SITE CHARACTERIZATION REPORT

for the

ALPHA PORTLAND (OTISCA INDUSTRIES) SITE

[DEC SITE NO. 734006]

Ogle Road [Tax Map No. 083.-01-07.0]
Town of Dewitt, Onondaga County, New York

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1.0 EXECUTIVE SUMMARY

In the fall of 2023 and winter 2023-2024, TDK Engineering Associates, P.C. (TDK), conducted a Site Characterization (SC) Investigation program at the former Alpha Portland (Otisca Industries) cement plant facility (Site). The investigation was requested by the New York State Department of Environmental Conservation (DEC), based on the historic importation, storage and usage of hazardous wastes at the Site.

The wastes were reportedly imported to the Site in the late 1970s, for use as an alternative fuel source for the facility's cement production kilns to reduce stack emissions associated with utilization of coal. Previous remediation efforts resulted in removal of source /waste storage areas, however a follow-up investigation was requested in order to characterize the Site with respect to the presence and extent of residual contamination in connection with the historic handling of hazardous wastes at the Site.

The SC investigation included the advancement of eight soil borings and installation of two groundwater monitoring wells at the Site. Soil and groundwater samples were collected and analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), metals, polychlorinated biphenyls (PCBs) and Per- and Polyfluoroalkyl Substances (PFAS). Surface water and sediment samples, obtained from a pond and drainage swales located along the down-gradient perimeter of the Site were also obtained and submitted for the above analyses.

Overall, the constituent levels detected were low, with the majority of compound concentrations reported as "non-detect", below the applicable standards, criteria and guidance (SCG) or only marginally exceeding the most stringent SCGs. Bedrock was encountered at relatively shallow depths (4 to 13 feet) throughout the majority of the Site and groundwater was not encountered above the bedrock in upland areas. The trace to non-detect levels of contaminants in the overburden soils, suggests a relatively low potential for exposure concerns in connection with the shallow soils.

Subsurface soils encountered in the downgradient (southeastern) zone of the Site, in the vicinity of a pond and drainage swale were primarily fine-grained. As such, the on-site, native overburden soils can be expected to restrict extensive migration of contamination through the groundwater or vadose zone. Constituent levels in the groundwater were also trace to non-detect and the absence of elevated VOC concentrations further suggests that the potential for exposure to contamination through soil vapor intrusion is limited.

Several contaminants, which included a PCB aroclor were detected in a sediment sample that was taken from the pond's outlet into the perimeter drainage swale. The constituent levels were relatively low, and the PCB concentration only marginally exceeded the DEC's most stringent soil cleanup objective (i.e., for Unrestricted Site Use [UNR]). However, the sample point was immediately adjacent to the Site's southern property boundary and the pond extends further to south, across the property line and on to the neighboring school

property. Accordingly, it is TDK's opinion that as a precaution, a focused confirmation sampling and analysis effort within the pond limits and immediate upland area is warranted.

The entrance to the Site is controlled by a secured gate and the property is posted with no trespassing signs to further restrict pedestrian access. To further restrict access to the Site, from both a public safety standpoint and in consideration of residual constituents, Alpha Omega Products (A-O) has indicated their intention to initiate/continue the following best management practices:

- Inspection, repair/replacement and/or addition of multiple posted signs on buildings, trees, etc., throughout the Site. The signs are relatively large (i.e., 2 ft x 3 ft), thereby providing clear visibility and contain unambiguous language (i.e., "Posted – No Trespassing - Violators Will Be Prosecuted") and a telephone number if there are any questions or concerns.
- Installation of physical barriers at building access openings.
- Continued monitoring of security cameras at the entrance gate and selected locations within the interior of the Site. Consideration will also be given to the installation of additional cameras.
- Contacting of police and ticketing or arresting of trespassers, as needed.
- Continued daily patrols of the site, in addition to periodic patrols / monitoring conducted by contracted security agency personnel.
- Application to for a DEC Nuisance Beaver Permit to allow trapping of beavers, as needed to discourage unauthorized access to the property by nearby residents for beaver dam removal / localized flooding control.

A-O has also indicated that perimeter fencing may also be installed at strategic locations, as warranted.

