09:48	02/02/23 23:41	1
Manganese	**0.055**	**B**	0.0030	0.00040	mg/L		02/02/23 09:48	02/02/23 23:41	1
Nickel	ND		0.010	0.0013	mg/L		02/02/23 09:48	02/02/23 23:41	1
Potassium	**3.8**		0.50	0.10	mg/L		02/02/23 09:48	02/02/23 23:41	1
Selenium	ND		0.025	0.0087	mg/L		02/02/23 09:48	02/02/23 23:41	1
Silver	ND		0.0060	0.0017	mg/L		02/02/23 09:48	02/02/23 23:41	1
Sodium	**87.0**		1.0	0.32	mg/L		02/02/23 09:48	02/02/23 23:41	1
Thallium	ND		0.020	0.010	mg/L		02/02/23 09:48	02/02/23 23:41	1
Vanadium	ND		0.0050	0.0015	mg/L		02/02/23 09:48	02/02/23 23:41	1
Zinc	**0.0015**	**J**	0.010	0.0015	mg/L		02/02/23 09:48	02/02/23 23:41	1

Method: SW846 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	ND		0.20	0.060	mg/L		02/02/23 09:47	02/03/23 22:07	1
Antimony, Dissolved	ND		0.020	0.0068	mg/L		02/02/23 09:47	02/03/23 01:13	1
Arsenic, Dissolved	ND		0.015	0.0056	mg/L		02/02/23 09:47	02/03/23 01:13	1
Barium, Dissolved	**0.14**		0.0020	0.00070	mg/L		02/02/23 09:47	02/03/23 22:07	1
Beryllium, Dissolved	ND		0.0020	0.00030	mg/L		02/02/23 09:47	02/03/23 22:07	1
Cadmium, Dissolved	ND		0.0020	0.00050	mg/L		02/02/23 09:47	02/03/23 01:13	1
Calcium, Dissolved	**57.5**		0.50	0.10	mg/L		02/02/23 09:47	02/03/23 22:07	1

Client Sample ID: MW3-013123

Date Collected: 01/31/23 12:10
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-3
Matrix: Water

Method: SW846 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, Dissolved	ND		0.0040	0.0010	mg/L		02/02/23 09:47	02/03/23 01:13	1
Cobalt, Dissolved	ND		0.0040	0.00063	mg/L		02/02/23 09:47	02/03/23 01:13	1
Copper, Dissolved	ND		0.010	0.0016	mg/L		02/02/23 09:47	02/03/23 01:13	1
Iron, Dissolved	ND		0.050	0.019	mg/L		02/02/23 09:47	02/03/23 22:07	1
Lead, Dissolved	ND		0.010	0.0030	mg/L		02/02/23 09:47	02/03/23 01:13	1
Magnesium, Dissolved	**11.2**		0.20	0.043	mg/L		02/02/23 09:47	02/03/23 01:13	1
Manganese, Dissolved	**0.046**	**B**	0.0030	0.00040	mg/L		02/02/23 09:47	02/03/23 01:13	1
Nickel, Dissolved	ND		0.010	0.0013	mg/L		02/02/23 09:47	02/03/23 01:13	1
Potassium, Dissolved	**3.7**		0.50	0.10	mg/L		02/02/23 09:47	02/03/23 01:13	1
Selenium, Dissolved	ND		0.025	0.0087	mg/L		02/02/23 09:47	02/03/23 01:13	1
Silver, Dissolved	ND		0.0060	0.0017	mg/L		02/02/23 09:47	02/03/23 01:13	1
Sodium, Dissolved	**84.9**		1.0	0.32	mg/L		02/02/23 09:47	02/03/23 01:13	1
Thallium, Dissolved	ND		0.020	0.010	mg/L		02/02/23 09:47	02/03/23 01:13	1
Vanadium, Dissolved	ND		0.0050	0.0015	mg/L		02/02/23 09:47	02/03/23 01:13	1
Zinc, Dissolved	**0.0015**	**J**	0.010	0.0015	mg/L		02/02/23 09:47	02/03/23 01:13	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		02/02/23 11:30	02/02/23 17:32	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00020	0.000043	mg/L		02/02/23 11:30	02/02/23 17:15	1

Client Sample ID: MW5-013123

Date Collected: 01/31/23 15:10
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-4
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			02/02/23 12:07	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/02/23 12:07	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/02/23 12:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			02/02/23 12:07	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/02/23 12:07	1
1,1-Dichloroethane	**0.55**	**J**	1.0	0.38	ug/L			02/02/23 12:07	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/02/23 12:07	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/02/23 12:07	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/02/23 12:07	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/02/23 12:07	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/02/23 12:07	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/02/23 12:07	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/02/23 12:07	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/02/23 12:07	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/02/23 12:07	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/02/23 12:07	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/02/23 12:07	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/02/23 12:07	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/02/23 12:07	1
2-Hexanone	ND		5.0	1.2	ug/L			02/02/23 12:07	1

Client Sample ID: MW5-013123

Date Collected: 01/31/23 15:10
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-4

Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/02/23 12:07	1
Acetone	ND		10	3.0	ug/L			02/02/23 12:07	1
Benzene	**3.1**		1.0	0.41	ug/L			02/02/23 12:07	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/02/23 12:07	1
Bromoform	ND		1.0	0.26	ug/L			02/02/23 12:07	1
Bromomethane	ND		1.0	0.69	ug/L			02/02/23 12:07	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/02/23 12:07	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/02/23 12:07	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/02/23 12:07	1
Chloroethane	ND		1.0	0.32	ug/L			02/02/23 12:07	1
Chloroform	ND		1.0	0.34	ug/L			02/02/23 12:07	1
Chloromethane	ND		1.0	0.35	ug/L			02/02/23 12:07	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/02/23 12:07	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/02/23 12:07	1
Cyclohexane	ND		1.0	0.18	ug/L			02/02/23 12:07	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/02/23 12:07	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/02/23 12:07	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/02/23 12:07	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/02/23 12:07	1
m,p-Xylene	ND		2.0	0.66	ug/L			02/02/23 12:07	1
Methyl acetate	ND		2.5	1.3	ug/L			02/02/23 12:07	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/02/23 12:07	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/02/23 12:07	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/02/23 12:07	1
n-Butylbenzene	ND		1.0	0.64	ug/L			02/02/23 12:07	1
N-Propylbenzene	ND		1.0	0.69	ug/L			02/02/23 12:07	1
o-Xylene	ND		1.0	0.76	ug/L			02/02/23 12:07	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			02/02/23 12:07	1
Styrene	ND		1.0	0.73	ug/L			02/02/23 12:07	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			02/02/23 12:07	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/02/23 12:07	1
Toluene	ND		1.0	0.51	ug/L			02/02/23 12:07	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/02/23 12:07	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/02/23 12:07	1
Trichloroethene	**0.51**	**J**	1.0	0.46	ug/L			02/02/23 12:07	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/02/23 12:07	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/02/23 12:07	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/02/23 12:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*02/02/23 12:07*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*02/02/23 12:07*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*02/02/23 12:07*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*02/02/23 12:07*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.2	0.50	ug/L		02/02/23 08:19	02/03/23 15:48	1
2,4,6-Trichlorophenol	ND		5.2	0.64	ug/L		02/02/23 08:19	02/03/23 15:48	1
2,4-Dichlorophenol	ND		5.2	0.53	ug/L		02/02/23 08:19	02/03/23 15:48	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-1

Client Sample ID: MW5-013123
Date Collected: 01/31/23 15:10
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-4
Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4-Dimethylphenol	ND		5.2	0.52	ug/L		02/02/23 08:19	02/03/23 15:48	1
2,4-Dinitrophenol	ND		10	2.3	ug/L		02/02/23 08:19	02/03/23 15:48	1
2,4-Dinitrotoluene	ND		5.2	0.47	ug/L		02/02/23 08:19	02/03/23 15:48	1
2,6-Dinitrotoluene	ND		5.2	0.42	ug/L		02/02/23 08:19	02/03/23 15:48	1
2-Chloronaphthalene	ND		5.2	0.48	ug/L		02/02/23 08:19	02/03/23 15:48	1
2-Chlorophenol	ND		5.2	0.55	ug/L		02/02/23 08:19	02/03/23 15:48	1
2-Methylnaphthalene	ND		5.2	0.63	ug/L		02/02/23 08:19	02/03/23 15:48	1
2-Methylphenol	ND		5.2	0.42	ug/L		02/02/23 08:19	02/03/23 15:48	1
2-Nitroaniline	ND		10	0.44	ug/L		02/02/23 08:19	02/03/23 15:48	1
2-Nitrophenol	ND		5.2	0.50	ug/L		02/02/23 08:19	02/03/23 15:48	1
3,3'-Dichlorobenzidine	ND		5.2	0.42	ug/L		02/02/23 08:19	02/03/23 15:48	1
3-Nitroaniline	ND		10	0.50	ug/L		02/02/23 08:19	02/03/23 15:48	1
4,6-Dinitro-2-methylphenol	ND		10	2.3	ug/L		02/02/23 08:19	02/03/23 15:48	1
4-Bromophenyl phenyl ether	ND		5.2	0.47	ug/L		02/02/23 08:19	02/03/23 15:48	1
4-Chloro-3-methylphenol	ND		5.2	0.47	ug/L		02/02/23 08:19	02/03/23 15:48	1
4-Chloroaniline	ND		5.2	0.61	ug/L		02/02/23 08:19	02/03/23 15:48	1
4-Chlorophenyl phenyl ether	ND		5.2	0.36	ug/L		02/02/23 08:19	02/03/23 15:48	1
4-Methylphenol	ND		10	0.38	ug/L		02/02/23 08:19	02/03/23 15:48	1
4-Nitroaniline	ND		10	0.26	ug/L		02/02/23 08:19	02/03/23 15:48	1
4-Nitrophenol	ND		10	1.6	ug/L		02/02/23 08:19	02/03/23 15:48	1
Acenaphthene	**0.44**	**J**	5.2	0.43	ug/L		02/02/23 08:19	02/03/23 15:48	1
Acenaphthylene	ND		5.2	0.40	ug/L		02/02/23 08:19	02/03/23 15:48	1
Acetophenone	ND		5.2	0.56	ug/L		02/02/23 08:19	02/03/23 15:48	1
Anthracene	ND		5.2	0.29	ug/L		02/02/23 08:19	02/03/23 15:48	1
Atrazine	ND		5.2	0.48	ug/L		02/02/23 08:19	02/03/23 15:48	1
Benzaldehyde	ND		5.2	0.28	ug/L		02/02/23 08:19	02/03/23 15:48	1
Benzo[a]anthracene	ND		5.2	0.38	ug/L		02/02/23 08:19	02/03/23 15:48	1
Benzo[a]pyrene	ND		5.2	0.49	ug/L		02/02/23 08:19	02/03/23 15:48	1
Benzo[b]fluoranthene	ND		5.2	0.35	ug/L		02/02/23 08:19	02/03/23 15:48	1
Benzo[g,h,i]perylene	ND		5.2	0.36	ug/L		02/02/23 08:19	02/03/23 15:48	1
Benzo[k]fluoranthene	ND		5.2	0.76	ug/L		02/02/23 08:19	02/03/23 15:48	1
Biphenyl	ND		5.2	0.68	ug/L		02/02/23 08:19	02/03/23 15:48	1
bis (2-chloroisopropyl) ether	ND		5.2	0.54	ug/L		02/02/23 08:19	02/03/23 15:48	1
Bis(2-chloroethoxy)methane	ND		5.2	0.36	ug/L		02/02/23 08:19	02/03/23 15:48	1
Bis(2-chloroethyl)ether	ND		5.2	0.42	ug/L		02/02/23 08:19	02/03/23 15:48	1
Bis(2-ethylhexyl) phthalate	ND		5.2	2.3	ug/L		02/02/23 08:19	02/03/23 15:48	1
Butyl benzyl phthalate	ND		5.2	1.0	ug/L		02/02/23 08:19	02/03/23 15:48	1
Caprolactam	ND		5.2	2.3	ug/L		02/02/23 08:19	02/03/23 15:48	1
Carbazole	ND		5.2	0.31	ug/L		02/02/23 08:19	02/03/23 15:48	1
Chrysene	ND		5.2	0.34	ug/L		02/02/23 08:19	02/03/23 15:48	1
Dibenz(a,h)anthracene	ND		5.2	0.44	ug/L		02/02/23 08:19	02/03/23 15:48	1
Dibenzofuran	ND		10	0.53	ug/L		02/02/23 08:19	02/03/23 15:48	1
Diethyl phthalate	ND		5.2	0.23	ug/L		02/02/23 08:19	02/03/23 15:48	1
Dimethyl phthalate	ND		5.2	0.38	ug/L		02/02/23 08:19	02/03/23 15:48	1
Di-n-butyl phthalate	ND		5.2	0.32	ug/L		02/02/23 08:19	02/03/23 15:48	1
Di-n-octyl phthalate	ND		5.2	0.49	ug/L		02/02/23 08:19	02/03/23 15:48	1
Fluoranthene	ND		5.2	0.42	ug/L		02/02/23 08:19	02/03/23 15:48	1
Fluorene	ND		5.2	0.38	ug/L		02/02/23 08:19	02/03/23 15:48	1
Hexachlorobenzene	ND		5.2	0.53	ug/L		02/02/23 08:19	02/03/23 15:48	1

Client Sample ID: MW5-013123
Date Collected: 01/31/23 15:10
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-4
Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachlorobutadiene	ND		5.2	0.71	ug/L		02/02/23 08:19	02/03/23 15:48	1
Hexachlorocyclopentadiene	ND		5.2	0.61	ug/L		02/02/23 08:19	02/03/23 15:48	1
Hexachloroethane	ND		5.2	0.61	ug/L		02/02/23 08:19	02/03/23 15:48	1
Indeno[1,2,3-cd]pyrene	ND		5.2	0.49	ug/L		02/02/23 08:19	02/03/23 15:48	1
Isophorone	ND		5.2	0.45	ug/L		02/02/23 08:19	02/03/23 15:48	1
Naphthalene	ND		5.2	0.79	ug/L		02/02/23 08:19	02/03/23 15:48	1
Nitrobenzene	ND		5.2	0.30	ug/L		02/02/23 08:19	02/03/23 15:48	1
N-Nitrosodi-n-propylamine	ND		5.2	0.56	ug/L		02/02/23 08:19	02/03/23 15:48	1
N-Nitrosodiphenylamine	ND		5.2	0.53	ug/L		02/02/23 08:19	02/03/23 15:48	1
Pentachlorophenol	ND		10	2.3	ug/L		02/02/23 08:19	02/03/23 15:48	1
Phenanthrene	ND		5.2	0.46	ug/L		02/02/23 08:19	02/03/23 15:48	1
Phenol	ND		5.2	0.41	ug/L		02/02/23 08:19	02/03/23 15:48	1
Pyrene	ND		5.2	0.35	ug/L		02/02/23 08:19	02/03/23 15:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*94*		*41 - 120*	*02/02/23 08:19*	*02/03/23 15:48*	*1*
2-Fluorobiphenyl (Surr)	*101*		*48 - 120*	*02/02/23 08:19*	*02/03/23 15:48*	*1*
2-Fluorophenol (Surr)	*69*		*35 - 120*	*02/02/23 08:19*	*02/03/23 15:48*	*1*
Nitrobenzene-d5 (Surr)	*91*		*46 - 120*	*02/02/23 08:19*	*02/03/23 15:48*	*1*
Phenol-d5 (Surr)	*52*		*22 - 120*	*02/02/23 08:19*	*02/03/23 15:48*	*1*
p-Terphenyl-d14 (Surr)	*82*		*60 - 148*	*02/02/23 08:19*	*02/03/23 15:48*	*1*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		02/02/23 09:48	02/02/23 23:45	1
Antimony	ND		0.020	0.0068	mg/L		02/02/23 09:48	02/02/23 23:45	1
Arsenic	ND		0.015	0.0056	mg/L		02/02/23 09:48	02/02/23 23:45	1
Barium	**0.084**	**^2**	0.0020	0.00070	mg/L		02/02/23 09:48	02/02/23 23:45	1
Beryllium	ND		0.0020	0.00030	mg/L		02/02/23 09:48	02/02/23 23:45	1
Cadmium	ND		0.0020	0.00050	mg/L		02/02/23 09:48	02/02/23 23:45	1
Calcium	**94.2**		0.50	0.10	mg/L		02/02/23 09:48	02/02/23 23:45	1
Chromium	ND		0.0040	0.0010	mg/L		02/02/23 09:48	02/02/23 23:45	1
Cobalt	ND		0.0040	0.00063	mg/L		02/02/23 09:48	02/02/23 23:45	1
Copper	**0.0019**	**J**	0.010	0.0016	mg/L		02/02/23 09:48	02/02/23 23:45	1
Iron	**0.047**	**J**	0.050	0.019	mg/L		02/02/23 09:48	02/02/23 23:45	1
Lead	**0.0042**	**J**	0.010	0.0030	mg/L		02/02/23 09:48	02/02/23 23:45	1
Magnesium	**13.3**		0.20	0.043	mg/L		02/02/23 09:48	02/02/23 23:45	1
Manganese	**0.87**	**B**	0.0030	0.00040	mg/L		02/02/23 09:48	02/02/23 23:45	1
Nickel	**0.0013**	**J**	0.010	0.0013	mg/L		02/02/23 09:48	02/02/23 23:45	1
Potassium	**5.4**		0.50	0.10	mg/L		02/02/23 09:48	02/02/23 23:45	1
Selenium	**0.0088**	**J**	0.025	0.0087	mg/L		02/02/23 09:48	02/02/23 23:45	1
Silver	ND		0.0060	0.0017	mg/L		02/02/23 09:48	02/02/23 23:45	1
Sodium	**36.0**		1.0	0.32	mg/L		02/02/23 09:48	02/02/23 23:45	1
Thallium	ND		0.020	0.010	mg/L		02/02/23 09:48	02/02/23 23:45	1
Vanadium	ND		0.0050	0.0015	mg/L		02/02/23 09:48	02/02/23 23:45	1
Zinc	**0.0027**	**J**	0.010	0.0015	mg/L		02/02/23 09:48	02/02/23 23:45	1

Method: SW846 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	ND		0.20	0.060	mg/L		02/02/23 09:47	02/03/23 22:11	1

Client Sample ID: MW5-013123

Lab Sample ID: 480-205868-4

Date Collected: 01/31/23 15:10

Matrix: Water

Date Received: 02/01/23 10:30

Method: SW846 6010C - Metals (ICP) - Dissolved (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony, Dissolved	ND		0.020	0.0068	mg/L		02/02/23 09:47	02/03/23 01:17	1
Arsenic, Dissolved	ND		0.015	0.0056	mg/L		02/02/23 09:47	02/03/23 01:17	1
Barium, Dissolved	**0.087**		0.0020	0.00070	mg/L		02/02/23 09:47	02/03/23 22:11	1
Beryllium, Dissolved	ND		0.0020	0.00030	mg/L		02/02/23 09:47	02/03/23 22:11	1
Cadmium, Dissolved	ND		0.0020	0.00050	mg/L		02/02/23 09:47	02/03/23 01:17	1
Calcium, Dissolved	**99.1**		0.50	0.10	mg/L		02/02/23 09:47	02/03/23 22:11	1
Chromium, Dissolved	ND		0.0040	0.0010	mg/L		02/02/23 09:47	02/03/23 01:17	1
Cobalt, Dissolved	ND		0.0040	0.00063	mg/L		02/02/23 09:47	02/03/23 01:17	1
Copper, Dissolved	**0.0019**	**J**	0.010	0.0016	mg/L		02/02/23 09:47	02/03/23 01:17	1
Iron, Dissolved	**0.046**	**J**	0.050	0.019	mg/L		02/02/23 09:47	02/03/23 22:11	1
Lead, Dissolved	**0.0054**	**J**	0.010	0.0030	mg/L		02/02/23 09:47	02/03/23 01:17	1
Magnesium, Dissolved	**13.4**		0.20	0.043	mg/L		02/02/23 09:47	02/03/23 01:17	1
Manganese, Dissolved	**0.89**	**B**	0.0030	0.00040	mg/L		02/02/23 09:47	02/03/23 01:17	1
Nickel, Dissolved	**0.0016**	**J**	0.010	0.0013	mg/L		02/02/23 09:47	02/03/23 01:17	1
Potassium, Dissolved	**5.4**		0.50	0.10	mg/L		02/02/23 09:47	02/03/23 01:17	1
Selenium, Dissolved	**0.0093**	**J**	0.025	0.0087	mg/L		02/02/23 09:47	02/03/23 01:17	1
Silver, Dissolved	ND		0.0060	0.0017	mg/L		02/02/23 09:47	02/03/23 01:17	1
Sodium, Dissolved	**35.5**		1.0	0.32	mg/L		02/02/23 09:47	02/03/23 01:17	1
Thallium, Dissolved	ND		0.020	0.010	mg/L		02/02/23 09:47	02/03/23 01:17	1
Vanadium, Dissolved	ND		0.0050	0.0015	mg/L		02/02/23 09:47	02/03/23 01:17	1
Zinc, Dissolved	**0.0029**	**J**	0.010	0.0015	mg/L		02/02/23 09:47	02/03/23 01:17	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		02/02/23 11:30	02/02/23 17:33	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00020	0.000043	mg/L		02/02/23 11:30	02/02/23 17:17	1

Client Sample ID: MW1-013123

Lab Sample ID: 480-205868-5

Date Collected: 01/31/23 16:50

Matrix: Water

Date Received: 02/01/23 10:30

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			02/02/23 12:31	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/02/23 12:31	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/02/23 12:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			02/02/23 12:31	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/02/23 12:31	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/02/23 12:31	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/02/23 12:31	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/02/23 12:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/02/23 12:31	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/02/23 12:31	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/02/23 12:31	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/02/23 12:31	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/02/23 12:31	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/02/23 12:31	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-1

Client Sample ID: MW1-013123
Date Collected: 01/31/23 16:50
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-5
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/02/23 12:31	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/02/23 12:31	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/02/23 12:31	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/02/23 12:31	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/02/23 12:31	1
2-Hexanone	ND		5.0	1.2	ug/L			02/02/23 12:31	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/02/23 12:31	1
Acetone	ND		10	3.0	ug/L			02/02/23 12:31	1
Benzene	ND		1.0	0.41	ug/L			02/02/23 12:31	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/02/23 12:31	1
Bromoform	ND		1.0	0.26	ug/L			02/02/23 12:31	1
Bromomethane	ND		1.0	0.69	ug/L			02/02/23 12:31	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/02/23 12:31	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/02/23 12:31	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/02/23 12:31	1
Chloroethane	ND		1.0	0.32	ug/L			02/02/23 12:31	1
Chloroform	ND		1.0	0.34	ug/L			02/02/23 12:31	1
Chloromethane	ND		1.0	0.35	ug/L			02/02/23 12:31	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/02/23 12:31	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/02/23 12:31	1
Cyclohexane	ND		1.0	0.18	ug/L			02/02/23 12:31	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/02/23 12:31	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/02/23 12:31	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/02/23 12:31	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/02/23 12:31	1
m,p-Xylene	ND		2.0	0.66	ug/L			02/02/23 12:31	1
Methyl acetate	ND		2.5	1.3	ug/L			02/02/23 12:31	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/02/23 12:31	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/02/23 12:31	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/02/23 12:31	1
n-Butylbenzene	ND		1.0	0.64	ug/L			02/02/23 12:31	1
N-Propylbenzene	ND		1.0	0.69	ug/L			02/02/23 12:31	1
o-Xylene	ND		1.0	0.76	ug/L			02/02/23 12:31	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			02/02/23 12:31	1
Styrene	ND		1.0	0.73	ug/L			02/02/23 12:31	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			02/02/23 12:31	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/02/23 12:31	1
Toluene	ND		1.0	0.51	ug/L			02/02/23 12:31	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/02/23 12:31	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/02/23 12:31	1
Trichloroethene	**1.8**		1.0	0.46	ug/L			02/02/23 12:31	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/02/23 12:31	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/02/23 12:31	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/02/23 12:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*02/02/23 12:31*	*1*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*		*02/02/23 12:31*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*02/02/23 12:31*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*02/02/23 12:31*	*1*

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-1

Client Sample ID: MW1-013123
Date Collected: 01/31/23 16:50
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-5
Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.2	0.50	ug/L		02/02/23 08:19	02/03/23 16:16	1
2,4,6-Trichlorophenol	ND		5.2	0.64	ug/L		02/02/23 08:19	02/03/23 16:16	1
2,4-Dichlorophenol	ND		5.2	0.53	ug/L		02/02/23 08:19	02/03/23 16:16	1
2,4-Dimethylphenol	ND		5.2	0.52	ug/L		02/02/23 08:19	02/03/23 16:16	1
2,4-Dinitrophenol	ND		10	2.3	ug/L		02/02/23 08:19	02/03/23 16:16	1
2,4-Dinitrotoluene	ND		5.2	0.47	ug/L		02/02/23 08:19	02/03/23 16:16	1
2,6-Dinitrotoluene	ND		5.2	0.42	ug/L		02/02/23 08:19	02/03/23 16:16	1
2-Chloronaphthalene	ND		5.2	0.48	ug/L		02/02/23 08:19	02/03/23 16:16	1
2-Chlorophenol	ND		5.2	0.55	ug/L		02/02/23 08:19	02/03/23 16:16	1
2-Methylnaphthalene	ND		5.2	0.63	ug/L		02/02/23 08:19	02/03/23 16:16	1
2-Methylphenol	ND		5.2	0.42	ug/L		02/02/23 08:19	02/03/23 16:16	1
2-Nitroaniline	ND		10	0.44	ug/L		02/02/23 08:19	02/03/23 16:16	1
2-Nitrophenol	ND		5.2	0.50	ug/L		02/02/23 08:19	02/03/23 16:16	1
3,3'-Dichlorobenzidine	ND		5.2	0.42	ug/L		02/02/23 08:19	02/03/23 16:16	1
3-Nitroaniline	ND		10	0.50	ug/L		02/02/23 08:19	02/03/23 16:16	1
4,6-Dinitro-2-methylphenol	ND		10	2.3	ug/L		02/02/23 08:19	02/03/23 16:16	1
4-Bromophenyl phenyl ether	ND		5.2	0.47	ug/L		02/02/23 08:19	02/03/23 16:16	1
4-Chloro-3-methylphenol	ND		5.2	0.47	ug/L		02/02/23 08:19	02/03/23 16:16	1
4-Chloroaniline	ND		5.2	0.61	ug/L		02/02/23 08:19	02/03/23 16:16	1
4-Chlorophenyl phenyl ether	ND		5.2	0.36	ug/L		02/02/23 08:19	02/03/23 16:16	1
4-Methylphenol	ND		10	0.38	ug/L		02/02/23 08:19	02/03/23 16:16	1
4-Nitroaniline	ND		10	0.26	ug/L		02/02/23 08:19	02/03/23 16:16	1
4-Nitrophenol	ND		10	1.6	ug/L		02/02/23 08:19	02/03/23 16:16	1
Acenaphthene	ND		5.2	0.43	ug/L		02/02/23 08:19	02/03/23 16:16	1
Acenaphthylene	ND		5.2	0.40	ug/L		02/02/23 08:19	02/03/23 16:16	1
Acetophenone	ND		5.2	0.56	ug/L		02/02/23 08:19	02/03/23 16:16	1
Anthracene	ND		5.2	0.29	ug/L		02/02/23 08:19	02/03/23 16:16	1
Atrazine	ND		5.2	0.48	ug/L		02/02/23 08:19	02/03/23 16:16	1
Benzaldehyde	ND		5.2	0.28	ug/L		02/02/23 08:19	02/03/23 16:16	1
Benzo[a]anthracene	ND		5.2	0.38	ug/L		02/02/23 08:19	02/03/23 16:16	1
Benzo[a]pyrene	ND		5.2	0.49	ug/L		02/02/23 08:19	02/03/23 16:16	1
Benzo[b]fluoranthene	ND		5.2	0.35	ug/L		02/02/23 08:19	02/03/23 16:16	1
Benzo[g,h,i]perylene	ND		5.2	0.36	ug/L		02/02/23 08:19	02/03/23 16:16	1
Benzo[k]fluoranthene	ND		5.2	0.76	ug/L		02/02/23 08:19	02/03/23 16:16	1
Biphenyl	ND		5.2	0.68	ug/L		02/02/23 08:19	02/03/23 16:16	1
bis (2-chloroisopropyl) ether	ND		5.2	0.54	ug/L		02/02/23 08:19	02/03/23 16:16	1
Bis(2-chloroethoxy)methane	ND		5.2	0.36	ug/L		02/02/23 08:19	02/03/23 16:16	1
Bis(2-chloroethyl)ether	ND		5.2	0.42	ug/L		02/02/23 08:19	02/03/23 16:16	1
Bis(2-ethylhexyl) phthalate	ND		5.2	2.3	ug/L		02/02/23 08:19	02/03/23 16:16	1
Butyl benzyl phthalate	ND		5.2	1.0	ug/L		02/02/23 08:19	02/03/23 16:16	1
Caprolactam	ND		5.2	2.3	ug/L		02/02/23 08:19	02/03/23 16:16	1
Carbazole	ND		5.2	0.31	ug/L		02/02/23 08:19	02/03/23 16:16	1
Chrysene	ND		5.2	0.34	ug/L		02/02/23 08:19	02/03/23 16:16	1
Dibenz(a,h)anthracene	ND		5.2	0.44	ug/L		02/02/23 08:19	02/03/23 16:16	1
Dibenzofuran	ND		10	0.53	ug/L		02/02/23 08:19	02/03/23 16:16	1
Diethyl phthalate	ND		5.2	0.23	ug/L		02/02/23 08:19	02/03/23 16:16	1
Dimethyl phthalate	ND		5.2	0.38	ug/L		02/02/23 08:19	02/03/23 16:16	1
Di-n-butyl phthalate	ND		5.2	0.32	ug/L		02/02/23 08:19	02/03/23 16:16	1
Di-n-octyl phthalate	ND		5.2	0.49	ug/L		02/02/23 08:19	02/03/23 16:16	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-1