2.0 INTRODUCTION

2.1 Background

TDK Engineering Associates, P.C. (TDK) has prepared this Site Characterization Report (SCR) for the Alpha Portland (Otisca Industries) Site, located on Ogle Road in the Town of Dewitt, Onondaga County, NY (Site). The New York State Department of Environmental Conservation (DEC) has assigned the identification number 734006 and classification code of 03[1] to the Site. The site investigation was conducted in accordance with the Site Characterization Work Plan (SCWP) dated September 16, 2022[2], that was prepared by TDK and approved by the DEC on November 14, 2022[3].

A cement manufacturing plant had occupied the Site, dating from approximately 1914 to 1980. Hazardous wastes were imported to the facility during the late 1970's, where they were stored and utilized as an alternative fueling source for a coal-fired kiln. Accordingly, the purpose of the investigation was to evaluate the potential chemical impacts to surface and subsurface media on the Site, in connection with historic waste handling operations.

Additional information concerning the Site's environmental history is provided in Section 3.2 of this report and the above-referenced SCWP.

2.2 Scope of Work

The Site Characterization (SC) investigation consisted of the following general tasks:

- Advancement of a total of eight (8) soil borings within overburden soils throughout the Site.
- Installation of groundwater monitoring wells in two (2) of the soil borings.
- Collection of soil and groundwater samples from the soil borings and monitoring wells, for laboratory analysis and comparison of results to the applicable Standards, Criteria and Guidance (SCG).

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[1] Classification Code 3: Assigned to sites *….at which contamination does not presently and is not reasonably foreseeable to constitute a significant threat to public health or the environment*.

[2] *Site Characterization Work Plan for the Alpha Portland (Otisca Industries) Site [DEC Site No. 734006]*, prepared by TDK, dated May 12, 2022 [Revised September 16, 2022].

[3] Letter from Matthew Travis, DEC to Joe Durand, P.E., TDK dated November 14, 2022.

- Collection of surface water and sediment samples from six (6) locations within two ponds/wetlands located along the southern boundary of the Site, for analysis and comparison of results to SCGs.

- Compilation and assessment of the analytical results, along with pertinent surface drainage patterns and subsurface geologic characteristics into this report.

The above tasks are described in Sections 3.1 – 3.9 of this report, along with soil vapor intrusion (SVI) considerations, documentation of investigation-derived waste management, conclusions and recommendations [Sections 4.0 – 7.0].

3.0 SITE DESCRIPTION AND HISTORY

3.1 Regional Location and Physical Setting Description

The property has a total area of 121 acres and is accessed from the southern limit of Ogle Road. The northern area (roughly 17 acres) of the property is comprised of a reclaimed limestone mine (DEC No. 70626). The former cement production plant, support buildings and waste storage and handling areas, which comprise the Site encompass an approximately 25-acre area near the southeastern corner of the property.

Railroad tracks border approximately 1,500 lineal feet (lf) of the eastern property line. Adjoining parcels to the north, east and south include residential properties and Jamesville Elementary School. The residential parcels and school are served by municipal water[4] and no water supply wells are located within ½-mile of the Site[5]. A 250-foot wide parcel owned by National Grid (overhead power lines) and Clark Reservation State Park border the Site to the west.

A segment of Butternut Creek, which is a DEC Class C(T) stream is located approximately 500 feet east of the eastern property boundary. An approximately 0.12-acre freshwater wetland/pond, a portion (roughly $^2/_3$) of a 3-acre wetland/pond and a (Class C) tributary to the stream are located along the south and southeastern perimeters of the Site. The closest DEC wetland is located 800 feet west of the western boundary.

Topography throughout the Site is varied due to historic grading operations, however in general the ground surface slopes downward to the southeast, toward the tributary to Butternut Creek. Limestone bedrock is present at relatively shallow depths (approximately 4 to 13 feet) throughout the majority of the Site, based on subsurface profile information obtained during the drilling program [Section 3.4 and Appendix 2]. The regional

[4] Ref: Onondaga County Department of Finance – Office of Real Property Services: SDG Image Mate Online.

[5] Ref: NYSDEC Info Locator, accessed March 7, 2023.

- The borings were advanced to depths ranging from 9½ to 25 feet below ground surface using a mobile drill rig equipped with hollow-stem augers, in addition to drop hammer / split-spoon soil sampler capabilities.

- Soil samples were obtained during drilling at continuous (2-foot) intervals[7]. Representative samples were field-assessed for the presence of contamination, both visually and through screening for volatile organic compounds (VOC's) using a photo-ionization detection (PID) meter. Refer to Sections 4.4 and 4.5, in addition to the *Soil Boring Logs* [Appendix 2] for description of the subsurface profiles and a summary of PID responses.