Client Sample ID: MW1-013123

Date Collected: 01/31/23 16:50
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-5

Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		5.2	0.42	ug/L		02/02/23 08:19	02/03/23 16:16	1
Fluorene	ND		5.2	0.38	ug/L		02/02/23 08:19	02/03/23 16:16	1
Hexachlorobenzene	ND		5.2	0.53	ug/L		02/02/23 08:19	02/03/23 16:16	1
Hexachlorobutadiene	ND		5.2	0.71	ug/L		02/02/23 08:19	02/03/23 16:16	1
Hexachlorocyclopentadiene	ND		5.2	0.61	ug/L		02/02/23 08:19	02/03/23 16:16	1
Hexachloroethane	ND		5.2	0.61	ug/L		02/02/23 08:19	02/03/23 16:16	1
Indeno[1,2,3-cd]pyrene	ND		5.2	0.49	ug/L		02/02/23 08:19	02/03/23 16:16	1
Isophorone	ND		5.2	0.45	ug/L		02/02/23 08:19	02/03/23 16:16	1
Naphthalene	ND		5.2	0.79	ug/L		02/02/23 08:19	02/03/23 16:16	1
Nitrobenzene	ND		5.2	0.30	ug/L		02/02/23 08:19	02/03/23 16:16	1
N-Nitrosodi-n-propylamine	ND		5.2	0.56	ug/L		02/02/23 08:19	02/03/23 16:16	1
N-Nitrosodiphenylamine	ND		5.2	0.53	ug/L		02/02/23 08:19	02/03/23 16:16	1
Pentachlorophenol	ND		10	2.3	ug/L		02/02/23 08:19	02/03/23 16:16	1
Phenanthrene	ND		5.2	0.46	ug/L		02/02/23 08:19	02/03/23 16:16	1
Phenol	ND		5.2	0.41	ug/L		02/02/23 08:19	02/03/23 16:16	1
Pyrene	ND		5.2	0.35	ug/L		02/02/23 08:19	02/03/23 16:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*95*		*41 - 120*	*02/02/23 08:19*	*02/03/23 16:16*	*1*
2-Fluorobiphenyl (Surr)	*105*		*48 - 120*	*02/02/23 08:19*	*02/03/23 16:16*	*1*
2-Fluorophenol (Surr)	*80*		*35 - 120*	*02/02/23 08:19*	*02/03/23 16:16*	*1*
Nitrobenzene-d5 (Surr)	*98*		*46 - 120*	*02/02/23 08:19*	*02/03/23 16:16*	*1*
Phenol-d5 (Surr)	*60*		*22 - 120*	*02/02/23 08:19*	*02/03/23 16:16*	*1*
p-Terphenyl-d14 (Surr)	*99*		*60 - 148*	*02/02/23 08:19*	*02/03/23 16:16*	*1*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		02/02/23 09:48	02/02/23 23:49	1
Antimony	ND		0.020	0.0068	mg/L		02/02/23 09:48	02/02/23 23:49	1
Arsenic	ND		0.015	0.0056	mg/L		02/02/23 09:48	02/02/23 23:49	1
Barium	**0.14**	**^2**	0.0020	0.00070	mg/L		02/02/23 09:48	02/02/23 23:49	1
Beryllium	ND		0.0020	0.00030	mg/L		02/02/23 09:48	02/02/23 23:49	1
Cadmium	ND		0.0020	0.00050	mg/L		02/02/23 09:48	02/02/23 23:49	1
Calcium	**58.7**		0.50	0.10	mg/L		02/02/23 09:48	02/02/23 23:49	1
Chromium	**0.0010**	**J**	0.0040	0.0010	mg/L		02/02/23 09:48	02/02/23 23:49	1
Cobalt	ND		0.0040	0.00063	mg/L		02/02/23 09:48	02/02/23 23:49	1
Copper	ND		0.010	0.0016	mg/L		02/02/23 09:48	02/02/23 23:49	1
Iron	ND		0.050	0.019	mg/L		02/02/23 09:48	02/02/23 23:49	1
Lead	ND		0.010	0.0030	mg/L		02/02/23 09:48	02/02/23 23:49	1
Magnesium	**9.5**		0.20	0.043	mg/L		02/02/23 09:48	02/02/23 23:49	1
Manganese	**0.36**	**B**	0.0030	0.00040	mg/L		02/02/23 09:48	02/02/23 23:49	1
Nickel	ND		0.010	0.0013	mg/L		02/02/23 09:48	02/02/23 23:49	1
Potassium	**4.1**		0.50	0.10	mg/L		02/02/23 09:48	02/02/23 23:49	1
Selenium	ND		0.025	0.0087	mg/L		02/02/23 09:48	02/02/23 23:49	1
Silver	ND		0.0060	0.0017	mg/L		02/02/23 09:48	02/02/23 23:49	1
Sodium	**140**		1.0	0.32	mg/L		02/02/23 09:48	02/02/23 23:49	1
Thallium	ND		0.020	0.010	mg/L		02/02/23 09:48	02/02/23 23:49	1
Vanadium	ND		0.0050	0.0015	mg/L		02/02/23 09:48	02/02/23 23:49	1
Zinc	**0.0023**	**J**	0.010	0.0015	mg/L		02/02/23 09:48	02/02/23 23:49	1

Client Sample ID: MW1-013123

Date Collected: 01/31/23 16:50
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-5
Matrix: Water

Method: SW846 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	ND		0.20	0.060	mg/L		02/02/23 09:47	02/03/23 22:15	1
Antimony, Dissolved	ND		0.020	0.0068	mg/L		02/02/23 09:47	02/03/23 01:21	1
Arsenic, Dissolved	ND		0.015	0.0056	mg/L		02/02/23 09:47	02/03/23 01:21	1
Barium, Dissolved	**0.15**		0.0020	0.00070	mg/L		02/02/23 09:47	02/03/23 22:15	1
Beryllium, Dissolved	ND		0.0020	0.00030	mg/L		02/02/23 09:47	02/03/23 22:15	1
Cadmium, Dissolved	ND		0.0020	0.00050	mg/L		02/02/23 09:47	02/03/23 01:21	1
Calcium, Dissolved	**61.5**		0.50	0.10	mg/L		02/02/23 09:47	02/03/23 22:15	1
Chromium, Dissolved	ND		0.0040	0.0010	mg/L		02/02/23 09:47	02/03/23 01:21	1
Cobalt, Dissolved	ND		0.0040	0.00063	mg/L		02/02/23 09:47	02/03/23 01:21	1
Copper, Dissolved	ND		0.010	0.0016	mg/L		02/02/23 09:47	02/03/23 01:21	1
Iron, Dissolved	ND		0.050	0.019	mg/L		02/02/23 09:47	02/03/23 22:15	1
Lead, Dissolved	ND		0.010	0.0030	mg/L		02/02/23 09:47	02/03/23 01:21	1
Magnesium, Dissolved	**9.5**		0.20	0.043	mg/L		02/02/23 09:47	02/03/23 01:21	1
Manganese, Dissolved	**0.36**	**B**	0.0030	0.00040	mg/L		02/02/23 09:47	02/03/23 01:21	1
Nickel, Dissolved	ND		0.010	0.0013	mg/L		02/02/23 09:47	02/03/23 01:21	1
Potassium, Dissolved	**4.2**		0.50	0.10	mg/L		02/02/23 09:47	02/03/23 01:21	1
Selenium, Dissolved	ND		0.025	0.0087	mg/L		02/02/23 09:47	02/03/23 01:21	1
Silver, Dissolved	ND		0.0060	0.0017	mg/L		02/02/23 09:47	02/03/23 01:21	1
Sodium, Dissolved	**139**		1.0	0.32	mg/L		02/02/23 09:47	02/03/23 01:21	1
Thallium, Dissolved	ND		0.020	0.010	mg/L		02/02/23 09:47	02/03/23 01:21	1
Vanadium, Dissolved	ND		0.0050	0.0015	mg/L		02/02/23 09:47	02/03/23 01:21	1
Zinc, Dissolved	**0.0025**	**J**	0.010	0.0015	mg/L		02/02/23 09:47	02/03/23 01:21	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		02/02/23 11:30	02/02/23 17:35	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00020	0.000043	mg/L		02/02/23 11:30	02/02/23 17:18	1

Client Sample ID: FB_013123

Date Collected: 01/31/23 17:20
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-6
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			02/02/23 12:54	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/02/23 12:54	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/02/23 12:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			02/02/23 12:54	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/02/23 12:54	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/02/23 12:54	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/02/23 12:54	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/02/23 12:54	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/02/23 12:54	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/02/23 12:54	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/02/23 12:54	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/02/23 12:54	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/02/23 12:54	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-1

Client Sample ID: FB_013123
Date Collected: 01/31/23 17:20
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-6
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/02/23 12:54	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/02/23 12:54	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/02/23 12:54	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/02/23 12:54	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/02/23 12:54	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/02/23 12:54	1
2-Hexanone	ND		5.0	1.2	ug/L			02/02/23 12:54	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/02/23 12:54	1
Acetone	ND		10	3.0	ug/L			02/02/23 12:54	1
Benzene	ND		1.0	0.41	ug/L			02/02/23 12:54	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/02/23 12:54	1
Bromoform	ND		1.0	0.26	ug/L			02/02/23 12:54	1
Bromomethane	ND		1.0	0.69	ug/L			02/02/23 12:54	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/02/23 12:54	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/02/23 12:54	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/02/23 12:54	1
Chloroethane	ND		1.0	0.32	ug/L			02/02/23 12:54	1
Chloroform	ND		1.0	0.34	ug/L			02/02/23 12:54	1
Chloromethane	ND		1.0	0.35	ug/L			02/02/23 12:54	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/02/23 12:54	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/02/23 12:54	1
Cyclohexane	ND		1.0	0.18	ug/L			02/02/23 12:54	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/02/23 12:54	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/02/23 12:54	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/02/23 12:54	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/02/23 12:54	1
m,p-Xylene	ND		2.0	0.66	ug/L			02/02/23 12:54	1
Methyl acetate	ND		2.5	1.3	ug/L			02/02/23 12:54	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/02/23 12:54	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/02/23 12:54	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/02/23 12:54	1
n-Butylbenzene	ND		1.0	0.64	ug/L			02/02/23 12:54	1
N-Propylbenzene	ND		1.0	0.69	ug/L			02/02/23 12:54	1
o-Xylene	ND		1.0	0.76	ug/L			02/02/23 12:54	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			02/02/23 12:54	1
Styrene	ND		1.0	0.73	ug/L			02/02/23 12:54	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			02/02/23 12:54	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/02/23 12:54	1
Toluene	ND		1.0	0.51	ug/L			02/02/23 12:54	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/02/23 12:54	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/02/23 12:54	1
Trichloroethene	ND		1.0	0.46	ug/L			02/02/23 12:54	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/02/23 12:54	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/02/23 12:54	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/02/23 12:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*77 - 120*		*02/02/23 12:54*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*02/02/23 12:54*	*1*
Dibromofluoromethane (Surr)	*112*		*75 - 123*		*02/02/23 12:54*	*1*

Client Sample ID: FB_013123
Date Collected: 01/31/23 17:20
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-6
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*80 - 120*		*02/02/23 12:54*	*1*

Method: SW846 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		02/02/23 08:12	02/03/23 13:31	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*43*		*15 - 110*	*02/02/23 08:12*	*02/03/23 13:31*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.7	0.55	ug/L		02/02/23 08:19	02/03/23 16:43	1
2,4,6-Trichlorophenol	ND		5.7	0.69	ug/L		02/02/23 08:19	02/03/23 16:43	1
2,4-Dichlorophenol	ND		5.7	0.58	ug/L		02/02/23 08:19	02/03/23 16:43	1
2,4-Dimethylphenol	ND		5.7	0.57	ug/L		02/02/23 08:19	02/03/23 16:43	1
2,4-Dinitrophenol	ND		11	2.5	ug/L		02/02/23 08:19	02/03/23 16:43	1
2,4-Dinitrotoluene	ND		5.7	0.51	ug/L		02/02/23 08:19	02/03/23 16:43	1
2,6-Dinitrotoluene	ND		5.7	0.45	ug/L		02/02/23 08:19	02/03/23 16:43	1
2-Chloronaphthalene	ND		5.7	0.52	ug/L		02/02/23 08:19	02/03/23 16:43	1
2-Chlorophenol	ND		5.7	0.60	ug/L		02/02/23 08:19	02/03/23 16:43	1
2-Methylnaphthalene	ND		5.7	0.68	ug/L		02/02/23 08:19	02/03/23 16:43	1
2-Methylphenol	ND		5.7	0.45	ug/L		02/02/23 08:19	02/03/23 16:43	1
2-Nitroaniline	ND		11	0.48	ug/L		02/02/23 08:19	02/03/23 16:43	1
2-Nitrophenol	ND		5.7	0.55	ug/L		02/02/23 08:19	02/03/23 16:43	1
3,3'-Dichlorobenzidine	ND		5.7	0.45	ug/L		02/02/23 08:19	02/03/23 16:43	1
3-Nitroaniline	ND		11	0.55	ug/L		02/02/23 08:19	02/03/23 16:43	1
4,6-Dinitro-2-methylphenol	ND		11	2.5	ug/L		02/02/23 08:19	02/03/23 16:43	1
4-Bromophenyl phenyl ether	ND		5.7	0.51	ug/L		02/02/23 08:19	02/03/23 16:43	1
4-Chloro-3-methylphenol	ND		5.7	0.51	ug/L		02/02/23 08:19	02/03/23 16:43	1
4-Chloroaniline	ND		5.7	0.67	ug/L		02/02/23 08:19	02/03/23 16:43	1
4-Chlorophenyl phenyl ether	ND		5.7	0.40	ug/L		02/02/23 08:19	02/03/23 16:43	1
4-Methylphenol	ND		11	0.41	ug/L		02/02/23 08:19	02/03/23 16:43	1
4-Nitroaniline	ND		11	0.28	ug/L		02/02/23 08:19	02/03/23 16:43	1
4-Nitrophenol	ND		11	1.7	ug/L		02/02/23 08:19	02/03/23 16:43	1
Acenaphthene	ND		5.7	0.47	ug/L		02/02/23 08:19	02/03/23 16:43	1
Acenaphthylene	ND		5.7	0.43	ug/L		02/02/23 08:19	02/03/23 16:43	1
Acetophenone	ND		5.7	0.61	ug/L		02/02/23 08:19	02/03/23 16:43	1
Anthracene	ND		5.7	0.32	ug/L		02/02/23 08:19	02/03/23 16:43	1
Atrazine	ND		5.7	0.52	ug/L		02/02/23 08:19	02/03/23 16:43	1
Benzaldehyde	ND		5.7	0.30	ug/L		02/02/23 08:19	02/03/23 16:43	1
Benzo[a]anthracene	ND		5.7	0.41	ug/L		02/02/23 08:19	02/03/23 16:43	1
Benzo[a]pyrene	ND		5.7	0.53	ug/L		02/02/23 08:19	02/03/23 16:43	1
Benzo[b]fluoranthene	ND		5.7	0.39	ug/L		02/02/23 08:19	02/03/23 16:43	1
Benzo[g,h,i]perylene	ND		5.7	0.40	ug/L		02/02/23 08:19	02/03/23 16:43	1
Benzo[k]fluoranthene	ND		5.7	0.83	ug/L		02/02/23 08:19	02/03/23 16:43	1
Biphenyl	ND		5.7	0.74	ug/L		02/02/23 08:19	02/03/23 16:43	1
bis (2-chloroisopropyl) ether	ND		5.7	0.59	ug/L		02/02/23 08:19	02/03/23 16:43	1
Bis(2-chloroethoxy)methane	ND		5.7	0.40	ug/L		02/02/23 08:19	02/03/23 16:43	1
Bis(2-chloroethyl)ether	ND		5.7	0.45	ug/L		02/02/23 08:19	02/03/23 16:43	1
Bis(2-ethylhexyl) phthalate	ND		5.7	2.5	ug/L		02/02/23 08:19	02/03/23 16:43	1

Client Sample ID: FB_013123
Date Collected: 01/31/23 17:20
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-6
Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Butyl benzyl phthalate	ND		5.7	1.1	ug/L		02/02/23 08:19	02/03/23 16:43	1
Caprolactam	ND		5.7	2.5	ug/L		02/02/23 08:19	02/03/23 16:43	1
Carbazole	ND		5.7	0.34	ug/L		02/02/23 08:19	02/03/23 16:43	1
Chrysene	ND		5.7	0.38	ug/L		02/02/23 08:19	02/03/23 16:43	1
Dibenz(a,h)anthracene	ND		5.7	0.48	ug/L		02/02/23 08:19	02/03/23 16:43	1
Dibenzofuran	ND		11	0.58	ug/L		02/02/23 08:19	02/03/23 16:43	1
Diethyl phthalate	ND		5.7	0.25	ug/L		02/02/23 08:19	02/03/23 16:43	1
Dimethyl phthalate	ND		5.7	0.41	ug/L		02/02/23 08:19	02/03/23 16:43	1
Di-n-butyl phthalate	ND		5.7	0.35	ug/L		02/02/23 08:19	02/03/23 16:43	1
Di-n-octyl phthalate	ND		5.7	0.53	ug/L		02/02/23 08:19	02/03/23 16:43	1
Fluoranthene	ND		5.7	0.45	ug/L		02/02/23 08:19	02/03/23 16:43	1
Fluorene	ND		5.7	0.41	ug/L		02/02/23 08:19	02/03/23 16:43	1
Hexachlorobenzene	ND		5.7	0.58	ug/L		02/02/23 08:19	02/03/23 16:43	1
Hexachlorobutadiene	ND		5.7	0.77	ug/L		02/02/23 08:19	02/03/23 16:43	1
Hexachlorocyclopentadiene	ND		5.7	0.67	ug/L		02/02/23 08:19	02/03/23 16:43	1
Hexachloroethane	ND		5.7	0.67	ug/L		02/02/23 08:19	02/03/23 16:43	1
Indeno[1,2,3-cd]pyrene	ND		5.7	0.53	ug/L		02/02/23 08:19	02/03/23 16:43	1
Isophorone	ND		5.7	0.49	ug/L		02/02/23 08:19	02/03/23 16:43	1
Naphthalene	ND		5.7	0.86	ug/L		02/02/23 08:19	02/03/23 16:43	1
Nitrobenzene	ND		5.7	0.33	ug/L		02/02/23 08:19	02/03/23 16:43	1
N-Nitrosodi-n-propylamine	ND		5.7	0.61	ug/L		02/02/23 08:19	02/03/23 16:43	1
N-Nitrosodiphenylamine	ND		5.7	0.58	ug/L		02/02/23 08:19	02/03/23 16:43	1
Pentachlorophenol	ND		11	2.5	ug/L		02/02/23 08:19	02/03/23 16:43	1
Phenanthrene	ND		5.7	0.50	ug/L		02/02/23 08:19	02/03/23 16:43	1
Phenol	ND		5.7	0.44	ug/L		02/02/23 08:19	02/03/23 16:43	1
Pyrene	ND		5.7	0.39	ug/L		02/02/23 08:19	02/03/23 16:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*90*		*41 - 120*	*02/02/23 08:19*	*02/03/23 16:43*	*1*
2-Fluorobiphenyl (Surr)	*107*		*48 - 120*	*02/02/23 08:19*	*02/03/23 16:43*	*1*
2-Fluorophenol (Surr)	*77*		*35 - 120*	*02/02/23 08:19*	*02/03/23 16:43*	*1*
Nitrobenzene-d5 (Surr)	*99*		*46 - 120*	*02/02/23 08:19*	*02/03/23 16:43*	*1*
Phenol-d5 (Surr)	*56*		*22 - 120*	*02/02/23 08:19*	*02/03/23 16:43*	*1*
p-Terphenyl-d14 (Surr)	*108*		*60 - 148*	*02/02/23 08:19*	*02/03/23 16:43*	*1*

Method: SW846 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		02/02/23 09:48	02/02/23 23:52	1
Antimony	ND		0.020	0.0068	mg/L		02/02/23 09:48	02/02/23 23:52	1
Arsenic	ND		0.015	0.0056	mg/L		02/02/23 09:48	02/02/23 23:52	1
Barium	ND		0.0020	0.00070	mg/L		02/02/23 09:48	02/02/23 23:52	1
Beryllium	ND		0.0020	0.00030	mg/L		02/02/23 09:48	02/02/23 23:52	1
Cadmium	ND		0.0020	0.00050	mg/L		02/02/23 09:48	02/02/23 23:52	1
Calcium	ND		0.50	0.10	mg/L		02/02/23 09:48	02/02/23 23:52	1
Chromium	ND		0.0040	0.0010	mg/L		02/02/23 09:48	02/02/23 23:52	1
Cobalt	ND		0.0040	0.00063	mg/L		02/02/23 09:48	02/02/23 23:52	1
Copper	ND		0.010	0.0016	mg/L		02/02/23 09:48	02/02/23 23:52	1
Iron	ND		0.050	0.019	mg/L		02/02/23 09:48	02/02/23 23:52	1
Lead	ND		0.010	0.0030	mg/L		02/02/23 09:48	02/02/23 23:52	1
Magnesium	ND		0.20	0.043	mg/L		02/02/23 09:48	02/02/23 23:52	1

Client Sample ID: FB_013123

Lab Sample ID: 480-205868-6

Date Collected: 01/31/23 17:20

Matrix: Water

Date Received: 02/01/23 10:30

Method: SW846 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.00089**	**J B**	0.0030	0.00040	mg/L		02/02/23 09:48	02/02/23 23:52	1
Nickel	ND		0.010	0.0013	mg/L		02/02/23 09:48	02/02/23 23:52	1
Potassium	ND		0.50	0.10	mg/L		02/02/23 09:48	02/02/23 23:52	1
Selenium	ND		0.025	0.0087	mg/L		02/02/23 09:48	02/02/23 23:52	1
Silver	ND		0.0060	0.0017	mg/L		02/02/23 09:48	02/02/23 23:52	1
Sodium	ND		1.0	0.32	mg/L		02/02/23 09:48	02/02/23 23:52	1
Thallium	ND		0.020	0.010	mg/L		02/02/23 09:48	02/02/23 23:52	1
Vanadium	ND		0.0050	0.0015	mg/L		02/02/23 09:48	02/02/23 23:52	1
Zinc	ND		0.010	0.0015	mg/L		02/02/23 09:48	02/02/23 23:52	1

Method: SW846 6010C - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	ND		0.20	0.060	mg/L		02/02/23 09:47	02/03/23 22:19	1
Antimony, Dissolved	ND		0.020	0.0068	mg/L		02/02/23 09:47	02/03/23 01:24	1
Arsenic, Dissolved	ND		0.015	0.0056	mg/L		02/02/23 09:47	02/03/23 01:24	1
Barium, Dissolved	ND		0.0020	0.00070	mg/L		02/02/23 09:47	02/03/23 22:19	1
Beryllium, Dissolved	ND		0.0020	0.00030	mg/L		02/02/23 09:47	02/03/23 22:19	1
Cadmium, Dissolved	ND		0.0020	0.00050	mg/L		02/02/23 09:47	02/03/23 01:24	1
Calcium, Dissolved	ND		0.50	0.10	mg/L		02/02/23 09:47	02/03/23 22:19	1
Chromium, Dissolved	ND		0.0040	0.0010	mg/L		02/02/23 09:47	02/03/23 01:24	1
Cobalt, Dissolved	ND		0.0040	0.00063	mg/L		02/02/23 09:47	02/03/23 01:24	1
Copper, Dissolved	ND		0.010	0.0016	mg/L		02/02/23 09:47	02/03/23 01:24	1
Iron, Dissolved	ND		0.050	0.019	mg/L		02/02/23 09:47	02/03/23 22:19	1
Lead, Dissolved	ND		0.010	0.0030	mg/L		02/02/23 09:47	02/03/23 01:24	1
Magnesium, Dissolved	ND		0.20	0.043	mg/L		02/02/23 09:47	02/03/23 01:24	1
Manganese, Dissolved	ND		0.0030	0.00040	mg/L		02/02/23 09:47	02/03/23 01:24	1
Nickel, Dissolved	ND		0.010	0.0013	mg/L		02/02/23 09:47	02/03/23 01:24	1
Potassium, Dissolved	ND		0.50	0.10	mg/L		02/02/23 09:47	02/03/23 01:24	1
Selenium, Dissolved	ND		0.025	0.0087	mg/L		02/02/23 09:47	02/03/23 01:24	1
Silver, Dissolved	ND		0.0060	0.0017	mg/L		02/02/23 09:47	02/03/23 01:24	1
Sodium, Dissolved	ND		1.0	0.32	mg/L		02/02/23 09:47	02/03/23 01:24	1
Thallium, Dissolved	ND		0.020	0.010	mg/L		02/02/23 09:47	02/03/23 01:24	1
Vanadium, Dissolved	ND		0.0050	0.0015	mg/L		02/02/23 09:47	02/03/23 01:24	1
Zinc, Dissolved	ND		0.010	0.0015	mg/L		02/02/23 09:47	02/03/23 01:24	1

Method: SW846 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		02/02/23 11:30	02/02/23 17:36	1

Method: SW846 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00020	0.000043	mg/L		02/02/23 11:30	02/02/23 17:19	1

Client Sample ID: TB_013123

Lab Sample ID: 480-205868-7

Date Collected: 01/31/23 09:00

Matrix: Water

Date Received: 02/01/23 10:30

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			02/02/23 13:19	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/02/23 13:19	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-1

Client Sample ID: TB_013123
Date Collected: 01/31/23 09:00
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-7
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/02/23 13:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			02/02/23 13:19	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/02/23 13:19	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/02/23 13:19	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/02/23 13:19	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/02/23 13:19	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/02/23 13:19	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/02/23 13:19	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/02/23 13:19	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/02/23 13:19	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/02/23 13:19	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/02/23 13:19	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/02/23 13:19	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/02/23 13:19	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/02/23 13:19	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/02/23 13:19	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/02/23 13:19	1
2-Hexanone	ND		5.0	1.2	ug/L			02/02/23 13:19	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/02/23 13:19	1
Acetone	ND		10	3.0	ug/L			02/02/23 13:19	1
Benzene	ND		1.0	0.41	ug/L			02/02/23 13:19	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/02/23 13:19	1
Bromoform	ND		1.0	0.26	ug/L			02/02/23 13:19	1
Bromomethane	ND		1.0	0.69	ug/L			02/02/23 13:19	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/02/23 13:19	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/02/23 13:19	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/02/23 13:19	1
Chloroethane	ND		1.0	0.32	ug/L			02/02/23 13:19	1
Chloroform	ND		1.0	0.34	ug/L			02/02/23 13:19	1
Chloromethane	ND		1.0	0.35	ug/L			02/02/23 13:19	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/02/23 13:19	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/02/23 13:19	1
Cyclohexane	ND		1.0	0.18	ug/L			02/02/23 13:19	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/02/23 13:19	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/02/23 13:19	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/02/23 13:19	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/02/23 13:19	1
m,p-Xylene	ND		2.0	0.66	ug/L			02/02/23 13:19	1
Methyl acetate	ND		2.5	1.3	ug/L			02/02/23 13:19	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/02/23 13:19	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/02/23 13:19	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/02/23 13:19	1
n-Butylbenzene	ND		1.0	0.64	ug/L			02/02/23 13:19	1
N-Propylbenzene	ND		1.0	0.69	ug/L			02/02/23 13:19	1
o-Xylene	ND		1.0	0.76	ug/L			02/02/23 13:19	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			02/02/23 13:19	1
Styrene	ND		1.0	0.73	ug/L			02/02/23 13:19	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			02/02/23 13:19	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/02/23 13:19	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-1

Client Sample ID: TB_013123
Date Collected: 01/31/23 09:00
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-7
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		1.0	0.51	ug/L			02/02/23 13:19	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/02/23 13:19	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/02/23 13:19	1
Trichloroethene	ND		1.0	0.46	ug/L			02/02/23 13:19	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/02/23 13:19	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/02/23 13:19	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/02/23 13:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*02/02/23 13:19*	*1*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*		*02/02/23 13:19*	*1*
Dibromofluoromethane (Surr)	*108*		*75 - 123*		*02/02/23 13:19*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*02/02/23 13:19*	*1*

Surrogate Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-205868-1	MW2-013123	107	99	110	104
480-205868-1 MS	MW2-013123-MS	104	99	112	100
480-205868-1 MSD	MW2-013123-MSD	103	93	114	100
480-205868-2	FDUP-013123	104	96	106	100
480-205868-3	MW3-013123	106	97	109	104
480-205868-4	MW5-013123	105	97	107	101
480-205868-5	MW1-013123	103	90	104	97
480-205868-6	FB_013123	108	98	112	102
480-205868-7	TB_013123	105	93	108	98
LCS 480-657643/5	Lab Control Sample	101	98	113	100
MB 480-657643/7	Method Blank	103	91	107	95