- Samples for laboratory analysis were obtained at depths consistent with the Sampling Rationale section of the Site Characterization Work Plan (SCWP) and as summarized in Section 4.7 of this report. The sample locations (depths) are also indicated on the *Soil Boring Logs* [Appendix 2].

- The borings were backfilled with drill cuttings, supplemented with hydrated bentonite pellets and/or sand as needed.

4.2 Groundwater Monitoring Well Construction

- Groundwater monitoring wells were constructed within two of the soil borings that were advanced within the lower (lagoon) area of the site and where groundwater was encountered in overburden soils above bedrock. The wells are designated as MW-3 and MW-5 and their locations are shown on the *Site Characterization Plan* [*Sheet SC-1*, Appendix 1].

- Both wells are 2-inch diameter (PVC), with 10-slot (0.010-inch aperture opening) screened sections extending above and below the groundwater surface. The screens were surrounded by filter sand compatible with the screen size (e.g., Morie #1) and bentonite (clay) seals were provided over the sand packs.

- The wells were further protected utilizing locked 4-inch diameter steel casings extending approximately 2½ feet above the surrounding ground surface. Disturbed ground surrounding the wells heads was restored using 18-inch diameter by 4-inch thick concrete collars.

- Each well was developed using a peristaltic pump, however the extensive presence of fine-grained soils nonetheless resulted in elevated turbidity levels during the subsequent sampling program [Section 3.7].

[7] Sampling interval modified to 5 feet (i.e., "standard" interval) from 20 – 25 ft in MW-2.

- Refer to the *Overburden Monitoring Well Construction Detail* [Appendix 3] for additional information.

4.3 Variances from Scope of Work

- No groundwater was encountered, above the refusal (i.e., bedrock) depths at three of the initially designated monitoring well locations (MW-1, MW-2 and MW-4). Accordingly, soil samples were obtained at each boring location, at depths consistent with the Sampling Rationale section of the SCWP and in lieu of groundwater samples for laboratory analysis.

- The absence of an up-gradient overburden monitoring well, due to shallow bedrock precluded the installation of the wells in a "triangle" pattern to obtain a groundwater flow direction. However, based on site topography [*Sheet SC-1*, Appendix 1], groundwater flow throughout the Site is anticipated to be generally directed toward the southeast.

- An additional groundwater monitoring well, MW-5 was substituted for a previously proposed soil boring (SB-3) in the down-gradient (former lagoon) area of the Site. The DEC's Project Manager at the time the field work was performed, Mr. Matt Travis was notified of the modification to the soil boing configuration and monitoring well installation.

4.4 Soil Profile

Based on the subsurface profiles encountered during the drilling program, the descriptions below segregate the Site into the following three general zones:

<u>Upland (Northern) Area (SB-1, MW-1 & MW-4)</u>:

- The subsurface profile is comprised of gray/dark gray silt and fine gravel to a depth of 4 feet below ground surface (bgs), overlying limestone bedrock fragments with intermittent lenses of hard silt. Refusal was encountered, using conventional drilling methods[8] at depths of 13 to 14 feet. No groundwater was encounterred any of the borings.

- Note that in MW-4, refusal was encountered at 4½ feet and the presence of bedrock was further confirmed through the advancement of a 5-ft long core into the rock. A photograph of the recovered bedrock core is provided in Appendix 2.1.

[8] Based on the "N" count per the Standard Penetration Test (ASTM D1586) exceeding a value of 50 and/or slow advancement of the augers.

Former Waste Storage and Fill Areas (SB-2 & MW-2):

- Soils within this area can generally be described as brown silt and clay to depths ranging from 7 feet bgs (SB-2) to 18 feet bgs (MW-2). Little (i.e., 10 – 20%) fine gravel was encountered in both borings, to depths ranging from 7 to 10 feet bgs.

- Bedrock fragments were initially encountered at a depths of 7 feet and 18 feet in SB-2 and MW-2, respectively and refusal depths were 8 feet (SB-2) and 25 feet (MW-2). No groundwater was encountered in either boring.

- Trace brick and wood fragments were encountered in MW-2 from depths of approximately 2 to 10 feet, suggesting historic filling operations in the vicinity of the soil boring.

Lower (Former Lagoon) Area of Site (MW-3, MW-5 & SB-4):

- The soil profile adjacent to the former lagoon and pond is generally comprised of primarily fine-grained soils (i.e., silt, clay or fine sand), with a relatively higher percentage of intermixed gravel in MW-5. Layers of fine gravel and organic soils (i.e., "peat") were encountered at the bottom 6 to 12 inches in soil borings SB-4 and MW-5, respectively.