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(41-120)	(48-120)	(35-120)	(46-120)	(22-120)	(60-148)
480-205868-1	MW2-013123	101	111	84	100	64	103
480-205868-1 MS	MW2-013123-MS	109	98	70	92	61	92
480-205868-1 MSD	MW2-013123-MSD	116	105	78	101	66	97
480-205868-2	FDUP-013123	99	107	78	99	58	92
480-205868-3	MW3-013123	93	97	71	89	53	89
480-205868-4	MW5-013123	94	101	69	91	52	82
480-205868-5	MW1-013123	95	105	80	98	60	99
480-205868-6	FB_013123	90	107	77	99	56	108
LCS 480-657657/2-A	Lab Control Sample	113	104	75	100	63	101
MB 480-657657/1-A	Method Blank	82	102	77	95	57	104

Surrogate Legend

TBP = 2,4,6-Tribromophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
2FP = 2-Fluorophenol (Surr)
NBZ = Nitrobenzene-d5 (Surr)
PHL = Phenol-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Isotope Dilution Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-1

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water

Prep Type: Total/NA

		Percent Isotope Dilution Recovery (Acceptance Limits)						
Lab Sample ID	Client Sample ID	DXE (15-110)						
480-205868-1	MW2-013123	47						
480-205868-1 MS	MW2-013123-MS	45						
480-205868-1 MSD	MW2-013123-MSD	47						
480-205868-2	FDUP-013123	47						
480-205868-6	FB_013123	43						
LCS 480-657656/2-A	Lab Control Sample	43						
MB 480-657656/1-A	Method Blank	43						

Surrogate Legend

DXE = 1,4-Dioxane-d8

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-657643/7
Matrix: Water
Analysis Batch: 657643

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.35	ug/L			02/02/23 09:38	1
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/02/23 09:38	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/02/23 09:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			02/02/23 09:38	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/02/23 09:38	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/02/23 09:38	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/02/23 09:38	1
1,2,3-Trimethylbenzene	ND		1.0	0.26	ug/L			02/02/23 09:38	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/02/23 09:38	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/02/23 09:38	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/02/23 09:38	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/02/23 09:38	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/02/23 09:38	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/02/23 09:38	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/02/23 09:38	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/02/23 09:38	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/02/23 09:38	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/02/23 09:38	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/02/23 09:38	1
2-Hexanone	ND		5.0	1.2	ug/L			02/02/23 09:38	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/02/23 09:38	1
Acetone	ND		10	3.0	ug/L			02/02/23 09:38	1
Benzene	ND		1.0	0.41	ug/L			02/02/23 09:38	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/02/23 09:38	1
Bromoform	ND		1.0	0.26	ug/L			02/02/23 09:38	1
Bromomethane	ND		1.0	0.69	ug/L			02/02/23 09:38	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/02/23 09:38	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/02/23 09:38	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/02/23 09:38	1
Chloroethane	ND		1.0	0.32	ug/L			02/02/23 09:38	1
Chloroform	ND		1.0	0.34	ug/L			02/02/23 09:38	1
Chloromethane	ND		1.0	0.35	ug/L			02/02/23 09:38	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/02/23 09:38	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/02/23 09:38	1
Cyclohexane	ND		1.0	0.18	ug/L			02/02/23 09:38	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/02/23 09:38	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/02/23 09:38	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/02/23 09:38	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/02/23 09:38	1
m,p-Xylene	ND		2.0	0.66	ug/L			02/02/23 09:38	1
Methyl acetate	ND		2.5	1.3	ug/L			02/02/23 09:38	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/02/23 09:38	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/02/23 09:38	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/02/23 09:38	1
n-Butylbenzene	ND		1.0	0.64	ug/L			02/02/23 09:38	1
N-Propylbenzene	ND		1.0	0.69	ug/L			02/02/23 09:38	1
o-Xylene	ND		1.0	0.76	ug/L			02/02/23 09:38	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			02/02/23 09:38	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-657643/7
Matrix: Water
Analysis Batch: 657643

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		1.0	0.73	ug/L			02/02/23 09:38	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			02/02/23 09:38	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/02/23 09:38	1
Toluene	ND		1.0	0.51	ug/L			02/02/23 09:38	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/02/23 09:38	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/02/23 09:38	1
Trichloroethene	ND		1.0	0.46	ug/L			02/02/23 09:38	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/02/23 09:38	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/02/23 09:38	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/02/23 09:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*02/02/23 09:38*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*02/02/23 09:38*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*02/02/23 09:38*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*02/02/23 09:38*	*1*

Lab Sample ID: LCS 480-657643/5
Matrix: Water
Analysis Batch: 657643

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	25.0	29.3		ug/L		117	80 - 120
1,1,1-Trichloroethane	25.0	29.7		ug/L		119	73 - 126
1,1,2,2-Tetrachloroethane	25.0	25.7		ug/L		103	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	31.5		ug/L		126	61 - 148
1,1,2-Trichloroethane	25.0	25.4		ug/L		101	76 - 122
1,1-Dichloroethane	25.0	28.6		ug/L		114	77 - 120
1,1-Dichloroethene	25.0	30.7		ug/L		123	66 - 127
1,2,4-Trichlorobenzene	25.0	26.4		ug/L		106	79 - 122
1,2,4-Trimethylbenzene	25.0	27.5		ug/L		110	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	25.9		ug/L		104	56 - 134
1,2-Dibromoethane	25.0	26.6		ug/L		106	77 - 120
1,2-Dichlorobenzene	25.0	26.6		ug/L		106	80 - 124
1,2-Dichloroethane	25.0	26.8		ug/L		107	75 - 120
1,2-Dichloropropane	25.0	28.6		ug/L		115	76 - 120
1,3,5-Trimethylbenzene	25.0	27.4		ug/L		110	77 - 121
1,3-Dichlorobenzene	25.0	26.6		ug/L		107	77 - 120
1,4-Dichlorobenzene	25.0	27.0		ug/L		108	80 - 120
2-Butanone (MEK)	125	141		ug/L		112	57 - 140
2-Hexanone	125	123		ug/L		99	65 - 127
4-Methyl-2-pentanone (MIBK)	125	122		ug/L		98	71 - 125
Acetone	125	134		ug/L		107	56 - 142
Benzene	25.0	29.6		ug/L		118	71 - 124
Bromodichloromethane	25.0	29.2		ug/L		117	80 - 122
Bromoform	25.0	29.3		ug/L		117	61 - 132
Bromomethane	25.0	20.4		ug/L		82	55 - 144
Carbon disulfide	25.0	30.4		ug/L		122	59 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-657643/5
Matrix: Water
Analysis Batch: 657643

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon tetrachloride	25.0	31.3		ug/L		125	72 - 134
Chlorobenzene	25.0	26.7		ug/L		107	80 - 120
Chloroethane	25.0	20.1		ug/L		80	69 - 136
Chloroform	25.0	28.0		ug/L		112	73 - 127
Chloromethane	25.0	26.4		ug/L		105	68 - 124
cis-1,2-Dichloroethene	25.0	29.7		ug/L		119	74 - 124
cis-1,3-Dichloropropene	25.0	29.5		ug/L		118	74 - 124
Cyclohexane	25.0	30.0		ug/L		120	59 - 135
Dibromochloromethane	25.0	28.9		ug/L		116	75 - 125
Dichlorodifluoromethane	25.0	28.3		ug/L		113	59 - 135
Ethylbenzene	25.0	26.6		ug/L		106	77 - 123
Isopropylbenzene	25.0	27.4		ug/L		109	77 - 122
m,p-Xylene	25.0	27.7		ug/L		111	76 - 122
Methyl acetate	50.0	59.0		ug/L		118	74 - 133
Methyl tert-butyl ether	25.0	27.4		ug/L		110	77 - 120
Methylcyclohexane	25.0	30.7		ug/L		123	68 - 134
Methylene Chloride	25.0	28.4		ug/L		114	75 - 124
n-Butylbenzene	25.0	27.1		ug/L		108	71 - 128
N-Propylbenzene	25.0	26.9		ug/L		108	75 - 127
o-Xylene	25.0	27.8		ug/L		111	76 - 122
sec-Butylbenzene	25.0	28.1		ug/L		112	74 - 127
Styrene	25.0	27.5		ug/L		110	80 - 120
tert-Butylbenzene	25.0	28.3		ug/L		113	75 - 123
Tetrachloroethene	25.0	28.2		ug/L		113	74 - 122
Toluene	25.0	26.7		ug/L		107	80 - 122
trans-1,2-Dichloroethene	25.0	30.2		ug/L		121	73 - 127
Trichloroethene	25.0	29.1		ug/L		117	74 - 123
Trichlorofluoromethane	25.0	18.6		ug/L		75	62 - 150
Vinyl chloride	25.0	26.9		ug/L		108	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*
Dibromofluoromethane (Surr)	*113*		*75 - 123*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: 480-205868-1 MS
Matrix: Water
Analysis Batch: 657643

Client Sample ID: MW2-013123-MS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	ND		25.0	27.5		ug/L		110	80 - 120
1,1,1-Trichloroethane	ND		25.0	28.8		ug/L		115	73 - 126
1,1,2,2-Tetrachloroethane	ND		25.0	24.9		ug/L		100	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	31.2		ug/L		125	61 - 148
1,1,2-Trichloroethane	ND		25.0	25.1		ug/L		101	76 - 122
1,1-Dichloroethane	ND		25.0	27.6		ug/L		110	77 - 120
1,1-Dichloroethene	ND		25.0	30.3		ug/L		121	66 - 127

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-205868-1 MS
Matrix: Water
Analysis Batch: 657643

Client Sample ID: MW2-013123-MS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,2,4-Trichlorobenzene	ND		25.0	24.7		ug/L		99	79 - 122
1,2,4-Trimethylbenzene	ND		25.0	25.5		ug/L		102	76 - 121
1,2-Dibromo-3-Chloropropane	ND		25.0	24.4		ug/L		97	56 - 134
1,2-Dibromoethane	ND		25.0	26.0		ug/L		104	77 - 120
1,2-Dichlorobenzene	ND		25.0	25.0		ug/L		100	80 - 124
1,2-Dichloroethane	ND		25.0	25.9		ug/L		104	75 - 120
1,2-Dichloropropane	ND		25.0	28.3		ug/L		113	76 - 120
1,3,5-Trimethylbenzene	ND		25.0	25.7		ug/L		103	77 - 121
1,3-Dichlorobenzene	ND		25.0	25.4		ug/L		101	77 - 120
1,4-Dichlorobenzene	ND		25.0	25.9		ug/L		103	78 - 124
2-Butanone (MEK)	ND		125	153		ug/L		122	57 - 140
2-Hexanone	ND		125	130		ug/L		104	65 - 127
4-Methyl-2-pentanone (MIBK)	ND		125	124		ug/L		99	71 - 125
Acetone	ND		125	151		ug/L		121	56 - 142
Benzene	ND		25.0	28.9		ug/L		116	71 - 124
Bromodichloromethane	ND		25.0	28.0		ug/L		112	80 - 122
Bromoform	ND		25.0	27.5		ug/L		110	61 - 132
Bromomethane	ND		25.0	24.0		ug/L		96	55 - 144
Carbon disulfide	ND		25.0	27.9		ug/L		112	59 - 134
Carbon tetrachloride	ND		25.0	31.1		ug/L		124	72 - 134
Chlorobenzene	ND		25.0	25.7		ug/L		103	80 - 120
Chloroethane	ND		25.0	23.9		ug/L		96	69 - 136
Chloroform	ND		25.0	26.6		ug/L		106	73 - 127
Chloromethane	ND		25.0	28.8		ug/L		115	68 - 124
cis-1,2-Dichloroethene	ND		25.0	28.1		ug/L		112	74 - 124
cis-1,3-Dichloropropene	ND		25.0	28.5		ug/L		114	74 - 124
Cyclohexane	ND		25.0	30.3		ug/L		121	59 - 135
Dibromochloromethane	ND		25.0	26.9		ug/L		107	75 - 125
Dichlorodifluoromethane	ND		25.0	30.7		ug/L		123	59 - 135
Ethylbenzene	ND		25.0	25.8		ug/L		103	77 - 123
Isopropylbenzene	ND		25.0	25.7		ug/L		103	77 - 122
m,p-Xylene	ND		25.0	26.8		ug/L		107	76 - 122
Methyl acetate	ND		50.0	60.4		ug/L		121	74 - 133
Methyl tert-butyl ether	ND		25.0	26.3		ug/L		105	77 - 120
Methylcyclohexane	ND		25.0	30.3		ug/L		121	68 - 134
Methylene Chloride	ND		25.0	26.9		ug/L		108	75 - 124
n-Butylbenzene	ND		25.0	26.0		ug/L		104	71 - 128
N-Propylbenzene	ND		25.0	25.7		ug/L		103	75 - 127
o-Xylene	ND		25.0	26.4		ug/L		105	76 - 122
sec-Butylbenzene	ND		25.0	26.7		ug/L		107	74 - 127
Styrene	ND		25.0	26.9		ug/L		108	80 - 120
tert-Butylbenzene	ND		25.0	26.7		ug/L		107	75 - 123
Tetrachloroethene	ND		25.0	27.3		ug/L		109	74 - 122
Toluene	ND		25.0	25.9		ug/L		104	80 - 122
trans-1,2-Dichloroethene	ND		25.0	28.8		ug/L		115	73 - 127
Trichloroethene	ND		25.0	27.9		ug/L		112	74 - 123
Trichlorofluoromethane	ND		25.0	29.0		ug/L		116	62 - 150
Vinyl chloride	ND		25.0	30.4		ug/L		122	65 - 133

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-205868-1 MS
Matrix: Water
Analysis Batch: 657643

Client Sample ID: MW2-013123-MS
Prep Type: Total/NA

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*
Dibromofluoromethane (Surr)	*112*		*75 - 123*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: 480-205868-1 MSD
Matrix: Water
Analysis Batch: 657643

Client Sample ID: MW2-013123-MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		25.0	29.1		ug/L		117	80 - 120	6	20
1,1,1-Trichloroethane	ND		25.0	29.2		ug/L		117	73 - 126	1	15
1,1,2,2-Tetrachloroethane	ND		25.0	25.9		ug/L		104	76 - 120	4	15
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		25.0	31.4		ug/L		126	61 - 148	1	20
1,1,2-Trichloroethane	ND		25.0	25.1		ug/L		100	76 - 122	0	15
1,1-Dichloroethane	ND		25.0	28.3		ug/L		113	77 - 120	3	20
1,1-Dichloroethene	ND		25.0	31.0		ug/L		124	66 - 127	2	16
1,2,4-Trichlorobenzene	ND		25.0	25.4		ug/L		101	79 - 122	3	20
1,2,4-Trimethylbenzene	ND		25.0	26.9		ug/L		108	76 - 121	5	20
1,2-Dibromo-3-Chloropropane	ND		25.0	25.9		ug/L		103	56 - 134	6	15
1,2-Dibromoethane	ND		25.0	25.8		ug/L		103	77 - 120	1	15
1,2-Dichlorobenzene	ND		25.0	26.2		ug/L		105	80 - 124	5	20
1,2-Dichloroethane	ND		25.0	26.0		ug/L		104	75 - 120	0	20
1,2-Dichloropropane	ND		25.0	27.6		ug/L		110	76 - 120	2	20
1,3,5-Trimethylbenzene	ND		25.0	27.2		ug/L		109	77 - 121	5	20
1,3-Dichlorobenzene	ND		25.0	26.1		ug/L		104	77 - 120	3	20
1,4-Dichlorobenzene	ND		25.0	26.6		ug/L		107	78 - 124	3	20
2-Butanone (MEK)	ND		125	145		ug/L		116	57 - 140	5	20
2-Hexanone	ND		125	122		ug/L		97	65 - 127	7	15
4-Methyl-2-pentanone (MIBK)	ND		125	124		ug/L		99	71 - 125	0	35
Acetone	ND		125	147		ug/L		118	56 - 142	2	15
Benzene	ND		25.0	28.8		ug/L		115	71 - 124	1	13
Bromodichloromethane	ND		25.0	28.1		ug/L		112	80 - 122	0	15
Bromoform	ND		25.0	27.8		ug/L		111	61 - 132	1	15
Bromomethane	ND		25.0	22.5		ug/L		90	55 - 144	6	15
Carbon disulfide	ND		25.0	28.9		ug/L		116	59 - 134	4	15
Carbon tetrachloride	ND		25.0	31.2		ug/L		125	72 - 134	1	15
Chlorobenzene	ND		25.0	25.9		ug/L		104	80 - 120	1	25
Chloroethane	ND		25.0	22.6		ug/L		90	69 - 136	6	15
Chloroform	ND		25.0	27.1		ug/L		108	73 - 127	2	20
Chloromethane	ND		25.0	27.7		ug/L		111	68 - 124	4	15
cis-1,2-Dichloroethene	ND		25.0	28.9		ug/L		115	74 - 124	3	15
cis-1,3-Dichloropropene	ND		25.0	27.4		ug/L		109	74 - 124	4	15
Cyclohexane	ND		25.0	29.9		ug/L		119	59 - 135	1	20
Dibromochloromethane	ND		25.0	27.5		ug/L		110	75 - 125	2	15
Dichlorodifluoromethane	ND		25.0	29.4		ug/L		118	59 - 135	4	20
Ethylbenzene	ND		25.0	26.0		ug/L		104	77 - 123	0	15
Isopropylbenzene	ND		25.0	27.2		ug/L		109	77 - 122	6	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-205868-1 MSD
Matrix: Water
Analysis Batch: 657643

Client Sample ID: MW2-013123-MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
m,p-Xylene	ND		25.0	27.0		ug/L		108	76 - 122	1	16
Methyl acetate	ND		50.0	60.7		ug/L		121	74 - 133	1	20
Methyl tert-butyl ether	ND		25.0	26.5		ug/L		106	77 - 120	1	37
Methylcyclohexane	ND		25.0	30.0		ug/L		120	68 - 134	1	20
Methylene Chloride	ND		25.0	27.7		ug/L		111	75 - 124	3	15
n-Butylbenzene	ND		25.0	27.1		ug/L		108	71 - 128	4	15
N-Propylbenzene	ND		25.0	26.7		ug/L		107	75 - 127	4	15
o-Xylene	ND		25.0	27.4		ug/L		110	76 - 122	4	16
sec-Butylbenzene	ND		25.0	28.1		ug/L		112	74 - 127	5	15
Styrene	ND		25.0	26.4		ug/L		106	80 - 120	2	20
tert-Butylbenzene	ND		25.0	27.9		ug/L		111	75 - 123	4	15
Tetrachloroethene	ND		25.0	27.8		ug/L		111	74 - 122	2	20
Toluene	ND		25.0	26.1		ug/L		104	80 - 122	1	15
trans-1,2-Dichloroethene	ND		25.0	29.7		ug/L		119	73 - 127	3	20
Trichloroethene	ND		25.0	28.2		ug/L		113	74 - 123	1	16
Trichlorofluoromethane	ND		25.0	28.8		ug/L		115	62 - 150	1	20
Vinyl chloride	ND		25.0	29.4		ug/L		118	65 - 133	3	15

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*
4-Bromofluorobenzene (Surr)	*93*		*73 - 120*
Dibromofluoromethane (Surr)	*114*		*75 - 123*
Toluene-d8 (Surr)	*100*		*80 - 120*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-657657/1-A
Matrix: Water
Analysis Batch: 657806

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657657

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2,4,5-Trichlorophenol	ND		5.0	0.48	ug/L		02/02/23 08:19	02/03/23 12:10	1
2,4,6-Trichlorophenol	ND		5.0	0.61	ug/L		02/02/23 08:19	02/03/23 12:10	1
2,4-Dichlorophenol	ND		5.0	0.51	ug/L		02/02/23 08:19	02/03/23 12:10	1
2,4-Dimethylphenol	ND		5.0	0.50	ug/L		02/02/23 08:19	02/03/23 12:10	1
2,4-Dinitrophenol	ND		10	2.2	ug/L		02/02/23 08:19	02/03/23 12:10	1
2,4-Dinitrotoluene	ND		5.0	0.45	ug/L		02/02/23 08:19	02/03/23 12:10	1
2,6-Dinitrotoluene	ND		5.0	0.40	ug/L		02/02/23 08:19	02/03/23 12:10	1
2-Chloronaphthalene	ND		5.0	0.46	ug/L		02/02/23 08:19	02/03/23 12:10	1
2-Chlorophenol	ND		5.0	0.53	ug/L		02/02/23 08:19	02/03/23 12:10	1
2-Methylnaphthalene	ND		5.0	0.60	ug/L		02/02/23 08:19	02/03/23 12:10	1
2-Methylphenol	ND		5.0	0.40	ug/L		02/02/23 08:19	02/03/23 12:10	1
2-Nitroaniline	ND		10	0.42	ug/L		02/02/23 08:19	02/03/23 12:10	1
2-Nitrophenol	ND		5.0	0.48	ug/L		02/02/23 08:19	02/03/23 12:10	1
3,3'-Dichlorobenzidine	ND		5.0	0.40	ug/L		02/02/23 08:19	02/03/23 12:10	1
3-Nitroaniline	ND		10	0.48	ug/L		02/02/23 08:19	02/03/23 12:10	1
4,6-Dinitro-2-methylphenol	ND		10	2.2	ug/L		02/02/23 08:19	02/03/23 12:10	1
4-Bromophenyl phenyl ether	ND		5.0	0.45	ug/L		02/02/23 08:19	02/03/23 12:10	1
4-Chloro-3-methylphenol	ND		5.0	0.45	ug/L		02/02/23 08:19	02/03/23 12:10	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-657657/1-A
Matrix: Water
Analysis Batch: 657806

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657657

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Chloroaniline	ND		5.0	0.59	ug/L		02/02/23 08:19	02/03/23 12:10	1
4-Chlorophenyl phenyl ether	ND		5.0	0.35	ug/L		02/02/23 08:19	02/03/23 12:10	1
4-Methylphenol	ND		10	0.36	ug/L		02/02/23 08:19	02/03/23 12:10	1
4-Nitroaniline	ND		10	0.25	ug/L		02/02/23 08:19	02/03/23 12:10	1
4-Nitrophenol	ND		10	1.5	ug/L		02/02/23 08:19	02/03/23 12:10	1
Acenaphthene	ND		5.0	0.41	ug/L		02/02/23 08:19	02/03/23 12:10	1
Acenaphthylene	ND		5.0	0.38	ug/L		02/02/23 08:19	02/03/23 12:10	1
Acetophenone	ND		5.0	0.54	ug/L		02/02/23 08:19	02/03/23 12:10	1
Anthracene	ND		5.0	0.28	ug/L		02/02/23 08:19	02/03/23 12:10	1
Atrazine	ND		5.0	0.46	ug/L		02/02/23 08:19	02/03/23 12:10	1
Benzaldehyde	ND		5.0	0.27	ug/L		02/02/23 08:19	02/03/23 12:10	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		02/02/23 08:19	02/03/23 12:10	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		02/02/23 08:19	02/03/23 12:10	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		02/02/23 08:19	02/03/23 12:10	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		02/02/23 08:19	02/03/23 12:10	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		02/02/23 08:19	02/03/23 12:10	1
Biphenyl	ND		5.0	0.65	ug/L		02/02/23 08:19	02/03/23 12:10	1
bis (2-chloroisopropyl) ether	ND		5.0	0.52	ug/L		02/02/23 08:19	02/03/23 12:10	1
Bis(2-chloroethoxy)methane	ND		5.0	0.35	ug/L		02/02/23 08:19	02/03/23 12:10	1
Bis(2-chloroethyl)ether	ND		5.0	0.40	ug/L		02/02/23 08:19	02/03/23 12:10	1
Bis(2-ethylhexyl) phthalate	ND		5.0	2.2	ug/L		02/02/23 08:19	02/03/23 12:10	1
Butyl benzyl phthalate	ND		5.0	1.0	ug/L		02/02/23 08:19	02/03/23 12:10	1
Caprolactam	ND		5.0	2.2	ug/L		02/02/23 08:19	02/03/23 12:10	1
Carbazole	ND		5.0	0.30	ug/L		02/02/23 08:19	02/03/23 12:10	1
Chrysene	ND		5.0	0.33	ug/L		02/02/23 08:19	02/03/23 12:10	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		02/02/23 08:19	02/03/23 12:10	1
Dibenzofuran	ND		10	0.51	ug/L		02/02/23 08:19	02/03/23 12:10	1
Diethyl phthalate	ND		5.0	0.22	ug/L		02/02/23 08:19	02/03/23 12:10	1
Dimethyl phthalate	ND		5.0	0.36	ug/L		02/02/23 08:19	02/03/23 12:10	1
Di-n-butyl phthalate	ND		5.0	0.31	ug/L		02/02/23 08:19	02/03/23 12:10	1
Di-n-octyl phthalate	ND		5.0	0.47	ug/L		02/02/23 08:19	02/03/23 12:10	1
Fluoranthene	ND		5.0	0.40	ug/L		02/02/23 08:19	02/03/23 12:10	1
Fluorene	ND		5.0	0.36	ug/L		02/02/23 08:19	02/03/23 12:10	1
Hexachlorobenzene	ND		5.0	0.51	ug/L		02/02/23 08:19	02/03/23 12:10	1
Hexachlorobutadiene	ND		5.0	0.68	ug/L		02/02/23 08:19	02/03/23 12:10	1
Hexachlorocyclopentadiene	ND		5.0	0.59	ug/L		02/02/23 08:19	02/03/23 12:10	1
Hexachloroethane	ND		5.0	0.59	ug/L		02/02/23 08:19	02/03/23 12:10	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		02/02/23 08:19	02/03/23 12:10	1
Isophorone	ND		5.0	0.43	ug/L		02/02/23 08:19	02/03/23 12:10	1
Naphthalene	ND		5.0	0.76	ug/L		02/02/23 08:19	02/03/23 12:10	1
Nitrobenzene	ND		5.0	0.29	ug/L		02/02/23 08:19	02/03/23 12:10	1
N-Nitrosodi-n-propylamine	ND		5.0	0.54	ug/L		02/02/23 08:19	02/03/23 12:10	1
N-Nitrosodiphenylamine	ND		5.0	0.51	ug/L		02/02/23 08:19	02/03/23 12:10	1
Pentachlorophenol	ND		10	2.2	ug/L		02/02/23 08:19	02/03/23 12:10	1
Phenanthrene	ND		5.0	0.44	ug/L		02/02/23 08:19	02/03/23 12:10	1
Phenol	ND		5.0	0.39	ug/L		02/02/23 08:19	02/03/23 12:10	1
Pyrene	ND		5.0	0.34	ug/L		02/02/23 08:19	02/03/23 12:10	1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 480-657657/1-A
Matrix: Water
Analysis Batch: 657806

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657657

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	82		41 - 120	02/02/23 08:19	02/03/23 12:10	1
2-Fluorobiphenyl (Surr)	102		48 - 120	02/02/23 08:19	02/03/23 12:10	1
2-Fluorophenol (Surr)	77		35 - 120	02/02/23 08:19	02/03/23 12:10	1
Nitrobenzene-d5 (Surr)	95		46 - 120	02/02/23 08:19	02/03/23 12:10	1
Phenol-d5 (Surr)	57		22 - 120	02/02/23 08:19	02/03/23 12:10	1
p-Terphenyl-d14 (Surr)	104		60 - 148	02/02/23 08:19	02/03/23 12:10	1

Lab Sample ID: LCS 480-657657/2-A
Matrix: Water
Analysis Batch: 657806

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657657

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	32.0	36.6		ug/L		114	65 - 126
2,4,6-Trichlorophenol	32.0	31.5		ug/L		98	64 - 120
2,4-Dichlorophenol	32.0	29.8		ug/L		93	63 - 120
2,4-Dimethylphenol	32.0	30.6		ug/L		96	47 - 120
2,4-Dinitrophenol	64.0	76.3		ug/L		119	31 - 137
2,4-Dinitrotoluene	32.0	34.3		ug/L		107	69 - 120
2,6-Dinitrotoluene	32.0	34.2		ug/L		107	68 - 120
2-Chloronaphthalene	32.0	29.4		ug/L		92	58 - 120
2-Chlorophenol	32.0	28.4		ug/L		89	48 - 120
2-Methylnaphthalene	32.0	26.5		ug/L		83	59 - 120
2-Methylphenol	32.0	30.4		ug/L		95	39 - 120
2-Nitroaniline	32.0	36.0		ug/L		113	54 - 127
2-Nitrophenol	32.0	32.5		ug/L		102	52 - 125
3,3'-Dichlorobenzidine	64.0	59.8		ug/L		93	49 - 135
3-Nitroaniline	32.0	26.6		ug/L		83	51 - 120
4,6-Dinitro-2-methylphenol	64.0	86.2		ug/L		135	46 - 136
4-Bromophenyl phenyl ether	32.0	31.9		ug/L		100	65 - 120
4-Chloro-3-methylphenol	32.0	31.5		ug/L		98	61 - 123
4-Chloroaniline	32.0	23.0		ug/L		72	30 - 120
4-Chlorophenyl phenyl ether	32.0	30.8		ug/L		96	62 - 120
4-Methylphenol	32.0	30.3		ug/L		95	29 - 131
4-Nitroaniline	32.0	30.1		ug/L		94	65 - 120
4-Nitrophenol	64.0	59.5		ug/L		93	45 - 120
Acenaphthene	32.0	31.1		ug/L		97	60 - 120
Acenaphthylene	32.0	31.3		ug/L		98	63 - 120
Acetophenone	32.0	35.3		ug/L		110	45 - 120
Anthracene	32.0	32.4		ug/L		101	67 - 120
Atrazine	64.0	76.2		ug/L		119	71 - 130
Benzaldehyde	64.0	59.8		ug/L		93	10 - 140
Benzo[a]anthracene	32.0	31.5		ug/L		99	70 - 121
Benzo[a]pyrene	32.0	33.3		ug/L		104	60 - 123
Benzo[b]fluoranthene	32.0	32.8		ug/L		102	66 - 126
Benzo[g,h,i]perylene	32.0	31.8		ug/L		99	66 - 150
Benzo[k]fluoranthene	32.0	33.2		ug/L		104	65 - 124
Biphenyl	32.0	30.6		ug/L		96	59 - 120
bis (2-chloroisopropyl) ether	32.0	32.9		ug/L		103	21 - 136

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-657657/2-A
Matrix: Water
Analysis Batch: 657806

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657657

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bis(2-chloroethoxy)methane	32.0	32.1		ug/L		100	50 - 128
Bis(2-chloroethyl)ether	32.0	37.1		ug/L		116	44 - 120
Bis(2-ethylhexyl) phthalate	32.0	32.7		ug/L		102	63 - 139
Butyl benzyl phthalate	32.0	31.5		ug/L		98	70 - 129
Caprolactam	64.0	23.7		ug/L		37	22 - 120
Carbazole	32.0	37.1		ug/L		116	66 - 123
Chrysene	32.0	31.4		ug/L		98	69 - 120
Dibenz(a,h)anthracene	32.0	33.4		ug/L		105	65 - 135
Dibenzofuran	32.0	30.8		ug/L		96	66 - 120
Diethyl phthalate	32.0	34.5		ug/L		108	59 - 127
Dimethyl phthalate	32.0	32.5		ug/L		102	68 - 120
Di-n-butyl phthalate	32.0	33.9		ug/L		106	69 - 131
Di-n-octyl phthalate	32.0	32.5		ug/L		101	63 - 140
Fluoranthene	32.0	31.9		ug/L		100	69 - 126
Fluorene	32.0	30.7		ug/L		96	66 - 120
Hexachlorobenzene	32.0	32.4		ug/L		101	61 - 120
Hexachlorobutadiene	32.0	20.3		ug/L		63	35 - 120
Hexachlorocyclopentadiene	32.0	22.1		ug/L		69	31 - 120
Hexachloroethane	32.0	23.8		ug/L		74	43 - 120
Indeno[1,2,3-cd]pyrene	32.0	34.6		ug/L		108	69 - 146
Isophorone	32.0	31.7		ug/L		99	55 - 120
Naphthalene	32.0	26.4		ug/L		83	57 - 120
Nitrobenzene	32.0	30.8		ug/L		96	53 - 123
N-Nitrosodi-n-propylamine	32.0	35.7		ug/L		112	32 - 140
Pentachlorophenol	64.0	80.8		ug/L		126	29 - 136
Phenanthrene	32.0	31.7		ug/L		99	68 - 120
Phenol	32.0	21.5		ug/L		67	17 - 120
Pyrene	32.0	32.4		ug/L		101	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*113*		*41 - 120*
2-Fluorobiphenyl (Surr)	*104*		*48 - 120*
2-Fluorophenol (Surr)	*75*		*35 - 120*
Nitrobenzene-d5 (Surr)	*100*		*46 - 120*
Phenol-d5 (Surr)	*63*		*22 - 120*
p-Terphenyl-d14 (Surr)	*101*		*60 - 148*

Lab Sample ID: 480-205868-1 MS
Matrix: Water
Analysis Batch: 657806

Client Sample ID: MW2-013123-MS
Prep Type: Total/NA
Prep Batch: 657657

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,4,5-Trichlorophenol	ND		32.0	34.6		ug/L		108	65 - 126
2,4,6-Trichlorophenol	ND		32.0	29.8		ug/L		93	64 - 120
2,4-Dichlorophenol	ND		32.0	28.4		ug/L		89	48 - 132
2,4-Dimethylphenol	ND		32.0	29.2		ug/L		91	39 - 130
2,4-Dinitrophenol	ND		64.0	78.1		ug/L		122	21 - 150
2,4-Dinitrotoluene	ND		32.0	33.8		ug/L		106	54 - 138

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-205868-1 MS
Matrix: Water
Analysis Batch: 657806

Client Sample ID: MW2-013123-MS
Prep Type: Total/NA
Prep Batch: 657657

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
2,6-Dinitrotoluene	ND		32.0	34.5		ug/L		108	17 - 150
2-Chloronaphthalene	ND		32.0	28.0		ug/L		87	52 - 124
2-Chlorophenol	ND		32.0	26.7		ug/L		83	48 - 120
2-Methylnaphthalene	ND		32.0	25.5		ug/L		80	34 - 140
2-Methylphenol	ND		32.0	29.0		ug/L		91	46 - 120
2-Nitroaniline	ND		32.0	34.4		ug/L		108	44 - 136
2-Nitrophenol	ND		32.0	31.2		ug/L		98	38 - 141
3,3'-Dichlorobenzidine	ND		64.0	56.7		ug/L		89	10 - 150
3-Nitroaniline	ND		32.0	25.7		ug/L		80	32 - 150
4,6-Dinitro-2-methylphenol	ND		64.0	84.4		ug/L		132	38 - 150
4-Bromophenyl phenyl ether	ND		32.0	30.7		ug/L		96	63 - 126
4-Chloro-3-methylphenol	ND		32.0	30.2		ug/L		94	64 - 127
4-Chloroaniline	ND		32.0	20.9		ug/L		65	16 - 124
4-Chlorophenyl phenyl ether	ND		32.0	29.4		ug/L		92	61 - 120
4-Methylphenol	ND		32.0	29.0		ug/L		90	36 - 120
4-Nitroaniline	ND		32.0	31.1		ug/L		97	32 - 150
4-Nitrophenol	ND		64.0	57.1		ug/L		89	23 - 132
Acenaphthene	ND		32.0	29.5		ug/L		92	48 - 120
Acenaphthylene	ND		32.0	30.2		ug/L		94	63 - 120
Acetophenone	ND		32.0	33.5		ug/L		105	53 - 120
Anthracene	ND		32.0	31.0		ug/L		97	65 - 122
Atrazine	ND		64.0	75.5		ug/L		118	50 - 150
Benzaldehyde	ND		64.0	57.0		ug/L		89	10 - 150
Benzo[a]anthracene	ND		32.0	30.9		ug/L		97	43 - 124
Benzo[a]pyrene	ND		32.0	31.3		ug/L		98	23 - 125
Benzo[b]fluoranthene	ND		32.0	30.9		ug/L		96	27 - 127
Benzo[g,h,i]perylene	ND		32.0	30.3		ug/L		95	16 - 147
Benzo[k]fluoranthene	ND		32.0	30.5		ug/L		95	20 - 124
Biphenyl	ND		32.0	29.5		ug/L		92	57 - 120
bis (2-chloroisopropyl) ether	ND		32.0	31.5		ug/L		98	28 - 121
Bis(2-chloroethoxy)methane	ND		32.0	30.3		ug/L		95	44 - 128
Bis(2-chloroethyl)ether	ND	F1	32.0	36.2		ug/L		113	45 - 120
Bis(2-ethylhexyl) phthalate	ND		32.0	31.6		ug/L		99	16 - 150
Butyl benzyl phthalate	ND		32.0	31.3		ug/L		98	51 - 140
Caprolactam	ND		64.0	23.6		ug/L		37	10 - 120
Carbazole	ND		32.0	36.0		ug/L		113	16 - 148
Chrysene	ND		32.0	30.8		ug/L		96	44 - 122
Dibenz(a,h)anthracene	ND		32.0	32.1		ug/L		100	16 - 139
Dibenzofuran	ND		32.0	29.9		ug/L		93	60 - 120
Diethyl phthalate	ND		32.0	34.1		ug/L		106	53 - 133
Dimethyl phthalate	ND		32.0	31.9		ug/L		100	59 - 123
Di-n-butyl phthalate	ND		32.0	32.5		ug/L		102	65 - 129
Di-n-octyl phthalate	ND		32.0	31.5		ug/L		98	16 - 150
Fluoranthene	ND		32.0	31.1		ug/L		97	63 - 129
Fluorene	ND		32.0	29.8		ug/L		93	62 - 120
Hexachlorobenzene	ND		32.0	31.2		ug/L		98	57 - 121
Hexachlorobutadiene	ND		32.0	19.1		ug/L		60	37 - 120
Hexachlorocyclopentadiene	ND		32.0	21.4		ug/L		67	21 - 120
Hexachloroethane	ND		32.0	21.7		ug/L		68	16 - 130

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-205868-1 MS
Matrix: Water
Analysis Batch: 657806

Client Sample ID: MW2-013123-MS
Prep Type: Total/NA
Prep Batch: 657657

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Indeno[1,2,3-cd]pyrene	ND		32.0	32.6		ug/L		102	16 - 140
Isophorone	ND		32.0	30.4		ug/L		95	48 - 133
Naphthalene	ND		32.0	25.5		ug/L		80	45 - 120
Nitrobenzene	ND		32.0	29.0		ug/L		91	45 - 123
N-Nitrosodi-n-propylamine	ND		32.0	34.8		ug/L		109	49 - 120
Pentachlorophenol	ND		64.0	78.0		ug/L		122	23 - 149
Phenanthrene	ND		32.0	30.6		ug/L		96	65 - 122
Phenol	ND		32.0	20.8		ug/L		65	16 - 120
Pyrene	ND		32.0	31.2		ug/L		98	58 - 128

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*109*		*41 - 120*
2-Fluorobiphenyl (Surr)	*98*		*48 - 120*
2-Fluorophenol (Surr)	*70*		*35 - 120*
Nitrobenzene-d5 (Surr)	*92*		*46 - 120*
Phenol-d5 (Surr)	*61*		*22 - 120*
p-Terphenyl-d14 (Surr)	*92*		*60 - 148*

Lab Sample ID: 480-205868-1 MSD
Matrix: Water
Analysis Batch: 657806

Client Sample ID: MW2-013123-MSD
Prep Type: Total/NA
Prep Batch: 657657

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2,4,5-Trichlorophenol	ND		33.3	37.1		ug/L		111	65 - 126	7	18
2,4,6-Trichlorophenol	ND		33.3	32.6		ug/L		98	64 - 120	9	19
2,4-Dichlorophenol	ND		33.3	31.2		ug/L		94	48 - 132	9	19
2,4-Dimethylphenol	ND		33.3	32.3		ug/L		97	39 - 130	10	42
2,4-Dinitrophenol	ND		66.7	83.1		ug/L		125	21 - 150	6	22
2,4-Dinitrotoluene	ND		33.3	36.8		ug/L		110	54 - 138	9	20
2,6-Dinitrotoluene	ND		33.3	36.1		ug/L		108	17 - 150	5	15
2-Chloronaphthalene	ND		33.3	31.2		ug/L		94	52 - 124	11	21
2-Chlorophenol	ND		33.3	30.0		ug/L		90	48 - 120	12	25
2-Methylnaphthalene	ND		33.3	28.6		ug/L		86	34 - 140	11	21
2-Methylphenol	ND		33.3	32.7		ug/L		98	46 - 120	12	27
2-Nitroaniline	ND		33.3	37.6		ug/L		113	44 - 136	9	15
2-Nitrophenol	ND		33.3	34.9		ug/L		105	38 - 141	11	18
3,3'-Dichlorobenzidine	ND		66.7	62.9		ug/L		94	10 - 150	10	25
3-Nitroaniline	ND		33.3	26.1		ug/L		78	32 - 150	2	19
4,6-Dinitro-2-methylphenol	ND		66.7	92.6		ug/L		139	38 - 150	9	15
4-Bromophenyl phenyl ether	ND		33.3	33.5		ug/L		100	63 - 126	9	15
4-Chloro-3-methylphenol	ND		33.3	32.9		ug/L		99	64 - 127	9	27
4-Chloroaniline	ND		33.3	20.8		ug/L		62	16 - 124	1	22
4-Chlorophenyl phenyl ether	ND		33.3	32.0		ug/L		96	61 - 120	8	16
4-Methylphenol	ND		33.3	32.3		ug/L		97	36 - 120	11	24
4-Nitroaniline	ND		33.3	31.7		ug/L		95	32 - 150	2	24
4-Nitrophenol	ND		66.7	58.5		ug/L		88	23 - 132	2	48
Acenaphthene	ND		33.3	32.7		ug/L		98	48 - 120	10	24
Acenaphthylene	ND		33.3	33.0		ug/L		99	63 - 120	9	18

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 480-205868-1 MSD
Matrix: Water
Analysis Batch: 657806

Client Sample ID: MW2-013123-MSD
Prep Type: Total/NA
Prep Batch: 657657

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acetophenone	ND		33.3	37.9		ug/L		114	53 - 120	12	20
Anthracene	ND		33.3	34.7		ug/L		104	65 - 122	11	15
Atrazine	ND		66.7	79.8		ug/L		120	50 - 150	6	20
Benzaldehyde	ND		66.7	66.7		ug/L		100	10 - 150	16	20
Benzo[a]anthracene	ND		33.3	33.0		ug/L		99	43 - 124	7	15
Benzo[a]pyrene	ND		33.3	33.4		ug/L		100	23 - 125	7	15
Benzo[b]fluoranthene	ND		33.3	34.0		ug/L		102	27 - 127	10	15
Benzo[g,h,i]perylene	ND		33.3	32.2		ug/L		97	16 - 147	6	15
Benzo[k]fluoranthene	ND		33.3	33.8		ug/L		101	20 - 124	10	22
Biphenyl	ND		33.3	32.8		ug/L		98	57 - 120	11	20
bis (2-chloroisopropyl) ether	ND		33.3	35.4		ug/L		106	28 - 121	12	24
Bis(2-chloroethoxy)methane	ND		33.3	34.0		ug/L		102	44 - 128	11	17
Bis(2-chloroethyl)ether	ND	F1	33.3	42.1	F1	ug/L		126	45 - 120	15	21
Bis(2-ethylhexyl) phthalate	ND		33.3	34.0		ug/L		102	16 - 150	7	15
Butyl benzyl phthalate	ND		33.3	33.0		ug/L		99	51 - 140	5	16
Caprolactam	ND		66.7	24.5		ug/L		37	10 - 120	4	20
Carbazole	ND		33.3	38.1		ug/L		114	16 - 148	6	20
Chrysene	ND		33.3	32.6		ug/L		98	44 - 122	6	15
Dibenz(a,h)anthracene	ND		33.3	33.7		ug/L		101	16 - 139	5	15
Dibenzofuran	ND		33.3	32.7		ug/L		98	60 - 120	9	15
Diethyl phthalate	ND		33.3	36.5		ug/L		110	53 - 133	7	15
Dimethyl phthalate	ND		33.3	34.0		ug/L		102	59 - 123	7	15
Di-n-butyl phthalate	ND		33.3	35.2		ug/L		106	65 - 129	8	15
Di-n-octyl phthalate	ND		33.3	33.6		ug/L		101	16 - 150	6	16
Fluoranthene	ND		33.3	34.0		ug/L		102	63 - 129	9	15
Fluorene	ND		33.3	32.2		ug/L		97	62 - 120	8	15
Hexachlorobenzene	ND		33.3	33.8		ug/L		101	57 - 121	8	15
Hexachlorobutadiene	ND		33.3	21.4		ug/L		64	37 - 120	11	44
Hexachlorocyclopentadiene	ND		33.3	24.7		ug/L		74	21 - 120	14	49
Hexachloroethane	ND		33.3	25.2		ug/L		76	16 - 130	15	46
Indeno[1,2,3-cd]pyrene	ND		33.3	35.1		ug/L		105	16 - 140	7	15
Isophorone	ND		33.3	33.5		ug/L		100	48 - 133	10	17
Naphthalene	ND		33.3	28.3		ug/L		85	45 - 120	10	29
Nitrobenzene	ND		33.3	32.9		ug/L		99	45 - 123	13	24
N-Nitrosodi-n-propylamine	ND		33.3	39.2		ug/L		118	49 - 120	12	31
Pentachlorophenol	ND		66.7	83.2		ug/L		125	23 - 149	6	37
Phenanthrene	ND		33.3	33.5		ug/L		101	65 - 122	9	15
Phenol	ND		33.3	23.6		ug/L		71	16 - 120	13	34
Pyrene	ND		33.3	34.3		ug/L		103	58 - 128	9	19

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*116*		*41 - 120*
2-Fluorobiphenyl (Surr)	*105*		*48 - 120*
2-Fluorophenol (Surr)	*78*		*35 - 120*
Nitrobenzene-d5 (Surr)	*101*		*46 - 120*
Phenol-d5 (Surr)	*66*		*22 - 120*
p-Terphenyl-d14 (Surr)	*97*		*60 - 148*

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Lab Sample ID: MB 480-657656/1-A
Matrix: Water
Analysis Batch: 657799

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657656

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.10	ug/L		02/02/23 08:12	02/03/23 11:17	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8	*43*		*15 - 110*	*02/02/23 08:12*	*02/03/23 11:17*	*1*

Lab Sample ID: LCS 480-657656/2-A
Matrix: Water
Analysis Batch: 657799

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657656

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			2.00	2.05		ug/L		103	40 - 140		

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8	*43*		*15 - 110*

Lab Sample ID: 480-205868-1 MS
Matrix: Water
Analysis Batch: 657799

Client Sample ID: MW2-013123-MS
Prep Type: Total/NA
Prep Batch: 657656

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane	ND		2.00	2.05		ug/L		102	40 - 140		

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
1,4-Dioxane-d8	*45*		*15 - 110*

Lab Sample ID: 480-205868-1 MSD
Matrix: Water
Analysis Batch: 657799

Client Sample ID: MW2-013123-MSD
Prep Type: Total/NA
Prep Batch: 657656

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	ND		2.17	2.22		ug/L		102	40 - 140	8	20

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,4-Dioxane-d8	*47*		*15 - 110*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-657580/1-A
Matrix: Water
Analysis Batch: 657819

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657580

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		02/02/23 09:48	02/02/23 22:05	1
Antimony	ND		0.020	0.0068	mg/L		02/02/23 09:48	02/02/23 22:05	1
Arsenic	ND		0.015	0.0056	mg/L		02/02/23 09:48	02/02/23 22:05	1
Barium	ND		0.0020	0.00070	mg/L		02/02/23 09:48	02/02/23 22:05	1
Beryllium	ND		0.0020	0.00030	mg/L		02/02/23 09:48	02/02/23 22:05	1
Cadmium	ND		0.0020	0.00050	mg/L		02/02/23 09:48	02/02/23 22:05	1
Calcium	ND		0.50	0.10	mg/L		02/02/23 09:48	02/02/23 22:05	1
Chromium	ND		0.0040	0.0010	mg/L		02/02/23 09:48	02/02/23 22:05	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 480-657580/1-A
Matrix: Water
Analysis Batch: 657819

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657580

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		0.0040	0.00063	mg/L		02/02/23 09:48	02/02/23 22:05	1
Copper	ND		0.010	0.0016	mg/L		02/02/23 09:48	02/02/23 22:05	1
Iron	ND		0.050	0.019	mg/L		02/02/23 09:48	02/02/23 22:05	1
Lead	ND		0.010	0.0030	mg/L		02/02/23 09:48	02/02/23 22:05	1
Magnesium	ND		0.20	0.043	mg/L		02/02/23 09:48	02/02/23 22:05	1
Manganese	0.000460	J	0.0030	0.00040	mg/L		02/02/23 09:48	02/02/23 22:05	1
Nickel	ND		0.010	0.0013	mg/L		02/02/23 09:48	02/02/23 22:05	1
Potassium	ND		0.50	0.10	mg/L		02/02/23 09:48	02/02/23 22:05	1
Selenium	ND		0.025	0.0087	mg/L		02/02/23 09:48	02/02/23 22:05	1
Silver	ND		0.0060	0.0017	mg/L		02/02/23 09:48	02/02/23 22:05	1
Sodium	ND		1.0	0.32	mg/L		02/02/23 09:48	02/02/23 22:05	1
Thallium	ND		0.020	0.010	mg/L		02/02/23 09:48	02/02/23 22:05	1
Vanadium	ND		0.0050	0.0015	mg/L		02/02/23 09:48	02/02/23 22:05	1
Zinc	ND		0.010	0.0015	mg/L		02/02/23 09:48	02/02/23 22:05	1

Lab Sample ID: LCS 480-657580/2-A
Matrix: Water
Analysis Batch: 657819

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657580

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	10.0	9.77		mg/L		98	80 - 120
Antimony	0.200	0.215		mg/L		108	80 - 120
Arsenic	0.200	0.199		mg/L		100	80 - 120
Barium	0.200	0.197		mg/L		99	80 - 120
Beryllium	0.200	0.205		mg/L		102	80 - 120
Cadmium	0.200	0.212		mg/L		106	80 - 120
Calcium	10.0	10.22		mg/L		102	80 - 120
Chromium	0.200	0.202		mg/L		101	80 - 120
Cobalt	0.200	0.201		mg/L		101	80 - 120
Copper	0.200	0.205		mg/L		102	80 - 120
Iron	10.0	10.34		mg/L		103	80 - 120
Lead	0.200	0.210		mg/L		105	80 - 120
Magnesium	10.0	9.80		mg/L		98	80 - 120
Manganese	0.200	0.207		mg/L		103	80 - 120
Nickel	0.200	0.202		mg/L		101	80 - 120
Potassium	10.0	9.82		mg/L		98	80 - 120
Selenium	0.200	0.201		mg/L		101	80 - 120
Silver	0.0500	0.0492		mg/L		98	80 - 120
Sodium	10.0	9.75		mg/L		97	80 - 120
Thallium	0.200	0.204		mg/L		102	80 - 120
Vanadium	0.200	0.207		mg/L		103	80 - 120
Zinc	0.200	0.199		mg/L		99	80 - 120

Lab Sample ID: 480-205868-1 MS
Matrix: Water
Analysis Batch: 657819

Client Sample ID: MW2-013123-MS
Prep Type: Total/NA
Prep Batch: 657580

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	0.12	J	10.0	10.20		mg/L		101	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-205868-1 MS
Matrix: Water
Analysis Batch: 657819

Client Sample ID: MW2-013123-MS
Prep Type: Total/NA
Prep Batch: 657580

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony	ND		0.200	0.217		mg/L		108	75 - 125
Arsenic	ND		0.200	0.206		mg/L		103	75 - 125
Barium	0.096		0.200	0.301		mg/L		103	75 - 125
Beryllium	ND		0.200	0.207		mg/L		104	75 - 125
Cadmium	ND		0.200	0.213		mg/L		106	75 - 125
Calcium	79.0		10.0	90.00	4	mg/L		110	75 - 125
Chromium	ND		0.200	0.203		mg/L		101	75 - 125
Cobalt	ND		0.200	0.204		mg/L		102	75 - 125
Copper	ND		0.200	0.204		mg/L		102	75 - 125
Iron	0.046	J	10.0	10.29		mg/L		102	75 - 125
Lead	ND		0.200	0.213		mg/L		107	75 - 125
Magnesium	15.9		10.0	25.83		mg/L		100	75 - 125
Manganese	0.14	B	0.200	0.350		mg/L		103	75 - 125
Nickel	ND		0.200	0.204		mg/L		102	75 - 125
Potassium	3.6		10.0	13.70		mg/L		101	75 - 125
Selenium	ND		0.200	0.202		mg/L		101	75 - 125
Silver	ND		0.0500	0.0499		mg/L		100	75 - 125
Sodium	53.0		10.0	63.61	4	mg/L		106	75 - 125
Thallium	ND		0.200	0.205		mg/L		103	75 - 125
Vanadium	ND		0.200	0.209		mg/L		104	75 - 125
Zinc	ND		0.200	0.198		mg/L		99	75 - 125

Lab Sample ID: 480-205868-1 MSD
Matrix: Water
Analysis Batch: 657819

Client Sample ID: MW2-013123-MSD
Prep Type: Total/NA
Prep Batch: 657580

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	0.12	J	10.0	9.96		mg/L		98	75 - 125	2	20
Antimony	ND		0.200	0.212		mg/L		106	75 - 125	2	20
Arsenic	ND		0.200	0.203		mg/L		102	75 - 125	1	20
Barium	0.096		0.200	0.295		mg/L		100	75 - 125	2	20
Beryllium	ND		0.200	0.202		mg/L		101	75 - 125	3	20
Cadmium	ND		0.200	0.207		mg/L		104	75 - 125	2	20
Calcium	79.0		10.0	87.65	4	mg/L		86	75 - 125	3	20
Chromium	ND		0.200	0.198		mg/L		99	75 - 125	3	20
Cobalt	ND		0.200	0.198		mg/L		99	75 - 125	3	20
Copper	ND		0.200	0.199		mg/L		99	75 - 125	2	20
Iron	0.046	J	10.0	10.01		mg/L		100	75 - 125	3	20
Lead	ND		0.200	0.210		mg/L		105	75 - 125	2	20
Magnesium	15.9		10.0	25.24		mg/L		94	75 - 125	2	20
Manganese	0.14	B	0.200	0.344		mg/L		100	75 - 125	2	20
Nickel	ND		0.200	0.198		mg/L		99	75 - 125	3	20
Potassium	3.6		10.0	13.48		mg/L		99	75 - 125	2	20
Selenium	ND		0.200	0.200		mg/L		100	75 - 125	1	20
Silver	ND		0.0500	0.0486		mg/L		97	75 - 125	3	20
Sodium	53.0		10.0	62.20	4	mg/L		92	75 - 125	2	20
Thallium	ND		0.200	0.199		mg/L		99	75 - 125	3	20
Vanadium	ND		0.200	0.203		mg/L		102	75 - 125	3	20
Zinc	ND		0.200	0.194		mg/L		97	75 - 125	2	20

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-657568/1-A
Matrix: Water
Analysis Batch: 657820

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 657568

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony, Dissolved	ND		0.020	0.0068	mg/L		02/02/23 09:47	02/03/23 00:08	1
Arsenic, Dissolved	ND		0.015	0.0056	mg/L		02/02/23 09:47	02/03/23 00:08	1
Cadmium, Dissolved	ND		0.0020	0.00050	mg/L		02/02/23 09:47	02/03/23 00:08	1
Chromium, Dissolved	ND		0.0040	0.0010	mg/L		02/02/23 09:47	02/03/23 00:08	1
Cobalt, Dissolved	ND		0.0040	0.00063	mg/L		02/02/23 09:47	02/03/23 00:08	1
Copper, Dissolved	ND		0.010	0.0016	mg/L		02/02/23 09:47	02/03/23 00:08	1
Lead, Dissolved	ND		0.010	0.0030	mg/L		02/02/23 09:47	02/03/23 00:08	1
Magnesium, Dissolved	ND		0.20	0.043	mg/L		02/02/23 09:47	02/03/23 00:08	1
Manganese, Dissolved	0.000400	J	0.0030	0.00040	mg/L		02/02/23 09:47	02/03/23 00:08	1
Nickel, Dissolved	ND		0.010	0.0013	mg/L		02/02/23 09:47	02/03/23 00:08	1
Potassium, Dissolved	ND		0.50	0.10	mg/L		02/02/23 09:47	02/03/23 00:08	1
Selenium, Dissolved	ND		0.025	0.0087	mg/L		02/02/23 09:47	02/03/23 00:08	1
Silver, Dissolved	ND		0.0060	0.0017	mg/L		02/02/23 09:47	02/03/23 00:08	1
Sodium, Dissolved	ND		1.0	0.32	mg/L		02/02/23 09:47	02/03/23 00:08	1
Thallium, Dissolved	ND		0.020	0.010	mg/L		02/02/23 09:47	02/03/23 00:08	1
Vanadium, Dissolved	ND		0.0050	0.0015	mg/L		02/02/23 09:47	02/03/23 00:08	1
Zinc, Dissolved	ND		0.010	0.0015	mg/L		02/02/23 09:47	02/03/23 00:08	1

Lab Sample ID: MB 480-657568/1-A
Matrix: Water
Analysis Batch: 657965

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 657568

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum, Dissolved	ND		0.20	0.060	mg/L		02/02/23 09:47	02/03/23 21:25	1
Barium, Dissolved	ND		0.0020	0.00070	mg/L		02/02/23 09:47	02/03/23 21:25	1
Beryllium, Dissolved	ND		0.0020	0.00030	mg/L		02/02/23 09:47	02/03/23 21:25	1
Calcium, Dissolved	ND		0.50	0.10	mg/L		02/02/23 09:47	02/03/23 21:25	1
Iron, Dissolved	ND		0.050	0.019	mg/L		02/02/23 09:47	02/03/23 21:25	1

Lab Sample ID: LCS 480-657568/2-A
Matrix: Water
Analysis Batch: 657820

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 657568

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony, Dissolved	0.200	0.207		mg/L		104	80 - 120
Arsenic, Dissolved	0.200	0.195		mg/L		97	80 - 120
Cadmium, Dissolved	0.200	0.204		mg/L		102	80 - 120
Chromium, Dissolved	0.200	0.199		mg/L		99	80 - 120
Cobalt, Dissolved	0.200	0.195		mg/L		98	80 - 120
Copper, Dissolved	0.200	0.203		mg/L		101	80 - 120
Lead, Dissolved	0.200	0.202		mg/L		101	80 - 120
Magnesium, Dissolved	10.0	9.56		mg/L		96	80 - 120
Manganese, Dissolved	0.200	0.201		mg/L		100	80 - 120
Nickel, Dissolved	0.200	0.196		mg/L		98	80 - 120
Potassium, Dissolved	10.0	9.79		mg/L		98	80 - 120
Selenium, Dissolved	0.200	0.193		mg/L		97	80 - 120
Silver, Dissolved	0.0500	0.0481		mg/L		96	80 - 120
Sodium, Dissolved	10.0	9.66		mg/L		96	80 - 120
Thallium, Dissolved	0.200	0.197		mg/L		98	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-657568/2-A
Matrix: Water
Analysis Batch: 657820