- Groundwater was encountered at a depth of approximately 7 feet bgs within the two borings that were converted into monitoring wells (i.e., MW-3 and MW-5).

4.5 Field Screening for Contamination

- No PID responses or olfactory indications of contamination were noted in any of the soil borings during the field work. Visual observations of dark, "stained" soil (i.e., suggesting potential petroleum or chemical contamination) were observed in soil borings MW-4 and SB-1 at depth of approximately 2 feet.

- The depths of the soil samples which were submitted for laboratory analysis were determined in consideration of the above field observations, consistent with the SCWP and as further described in Section 4.7.

4.6 Analytical Methods / Parameters

The analytical parameter lists and quantitative limits relative to the soil, groundwater, surface water and sediment samples are listed below:

- VOC's & SVOCs - Target compound list (TCL) per Environmental Protection Agency (EPA) Contract Laboratory Program (CLP), including tentatively identified compounds (TICs).

- PCBs – TCL

- Metals - Target analytical list (TAL) per EPA CLP Statement of Work for Inorganic Analysis, Multi-Media, Multi Concentration.

- Per- and Polyfluoroalkyl Substances (PFAS) - DEC *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Appendix G – PFAS Analyte List*, April 2023.

4.7 Sampling Rationale and Methodology

Consistent with the Site Characterization Work Plan (SCWP), sampling rationale and methodology are summarized below:

Soil (from borings)

- Based on the field screening observations [Section 4.5], samples that were submitted for analysis were obtained from the shallowest split-spoon(s) having a recoverable quantity of soils, in consideration of the most likely exposure pathway (i.e., dermal contact and/or inhalation) based on current site conditions.

- Note that additional steel split-spoon samplers were advanced adjacent[9] to the initial borings and/or soils were obtained immediately above or below the target depths, as needed to meet sample volume requirements.

- The sample depths were recorded on the soil boring logs.

Groundwater

- The groundwater sampling program included measurements of depths to static water levels, free product checks and field measurements of pH, turbidity, conductivity and oxidation-reduction potential (ORP) during purging operations.

- Field logs are included in Appendix 4. Note the following:
  - Low flow sampling methods were performed, utilizing a peristaltic pump.

[9] Within approximately 3 feet.

- No observations of non-aqueous phase liquid (i.e., free product), discoloration (e.g., "sheen") or odors were noted during the sampling program.
- Elevated turbidity levels (i.e., ranging from 546 to 937 NTU[10]) were reported on the groundwater sampling field logs [Appendix 4]. However, the sample collection containers included nitric acid preservative and accordingly, the samples were not filtered prior to analysis.
- Relatively high pH readings (i.e, 12.07 – 12.38) were reported in monitoring well MW-5 [Appendix 4]. These can potentially be attributed to the (upslope) proximity of the historic clinker dust (CKD) pile. Note that a sample of CKD that was collected and analyzed in 2010, by others had a similarly elevated pH (12.46)[11].
- An additional, potential contributing factor to the elevated pH readings is the reported historic discharge of cement dust, through floor drains from the cement plant to the lagoon area[12].

Surface Water

- The surface water samples were obtained using a stainless-steel scoop. No observations of free product, "sheen", or odors were noted during the field sampling effort.

Sediment

- Sediment samples were obtained at the same locations as the surface water samples, following collection of the surface water samples and utilizing steel hand tools.
- Portions of the recovered sediment were placed into polyethylene baggies and screened for the presence of VOCs using a PID meter. The highest PID response of 3.9 parts per million (ppm) was obtained at SS-3. PID responses of less than 1 ppm were obtained at SS-2, 4 & 5 and a response of 0 ppm was recorded at SS-1 and SS-6.

Refer to Appendix 6 of the SCWP for additional information concerning sampling methodology, if desired.

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[10] NTU – Nephelometric Turbidity Units

[11] *Report of Analyses* – Sample No. 583935; Sample ID - Jamesville CKD, prepared by Certified Environmental Services, dated March 5, 2010.

[12] *Final Site Inspection Report – Alpha Portland Cement, Jamesville, New York*, prepared by Roy F. Weston, Inc., dated February 11, 1994.