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 657568

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Vanadium, Dissolved	0.200	0.203		mg/L		101	80 - 120
Zinc, Dissolved	0.200	0.198		mg/L		99	80 - 120

Lab Sample ID: LCS 480-657568/2-A
Matrix: Water
Analysis Batch: 657965

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 657568

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum, Dissolved	10.0	10.30		mg/L		103	80 - 120
Barium, Dissolved	0.200	0.214		mg/L		107	80 - 120
Beryllium, Dissolved	0.200	0.222		mg/L		111	80 - 120
Calcium, Dissolved	10.0	10.58		mg/L		106	80 - 120
Iron, Dissolved	10.0	10.49		mg/L		105	80 - 120

Lab Sample ID: 480-205868-1 MS
Matrix: Water
Analysis Batch: 657820

Client Sample ID: MW2-013123-MS
Prep Type: Dissolved
Prep Batch: 657568

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Antimony, Dissolved	ND		0.200	0.216		mg/L		108	75 - 125
Arsenic, Dissolved	ND		0.200	0.208		mg/L		104	75 - 125
Cadmium, Dissolved	ND		0.200	0.213		mg/L		106	75 - 125
Chromium, Dissolved	ND		0.200	0.202		mg/L		101	75 - 125
Cobalt, Dissolved	ND		0.200	0.204		mg/L		102	75 - 125
Copper, Dissolved	ND		0.200	0.203		mg/L		102	75 - 125
Lead, Dissolved	ND		0.200	0.216		mg/L		108	75 - 125
Magnesium, Dissolved	15.6		10.0	25.76		mg/L		102	75 - 125
Manganese, Dissolved	0.14	B	0.200	0.341		mg/L		101	75 - 125
Nickel, Dissolved	ND		0.200	0.204		mg/L		102	75 - 125
Potassium, Dissolved	3.5		10.0	13.64		mg/L		102	75 - 125
Selenium, Dissolved	ND		0.200	0.208		mg/L		104	75 - 125
Silver, Dissolved	ND		0.0500	0.0492		mg/L		98	75 - 125
Sodium, Dissolved	52.0		10.0	63.54	4	mg/L		115	75 - 125
Thallium, Dissolved	ND		0.200	0.204		mg/L		102	75 - 125
Vanadium, Dissolved	ND		0.200	0.208		mg/L		104	75 - 125
Zinc, Dissolved	ND		0.200	0.200		mg/L		100	75 - 125

Lab Sample ID: 480-205868-1 MS
Matrix: Water
Analysis Batch: 657965

Client Sample ID: MW2-013123-MS
Prep Type: Dissolved
Prep Batch: 657568

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum, Dissolved	ND		10.0	10.31		mg/L		103	75 - 125
Barium, Dissolved	0.098		0.200	0.314		mg/L		108	75 - 125
Beryllium, Dissolved	ND		0.200	0.226		mg/L		113	75 - 125
Calcium, Dissolved	80.3		10.0	92.81	4	mg/L		125	75 - 125
Iron, Dissolved	0.019	J	10.0	10.43		mg/L		104	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-205868-1 MSD
Matrix: Water
Analysis Batch: 657820

Client Sample ID: MW2-013123-MSD
Prep Type: Dissolved
Prep Batch: 657568

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Antimony, Dissolved	ND		0.200	0.209		mg/L		104	75 - 125	3	20
Arsenic, Dissolved	ND		0.200	0.202		mg/L		101	75 - 125	3	20
Cadmium, Dissolved	ND		0.200	0.209		mg/L		104	75 - 125	2	20
Chromium, Dissolved	ND		0.200	0.200		mg/L		100	75 - 125	1	20
Cobalt, Dissolved	ND		0.200	0.200		mg/L		100	75 - 125	2	20
Copper, Dissolved	ND		0.200	0.200		mg/L		100	75 - 125	1	20
Lead, Dissolved	ND		0.200	0.210		mg/L		105	75 - 125	3	20
Magnesium, Dissolved	15.6		10.0	25.32		mg/L		97	75 - 125	2	20
Manganese, Dissolved	0.14	B	0.200	0.335		mg/L		98	75 - 125	2	20
Nickel, Dissolved	ND		0.200	0.200		mg/L		100	75 - 125	2	20
Potassium, Dissolved	3.5		10.0	13.52		mg/L		101	75 - 125	1	20
Selenium, Dissolved	ND		0.200	0.200		mg/L		100	75 - 125	4	20
Silver, Dissolved	ND		0.0500	0.0488		mg/L		98	75 - 125	1	20
Sodium, Dissolved	52.0		10.0	62.90	4	mg/L		109	75 - 125	1	20
Thallium, Dissolved	ND		0.200	0.200		mg/L		100	75 - 125	2	20
Vanadium, Dissolved	ND		0.200	0.206		mg/L		103	75 - 125	1	20
Zinc, Dissolved	ND		0.200	0.197		mg/L		99	75 - 125	1	20

Lab Sample ID: 480-205868-1 MSD
Matrix: Water
Analysis Batch: 657965

Client Sample ID: MW2-013123-MSD
Prep Type: Dissolved
Prep Batch: 657568

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum, Dissolved	ND		10.0	10.18		mg/L		102	75 - 125	1	20
Barium, Dissolved	0.098		0.200	0.311		mg/L		107	75 - 125	1	20
Beryllium, Dissolved	ND		0.200	0.220		mg/L		110	75 - 125	3	20
Calcium, Dissolved	80.3		10.0	91.20	4	mg/L		109	75 - 125	2	20
Iron, Dissolved	0.019	J	10.0	10.19		mg/L		102	75 - 125	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-657720/1-A
Matrix: Water
Analysis Batch: 657771

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657720

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury, Dissolved	ND		0.00020	0.000043	mg/L		02/02/23 11:30	02/02/23 16:44	1

Lab Sample ID: LCS 480-657720/2-A
Matrix: Water
Analysis Batch: 657771

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657720

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury, Dissolved			0.00669	0.00637		mg/L		95	80 - 120		

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: MB 480-657721/1-A
Matrix: Water
Analysis Batch: 657771

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 657721

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000043	mg/L		02/02/23 11:30	02/02/23 17:20	1

Lab Sample ID: LCS 480-657721/2-A
Matrix: Water
Analysis Batch: 657771

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 657721

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury			0.00669	0.00617		mg/L		92	80 - 120		

Lab Sample ID: 480-205868-1 MS
Matrix: Water
Analysis Batch: 657771

Client Sample ID: MW2-013123-MS
Prep Type: Total/NA
Prep Batch: 657721

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury	ND		0.00669	0.00650		mg/L		97	80 - 120		

Lab Sample ID: 480-205868-1 MSD
Matrix: Water
Analysis Batch: 657771

Client Sample ID: MW2-013123-MSD
Prep Type: Total/NA
Prep Batch: 657721

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury	ND		0.00669	0.00640		mg/L		96	80 - 120	2	20

Lab Sample ID: 480-205868-1 MS
Matrix: Water
Analysis Batch: 657771

Client Sample ID: MW2-013123-MS
Prep Type: Dissolved
Prep Batch: 657720

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Mercury, Dissolved	ND		0.00669	0.00650		mg/L		97	80 - 120		

Lab Sample ID: 480-205868-1 MSD
Matrix: Water
Analysis Batch: 657771

Client Sample ID: MW2-013123-MSD
Prep Type: Dissolved
Prep Batch: 657720

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Mercury, Dissolved	ND		0.00669	0.00648		mg/L		97	80 - 120	0	20

GC/MS VOA

Analysis Batch: 657643

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205868-1	MW2-013123	Total/NA	Water	8260C	
480-205868-2	FDUP-013123	Total/NA	Water	8260C	
480-205868-3	MW3-013123	Total/NA	Water	8260C	
480-205868-4	MW5-013123	Total/NA	Water	8260C	
480-205868-5	MW1-013123	Total/NA	Water	8260C	
480-205868-6	FB_013123	Total/NA	Water	8260C	
480-205868-7	TB_013123	Total/NA	Water	8260C	
MB 480-657643/7	Method Blank	Total/NA	Water	8260C	
LCS 480-657643/5	Lab Control Sample	Total/NA	Water	8260C	
480-205868-1 MS	MW2-013123-MS	Total/NA	Water	8260C	
480-205868-1 MSD	MW2-013123-MSD	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 657656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205868-1	MW2-013123	Total/NA	Water	3510C	
480-205868-2	FDUP-013123	Total/NA	Water	3510C	
480-205868-6	FB_013123	Total/NA	Water	3510C	
MB 480-657656/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-657656/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-205868-1 MS	MW2-013123-MS	Total/NA	Water	3510C	
480-205868-1 MSD	MW2-013123-MSD	Total/NA	Water	3510C	

Prep Batch: 657657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205868-1	MW2-013123	Total/NA	Water	3510C	
480-205868-2	FDUP-013123	Total/NA	Water	3510C	
480-205868-3	MW3-013123	Total/NA	Water	3510C	
480-205868-4	MW5-013123	Total/NA	Water	3510C	
480-205868-5	MW1-013123	Total/NA	Water	3510C	
480-205868-6	FB_013123	Total/NA	Water	3510C	
MB 480-657657/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-657657/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-205868-1 MS	MW2-013123-MS	Total/NA	Water	3510C	
480-205868-1 MSD	MW2-013123-MSD	Total/NA	Water	3510C	

Analysis Batch: 657799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205868-1	MW2-013123	Total/NA	Water	8270D SIM ID	657656
480-205868-2	FDUP-013123	Total/NA	Water	8270D SIM ID	657656
480-205868-6	FB_013123	Total/NA	Water	8270D SIM ID	657656
MB 480-657656/1-A	Method Blank	Total/NA	Water	8270D SIM ID	657656
LCS 480-657656/2-A	Lab Control Sample	Total/NA	Water	8270D SIM ID	657656
480-205868-1 MS	MW2-013123-MS	Total/NA	Water	8270D SIM ID	657656
480-205868-1 MSD	MW2-013123-MSD	Total/NA	Water	8270D SIM ID	657656

Analysis Batch: 657806

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205868-1	MW2-013123	Total/NA	Water	8270D	657657
480-205868-2	FDUP-013123	Total/NA	Water	8270D	657657

GC/MS Semi VOA (Continued)

Analysis Batch: 657806 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205868-3	MW3-013123	Total/NA	Water	8270D	657657
480-205868-4	MW5-013123	Total/NA	Water	8270D	657657
480-205868-5	MW1-013123	Total/NA	Water	8270D	657657
480-205868-6	FB_013123	Total/NA	Water	8270D	657657
MB 480-657657/1-A	Method Blank	Total/NA	Water	8270D	657657
LCS 480-657657/2-A	Lab Control Sample	Total/NA	Water	8270D	657657
480-205868-1 MS	MW2-013123-MS	Total/NA	Water	8270D	657657
480-205868-1 MSD	MW2-013123-MSD	Total/NA	Water	8270D	657657

Metals

Prep Batch: 657568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205868-1	MW2-013123	Dissolved	Water	3005A	
480-205868-2	FDUP-013123	Dissolved	Water	3005A	
480-205868-3	MW3-013123	Dissolved	Water	3005A	
480-205868-4	MW5-013123	Dissolved	Water	3005A	
480-205868-5	MW1-013123	Dissolved	Water	3005A	
480-205868-6	FB_013123	Dissolved	Water	3005A	
MB 480-657568/1-A	Method Blank	Total Recoverable	Water	3005A	
LCS 480-657568/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
480-205868-1 MS	MW2-013123-MS	Dissolved	Water	3005A	
480-205868-1 MSD	MW2-013123-MSD	Dissolved	Water	3005A	

Prep Batch: 657580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205868-1	MW2-013123	Total/NA	Water	3005A	
480-205868-2	FDUP-013123	Total/NA	Water	3005A	
480-205868-3	MW3-013123	Total/NA	Water	3005A	
480-205868-4	MW5-013123	Total/NA	Water	3005A	
480-205868-5	MW1-013123	Total/NA	Water	3005A	
480-205868-6	FB_013123	Total/NA	Water	3005A	
MB 480-657580/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-657580/2-A	Lab Control Sample	Total/NA	Water	3005A	
480-205868-1 MS	MW2-013123-MS	Total/NA	Water	3005A	
480-205868-1 MSD	MW2-013123-MSD	Total/NA	Water	3005A	

Prep Batch: 657720

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205868-1	MW2-013123	Dissolved	Water	7470A	
480-205868-2	FDUP-013123	Dissolved	Water	7470A	
480-205868-3	MW3-013123	Dissolved	Water	7470A	
480-205868-4	MW5-013123	Dissolved	Water	7470A	
480-205868-5	MW1-013123	Dissolved	Water	7470A	
480-205868-6	FB_013123	Dissolved	Water	7470A	
MB 480-657720/1-A	Method Blank	Total/NA	Water	7470A	
LCS 480-657720/2-A	Lab Control Sample	Total/NA	Water	7470A	
480-205868-1 MS	MW2-013123-MS	Dissolved	Water	7470A	
480-205868-1 MSD	MW2-013123-MSD	Dissolved	Water	7470A	

Metals

Prep Batch: 657721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205868-1	MW2-013123	Total/NA	Water	7470A	
480-205868-2	FDUP-013123	Total/NA	Water	7470A	
480-205868-3	MW3-013123	Total/NA	Water	7470A	
480-205868-4	MW5-013123	Total/NA	Water	7470A	
480-205868-5	MW1-013123	Total/NA	Water	7470A	
480-205868-6	FB_013123	Total/NA	Water	7470A	
MB 480-657721/1-A	Method Blank	Total/NA	Water	7470A	
LCS 480-657721/2-A	Lab Control Sample	Total/NA	Water	7470A	
480-205868-1 MS	MW2-013123-MS	Total/NA	Water	7470A	
480-205868-1 MSD	MW2-013123-MSD	Total/NA	Water	7470A	

Analysis Batch: 657771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205868-1	MW2-013123	Dissolved	Water	7470A	657720
480-205868-1	MW2-013123	Total/NA	Water	7470A	657721
480-205868-2	FDUP-013123	Dissolved	Water	7470A	657720
480-205868-2	FDUP-013123	Total/NA	Water	7470A	657721
480-205868-3	MW3-013123	Dissolved	Water	7470A	657720
480-205868-3	MW3-013123	Total/NA	Water	7470A	657721
480-205868-4	MW5-013123	Dissolved	Water	7470A	657720
480-205868-4	MW5-013123	Total/NA	Water	7470A	657721
480-205868-5	MW1-013123	Dissolved	Water	7470A	657720
480-205868-5	MW1-013123	Total/NA	Water	7470A	657721
480-205868-6	FB_013123	Dissolved	Water	7470A	657720
480-205868-6	FB_013123	Total/NA	Water	7470A	657721
MB 480-657720/1-A	Method Blank	Total/NA	Water	7470A	657720
MB 480-657721/1-A	Method Blank	Total/NA	Water	7470A	657721
LCS 480-657720/2-A	Lab Control Sample	Total/NA	Water	7470A	657720
LCS 480-657721/2-A	Lab Control Sample	Total/NA	Water	7470A	657721
480-205868-1 MS	MW2-013123-MS	Dissolved	Water	7470A	657720
480-205868-1 MS	MW2-013123-MS	Total/NA	Water	7470A	657721
480-205868-1 MSD	MW2-013123-MSD	Dissolved	Water	7470A	657720
480-205868-1 MSD	MW2-013123-MSD	Total/NA	Water	7470A	657721

Analysis Batch: 657819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205868-1	MW2-013123	Total/NA	Water	6010C	657580
480-205868-2	FDUP-013123	Total/NA	Water	6010C	657580
480-205868-3	MW3-013123	Total/NA	Water	6010C	657580
480-205868-4	MW5-013123	Total/NA	Water	6010C	657580
480-205868-5	MW1-013123	Total/NA	Water	6010C	657580
480-205868-6	FB_013123	Total/NA	Water	6010C	657580
MB 480-657580/1-A	Method Blank	Total/NA	Water	6010C	657580
LCS 480-657580/2-A	Lab Control Sample	Total/NA	Water	6010C	657580
480-205868-1 MS	MW2-013123-MS	Total/NA	Water	6010C	657580
480-205868-1 MSD	MW2-013123-MSD	Total/NA	Water	6010C	657580

Analysis Batch: 657820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205868-1	MW2-013123	Dissolved	Water	6010C	657568
480-205868-2	FDUP-013123	Dissolved	Water	6010C	657568

Metals (Continued)

Analysis Batch: 657820 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205868-3	MW3-013123	Dissolved	Water	6010C	657568
480-205868-4	MW5-013123	Dissolved	Water	6010C	657568
480-205868-5	MW1-013123	Dissolved	Water	6010C	657568
480-205868-6	FB_013123	Dissolved	Water	6010C	657568
MB 480-657568/1-A	Method Blank	Total Recoverable	Water	6010C	657568
LCS 480-657568/2-A	Lab Control Sample	Total Recoverable	Water	6010C	657568
480-205868-1 MS	MW2-013123-MS	Dissolved	Water	6010C	657568
480-205868-1 MSD	MW2-013123-MSD	Dissolved	Water	6010C	657568

Analysis Batch: 657965

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205868-1	MW2-013123	Dissolved	Water	6010C	657568
480-205868-2	FDUP-013123	Dissolved	Water	6010C	657568
480-205868-3	MW3-013123	Dissolved	Water	6010C	657568
480-205868-4	MW5-013123	Dissolved	Water	6010C	657568
480-205868-5	MW1-013123	Dissolved	Water	6010C	657568
480-205868-6	FB_013123	Dissolved	Water	6010C	657568
MB 480-657568/1-A	Method Blank	Total Recoverable	Water	6010C	657568
LCS 480-657568/2-A	Lab Control Sample	Total Recoverable	Water	6010C	657568
480-205868-1 MS	MW2-013123-MS	Dissolved	Water	6010C	657568
480-205868-1 MSD	MW2-013123-MSD	Dissolved	Water	6010C	657568

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-1

Client Sample ID: MW2-013123

Lab Sample ID: 480-205868-1

Date Collected: 01/31/23 10:30

Matrix: Water

Date Received: 02/01/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	657643	CB	EET BUF	02/02/23 10:55
Total/NA	Prep	3510C			657657	MS	EET BUF	02/02/23 08:19
Total/NA	Analysis	8270D		1	657806	JMM	EET BUF	02/03/23 13:59
Total/NA	Prep	3510C			657656	MS	EET BUF	02/02/23 08:12
Total/NA	Analysis	8270D SIM ID		1	657799	JMM	EET BUF	02/03/23 12:47
Dissolved	Prep	3005A			657568	VAK	EET BUF	02/02/23 09:47
Dissolved	Analysis	6010C		1	657820	LMH	EET BUF	02/03/23 00:39
Dissolved	Prep	3005A			657568	VAK	EET BUF	02/02/23 09:47
Dissolved	Analysis	6010C		1	657965	LMH	EET BUF	02/03/23 21:33
Total/NA	Prep	3005A			657580	VAK	EET BUF	02/02/23 09:48
Total/NA	Analysis	6010C		1	657819	LMH	EET BUF	02/02/23 23:07
Dissolved	Prep	7470A			657720	VAK	EET BUF	02/02/23 11:30
Dissolved	Analysis	7470A		1	657771	NVK	EET BUF	02/02/23 17:06
Total/NA	Prep	7470A			657721	VAK	EET BUF	02/02/23 11:30
Total/NA	Analysis	7470A		1	657771	NVK	EET BUF	02/02/23 17:23

Client Sample ID: FDUP-013123

Lab Sample ID: 480-205868-2

Date Collected: 01/31/23 00:00

Matrix: Water

Date Received: 02/01/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	657643	CB	EET BUF	02/02/23 11:19
Total/NA	Prep	3510C			657657	MS	EET BUF	02/02/23 08:19
Total/NA	Analysis	8270D		1	657806	JMM	EET BUF	02/03/23 14:54
Total/NA	Prep	3510C			657656	MS	EET BUF	02/02/23 08:12
Total/NA	Analysis	8270D SIM ID		1	657799	JMM	EET BUF	02/03/23 13:09
Dissolved	Prep	3005A			657568	VAK	EET BUF	02/02/23 09:47
Dissolved	Analysis	6010C		1	657820	LMH	EET BUF	02/03/23 01:09
Dissolved	Prep	3005A			657568	VAK	EET BUF	02/02/23 09:47
Dissolved	Analysis	6010C		1	657965	LMH	EET BUF	02/03/23 22:03
Total/NA	Prep	3005A			657580	VAK	EET BUF	02/02/23 09:48
Total/NA	Analysis	6010C		1	657819	LMH	EET BUF	02/02/23 23:37
Dissolved	Prep	7470A			657720	VAK	EET BUF	02/02/23 11:30
Dissolved	Analysis	7470A		1	657771	NVK	EET BUF	02/02/23 17:11
Total/NA	Prep	7470A			657721	VAK	EET BUF	02/02/23 11:30
Total/NA	Analysis	7470A		1	657771	NVK	EET BUF	02/02/23 17:31

Client Sample ID: MW3-013123

Lab Sample ID: 480-205868-3

Date Collected: 01/31/23 12:10

Matrix: Water

Date Received: 02/01/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	657643	CB	EET BUF	02/02/23 11:42
Total/NA	Prep	3510C			657657	MS	EET BUF	02/02/23 08:19
Total/NA	Analysis	8270D		1	657806	JMM	EET BUF	02/03/23 15:21

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-1

Client Sample ID: MW3-013123

Lab Sample ID: 480-205868-3

Date Collected: 01/31/23 12:10

Matrix: Water

Date Received: 02/01/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	3005A			657568	VAK	EET BUF	02/02/23 09:47
Dissolved	Analysis	6010C		1	657820	LMH	EET BUF	02/03/23 01:13
Dissolved	Prep	3005A			657568	VAK	EET BUF	02/02/23 09:47
Dissolved	Analysis	6010C		1	657965	LMH	EET BUF	02/03/23 22:07
Total/NA	Prep	3005A			657580	VAK	EET BUF	02/02/23 09:48
Total/NA	Analysis	6010C		1	657819	LMH	EET BUF	02/02/23 23:41
Dissolved	Prep	7470A			657720	VAK	EET BUF	02/02/23 11:30
Dissolved	Analysis	7470A		1	657771	NVK	EET BUF	02/02/23 17:15
Total/NA	Prep	7470A			657721	VAK	EET BUF	02/02/23 11:30
Total/NA	Analysis	7470A		1	657771	NVK	EET BUF	02/02/23 17:32

Client Sample ID: MW5-013123

Lab Sample ID: 480-205868-4

Date Collected: 01/31/23 15:10

Matrix: Water

Date Received: 02/01/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	657643	CB	EET BUF	02/02/23 12:07
Total/NA	Prep	3510C			657657	MS	EET BUF	02/02/23 08:19
Total/NA	Analysis	8270D		1	657806	JMM	EET BUF	02/03/23 15:48
Dissolved	Prep	3005A			657568	VAK	EET BUF	02/02/23 09:47
Dissolved	Analysis	6010C		1	657820	LMH	EET BUF	02/03/23 01:17
Dissolved	Prep	3005A			657568	VAK	EET BUF	02/02/23 09:47
Dissolved	Analysis	6010C		1	657965	LMH	EET BUF	02/03/23 22:11
Total/NA	Prep	3005A			657580	VAK	EET BUF	02/02/23 09:48
Total/NA	Analysis	6010C		1	657819	LMH	EET BUF	02/02/23 23:45
Dissolved	Prep	7470A			657720	VAK	EET BUF	02/02/23 11:30
Dissolved	Analysis	7470A		1	657771	NVK	EET BUF	02/02/23 17:17
Total/NA	Prep	7470A			657721	VAK	EET BUF	02/02/23 11:30
Total/NA	Analysis	7470A		1	657771	NVK	EET BUF	02/02/23 17:33

Client Sample ID: MW1-013123

Lab Sample ID: 480-205868-5

Date Collected: 01/31/23 16:50

Matrix: Water

Date Received: 02/01/23 10:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	657643	CB	EET BUF	02/02/23 12:31
Total/NA	Prep	3510C			657657	MS	EET BUF	02/02/23 08:19
Total/NA	Analysis	8270D		1	657806	JMM	EET BUF	02/03/23 16:16
Dissolved	Prep	3005A			657568	VAK	EET BUF	02/02/23 09:47
Dissolved	Analysis	6010C		1	657820	LMH	EET BUF	02/03/23 01:21
Dissolved	Prep	3005A			657568	VAK	EET BUF	02/02/23 09:47
Dissolved	Analysis	6010C		1	657965	LMH	EET BUF	02/03/23 22:15
Total/NA	Prep	3005A			657580	VAK	EET BUF	02/02/23 09:48
Total/NA	Analysis	6010C		1	657819	LMH	EET BUF	02/02/23 23:49

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-1

Client Sample ID: MW1-013123
Date Collected: 01/31/23 16:50
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Dissolved	Prep	7470A			657720	VAK	EET BUF	02/02/23 11:30
Dissolved	Analysis	7470A		1	657771	NVK	EET BUF	02/02/23 17:18
Total/NA	Prep	7470A			657721	VAK	EET BUF	02/02/23 11:30
Total/NA	Analysis	7470A		1	657771	NVK	EET BUF	02/02/23 17:35

Client Sample ID: FB_013123
Date Collected: 01/31/23 17:20
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	657643	CB	EET BUF	02/02/23 12:54
Total/NA	Prep	3510C			657657	MS	EET BUF	02/02/23 08:19
Total/NA	Analysis	8270D		1	657806	JMM	EET BUF	02/03/23 16:43
Total/NA	Prep	3510C			657656	MS	EET BUF	02/02/23 08:12
Total/NA	Analysis	8270D SIM ID		1	657799	JMM	EET BUF	02/03/23 13:31
Dissolved	Prep	3005A			657568	VAK	EET BUF	02/02/23 09:47
Dissolved	Analysis	6010C		1	657820	LMH	EET BUF	02/03/23 01:24
Dissolved	Prep	3005A			657568	VAK	EET BUF	02/02/23 09:47
Dissolved	Analysis	6010C		1	657965	LMH	EET BUF	02/03/23 22:19
Total/NA	Prep	3005A			657580	VAK	EET BUF	02/02/23 09:48
Total/NA	Analysis	6010C		1	657819	LMH	EET BUF	02/02/23 23:52
Dissolved	Prep	7470A			657720	VAK	EET BUF	02/02/23 11:30
Dissolved	Analysis	7470A		1	657771	NVK	EET BUF	02/02/23 17:19
Total/NA	Prep	7470A			657721	VAK	EET BUF	02/02/23 11:30
Total/NA	Analysis	7470A		1	657771	NVK	EET BUF	02/02/23 17:36

Client Sample ID: TB_013123
Date Collected: 01/31/23 09:00
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	657643	CB	EET BUF	02/02/23 13:19

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-1

Laboratory: Eurofins Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260C		Water	1,2,3-Trimethylbenzene

Method Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	EET BUF
8270D SIM ID	Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)	SW846	EET BUF
6010C	Metals (ICP)	SW846	EET BUF
7470A	Mercury (CVAA)	SW846	EET BUF
3005A	Preparation, Total Metals	SW846	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF
7470A	Preparation, Mercury	SW846	EET BUF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-205868-1	MW2-013123	Water	01/31/23 10:30	02/01/23 10:30
480-205868-2	FDUP-013123	Water	01/31/23 00:00	02/01/23 10:30
480-205868-3	MW3-013123	Water	01/31/23 12:10	02/01/23 10:30
480-205868-4	MW5-013123	Water	01/31/23 15:10	02/01/23 10:30
480-205868-5	MW1-013123	Water	01/31/23 16:50	02/01/23 10:30
480-205868-6	FB_013123	Water	01/31/23 17:20	02/01/23 10:30
480-205868-7	TB_013123	Water	01/31/23 09:00	02/01/23 10:30

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Integral	Lab PM: Beninati, John	Carrier Tracking No(s):	COC No: 480-180974-37697.1
Client Contact: Mr. Glenn Esler	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Integral Consulting Inc	PWSID:			Job #:
Address: 319 SW Washington Ave Suite 1150	Due Date Requested: per contract			
City: Portland	TAT Requested (days): per contract			
State, Zip: OR, 97204	Compliance Project: Δ Yes Δ No			
Phone: 503-943-3617(Tel)	PO #: Purchase Order not required			
Email: gesler@integral-corp.com	WO #:			
Project Name: EF1017 - Refractories - Groundwater	Project #: 48025298			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA

480-205868 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D - TCL SVOCs	6010C, 7470A (TOTAL)	8260C - TCL VOCs	PFC_IDA - PFAS - NY 22 Analytes Method 1633	8270D_SIM_MS_ID - 1,4 Dioxane	6010C, 7470A (DISSOLVED)	Total	Special Instructions/Note:
			Preservation Code:				N	D	A	N	N	D		
MW2-013123	1/31/23	1030	G	Water			X	X	X	X	X	X	11	Dissolved metals field filtered
FDUP-013123		-		Water			X	X	X	X	X	X	11	
MW2-013123-MS		1030		Water			X	X	X	X	X	X	11	
MW2-013123-MSD		1030		Water			X	X	X	X	X	X	11	
MW3-013123		1210		Water		N	X	X	X			X	7	
MW5-013123		1510		Water		N	X	X	X			X	7	
MW1-013123		1650		Water		N	X	X	X			X	7	
FB-013123		1720		Water		N	X	X	X	X	X	X	11	
TB-013123		0900		Water	N	N			X				1	
				Water										
				Water										

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) Cat B per Quote

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Kathryn Latwanchik	1/31/21 1845	Integral		2/1/23 1030	FA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.1 1.6 1.4 # 1 ICE

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Integral Consulting Inc

Job Number: 480-205868-1

Login Number: 205868
List Number: 1
Creator: Yeager, Brian A

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	INTEGRAL
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Glenn Esler
Integral Consulting Inc
319 SW Washington Ave
Suite 1150
Portland, Oregon 97204

Generated 3/13/2023 3:09:17 PM Revision 1

JOB DESCRIPTION

EF1017 - Refractories

JOB NUMBER

480-205868-2

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

my EOL

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing Northeast, LLC Buffalo and its client. All questions regarding this report should be directed to the Eurofins Environment Testing Northeast, LLC Buffalo Project Manager or designee who has signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization



Generated
3/13/2023 3:09:17 PM
Revision 1

Authorized for release by
John Beninati, Project Manager
John.Beninati@et.eurofinsus.com
(716)504-9874

Table of Contents

Cover Page 1
Table of Contents 3
Definitions/Glossary 4
Case Narrative 5
Detection Summary 6
Client Sample Results 7
Isotope Dilution Summary 12
QC Sample Results 14
QC Association Summary 28
Lab Chronicle 29
Certification Summary 30
Method Summary 32
Sample Summary 33
Chain of Custody 34
Receipt Checklists 36

Definitions/Glossary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-2

Qualifiers

LCMS

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
I	Value is EMPC (estimated maximum possible concentration).
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-205868-2

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-205868-2

Comments
No additional comments.

Revision 1
The report being provided is a revision of the original report sent on 3/6/2023. The report (revision 1) is being revised due to: Report was revised to include missing QC data.

Receipt
The samples were received on 2/1/2023 10:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 1.4º C, 1.6º C and 2.1º C.

LCMS
Method 1633: The recovery for labeled isotope: 13C5 PFPeA and 13C3 HFPO-DA is outside the QC acceptance limits in the closing continuing calibration verification standard. Since the recovery for the labeled isotope is within QC limits in the following sample: FDUP-013123 (480-205868-2), the data is reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-2

Client Sample ID: MW2-013123 — Lab Sample ID: 480-205868-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorooctanoic acid	0.70	J	1.8	0.58	ng/L	1		1633	Total/NA
Perfluorobutanesulfonic acid	0.46	J	1.8	0.27	ng/L	1		1633	Total/NA

Client Sample ID: FDUP-013123 — Lab Sample ID: 480-205868-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perfluorobutanesulfonic acid	0.30	J	1.9	0.28	ng/L	1		1633	Total/NA

Client Sample ID: FB_013123 — Lab Sample ID: 480-205868-6

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-2

Client Sample ID: MW2-013123
Date Collected: 01/31/23 10:30
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-1
Matrix: Water

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	ND		7.2	1.8	ng/L		02/17/23 09:29	02/17/23 22:11	1
Perfluoropentanoic acid	ND		3.6	0.90	ng/L		02/17/23 09:29	02/17/23 22:11	1
Perfluorohexanoic acid	ND		1.8	0.45	ng/L		02/17/23 09:29	02/17/23 22:11	1
Perfluoroheptanoic acid	ND		1.8	0.47	ng/L		02/17/23 09:29	02/17/23 22:11	1
Perfluorooctanoic acid	**0.70**	**J**	1.8	0.58	ng/L		02/17/23 09:29	02/17/23 22:11	1
Perfluorononanoic acid	ND		1.8	0.45	ng/L		02/17/23 09:29	02/17/23 22:11	1
Perfluorodecanoic acid	ND		1.8	0.45	ng/L		02/17/23 09:29	02/17/23 22:11	1
Perfluoroundecanoic acid	ND		1.8	0.45	ng/L		02/17/23 09:29	02/17/23 22:11	1
Perfluorododecanoic acid	ND		1.8	0.45	ng/L		02/17/23 09:29	02/17/23 22:11	1
Perfluorotridecanoic acid	ND		1.8	0.45	ng/L		02/17/23 09:29	02/17/23 22:11	1
Perfluorotetradecanoic acid	ND		1.8	0.45	ng/L		02/17/23 09:29	02/17/23 22:11	1
Perfluorobutanesulfonic acid	**0.46**	**J**	1.8	0.27	ng/L		02/17/23 09:29	02/17/23 22:11	1
Perfluoropentanesulfonic acid	ND		1.8	0.45	ng/L		02/17/23 09:29	02/17/23 22:11	1
Perfluorohexanesulfonic acid	ND		1.8	0.51	ng/L		02/17/23 09:29	02/17/23 22:11	1
Perfluoroheptanesulfonic acid	ND		1.8	0.36	ng/L		02/17/23 09:29	02/17/23 22:11	1
Perfluorooctanesulfonic acid	ND		1.8	0.45	ng/L		02/17/23 09:29	02/17/23 22:11	1
Perfluorononanesulfonic acid	ND		1.8	0.36	ng/L		02/17/23 09:29	02/17/23 22:11	1
Perfluorodecanesulfonic acid	ND		1.8	0.45	ng/L		02/17/23 09:29	02/17/23 22:11	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.8	0.81	ng/L		02/17/23 09:29	02/17/23 22:11	1
1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	ND	F2	7.2	1.5	ng/L		02/17/23 09:29	02/17/23 22:11	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		7.2	2.3	ng/L		02/17/23 09:29	02/17/23 22:11	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		7.2	2.3	ng/L		02/17/23 09:29	02/17/23 22:11	1
Perfluorooctanesulfonamide	ND		1.8	0.45	ng/L		02/17/23 09:29	02/17/23 22:11	1
NMeFOSA	ND		1.8	0.45	ng/L		02/17/23 09:29	02/17/23 22:11	1
N-ethylperfluoro-1-octanesulfonamide	ND		1.8	0.45	ng/L		02/17/23 09:29	02/17/23 22:11	1
NMeFOSAA	ND		3.6	1.1	ng/L		02/17/23 09:29	02/17/23 22:11	1
NEtFOSAA	ND		1.8	0.63	ng/L		02/17/23 09:29	02/17/23 22:11	1
2-(N-methylperfluoro-1-octanesulfonamido) ethanol	ND		18	4.5	ng/L		02/17/23 09:29	02/17/23 22:11	1
2-(N-ethylperfluoro-1-octanesulfonamido) ethanol	ND		18	4.5	ng/L		02/17/23 09:29	02/17/23 22:11	1
HFPO-DA	ND		7.2	1.8	ng/L		02/17/23 09:29	02/17/23 22:11	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		7.2	1.4	ng/L		02/17/23 09:29	02/17/23 22:11	1
Perfluoro-3-methoxypropanoic acid	ND		3.6	0.45	ng/L		02/17/23 09:29	02/17/23 22:11	1
Perfluoro(4-methoxybutanoic acid)	ND		3.6	0.90	ng/L		02/17/23 09:29	02/17/23 22:11	1
Perfluoro-3,6-dioxaheptanoic acid	ND		3.6	0.90	ng/L		02/17/23 09:29	02/17/23 22:11	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	ND		7.2	0.90	ng/L		02/17/23 09:29	02/17/23 22:11	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	ND		7.2	1.8	ng/L		02/17/23 09:29	02/17/23 22:11	1
PFEESA	ND		3.6	0.45	ng/L		02/17/23 09:29	02/17/23 22:11	1
3:3 FTCA	ND		9.0	1.4	ng/L		02/17/23 09:29	02/17/23 22:11	1
5:3 FTCA	ND		45	9.0	ng/L		02/17/23 09:29	02/17/23 22:11	1
7:3 FTCA	ND		45	9.0	ng/L		02/17/23 09:29	02/17/23 22:11	1

Client Sample ID: MW2-013123

Lab Sample ID: 480-205868-1

Date Collected: 01/31/23 10:30

Matrix: Water

Date Received: 02/01/23 10:30

Isotope Dilution	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	111		20 - 150	02/17/23 09:29	02/17/23 22:11	1
13C5 PFPeA	105		20 - 150	02/17/23 09:29	02/17/23 22:11	1
13C5 PFHxA	113		20 - 150	02/17/23 09:29	02/17/23 22:11	1
13C4 PFHpA	109		20 - 150	02/17/23 09:29	02/17/23 22:11	1
13C8 PFOA	108		20 - 150	02/17/23 09:29	02/17/23 22:11	1
13C9 PFNA	107		20 - 150	02/17/23 09:29	02/17/23 22:11	1
13C6 PFDA	113		20 - 150	02/17/23 09:29	02/17/23 22:11	1
13C7 PFUnA	118		20 - 150	02/17/23 09:29	02/17/23 22:11	1
13C2-PFDoDA	102		20 - 150	02/17/23 09:29	02/17/23 22:11	1
13C2 PFTeDA	92.8		20 - 150	02/17/23 09:29	02/17/23 22:11	1
13C3 PFBS	116		20 - 150	02/17/23 09:29	02/17/23 22:11	1
13C3 PFHxS	136		20 - 150	02/17/23 09:29	02/17/23 22:11	1
13C8 PFOS	93.5		20 - 150	02/17/23 09:29	02/17/23 22:11	1
13C8 FOSA	94.6		20 - 150	02/17/23 09:29	02/17/23 22:11	1
d3-NMeFOSAA	93.6		20 - 150	02/17/23 09:29	02/17/23 22:11	1
d5-NEtFOSAA	89.2		20 - 150	02/17/23 09:29	02/17/23 22:11	1
M2-4:2 FTS	105		20 - 150	02/17/23 09:29	02/17/23 22:11	1
M2-6:2 FTS	121		20 - 150	02/17/23 09:29	02/17/23 22:11	1
M2-8:2 FTS	116		20 - 150	02/17/23 09:29	02/17/23 22:11	1
13C3 HFPO-DA	106		20 - 150	02/17/23 09:29	02/17/23 22:11	1
d7-N-MeFOSE-M	87.4		20 - 150	02/17/23 09:29	02/17/23 22:11	1
d9-N-EtFOSE-M	85.1		20 - 150	02/17/23 09:29	02/17/23 22:11	1
d5-NEtPFOSA	57.2		20 - 150	02/17/23 09:29	02/17/23 22:11	1
d3-NMePFOSA	62.8		20 - 150	02/17/23 09:29	02/17/23 22:11	1

Client Sample ID: FDUP-013123

Lab Sample ID: 480-205868-2

Date Collected: 01/31/23 00:00

Matrix: Water

Date Received: 02/01/23 10:30

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	ND		7.5	1.9	ng/L		02/28/23 09:44	03/02/23 04:39	1
Perfluoropentanoic acid	ND		3.7	0.93	ng/L		02/28/23 09:44	03/02/23 04:39	1
Perfluorohexanoic acid	ND		1.9	0.47	ng/L		02/28/23 09:44	03/02/23 04:39	1
Perfluoroheptanoic acid	ND		1.9	0.49	ng/L		02/28/23 09:44	03/02/23 04:39	1
Perfluorooctanoic acid	ND		1.9	0.60	ng/L		02/28/23 09:44	03/02/23 04:39	1
Perfluorononanoic acid	ND		1.9	0.47	ng/L		02/28/23 09:44	03/02/23 04:39	1
Perfluorodecanoic acid	ND		1.9	0.47	ng/L		02/28/23 09:44	03/02/23 04:39	1
Perfluoroundecanoic acid	ND		1.9	0.47	ng/L		02/28/23 09:44	03/02/23 04:39	1
Perfluorododecanoic acid	ND		1.9	0.47	ng/L		02/28/23 09:44	03/02/23 04:39	1
Perfluorotridecanoic acid	ND		1.9	0.47	ng/L		02/28/23 09:44	03/02/23 04:39	1
Perfluorotetradecanoic acid	ND		1.9	0.47	ng/L		02/28/23 09:44	03/02/23 04:39	1
Perfluorobutanesulfonic acid	**0.30**	**J**	1.9	0.28	ng/L		02/28/23 09:44	03/02/23 04:39	1
Perfluoropentanesulfonic acid	ND		1.9	0.47	ng/L		02/28/23 09:44	03/02/23 04:39	1
Perfluorohexanesulfonic acid	ND		1.9	0.53	ng/L		02/28/23 09:44	03/02/23 04:39	1
Perfluoroheptanesulfonic acid	ND		1.9	0.37	ng/L		02/28/23 09:44	03/02/23 04:39	1
Perfluorooctanesulfonic acid	ND		1.9	0.47	ng/L		02/28/23 09:44	03/02/23 04:39	1
Perfluorononanesulfonic acid	ND		1.9	0.37	ng/L		02/28/23 09:44	03/02/23 04:39	1
Perfluorodecanesulfonic acid	ND		1.9	0.47	ng/L		02/28/23 09:44	03/02/23 04:39	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.9	0.84	ng/L		02/28/23 09:44	03/02/23 04:39	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-2

Client Sample ID: FDUP-013123
Date Collected: 01/31/23 00:00
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-2
Matrix: Water

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	ND		7.5	1.6	ng/L		02/28/23 09:44	03/02/23 04:39	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		7.5	2.3	ng/L		02/28/23 09:44	03/02/23 04:39	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		7.5	2.4	ng/L		02/28/23 09:44	03/02/23 04:39	1
Perfluorooctanesulfonamide	ND		1.9	0.47	ng/L		02/28/23 09:44	03/02/23 04:39	1
NMeFOSA	ND		1.9	0.47	ng/L		02/28/23 09:44	03/02/23 04:39	1
N-ethylperfluoro-1-octanesulfonamide	ND		1.9	0.47	ng/L		02/28/23 09:44	03/02/23 04:39	1
NMeFOSAA	ND		3.7	1.1	ng/L		02/28/23 09:44	03/02/23 04:39	1
NEtFOSAA	ND		1.9	0.65	ng/L		02/28/23 09:44	03/02/23 04:39	1
2-(N-methylperfluoro-1-octanesulfonamido) ethanol	ND		19	4.7	ng/L		02/28/23 09:44	03/02/23 04:39	1
2-(N-ethylperfluoro-1-octanesulfonamido) ethanol	ND		19	4.7	ng/L		02/28/23 09:44	03/02/23 04:39	1
HFPO-DA	ND		7.5	1.9	ng/L		02/28/23 09:44	03/02/23 04:39	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		7.5	1.4	ng/L		02/28/23 09:44	03/02/23 04:39	1
Perfluoro-3-methoxypropanoic acid	ND		3.7	0.47	ng/L		02/28/23 09:44	03/02/23 04:39	1
Perfluoro(4-methoxybutanoic acid)	ND		3.7	0.93	ng/L		02/28/23 09:44	03/02/23 04:39	1
Perfluoro-3,6-dioxaheptanoic acid	ND		3.7	0.93	ng/L		02/28/23 09:44	03/02/23 04:39	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	ND		7.5	0.93	ng/L		02/28/23 09:44	03/02/23 04:39	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	ND		7.5	1.9	ng/L		02/28/23 09:44	03/02/23 04:39	1
PFEESA	ND		3.7	0.47	ng/L		02/28/23 09:44	03/02/23 04:39	1
3:3 FTCA	ND		9.3	1.4	ng/L		02/28/23 09:44	03/02/23 04:39	1
5:3 FTCA	ND		47	9.3	ng/L		02/28/23 09:44	03/02/23 04:39	1
7:3 FTCA	ND		47	9.3	ng/L		02/28/23 09:44	03/02/23 04:39	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*91.5*		*20 - 150*	*02/28/23 09:44*	*03/02/23 04:39*	*1*
13C5 PFPeA	*83.5*		*20 - 150*	*02/28/23 09:44*	*03/02/23 04:39*	*1*
13C5 PFHxA	*91.8*		*20 - 150*	*02/28/23 09:44*	*03/02/23 04:39*	*1*
13C4 PFHpA	*72.5*		*20 - 150*	*02/28/23 09:44*	*03/02/23 04:39*	*1*
13C8 PFOA	*83.9*		*20 - 150*	*02/28/23 09:44*	*03/02/23 04:39*	*1*
13C9 PFNA	*87.6*		*20 - 150*	*02/28/23 09:44*	*03/02/23 04:39*	*1*
13C6 PFDA	*96.9*		*20 - 150*	*02/28/23 09:44*	*03/02/23 04:39*	*1*
13C7 PFUnA	*85.2*		*20 - 150*	*02/28/23 09:44*	*03/02/23 04:39*	*1*
13C2-PFDoDA	*91.5*		*20 - 150*	*02/28/23 09:44*	*03/02/23 04:39*	*1*
13C2 PFTeDA	*76.1*		*20 - 150*	*02/28/23 09:44*	*03/02/23 04:39*	*1*
13C3 PFBS	*101*		*20 - 150*	*02/28/23 09:44*	*03/02/23 04:39*	*1*
13C3 PFHxS	*93.2*		*20 - 150*	*02/28/23 09:44*	*03/02/23 04:39*	*1*
13C8 PFOS	*85.4*		*20 - 150*	*02/28/23 09:44*	*03/02/23 04:39*	*1*
13C8 FOSA	*90.8*		*20 - 150*	*02/28/23 09:44*	*03/02/23 04:39*	*1*
d3-NMeFOSAA	*82.8*		*20 - 150*	*02/28/23 09:44*	*03/02/23 04:39*	*1*
d5-NEtFOSAA	*85.9*		*20 - 150*	*02/28/23 09:44*	*03/02/23 04:39*	*1*
M2-4:2 FTS	*87.6*		*20 - 150*	*02/28/23 09:44*	*03/02/23 04:39*	*1*
M2-6:2 FTS	*108*	*I*	*20 - 150*	*02/28/23 09:44*	*03/02/23 04:39*	*1*
M2-8:2 FTS	*82.1*		*20 - 150*	*02/28/23 09:44*	*03/02/23 04:39*	*1*

Client Sample ID: FDUP-013123

Lab Sample ID: 480-205868-2
Matrix: Water
Date Collected: 01/31/23 00:00
Date Received: 02/01/23 10:30

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C3 HFPO-DA	*88.0*		*20 - 150*	*02/28/23 09:44*	*03/02/23 04:39*	*1*
d7-N-MeFOSE-M	*66.3*		*20 - 150*	*02/28/23 09:44*	*03/02/23 04:39*	*1*
d9-N-EtFOSE-M	*67.7*		*20 - 150*	*02/28/23 09:44*	*03/02/23 04:39*	*1*
d5-NEtPFOSA	*55.4*		*20 - 150*	*02/28/23 09:44*	*03/02/23 04:39*	*1*
d3-NMePFOSA	*61.4*		*20 - 150*	*02/28/23 09:44*	*03/02/23 04:39*	*1*

Client Sample ID: FB_013123

Lab Sample ID: 480-205868-6
Matrix: Water
Date Collected: 01/31/23 17:20
Date Received: 02/01/23 10:30

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	ND		7.2	1.8	ng/L		02/17/23 09:29	02/17/23 22:56	1
Perfluoropentanoic acid	ND		3.6	0.90	ng/L		02/17/23 09:29	02/17/23 22:56	1
Perfluorohexanoic acid	ND		1.8	0.45	ng/L		02/17/23 09:29	02/17/23 22:56	1
Perfluoroheptanoic acid	ND		1.8	0.47	ng/L		02/17/23 09:29	02/17/23 22:56	1
Perfluorooctanoic acid	ND		1.8	0.58	ng/L		02/17/23 09:29	02/17/23 22:56	1
Perfluorononanoic acid	ND		1.8	0.45	ng/L		02/17/23 09:29	02/17/23 22:56	1
Perfluorodecanoic acid	ND		1.8	0.45	ng/L		02/17/23 09:29	02/17/23 22:56	1
Perfluoroundecanoic acid	ND		1.8	0.45	ng/L		02/17/23 09:29	02/17/23 22:56	1
Perfluorododecanoic acid	ND		1.8	0.45	ng/L		02/17/23 09:29	02/17/23 22:56	1
Perfluorotridecanoic acid	ND		1.8	0.45	ng/L		02/17/23 09:29	02/17/23 22:56	1
Perfluorotetradecanoic acid	ND		1.8	0.45	ng/L		02/17/23 09:29	02/17/23 22:56	1
Perfluorobutanesulfonic acid	ND		1.8	0.27	ng/L		02/17/23 09:29	02/17/23 22:56	1
Perfluoropentanesulfonic acid	ND		1.8	0.45	ng/L		02/17/23 09:29	02/17/23 22:56	1
Perfluorohexanesulfonic acid	ND		1.8	0.51	ng/L		02/17/23 09:29	02/17/23 22:56	1
Perfluoroheptanesulfonic acid	ND		1.8	0.36	ng/L		02/17/23 09:29	02/17/23 22:56	1
Perfluorooctanesulfonic acid	ND		1.8	0.45	ng/L		02/17/23 09:29	02/17/23 22:56	1
Perfluorononanesulfonic acid	ND		1.8	0.36	ng/L		02/17/23 09:29	02/17/23 22:56	1
Perfluorodecanesulfonic acid	ND		1.8	0.45	ng/L		02/17/23 09:29	02/17/23 22:56	1
Perfluorododecanesulfonic acid (PFDoS)	ND		1.8	0.81	ng/L		02/17/23 09:29	02/17/23 22:56	1
1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	ND		7.2	1.5	ng/L		02/17/23 09:29	02/17/23 22:56	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		7.2	2.3	ng/L		02/17/23 09:29	02/17/23 22:56	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		7.2	2.3	ng/L		02/17/23 09:29	02/17/23 22:56	1
Perfluorooctanesulfonamide	ND		1.8	0.45	ng/L		02/17/23 09:29	02/17/23 22:56	1
NMeFOSA	ND		1.8	0.45	ng/L		02/17/23 09:29	02/17/23 22:56	1
N-ethylperfluoro-1-octanesulfonamide	ND		1.8	0.45	ng/L		02/17/23 09:29	02/17/23 22:56	1
NMeFOSAA	ND		3.6	1.1	ng/L		02/17/23 09:29	02/17/23 22:56	1
NEtFOSAA	ND		1.8	0.63	ng/L		02/17/23 09:29	02/17/23 22:56	1
2-(N-methylperfluoro-1-octanesulfonamido) ethanol	ND		18	4.5	ng/L		02/17/23 09:29	02/17/23 22:56	1
2-(N-ethylperfluoro-1-octanesulfonamido) ethanol	ND		18	4.5	ng/L		02/17/23 09:29	02/17/23 22:56	1
HFPO-DA	ND		7.2	1.8	ng/L		02/17/23 09:29	02/17/23 22:56	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		7.2	1.4	ng/L		02/17/23 09:29	02/17/23 22:56	1

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-2

Client Sample ID: FB_013123
Date Collected: 01/31/23 17:20
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-6
Matrix: Water

Method: EPA 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluoro-3-methoxypropanoic acid	ND		3.6	0.45	ng/L		02/17/23 09:29	02/17/23 22:56	1
Perfluoro(4-methoxybutanoic acid)	ND		3.6	0.90	ng/L		02/17/23 09:29	02/17/23 22:56	1
Perfluoro-3,6-dioxaheptanoic acid	ND		3.6	0.90	ng/L		02/17/23 09:29	02/17/23 22:56	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	ND		7.2	0.90	ng/L		02/17/23 09:29	02/17/23 22:56	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	ND		7.2	1.8	ng/L		02/17/23 09:29	02/17/23 22:56	1
PFEESA	ND		3.6	0.45	ng/L		02/17/23 09:29	02/17/23 22:56	1
3:3 FTCA	ND		9.0	1.4	ng/L		02/17/23 09:29	02/17/23 22:56	1
5:3 FTCA	ND		45	9.0	ng/L		02/17/23 09:29	02/17/23 22:56	1
7:3 FTCA	ND		45	9.0	ng/L		02/17/23 09:29	02/17/23 22:56	1

Isotope Dilution	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*105*		*20 - 150*	*02/17/23 09:29*	*02/17/23 22:56*	*1*
13C5 PFPeA	*91.0*		*20 - 150*	*02/17/23 09:29*	*02/17/23 22:56*	*1*
13C5 PFHxA	*110*	*I*	*20 - 150*	*02/17/23 09:29*	*02/17/23 22:56*	*1*
13C4 PFHpA	*107*		*20 - 150*	*02/17/23 09:29*	*02/17/23 22:56*	*1*
13C8 PFOA	*108*		*20 - 150*	*02/17/23 09:29*	*02/17/23 22:56*	*1*
13C9 PFNA	*101*		*20 - 150*	*02/17/23 09:29*	*02/17/23 22:56*	*1*
13C6 PFDA	*103*		*20 - 150*	*02/17/23 09:29*	*02/17/23 22:56*	*1*
13C7 PFUnA	*114*		*20 - 150*	*02/17/23 09:29*	*02/17/23 22:56*	*1*
13C2-PFDoDA	*97.3*		*20 - 150*	*02/17/23 09:29*	*02/17/23 22:56*	*1*
13C2 PFTeDA	*96.5*		*20 - 150*	*02/17/23 09:29*	*02/17/23 22:56*	*1*
13C3 PFBS	*123*		*20 - 150*	*02/17/23 09:29*	*02/17/23 22:56*	*1*
13C3 PFHxS	*106*		*20 - 150*	*02/17/23 09:29*	*02/17/23 22:56*	*1*
13C8 PFOS	*96.2*		*20 - 150*	*02/17/23 09:29*	*02/17/23 22:56*	*1*
13C8 FOSA	*92.6*		*20 - 150*	*02/17/23 09:29*	*02/17/23 22:56*	*1*
d3-NMeFOSAA	*96.2*		*20 - 150*	*02/17/23 09:29*	*02/17/23 22:56*	*1*
d5-NEtFOSAA	*105*		*20 - 150*	*02/17/23 09:29*	*02/17/23 22:56*	*1*
M2-4:2 FTS	*98.2*		*20 - 150*	*02/17/23 09:29*	*02/17/23 22:56*	*1*
M2-6:2 FTS	*88.6*		*20 - 150*	*02/17/23 09:29*	*02/17/23 22:56*	*1*
M2-8:2 FTS	*104*		*20 - 150*	*02/17/23 09:29*	*02/17/23 22:56*	*1*
13C3 HFPO-DA	*95.5*		*20 - 150*	*02/17/23 09:29*	*02/17/23 22:56*	*1*
d7-N-MeFOSE-M	*83.3*		*20 - 150*	*02/17/23 09:29*	*02/17/23 22:56*	*1*
d9-N-EtFOSE-M	*84.9*		*20 - 150*	*02/17/23 09:29*	*02/17/23 22:56*	*1*
d5-NEtPFOSA	*73.2*		*20 - 150*	*02/17/23 09:29*	*02/17/23 22:56*	*1*
d3-NMePFOSA	*75.4*		*20 - 150*	*02/17/23 09:29*	*02/17/23 22:56*	*1*

Isotope Dilution Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-2

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFBA (20-150)	PFPeA (20-150)	13C5PHA (20-150)	C4PFHA (20-150)	C8PFOA (20-150)	C9PFNA (20-150)	C6PFDA (20-150)	13C7PUA (20-150)
480-205868-1	MW2-013123	111	105	113	109	108	107	113	118
480-205868-1 MS	MW2-013123-MS	95.5	101	92.4	92.0	82.0	96.7	91.1	98.4
480-205868-1 MSD	MW2-013123-MSD	105	121	125	131	93.1	103	99.7	106
480-205868-2	FDUP-013123	91.5	83.5	91.8	72.5	83.9	87.6	96.9	85.2
480-205868-6	FB_013123	105	91.0	110 I	107	108	101	103	114
LCS 410-345645/2-B	Lab Control Sample	110	117	103	108	101	113	117	105
LCS 410-348608/2-A	Lab Control Sample	93.9	81.3	84.8	89.9	99.9	95.2	103	94.8
LLCS 410-345645/3-B	Lab Control Sample	104	120	115	125	92.9	98.9	106	109
LLCS 410-348608/3-A	Lab Control Sample	89.4	98.1	106	116	87.4	99.7	93.3	83.5
MB 410-345645/1-A	Method Blank	104	107	99.0	101	115	112	117	114
MB 410-348608/1-A	Method Blank	96.3	93.0	92.1	98.3	104	89.9	93.5	88.6

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	PFDoDA (20-150)	PFTDA (20-150)	C3PFBS (20-150)	C3PFHS (20-150)	C8PFOS (20-150)	PFOSA (20-150)	d3NMFOS (20-150)	d5NEFOS (20-150)
480-205868-1	MW2-013123	102	92.8	116	136	93.5	94.6	93.6	89.2
480-205868-1 MS	MW2-013123-MS	89.7	87.0	96.9	103	89.5	88.6	90.4	102
480-205868-1 MSD	MW2-013123-MSD	97.2	94.9	103	111	92.3	94.9	93.8	91.3
480-205868-2	FDUP-013123	91.5	76.1	101	93.2	85.4	90.8	82.8	85.9
480-205868-6	FB_013123	97.3	96.5	123	106	96.2	92.6	96.2	105
LCS 410-345645/2-B	Lab Control Sample	104	88.9	101	108	101	106	113	126
LCS 410-348608/2-A	Lab Control Sample	92.7	84.2	96.3	81.1	82.1	86.9	84.8	81.4
LLCS 410-345645/3-B	Lab Control Sample	98.4	84.9	104	111	102	93.3	102	103
LLCS 410-348608/3-A	Lab Control Sample	81.6	79.8	93.1	80.1	93.0	103	79.3	85.3
MB 410-345645/1-A	Method Blank	114	98.4	99.5	106	101	99.2	118	110
MB 410-348608/1-A	Method Blank	91.2	77.9	89.3	92.7	83.5	87.3	73.8	78.0

		Percent Isotope Dilution Recovery (Acceptance Limits)							
Lab Sample ID	Client Sample ID	M242FTS (20-150)	M262FTS (20-150)	M282FTS (20-150)	HFPODA (20-150)	NMFM (20-150)	NEFM (20-150)	d5NPFSA (20-150)	d3NMFSA (20-150)
480-205868-1	MW2-013123	105	121	116	106	87.4	85.1	57.2	62.8
480-205868-1 MS	MW2-013123-MS	75.4	81.8	84.1	91.4	81.9	81.1	68.5	68.9
480-205868-1 MSD	MW2-013123-MSD	111	103	109	125	89.5	83.9	80.7	79.8
480-205868-2	FDUP-013123	87.6	108 I	82.1	88.0	66.3	67.7	55.4	61.4
480-205868-6	FB_013123	98.2	88.6	104	95.5	83.3	84.9	73.2	75.4
LCS 410-345645/2-B	Lab Control Sample	100	113	95.1	116	99.8	98.6	86.8	82.1
LCS 410-348608/2-A	Lab Control Sample	94.1	75.7	91.5	81.1	64.8	65.1	64.0	64.5
LLCS 410-345645/3-B	Lab Control Sample	95.0	120 I	107	137	90.6	87.0	86.6	84.9
LLCS 410-348608/3-A	Lab Control Sample	87.6	90.7	81.1	98.8	71.5	70.8	69.6	67.2
MB 410-345645/1-A	Method Blank	104	110	103	106	97.8	93.5	90.5	91.4
MB 410-348608/1-A	Method Blank	119 I	93.7	80.8	97.5	61.4	62.4	65.2	64.9

Surrogate Legend

PFBA = 13C4 PFBA
PFPeA = 13C5 PFPeA
13C5PHA = 13C5 PFHxA
C4PFHA = 13C4 PFHpA
C8PFOA = 13C8 PFOA
C9PFNA = 13C9 PFNA
C6PFDA = 13C6 PFDA
13C7PUA = 13C7 PFUnA

Isotope Dilution Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-2

PFDoDA = 13C2-PFDoDA
PFTDA = 13C2 PFTeDA
C3PFBS = 13C3 PFBS
C3PFHS = 13C3 PFHxS
C8PFOS = 13C8 PFOS
PFOSA = 13C8 FOSA
d3NMFOS = d3-NMeFOSAA
d5NEFOS = d5-NEtFOSAA
M242FTS = M2-4:2 FTS
M262FTS = M2-6:2 FTS
M282FTS = M2-8:2 FTS
HFPODA = 13C3 HFPO-DA
NMFM = d7-N-MeFOSE-M
NEFM = d9-N-EtFOSE-M
d5NPFSA = d5-NEtPFOSA
d3NMFSA = d3-NMePFOSA

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS

Lab Sample ID: MB 410-345645/1-A
Matrix: Water
Analysis Batch: 345729

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 345645

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	ND		8.0	2.0	ng/L		02/17/23 09:29	02/17/23 21:25	1
Perfluoropentanoic acid	ND		4.0	1.0	ng/L		02/17/23 09:29	02/17/23 21:25	1
Perfluorohexanoic acid	ND		2.0	0.50	ng/L		02/17/23 09:29	02/17/23 21:25	1
Perfluoroheptanoic acid	ND		2.0	0.52	ng/L		02/17/23 09:29	02/17/23 21:25	1
Perfluorooctanoic acid	ND		2.0	0.64	ng/L		02/17/23 09:29	02/17/23 21:25	1
Perfluorononanoic acid	ND		2.0	0.50	ng/L		02/17/23 09:29	02/17/23 21:25	1
Perfluorodecanoic acid	ND		2.0	0.50	ng/L		02/17/23 09:29	02/17/23 21:25	1
Perfluoroundecanoic acid	ND		2.0	0.50	ng/L		02/17/23 09:29	02/17/23 21:25	1
Perfluorododecanoic acid	ND		2.0	0.50	ng/L		02/17/23 09:29	02/17/23 21:25	1
Perfluorotridecanoic acid	ND		2.0	0.50	ng/L		02/17/23 09:29	02/17/23 21:25	1
Perfluorotetradecanoic acid	ND		2.0	0.50	ng/L		02/17/23 09:29	02/17/23 21:25	1
Perfluorobutanesulfonic acid	ND		2.0	0.30	ng/L		02/17/23 09:29	02/17/23 21:25	1
Perfluoropentanesulfonic acid	ND		2.0	0.50	ng/L		02/17/23 09:29	02/17/23 21:25	1
Perfluorohexanesulfonic acid	ND		2.0	0.57	ng/L		02/17/23 09:29	02/17/23 21:25	1
Perfluoroheptanesulfonic acid	ND		2.0	0.40	ng/L		02/17/23 09:29	02/17/23 21:25	1
Perfluorooctanesulfonic acid	ND		2.0	0.50	ng/L		02/17/23 09:29	02/17/23 21:25	1
Perfluorononanesulfonic acid	ND		2.0	0.40	ng/L		02/17/23 09:29	02/17/23 21:25	1
Perfluorodecanesulfonic acid	ND		2.0	0.50	ng/L		02/17/23 09:29	02/17/23 21:25	1
Perfluorododecanesulfonic acid (PFDoS)	ND		2.0	0.90	ng/L		02/17/23 09:29	02/17/23 21:25	1
1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	ND		8.0	1.7	ng/L		02/17/23 09:29	02/17/23 21:25	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		8.0	2.5	ng/L		02/17/23 09:29	02/17/23 21:25	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		8.0	2.6	ng/L		02/17/23 09:29	02/17/23 21:25	1
Perfluorooctanesulfonamide	ND		2.0	0.50	ng/L		02/17/23 09:29	02/17/23 21:25	1
NMeFOSA	ND		2.0	0.50	ng/L		02/17/23 09:29	02/17/23 21:25	1
N-ethylperfluoro-1-octanesulfonamide	ND		2.0	0.50	ng/L		02/17/23 09:29	02/17/23 21:25	1
NMeFOSAA	ND		4.0	1.2	ng/L		02/17/23 09:29	02/17/23 21:25	1
NEtFOSAA	ND		2.0	0.70	ng/L		02/17/23 09:29	02/17/23 21:25	1
2-(N-methylperfluoro-1-octanesulfonamido) ethanol	ND		20	5.0	ng/L		02/17/23 09:29	02/17/23 21:25	1
2-(N-ethylperfluoro-1-octanesulfonamido) ethanol	ND		20	5.0	ng/L		02/17/23 09:29	02/17/23 21:25	1
HFPO-DA	ND		8.0	2.0	ng/L		02/17/23 09:29	02/17/23 21:25	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		8.0	1.5	ng/L		02/17/23 09:29	02/17/23 21:25	1
Perfluoro-3-methoxypropanoic acid	ND		4.0	0.50	ng/L		02/17/23 09:29	02/17/23 21:25	1
Perfluoro(4-methoxybutanoic acid)	ND		4.0	1.0	ng/L		02/17/23 09:29	02/17/23 21:25	1
Perfluoro-3,6-dioxaheptanoic acid	ND		4.0	1.0	ng/L		02/17/23 09:29	02/17/23 21:25	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	ND		8.0	1.0	ng/L		02/17/23 09:29	02/17/23 21:25	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	ND		8.0	2.0	ng/L		02/17/23 09:29	02/17/23 21:25	1
PFEESA	ND		4.0	0.50	ng/L		02/17/23 09:29	02/17/23 21:25	1
3:3 FTCA	ND		10	1.5	ng/L		02/17/23 09:29	02/17/23 21:25	1
5:3 FTCA	ND		50	10	ng/L		02/17/23 09:29	02/17/23 21:25	1
7:3 FTCA	ND		50	10	ng/L		02/17/23 09:29	02/17/23 21:25	1

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Isotope Dilution	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
13C4 PFBA	104		20 - 150	02/17/23 09:29	02/17/23 21:25	1
13C5 PFPeA	107		20 - 150	02/17/23 09:29	02/17/23 21:25	1
13C5 PFHxA	99.0		20 - 150	02/17/23 09:29	02/17/23 21:25	1
13C4 PFHpA	101		20 - 150	02/17/23 09:29	02/17/23 21:25	1
13C8 PFOA	115		20 - 150	02/17/23 09:29	02/17/23 21:25	1
13C9 PFNA	112		20 - 150	02/17/23 09:29	02/17/23 21:25	1
13C6 PFDA	117		20 - 150	02/17/23 09:29	02/17/23 21:25	1
13C7 PFUnA	114		20 - 150	02/17/23 09:29	02/17/23 21:25	1
13C2-PFDoDA	114		20 - 150	02/17/23 09:29	02/17/23 21:25	1
13C2 PFTeDA	98.4		20 - 150	02/17/23 09:29	02/17/23 21:25	1
13C3 PFBS	99.5		20 - 150	02/17/23 09:29	02/17/23 21:25	1
13C3 PFHxS	106		20 - 150	02/17/23 09:29	02/17/23 21:25	1
13C8 PFOS	101		20 - 150	02/17/23 09:29	02/17/23 21:25	1
13C8 FOSA	99.2		20 - 150	02/17/23 09:29	02/17/23 21:25	1
d3-NMeFOSAA	118		20 - 150	02/17/23 09:29	02/17/23 21:25	1
d5-NEtFOSAA	110		20 - 150	02/17/23 09:29	02/17/23 21:25	1
M2-4:2 FTS	104		20 - 150	02/17/23 09:29	02/17/23 21:25	1
M2-6:2 FTS	110		20 - 150	02/17/23 09:29	02/17/23 21:25	1
M2-8:2 FTS	103		20 - 150	02/17/23 09:29	02/17/23 21:25	1
13C3 HFPO-DA	106		20 - 150	02/17/23 09:29	02/17/23 21:25	1
d7-N-MeFOSE-M	97.8		20 - 150	02/17/23 09:29	02/17/23 21:25	1
d9-N-EtFOSE-M	93.5		20 - 150	02/17/23 09:29	02/17/23 21:25	1
d5-NEtPFOSA	90.5		20 - 150	02/17/23 09:29	02/17/23 21:25	1
d3-NMePFOSA	91.4		20 - 150	02/17/23 09:29	02/17/23 21:25	1

Lab Sample ID: LCS 410-345645/2-B
Matrix: Water
Analysis Batch: 345729

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 345645

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid	100	97.0		ng/L		97	40 - 150
Perfluoropentanoic acid	50.1	54.2		ng/L		108	40 - 150
Perfluorohexanoic acid	25.0	28.7		ng/L		115	40 - 150
Perfluoroheptanoic acid	25.0	25.2		ng/L		101	40 - 150
Perfluorooctanoic acid	25.0	25.6		ng/L		102	40 - 150
Perfluorononanoic acid	25.0	23.1		ng/L		92	40 - 150
Perfluorodecanoic acid	25.0	22.2		ng/L		89	40 - 150
Perfluoroundecanoic acid	25.0	24.5		ng/L		98	40 - 150
Perfluorododecanoic acid	25.0	24.6		ng/L		98	40 - 150
Perfluorotridecanoic acid	25.0	24.7		ng/L		99	40 - 150
Perfluorotetradecanoic acid	25.0	25.1		ng/L		100	40 - 150
Perfluorobutanesulfonic acid	22.2	22.3		ng/L		100	40 - 150
Perfluoropentanesulfonic acid	23.6	22.2		ng/L		94	40 - 150
Perfluorohexanesulfonic acid	22.9	19.1		ng/L		83	40 - 150
Perfluoroheptanesulfonic acid	23.9	26.1		ng/L		109	40 - 150
Perfluorooctanesulfonic acid	23.2	25.8		ng/L		111	40 - 150
Perfluorononanesulfonic acid	24.1	26.8		ng/L		111	40 - 150
Perfluorodecanesulfonic acid	24.2	25.7		ng/L		106	40 - 150
Perfluorododecanesulfonic acid (PFDoS)	24.3	26.3		ng/L		108	40 - 150
1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	93.9	92.6		ng/L		99	40 - 150

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 410-345645/2-B
Matrix: Water
Analysis Batch: 345729

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 345645

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	95.2	68.5		ng/L		72	40 - 150
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	96.2	98.5		ng/L		102	40 - 150
Perfluorooctanesulfonamide	25.0	24.1		ng/L		96	40 - 150
NMeFOSA	25.0	29.3		ng/L		117	40 - 150
N-ethylperfluoro-1-octanesulfonamide	25.0	27.3		ng/L		109	40 - 150
NMeFOSAA	25.0	23.9		ng/L		95	40 - 150
NEtFOSAA	25.0	22.4		ng/L		89	40 - 150
2-(N-methylperfluoro-1-octanesulfonamido) ethanol	250	246		ng/L		98	40 - 150
2-(N-ethylperfluoro-1-octanesulfonamido) ethanol	250	243		ng/L		97	40 - 150
HFPO-DA	100	118		ng/L		118	40 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	94.5	100		ng/L		106	40 - 150
Perfluoro-3-methoxypropanoic acid	50.1	44.5		ng/L		89	40 - 150
Perfluoro(4-methoxybutanoic acid)	50.1	49.3		ng/L		98	40 - 150
Perfluoro-3,6-dioxaheptanoic acid	50.1	58.2		ng/L		116	40 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	93.5	97.6		ng/L		104	40 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	94.5	101		ng/L		107	40 - 150
PFEESA	44.6	47.6		ng/L		107	40 - 150
3:3 FTCA	100	105		ng/L		105	40 - 150
5:3 FTCA	501	612		ng/L		122	40 - 150
7:3 FTCA	501	653		ng/L		130	40 - 150

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*110*		*20 - 150*
13C5 PFPeA	*117*		*20 - 150*
13C5 PFHxA	*103*		*20 - 150*
13C4 PFHpA	*108*		*20 - 150*
13C8 PFOA	*101*		*20 - 150*
13C9 PFNA	*113*		*20 - 150*
13C6 PFDA	*117*		*20 - 150*
13C7 PFUnA	*105*		*20 - 150*
13C2-PFDoDA	*104*		*20 - 150*
13C2 PFTeDA	*88.9*		*20 - 150*
13C3 PFBS	*101*		*20 - 150*
13C3 PFHxS	*108*		*20 - 150*
13C8 PFOS	*101*		*20 - 150*
13C8 FOSA	*106*		*20 - 150*
d3-NMeFOSAA	*113*		*20 - 150*
d5-NEtFOSAA	*126*		*20 - 150*
M2-4:2 FTS	*100*		*20 - 150*

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 410-345645/2-B
Matrix: Water
Analysis Batch: 345729

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 345645

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
M2-6:2 FTS	*113*		*20 - 150*
M2-8:2 FTS	*95.1*		*20 - 150*
13C3 HFPO-DA	*116*		*20 - 150*
d7-N-MeFOSE-M	*99.8*		*20 - 150*
d9-N-EtFOSE-M	*98.6*		*20 - 150*
d5-NEtPFOSA	*86.8*		*20 - 150*
d3-NMePFOSA	*82.1*		*20 - 150*

Lab Sample ID: LLCS 410-345645/3-B
Matrix: Water
Analysis Batch: 345729

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 345645

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid	16.0	15.9		ng/L		99	40 - 150
Perfluoropentanoic acid	8.00	7.67		ng/L		96	40 - 150
Perfluorohexanoic acid	4.00	3.91		ng/L		98	40 - 150
Perfluoroheptanoic acid	4.00	3.55		ng/L		89	40 - 150
Perfluorooctanoic acid	4.00	3.45		ng/L		86	40 - 150
Perfluorononanoic acid	4.00	4.19		ng/L		105	40 - 150
Perfluorodecanoic acid	4.00	3.29		ng/L		82	40 - 150
Perfluoroundecanoic acid	4.00	3.87		ng/L		97	40 - 150
Perfluorododecanoic acid	4.00	3.75		ng/L		94	40 - 150
Perfluorotridecanoic acid	4.00	3.54		ng/L		89	40 - 150
Perfluorotetradecanoic acid	4.00	3.43		ng/L		86	40 - 150
Perfluorobutanesulfonic acid	3.55	3.71		ng/L		105	40 - 150
Perfluoropentanesulfonic acid	3.76	3.41		ng/L		91	40 - 150
Perfluorohexanesulfonic acid	3.66	2.77		ng/L		76	40 - 150
Perfluoroheptanesulfonic acid	3.81	3.72		ng/L		97	40 - 150
Perfluorooctanesulfonic acid	3.71	3.41		ng/L		92	40 - 150
Perfluorononanesulfonic acid	3.85	3.41		ng/L		89	40 - 150
Perfluorodecanesulfonic acid	3.86	3.36		ng/L		87	40 - 150
Perfluorododecanesulfonic acid (PFDoS)	3.88	3.48		ng/L		90	40 - 150
1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	15.0	13.3		ng/L		89	40 - 150
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	15.2	13.9		ng/L		91	40 - 150
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	15.4	11.3		ng/L		74	40 - 150
Perfluorooctanesulfonamide	4.00	3.75		ng/L		94	40 - 150
NMeFOSA	4.00	3.42		ng/L		85	40 - 150
N-ethylperfluoro-1-octanesulfonamide	4.00	3.70		ng/L		92	40 - 150
NMeFOSAA	4.00	4.10		ng/L		102	40 - 150
NEtFOSAA	4.00	4.16		ng/L		104	40 - 150
2-(N-methylperfluoro-1-octanesulfonamido) ethanol	40.0	37.2		ng/L		93	40 - 150
2-(N-ethylperfluoro-1-octanesulfonamido) ethanol	40.0	37.3		ng/L		93	40 - 150

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 410-345645/3-B
Matrix: Water
Analysis Batch: 345729

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 345645

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
HFPO-DA	16.0	15.4		ng/L		97	40 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	15.1	12.7		ng/L		84	40 - 150
Perfluoro-3-methoxypropanoic acid	8.00	7.56		ng/L		95	40 - 150
Perfluoro(4-methoxybutanoic acid)	8.00	7.25		ng/L		91	40 - 150
Perfluoro-3,6-dioxaheptanoic acid	8.00	8.47		ng/L		106	40 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	15.0	14.0		ng/L		94	40 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	15.1	12.3		ng/L		81	40 - 150
PFEESA	7.12	7.80		ng/L		110	40 - 150
3:3 FTCA	20.0	15.6		ng/L		78	40 - 150
5:3 FTCA	100	89.2		ng/L		89	40 - 150
7:3 FTCA	100	90.8		ng/L		91	40 - 150

Isotope Dilution	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
13C4 PFBA	*104*		*20 - 150*
13C5 PFPeA	*120*		*20 - 150*
13C5 PFHxA	*115*		*20 - 150*
13C4 PFHpA	*125*		*20 - 150*
13C8 PFOA	*92.9*		*20 - 150*
13C9 PFNA	*98.9*		*20 - 150*
13C6 PFDA	*106*		*20 - 150*
13C7 PFUnA	*109*		*20 - 150*
13C2-PFDoDA	*98.4*		*20 - 150*
13C2 PFTeDA	*84.9*		*20 - 150*
13C3 PFBS	*104*		*20 - 150*
13C3 PFHxS	*111*		*20 - 150*
13C8 PFOS	*102*		*20 - 150*
13C8 FOSA	*93.3*		*20 - 150*
d3-NMeFOSAA	*102*		*20 - 150*
d5-NEtFOSAA	*103*		*20 - 150*
M2-4:2 FTS	*95.0*		*20 - 150*
M2-6:2 FTS	*120*	*I*	*20 - 150*
M2-8:2 FTS	*107*		*20 - 150*
13C3 HFPO-DA	*137*		*20 - 150*
d7-N-MeFOSE-M	*90.6*		*20 - 150*
d9-N-EtFOSE-M	*87.0*		*20 - 150*
d5-NEtPFOSA	*86.6*		*20 - 150*
d3-NMePFOSA	*84.9*		*20 - 150*

Lab Sample ID: 480-205868-1 MS
Matrix: Water
Analysis Batch: 345729

Client Sample ID: MW2-013123-MS
Prep Type: Total/NA
Prep Batch: 345645

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid	ND		93.1	86.0		ng/L		92	40 - 150

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 480-205868-1 MS
Matrix: Water
Analysis Batch: 345729

Client Sample ID: MW2-013123-MS
Prep Type: Total/NA
Prep Batch: 345645

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoropentanoic acid	ND		46.6	40.1		ng/L		86	40 - 150
Perfluorohexanoic acid	ND		23.3	21.9		ng/L		94	40 - 150
Perfluoroheptanoic acid	ND		23.3	25.5		ng/L		109	40 - 150
Perfluorooctanoic acid	0.70	J	23.3	25.4		ng/L		106	40 - 150
Perfluorononanoic acid	ND		23.3	20.8		ng/L		89	40 - 150
Perfluorodecanoic acid	ND		23.3	23.5		ng/L		101	40 - 150
Perfluoroundecanoic acid	ND		23.3	21.7		ng/L		93	40 - 150
Perfluorododecanoic acid	ND		23.3	25.5		ng/L		110	40 - 150
Perfluorotridecanoic acid	ND		23.3	21.9		ng/L		94	40 - 150
Perfluorotetradecanoic acid	ND		23.3	24.6		ng/L		106	40 - 150
Perfluorobutanesulfonic acid	0.46	J	20.6	20.5		ng/L		97	40 - 150
Perfluoropentanesulfonic acid	ND		21.9	17.5		ng/L		80	40 - 150
Perfluorohexanesulfonic acid	ND		21.3	16.8		ng/L		79	40 - 150
Perfluoroheptanesulfonic acid	ND		22.2	20.3		ng/L		92	40 - 150
Perfluorooctanesulfonic acid	ND		21.6	21.2		ng/L		98	40 - 150
Perfluorononanesulfonic acid	ND		22.4	20.1		ng/L		90	40 - 150
Perfluorodecanesulfonic acid	ND		22.5	21.4		ng/L		95	40 - 150
Perfluorododecanesulfonic acid (PFDoS)	ND		22.6	22.9		ng/L		102	40 - 150
1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	ND	F2	87.3	103		ng/L		117	40 - 150
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		88.4	75.0		ng/L		85	40 - 150
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		89.4	71.2		ng/L		80	40 - 150
Perfluorooctanesulfonamide	ND		23.3	21.1		ng/L		90	40 - 150
NMeFOSA	ND		23.3	24.2		ng/L		104	40 - 150
N-ethylperfluoro-1-octanesulfonamide	ND		23.3	24.1		ng/L		104	40 - 150
NMeFOSAA	ND		23.3	23.1		ng/L		99	40 - 150
NEtFOSAA	ND		23.3	22.2		ng/L		95	40 - 150
2-(N-methylperfluoro-1-octanesulfonamido) ethanol	ND		233	231		ng/L		99	40 - 150
2-(N-ethylperfluoro-1-octanesulfonamido) ethanol	ND		233	230		ng/L		99	40 - 150
HFPO-DA	ND		93.0	104		ng/L		112	40 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		87.8	86.9		ng/L		99	40 - 150
Perfluoro-3-methoxypropanoic acid	ND		46.6	40.0		ng/L		86	40 - 150
Perfluoro(4-methoxybutanoic acid)	ND		46.6	39.6		ng/L		85	40 - 150
Perfluoro-3,6-dioxaheptanoic acid	ND		46.6	51.4		ng/L		110	40 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	ND		86.9	89.7		ng/L		103	40 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	ND		87.8	85.6		ng/L		97	40 - 150
PFEESA	ND		41.4	36.3		ng/L		88	40 - 150
3:3 FTCA	ND		93.1	85.4		ng/L		92	40 - 150

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 480-205868-1 MS
Matrix: Water
Analysis Batch: 345729

Client Sample ID: MW2-013123-MS
Prep Type: Total/NA
Prep Batch: 345645

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
5:3 FTCA	ND		466	482		ng/L		104	40 - 150
7:3 FTCA	ND		466	497		ng/L		107	40 - 150

Isotope Dilution	*MS %Recovery*	*MS Qualifier*	*Limits*
13C4 PFBA	*95.5*		*20 - 150*
13C5 PFPeA	*101*		*20 - 150*
13C5 PFHxA	*92.4*		*20 - 150*
13C4 PFHpA	*92.0*		*20 - 150*
13C8 PFOA	*82.0*		*20 - 150*
13C9 PFNA	*96.7*		*20 - 150*
13C6 PFDA	*91.1*		*20 - 150*
13C7 PFUnA	*98.4*		*20 - 150*
13C2-PFDoDA	*89.7*		*20 - 150*
13C2 PFTeDA	*87.0*		*20 - 150*
13C3 PFBS	*96.9*		*20 - 150*
13C3 PFHxS	*103*		*20 - 150*
13C8 PFOS	*89.5*		*20 - 150*
13C8 FOSA	*88.6*		*20 - 150*
d3-NMeFOSAA	*90.4*		*20 - 150*
d5-NEtFOSAA	*102*		*20 - 150*
M2-4:2 FTS	*75.4*		*20 - 150*
M2-6:2 FTS	*81.8*		*20 - 150*
M2-8:2 FTS	*84.1*		*20 - 150*
13C3 HFPO-DA	*91.4*		*20 - 150*
d7-N-MeFOSE-M	*81.9*		*20 - 150*
d9-N-EtFOSE-M	*81.1*		*20 - 150*
d5-NEtPFOSA	*68.5*		*20 - 150*
d3-NMePFOSA	*68.9*		*20 - 150*

Lab Sample ID: 480-205868-1 MSD
Matrix: Water
Analysis Batch: 345729

Client Sample ID: MW2-013123-MSD
Prep Type: Total/NA
Prep Batch: 345645

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorobutanoic acid	ND		96.2	99.3		ng/L		103	40 - 150	14	30
Perfluoropentanoic acid	ND		48.1	48.5		ng/L		101	40 - 150	19	30
Perfluorohexanoic acid	ND		24.0	23.4		ng/L		97	40 - 150	7	30
Perfluoroheptanoic acid	ND		24.0	20.5		ng/L		85	40 - 150	21	30
Perfluorooctanoic acid	0.70	J	24.0	28.5		ng/L		116	40 - 150	11	30
Perfluorononanoic acid	ND		24.0	23.4		ng/L		98	40 - 150	12	30
Perfluorodecanoic acid	ND		24.0	24.6		ng/L		102	40 - 150	5	30
Perfluoroundecanoic acid	ND		24.0	24.6		ng/L		102	40 - 150	12	30
Perfluorododecanoic acid	ND		24.0	23.5		ng/L		98	40 - 150	8	30
Perfluorotridecanoic acid	ND		24.0	23.8		ng/L		99	40 - 150	8	30
Perfluorotetradecanoic acid	ND		24.0	23.6		ng/L		98	40 - 150	4	30
Perfluorobutanesulfonic acid	0.46	J	21.3	23.6		ng/L		108	40 - 150	14	30
Perfluoropentanesulfonic acid	ND		22.6	18.7		ng/L		83	40 - 150	7	30
Perfluorohexanesulfonic acid	ND		22.0	21.1		ng/L		96	40 - 150	23	30
Perfluoroheptanesulfonic acid	ND		22.9	23.8		ng/L		104	40 - 150	16	30

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 480-205868-1 MSD
Matrix: Water
Analysis Batch: 345729

Client Sample ID: MW2-013123-MSD
Prep Type: Total/NA
Prep Batch: 345645

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Perfluorooctanesulfonic acid	ND		22.3	23.7		ng/L		106	40 - 150	11	30
Perfluorononanesulfonic acid	ND		23.1	23.0		ng/L		99	40 - 150	13	30
Perfluorodecanesulfonic acid	ND		23.2	22.1		ng/L		95	40 - 150	3	30
Perfluorododecanesulfonic acid (PFDoS)	ND		23.3	22.9		ng/L		98	40 - 150	0	30
1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	ND	F2	90.2	72.6	F2	ng/L		81	40 - 150	34	30
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		91.4	70.1		ng/L		77	40 - 150	7	30
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		92.3	79.7		ng/L		86	40 - 150	11	30
Perfluorooctanesulfonamide	ND		24.0	23.0		ng/L		96	40 - 150	9	30
NMeFOSA	ND		24.0	25.2		ng/L		105	40 - 150	4	30
N-ethylperfluoro-1-octanesulfonamide	ND		24.0	24.4		ng/L		101	40 - 150	1	30
NMeFOSAA	ND		24.0	23.8		ng/L		99	40 - 150	3	30
NEtFOSAA	ND		24.0	27.8		ng/L		116	40 - 150	22	30
2-(N-methylperfluoro-1-octanesulfonamido) ethanol	ND		240	235		ng/L		98	40 - 150	2	30
2-(N-ethylperfluoro-1-octanesulfonamido) ethanol	ND		240	240		ng/L		100	40 - 150	4	30
HFPO-DA	ND		96.0	100		ng/L		104	40 - 150	4	30
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		90.7	82.1		ng/L		90	40 - 150	6	30
Perfluoro-3-methoxypropanoic acid	ND		48.1	46.5		ng/L		97	40 - 150	15	30
Perfluoro(4-methoxybutanoic acid)	ND		48.1	43.9		ng/L		91	40 - 150	10	30
Perfluoro-3,6-dioxaheptanoic acid	ND		48.1	50.7		ng/L		105	40 - 150	1	30
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	ND		89.8	88.7		ng/L		99	40 - 150	1	30
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	ND		90.7	84.1		ng/L		93	40 - 150	2	30
PFEESA	ND		42.8	42.3		ng/L		99	40 - 150	15	30
3:3 FTCA	ND		96.2	103		ng/L		107	40 - 150	19	30
5:3 FTCA	ND		481	558		ng/L		116	40 - 150	15	30
7:3 FTCA	ND		481	470		ng/L		98	40 - 150	5	30

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
13C4 PFBA	*105*		*20 - 150*
13C5 PFPeA	*121*		*20 - 150*
13C5 PFHxA	*125*		*20 - 150*
13C4 PFHpA	*131*		*20 - 150*
13C8 PFOA	*93.1*		*20 - 150*
13C9 PFNA	*103*		*20 - 150*
13C6 PFDA	*99.7*		*20 - 150*
13C7 PFUnA	*106*		*20 - 150*
13C2-PFDoDA	*97.2*		*20 - 150*
13C2 PFTeDA	*94.9*		*20 - 150*

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: 480-205868-1 MSD
Matrix: Water
Analysis Batch: 345729

Client Sample ID: MW2-013123-MSD
Prep Type: Total/NA
Prep Batch: 345645

Isotope Dilution	*MSD %Recovery*	*MSD Qualifier*	*Limits*
13C3 PFBS	*103*		*20 - 150*
13C3 PFHxS	*111*		*20 - 150*
13C8 PFOS	*92.3*		*20 - 150*
13C8 FOSA	*94.9*		*20 - 150*
d3-NMeFOSAA	*93.8*		*20 - 150*
d5-NEtFOSAA	*91.3*		*20 - 150*
M2-4:2 FTS	*111*		*20 - 150*
M2-6:2 FTS	*103*		*20 - 150*
M2-8:2 FTS	*109*		*20 - 150*
13C3 HFPO-DA	*125*		*20 - 150*
d7-N-MeFOSE-M	*89.5*		*20 - 150*
d9-N-EtFOSE-M	*83.9*		*20 - 150*
d5-NEtPFOSA	*80.7*		*20 - 150*
d3-NMePFOSA	*79.8*		*20 - 150*

Lab Sample ID: MB 410-348608/1-A
Matrix: Water
Analysis Batch: 349204

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 348608

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perfluorobutanoic acid	ND		8.0	2.0	ng/L		02/28/23 09:44	03/01/23 23:38	1
Perfluoropentanoic acid	ND		4.0	1.0	ng/L		02/28/23 09:44	03/01/23 23:38	1
Perfluorohexanoic acid	ND		2.0	0.50	ng/L		02/28/23 09:44	03/01/23 23:38	1
Perfluoroheptanoic acid	ND		2.0	0.52	ng/L		02/28/23 09:44	03/01/23 23:38	1
Perfluorooctanoic acid	ND		2.0	0.64	ng/L		02/28/23 09:44	03/01/23 23:38	1
Perfluorononanoic acid	ND		2.0	0.50	ng/L		02/28/23 09:44	03/01/23 23:38	1
Perfluorodecanoic acid	ND		2.0	0.50	ng/L		02/28/23 09:44	03/01/23 23:38	1
Perfluoroundecanoic acid	ND		2.0	0.50	ng/L		02/28/23 09:44	03/01/23 23:38	1
Perfluorododecanoic acid	ND		2.0	0.50	ng/L		02/28/23 09:44	03/01/23 23:38	1
Perfluorotridecanoic acid	ND		2.0	0.50	ng/L		02/28/23 09:44	03/01/23 23:38	1
Perfluorotetradecanoic acid	ND		2.0	0.50	ng/L		02/28/23 09:44	03/01/23 23:38	1
Perfluorobutanesulfonic acid	ND		2.0	0.30	ng/L		02/28/23 09:44	03/01/23 23:38	1
Perfluoropentanesulfonic acid	ND		2.0	0.50	ng/L		02/28/23 09:44	03/01/23 23:38	1
Perfluorohexanesulfonic acid	ND		2.0	0.57	ng/L		02/28/23 09:44	03/01/23 23:38	1
Perfluoroheptanesulfonic acid	ND		2.0	0.40	ng/L		02/28/23 09:44	03/01/23 23:38	1
Perfluorooctanesulfonic acid	ND		2.0	0.50	ng/L		02/28/23 09:44	03/01/23 23:38	1
Perfluorononanesulfonic acid	ND		2.0	0.40	ng/L		02/28/23 09:44	03/01/23 23:38	1
Perfluorodecanesulfonic acid	ND		2.0	0.50	ng/L		02/28/23 09:44	03/01/23 23:38	1
Perfluorododecanesulfonic acid (PFDoS)	ND		2.0	0.90	ng/L		02/28/23 09:44	03/01/23 23:38	1
1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	ND		8.0	1.7	ng/L		02/28/23 09:44	03/01/23 23:38	1
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ND		8.0	2.5	ng/L		02/28/23 09:44	03/01/23 23:38	1
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ND		8.0	2.6	ng/L		02/28/23 09:44	03/01/23 23:38	1
Perfluorooctanesulfonamide	ND		2.0	0.50	ng/L		02/28/23 09:44	03/01/23 23:38	1
NMeFOSA	ND		2.0	0.50	ng/L		02/28/23 09:44	03/01/23 23:38	1
N-ethylperfluoro-1-octanesulfonamide	ND		2.0	0.50	ng/L		02/28/23 09:44	03/01/23 23:38	1
NMeFOSAA	ND		4.0	1.2	ng/L		02/28/23 09:44	03/01/23 23:38	1

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: MB 410-348608/1-A
Matrix: Water
Analysis Batch: 349204

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 348608

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
NEtFOSAA	ND		2.0	0.70	ng/L		02/28/23 09:44	03/01/23 23:38	1
2-(N-methylperfluoro-1-octanesulfonamido) ethanol	ND		20	5.0	ng/L		02/28/23 09:44	03/01/23 23:38	1
2-(N-ethylperfluoro-1-octanesulfonamido) ethanol	ND		20	5.0	ng/L		02/28/23 09:44	03/01/23 23:38	1
HFPO-DA	ND		8.0	2.0	ng/L		02/28/23 09:44	03/01/23 23:38	1
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND		8.0	1.5	ng/L		02/28/23 09:44	03/01/23 23:38	1
Perfluoro-3-methoxypropanoic acid	ND		4.0	0.50	ng/L		02/28/23 09:44	03/01/23 23:38	1
Perfluoro(4-methoxybutanoic acid)	ND		4.0	1.0	ng/L		02/28/23 09:44	03/01/23 23:38	1
Perfluoro-3,6-dioxaheptanoic acid	ND		4.0	1.0	ng/L		02/28/23 09:44	03/01/23 23:38	1
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	ND		8.0	1.0	ng/L		02/28/23 09:44	03/01/23 23:38	1
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	ND		8.0	2.0	ng/L		02/28/23 09:44	03/01/23 23:38	1
PFEESA	ND		4.0	0.50	ng/L		02/28/23 09:44	03/01/23 23:38	1
3:3 FTCA	ND		10	1.5	ng/L		02/28/23 09:44	03/01/23 23:38	1
5:3 FTCA	ND		50	10	ng/L		02/28/23 09:44	03/01/23 23:38	1
7:3 FTCA	ND		50	10	ng/L		02/28/23 09:44	03/01/23 23:38	1

Isotope Dilution	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
13C4 PFBA	*96.3*		*20 - 150*	*02/28/23 09:44*	*03/01/23 23:38*	*1*
13C5 PFPeA	*93.0*		*20 - 150*	*02/28/23 09:44*	*03/01/23 23:38*	*1*
13C5 PFHxA	*92.1*		*20 - 150*	*02/28/23 09:44*	*03/01/23 23:38*	*1*
13C4 PFHpA	*98.3*		*20 - 150*	*02/28/23 09:44*	*03/01/23 23:38*	*1*
13C8 PFOA	*104*		*20 - 150*	*02/28/23 09:44*	*03/01/23 23:38*	*1*
13C9 PFNA	*89.9*		*20 - 150*	*02/28/23 09:44*	*03/01/23 23:38*	*1*
13C6 PFDA	*93.5*		*20 - 150*	*02/28/23 09:44*	*03/01/23 23:38*	*1*
13C7 PFUnA	*88.6*		*20 - 150*	*02/28/23 09:44*	*03/01/23 23:38*	*1*
13C2-PFDoDA	*91.2*		*20 - 150*	*02/28/23 09:44*	*03/01/23 23:38*	*1*
13C2 PFTeDA	*77.9*		*20 - 150*	*02/28/23 09:44*	*03/01/23 23:38*	*1*
13C3 PFBS	*89.3*		*20 - 150*	*02/28/23 09:44*	*03/01/23 23:38*	*1*
13C3 PFHxS	*92.7*		*20 - 150*	*02/28/23 09:44*	*03/01/23 23:38*	*1*
13C8 PFOS	*83.5*		*20 - 150*	*02/28/23 09:44*	*03/01/23 23:38*	*1*
13C8 FOSA	*87.3*		*20 - 150*	*02/28/23 09:44*	*03/01/23 23:38*	*1*
d3-NMeFOSAA	*73.8*		*20 - 150*	*02/28/23 09:44*	*03/01/23 23:38*	*1*
d5-NEtFOSAA	*78.0*		*20 - 150*	*02/28/23 09:44*	*03/01/23 23:38*	*1*
M2-4:2 FTS	*119*	*I*	*20 - 150*	*02/28/23 09:44*	*03/01/23 23:38*	*1*
M2-6:2 FTS	*93.7*		*20 - 150*	*02/28/23 09:44*	*03/01/23 23:38*	*1*
M2-8:2 FTS	*80.8*		*20 - 150*	*02/28/23 09:44*	*03/01/23 23:38*	*1*
13C3 HFPO-DA	*97.5*		*20 - 150*	*02/28/23 09:44*	*03/01/23 23:38*	*1*
d7-N-MeFOSE-M	*61.4*		*20 - 150*	*02/28/23 09:44*	*03/01/23 23:38*	*1*
d9-N-EtFOSE-M	*62.4*		*20 - 150*	*02/28/23 09:44*	*03/01/23 23:38*	*1*
d5-NEtPFOSA	*65.2*		*20 - 150*	*02/28/23 09:44*	*03/01/23 23:38*	*1*
d3-NMePFOSA	*64.9*		*20 - 150*	*02/28/23 09:44*	*03/01/23 23:38*	*1*

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 410-348608/2-A
Matrix: Water
Analysis Batch: 349204

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 348608

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid	100	101		ng/L		101	40 - 150
Perfluoropentanoic acid	50.1	54.8	I	ng/L		109	40 - 150
Perfluorohexanoic acid	25.0	27.6		ng/L		110	40 - 150
Perfluoroheptanoic acid	25.0	26.4		ng/L		105	40 - 150
Perfluorooctanoic acid	25.0	23.9		ng/L		96	40 - 150
Perfluorononanoic acid	25.0	22.6		ng/L		90	40 - 150
Perfluorodecanoic acid	25.0	23.9		ng/L		95	40 - 150
Perfluoroundecanoic acid	25.0	23.8		ng/L		95	40 - 150
Perfluorododecanoic acid	25.0	22.0		ng/L		88	40 - 150
Perfluorotridecanoic acid	25.0	26.6		ng/L		106	40 - 150
Perfluorotetradecanoic acid	25.0	22.6		ng/L		90	40 - 150
Perfluorobutanesulfonic acid	22.2	18.7		ng/L		84	40 - 150
Perfluoropentanesulfonic acid	23.6	26.1		ng/L		111	40 - 150
Perfluorohexanesulfonic acid	22.9	25.8		ng/L		113	40 - 150
Perfluoroheptanesulfonic acid	23.9	26.0		ng/L		109	40 - 150
Perfluorooctanesulfonic acid	23.2	22.7		ng/L		98	40 - 150
Perfluorononanesulfonic acid	24.1	23.3		ng/L		97	40 - 150
Perfluorodecanesulfonic acid	24.2	24.3		ng/L		101	40 - 150
Perfluorododecanesulfonic acid (PFDoS)	24.3	21.3		ng/L		88	40 - 150
1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	93.9	83.8		ng/L		89	40 - 150
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	95.2	120		ng/L		126	40 - 150
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	96.2	99.1		ng/L		103	40 - 150
Perfluorooctanesulfonamide	25.0	26.3		ng/L		105	40 - 150
NMeFOSA	25.0	25.4		ng/L		101	40 - 150
N-ethylperfluoro-1-octanesulfonamide	25.0	25.7		ng/L		103	40 - 150
NMeFOSAA	25.0	26.3		ng/L		105	40 - 150
NEtFOSAA	25.0	22.9		ng/L		91	40 - 150
2-(N-methylperfluoro-1-octanesulfonamido) ethanol	250	262		ng/L		104	40 - 150
2-(N-ethylperfluoro-1-octanesulfonamido) ethanol	250	255		ng/L		102	40 - 150
HFPO-DA	100	107		ng/L		107	40 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	94.5	95.3		ng/L		101	40 - 150
Perfluoro-3-methoxypropanoic acid	50.1	50.2		ng/L		100	40 - 150
Perfluoro(4-methoxybutanoic acid)	50.1	56.1		ng/L		112	40 - 150
Perfluoro-3,6-dioxaheptanoic acid	50.1	50.1		ng/L		100	40 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	93.5	108		ng/L		116	40 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	94.5	102		ng/L		108	40 - 150
PFEESA	44.6	44.3		ng/L		99	40 - 150

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LCS 410-348608/2-A
Matrix: Water
Analysis Batch: 349204

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 348608

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
3:3 FTCA	100	122		ng/L		122	40 - 150
5:3 FTCA	501	606		ng/L		121	40 - 150
7:3 FTCA	501	647		ng/L		129	40 - 150

Isotope Dilution	*LCS %Recovery*	*LCS Qualifier*	*Limits*
13C4 PFBA	*93.9*		*20 - 150*
13C5 PFPeA	*81.3*		*20 - 150*
13C5 PFHxA	*84.8*		*20 - 150*
13C4 PFHpA	*89.9*		*20 - 150*
13C8 PFOA	*99.9*		*20 - 150*
13C9 PFNA	*95.2*		*20 - 150*
13C6 PFDA	*103*		*20 - 150*
13C7 PFUnA	*94.8*		*20 - 150*
13C2-PFDoDA	*92.7*		*20 - 150*
13C2 PFTeDA	*84.2*		*20 - 150*
13C3 PFBS	*96.3*		*20 - 150*
13C3 PFHxS	*81.1*		*20 - 150*
13C8 PFOS	*82.1*		*20 - 150*
13C8 FOSA	*86.9*		*20 - 150*
d3-NMeFOSAA	*84.8*		*20 - 150*
d5-NEtFOSAA	*81.4*		*20 - 150*
M2-4:2 FTS	*94.1*		*20 - 150*
M2-6:2 FTS	*75.7*		*20 - 150*
M2-8:2 FTS	*91.5*		*20 - 150*
13C3 HFPO-DA	*81.1*		*20 - 150*
d7-N-MeFOSE-M	*64.8*		*20 - 150*
d9-N-EtFOSE-M	*65.1*		*20 - 150*
d5-NEtPFOSA	*64.0*		*20 - 150*
d3-NMePFOSA	*64.5*		*20 - 150*

Lab Sample ID: LLCS 410-348608/3-A
Matrix: Water
Analysis Batch: 349204

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 348608

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluorobutanoic acid	16.0	15.4		ng/L		96	40 - 150
Perfluoropentanoic acid	8.00	7.56	I	ng/L		95	40 - 150
Perfluorohexanoic acid	4.00	3.52		ng/L		88	40 - 150
Perfluoroheptanoic acid	4.00	3.43		ng/L		86	40 - 150
Perfluorooctanoic acid	4.00	3.40		ng/L		85	40 - 150
Perfluorononanoic acid	4.00	2.99		ng/L		75	40 - 150
Perfluorodecanoic acid	4.00	3.74		ng/L		94	40 - 150
Perfluoroundecanoic acid	4.00	3.79		ng/L		95	40 - 150
Perfluorododecanoic acid	4.00	3.88		ng/L		97	40 - 150
Perfluorotridecanoic acid	4.00	3.39		ng/L		85	40 - 150
Perfluorotetradecanoic acid	4.00	3.65		ng/L		91	40 - 150
Perfluorobutanesulfonic acid	3.55	2.79		ng/L		79	40 - 150
Perfluoropentanesulfonic acid	3.76	3.12		ng/L		83	40 - 150
Perfluorohexanesulfonic acid	3.66	3.80		ng/L		104	40 - 150

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 410-348608/3-A
Matrix: Water
Analysis Batch: 349204

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 348608

Analyte	Spike Added	LLCS Result	LLCS Qualifier	Unit	D	%Rec	%Rec Limits
Perfluoroheptanesulfonic acid	3.81	3.47		ng/L		91	40 - 150
Perfluorooctanesulfonic acid	3.71	3.40		ng/L		92	40 - 150
Perfluorononanesulfonic acid	3.85	3.33		ng/L		86	40 - 150
Perfluorodecanesulfonic acid	3.86	3.35		ng/L		87	40 - 150
Perfluorododecanesulfonic acid (PFDoS)	3.88	3.23		ng/L		83	40 - 150
1H,1H,2H,2H-perfluorohexanesulfonic acid (4:2)	15.0	15.8		ng/L		105	40 - 150
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	15.2	15.4		ng/L		101	40 - 150
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	15.4	13.2		ng/L		86	40 - 150
Perfluorooctanesulfonamide	4.00	3.43		ng/L		86	40 - 150
NMeFOSA	4.00	3.89		ng/L		97	40 - 150
N-ethylperfluoro-1-octanesulfonamide	4.00	3.89		ng/L		97	40 - 150
NMeFOSAA	4.00	4.46		ng/L		112	40 - 150
NEtFOSAA	4.00	4.14		ng/L		104	40 - 150
2-(N-methylperfluoro-1-octanesulfonamido) ethanol	40.0	39.3		ng/L		98	40 - 150
2-(N-ethylperfluoro-1-octanesulfonamido) ethanol	40.0	39.8		ng/L		99	40 - 150
HFPO-DA	16.0	17.4		ng/L		109	40 - 150
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	15.1	18.2		ng/L		120	40 - 150
Perfluoro-3-methoxypropanoic acid	8.00	6.58		ng/L		82	40 - 150
Perfluoro(4-methoxybutanoic acid)	8.00	6.85		ng/L		86	40 - 150
Perfluoro-3,6-dioxaheptanoic acid	8.00	7.73		ng/L		97	40 - 150
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid	15.0	17.5		ng/L		117	40 - 150
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	15.1	16.2		ng/L		107	40 - 150
PFEESA	7.12	5.94		ng/L		83	40 - 150
3:3 FTCA	16.0	15.9		ng/L		99	40 - 150
5:3 FTCA	80.0	78.7		ng/L		98	40 - 150
7:3 FTCA	80.0	77.3		ng/L		97	40 - 150

Isotope Dilution	*LLCS %Recovery*	*LLCS Qualifier*	*Limits*
13C4 PFBA	*89.4*		*20 - 150*
13C5 PFPeA	*98.1*		*20 - 150*
13C5 PFHxA	*106*		*20 - 150*
13C4 PFHpA	*116*		*20 - 150*
13C8 PFOA	*87.4*		*20 - 150*
13C9 PFNA	*99.7*		*20 - 150*
13C6 PFDA	*93.3*		*20 - 150*
13C7 PFUnA	*83.5*		*20 - 150*
13C2-PFDoDA	*81.6*		*20 - 150*

Method: 1633 - Per- and Polyfluoroalkyl Substances by LC/MS/MS (Continued)

Lab Sample ID: LLCS 410-348608/3-A
Matrix: Water
Analysis Batch: 349204

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 348608

Isotope Dilution	LLCS %Recovery	LLCS Qualifier	Limits
13C2 PFTeDA	79.8		20 - 150
13C3 PFBS	93.1		20 - 150
13C3 PFHxS	80.1		20 - 150
13C8 PFOS	93.0		20 - 150
13C8 FOSA	103		20 - 150
d3-NMeFOSAA	79.3		20 - 150
d5-NEtFOSAA	85.3		20 - 150
M2-4:2 FTS	87.6		20 - 150
M2-6:2 FTS	90.7		20 - 150
M2-8:2 FTS	81.1		20 - 150
13C3 HFPO-DA	98.8		20 - 150
d7-N-MeFOSE-M	71.5		20 - 150
d9-N-EtFOSE-M	70.8		20 - 150
d5-NEtPFOSA	69.6		20 - 150
d3-NMePFOSA	67.2		20 - 150

LCMS

Prep Batch: 345645

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205868-1	MW2-013123	Total/NA	Water	1633	
480-205868-6	FB_013123	Total/NA	Water	1633	
MB 410-345645/1-A	Method Blank	Total/NA	Water	1633	
LCS 410-345645/2-B	Lab Control Sample	Total/NA	Water	1633	
LLCS 410-345645/3-B	Lab Control Sample	Total/NA	Water	1633	
480-205868-1 MS	MW2-013123-MS	Total/NA	Water	1633	
480-205868-1 MSD	MW2-013123-MSD	Total/NA	Water	1633	

Analysis Batch: 345729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205868-1	MW2-013123	Total/NA	Water	1633	345645
480-205868-6	FB_013123	Total/NA	Water	1633	345645
MB 410-345645/1-A	Method Blank	Total/NA	Water	1633	345645
LCS 410-345645/2-B	Lab Control Sample	Total/NA	Water	1633	345645
LLCS 410-345645/3-B	Lab Control Sample	Total/NA	Water	1633	345645
480-205868-1 MS	MW2-013123-MS	Total/NA	Water	1633	345645
480-205868-1 MSD	MW2-013123-MSD	Total/NA	Water	1633	345645

Prep Batch: 348608

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205868-2	FDUP-013123	Total/NA	Water	1633	
MB 410-348608/1-A	Method Blank	Total/NA	Water	1633	
LCS 410-348608/2-A	Lab Control Sample	Total/NA	Water	1633	
LLCS 410-348608/3-A	Lab Control Sample	Total/NA	Water	1633	

Analysis Batch: 349204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-205868-2	FDUP-013123	Total/NA	Water	1633	348608
MB 410-348608/1-A	Method Blank	Total/NA	Water	1633	348608
LCS 410-348608/2-A	Lab Control Sample	Total/NA	Water	1633	348608
LLCS 410-348608/3-A	Lab Control Sample	Total/NA	Water	1633	348608

Lab Chronicle

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-2

Client Sample ID: MW2-013123
Date Collected: 01/31/23 10:30
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			345645	S7AC	ELLE	02/17/23 09:29
Total/NA	Analysis	1633		1	345729	UUV6	ELLE	02/17/23 22:11

Client Sample ID: FDUP-013123
Date Collected: 01/31/23 00:00
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			348608	S7AC	ELLE	02/28/23 09:44
Total/NA	Analysis	1633		1	349204	UUV6	ELLE	03/02/23 04:39

Client Sample ID: FB_013123
Date Collected: 01/31/23 17:20
Date Received: 02/01/23 10:30

Lab Sample ID: 480-205868-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	1633			345645	S7AC	ELLE	02/17/23 09:29
Total/NA	Analysis	1633		1	345729	UUV6	ELLE	02/17/23 22:56

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-2

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
A2LA	Dept. of Defense ELAP	0001.01	11-30-24
A2LA	ISO/IEC 17025	0001.01	11-30-24
Alaska	State	PA00009	03-08-23
Arizona	State	AZ0780	03-11-23
Arkansas DEQ	State	88-00660	08-09-23
California	State	2792	11-30-23
Colorado	State	PA00009	06-30-23
Connecticut	State	PH-0746	06-30-23
DE Haz. Subst. Cleanup Act (HSCA)	State	019-006 (PA cert)	01-31-24
Delaware (DW)	State	N/A	01-31-24
Florida	NELAP	E87997	07-02-23
Georgia (DW)	State	C048	01-31-24
Hawaii	State	N/A	01-31-24
Illinois	NELAP	200027	01-31-24
Iowa	State	361	03-01-24
Kansas	NELAP	E-10151	10-31-23
Kentucky (DW)	State	KY90088	12-31-23
Kentucky (UST)	State	0001.01	11-30-24
Kentucky (WW)	State	KY90088	12-31-23
Louisiana (All)	NELAP	02055	06-30-23
Maine	State	2019012	03-12-23
Maryland	State	100	06-30-23
Massachusetts	State	M-PA009	06-30-23
Michigan	State	9930	01-31-24
Minnesota	NELAP	042-999-487	12-31-23
Mississippi	State	023	01-31-24
Missouri	State	450	01-31-25
Montana (DW)	State	0098	01-01-24
Nebraska	State	NE-OS-32-17	01-31-24
New Hampshire	NELAP	2730	01-10-24
New Jersey	NELAP	PA011	06-30-23
New York	NELAP	10670	04-01-23
North Carolina (DW)	State	42705	07-31-23
North Carolina (WW/SW)	State	521	12-31-23
North Dakota	State	R-205	01-31-24
Oklahoma	NELAP	R-205	08-31-23
Oregon	NELAP	PA200001	09-11-23
PALA	Canada	1978	09-16-24
Pennsylvania	NELAP	36-00037	01-31-24
Rhode Island	State	LAO00338	12-31-23
South Carolina	State	89002	01-31-24
Tennessee	State	02838	01-31-24
Texas	NELAP	T104704194-22-45	08-31-23
USDA	US Federal Programs	525-22-298-19481	10-25-25
Vermont	State	VT - 36037	10-28-23
Virginia	NELAP	460182	06-14-23
Washington	State	C457	04-11-23
West Virginia (DW)	State	9906 C	12-31-23
West Virginia DEP	State	055	07-31-23
Wyoming	State	8TMS-L	01-31-24

Accreditation/Certification Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-2

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Wyoming (UST)	A2LA	0001.01	11-30-24

Method Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-2

Method	Method Description	Protocol	Laboratory
1633	Per- and Polyfluoroalkyl Substances by LC/MS/MS	EPA	ELLE
1633	Solid-Phase Extraction (SPE)	EPA	ELLE

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Integral Consulting Inc
Project/Site: EF1017 - Refractories

Job ID: 480-205868-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-205868-1	MW2-013123	Water	01/31/23 10:30	02/01/23 10:30
480-205868-2	FDUP-013123	Water	01/31/23 00:00	02/01/23 10:30
480-205868-6	FB_013123	Water	01/31/23 17:20	02/01/23 10:30

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Integral	Lab PM: Beninati, John	Carrier Tracking No(s):	COC No: 480-180974-37697.1
Client Contact: Mr. Glenn Esler	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Company: Integral Consulting Inc		PWSID:		Job #:
Address: 319 SW Washington Ave Suite 1150	Due Date Requested: per contract			
City: Portland	TAT Requested (days): per contract			
State, Zip: OR, 97204	Compliance Project: Δ Yes Δ No			
Phone: 503-943-3617(Tel)	PO #: Purchase Order not required			
Email: gesler@integral-corp.com	WO #:			
Project Name: EF1017 - Refractories - Groundwater	Project #: 48025298			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA

480-205868 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D - TCL SVOCs	6010C, 7470A (TOTAL)	8260C - TCL VOCs	PFC_IDA - PFAS - NY 22 Analytes Method 1633	8270D_SIM_MS_ID - 1,4 Dioxane	1633, 7470A (DISSOLVED)	Total	Special Instructions/Note:
Preservation Code:							N	D	A	N	N	D		
MW2-013123	1/31/23	1030	G	Water			X	X	X	X	X	X	11	Dissolved metals field filtered
FDUP-013123		-		Water			X	X	X	X	X	X	11	
MW2-013123_MS		1030		Water			X	X	X	X	X	X	11	
MW2-013123_MSD		1030		Water			X	X	X	X	X	X	11	
MW3-013123		1210		Water		N	X	X	X			X	7	
MW5-013123		1510		Water		N	X	X	X			X	7	
MW1-013123		1650		Water		N	X	X	X			X	7	
FB-013123		1720		Water		N	X	X	X	X	X	X	11	
TB-013123		0900		Water	N	N			X				1	
				Water										
				Water										

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) Cat B per Quote

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Kathryn Catrambone	1/31/21 1845	Integral		2/1/23 1030	FA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.1 1.6 1.4 # 1 ICE

Ver: 06/08/2021

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Beninati, John	Carrier Tracking No(s):	COC No: 480-78311.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: John.Beninati@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 1
Company: Eurofins Lancaster Laboratories Environm		Accreditations Required (See note): NELAP - New York		Job #: 480-205868-1
Address: 2425 New Holland Pike, ,	Due Date Requested: 2/14/2023			
City: Lancaster	TAT Requested (days):			
State, Zip: PA, 17601				
Phone: 717-656-2300(Tel)	PO #:			
Email:	WO #:			
Project Name: Integral Consulting - EF1017 - Refractor	Project #: 48025298			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	1633/1633_SPE List of 40 (EPA 1633 Draft Method)	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-2_013123 (480-205868-1)	1/31/23	10:30 Eastern		Water			X	2	
MW-2_013123 (480-205868-1MS)	1/31/23	10:30 Eastern	MS	Water			X	2	
MW-2_013123 (480-205868-1MSD)	1/31/23	10:30 Eastern	MSD	Water			X	2	
FDUP_013123 (480-205868-2)	1/31/23	Eastern		Water			X	2	
FB_013123 (480-205868-6)	1/31/23	17:20 Eastern		Water			X	2	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		2-1-23 1800	TAL3			
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 2-6-23 09:40	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: -0.3 not frozen

CB

Login Sample Receipt Checklist

Client: Integral Consulting Inc

Job Number: 480-205868-2

Login Number: 205868
List Number: 1
Creator: Yeager, Brian A

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	INTEGRAL
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: Integral Consulting Inc

Job Number: 480-205868-2

Login Number: 205868
List Number: 2
Creator: Burkholder, Conrad

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC
List Creation: 02/06/23 02:57 PM

Question	Answer	Comment
The cooler's custody seal is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
Sample custody seals are intact.	N/A	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	N/A	