4.8 Designated Laboratory

The samples were submitted to Pace Analytical, 39 Spruce Street, East Longmeadow, MA 01028[13], New York State Department of Health (NYSDOH) ELAP[14] No. 10899 for full analysis [Section 4.6] consistent with the SCWP. Laboratory analytical reports are provided in Appendix 5 (separate attachment).

4.9 Analytical Data Summary

The analytical data, along with Standards, Criteria and Guidance (SCG) to which the results were compared are further compiled and summarized in *Analytical Data Summary Tables 1 – 20* [Appendix 6]. Exceedances of SCG, along with historic industrial uses of the constituents are summarized below:

Soils:

- No volatile organic compounds (VOC), semi-volatile organic compounds (SVOC), PCBs or Per- and Polyfluoroalkyl Substances (PFAS) exceeding the DEC's soil cleanup objectives (SCOs) or guidance values were reported.
- In the metals analysis, barium exceeded the Commercial Site Use SCO in SB-1, SB-2 and MW-2 and trivalent chromium and lead marginally exceeded the most stringent (Unrestricted Site Use [UNR]) SCOs in soil borings MW-2 and MW-4. Hexavalent chromium was reported in MW-4 at a concentration of 1.9 mg/kg (milligrams per kilogram, or parts per million [ppm]), which slightly exceeds the most restrictive (UNR) SCO of 1 ppm.
- The above metals have been utilized in industrial applications (e.g., vacuum tubes, batteries, paint, electroplating), however they also occur naturally in surficial soils and the reported detections fall within the observed ranges that have been recorded in the eastern US[15].
- Refer to *Analytical Data Summary Tables 1 – 5* for additional information.

Groundwater:

- One VOC detection, trichloroethene at 5.5 ug/L (micrograms per liter, or parts per billion [ppb]) in MW-5 exceeded the DEC groundwater standard of 5 ppb. The SVOC analysis also indicated only one compound, phenol at 24 ppb which exceeded the standard of 1 ppb.

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[13] a.k.a. Contest, A Pace Analytical Laboratory.

[14] ELAP – NYSDOH Environmental Laboratory Approval Program.

[15] Ref: *U.S. Geological Survey Professional Paper 1270 - Element Concentrations in Soils and Other Surficial Materials of the Conterminous United States, 1984*.

- Trichloroethene is an industrial degreasing solvent and phenols are utilized in various industries, including plastics, explosives and pharmaceutical industries. No specific source(s) of these compounds, with respect to the Site were identified.
- The metals analysis indicated only two constituents, Iron and Sodium which exceeded the groundwater standards. Iron occurs naturally in subsurface media and neither metal is generally considered to be a constituent of heightened concern with respect to groundwater quality, particularly in areas served by public water.
- No PCB detections were reported in the groundwater. Two PFAS compounds, perfluorobutanoic acid and 6:2 fluorotelomer sulfonic acid were reported at concentrations of 10 ng/L (nanograms per liter, or parts per trillion [ppt]) and 2.8 ppt, which barely exceeded the guidance values of 6.7 and 2.7 ppt, respectively. These compounds have been associated with stain-resistant food packaging products and fire-fighting foams, however no specific sources were documented in connection with this Site and PFAS has been found to be ubiquitous in the environment.
- Refer to *Analytical Data Summary Tables 6 – 10* for additional information.

Sediments:

- In the VOC analysis, only one compound, acetone which was reported in SS-3 at 0.081 parts per million (ppm) barely exceeded the most stringent (Unrestricted Use [UNR]) soil cleanup objective (SCO) of 0.05 ppm. No SVOC exceedances of SCOs were reported.
- In the metals analysis, arsenic was detected in SS-2 at 44 ppm, which exceeds the DEC's UNR and commercial SCO of 16 ppm. Arsenic is utilized for treating of wood products (e.g., railroad ties). Railroad tracks border the Site to the east and spurs have formerly extended onto the Site, however no specific source relative to the SS-2 location could be definitively identified.
- Manganese exceeded the UNR and Restricted-Residential (RR, e.g., apartment) site use SCOs and several additional metals (i.e., lead, nickel and zinc) marginally exceeded the UNR SCOs in SS-1, 2, 3 and/or 6. However, these metals have been documented to occur naturally in the environment.
- A PCB aroclor (1260) was detected in SS-3 at a concentration of 0.28 ppm, which slightly exceeds the UNR SCO of 0.1 ppm. The most common industrial use of PCBs has been as an insulating fluid in electrical transformers, however PCBs had also been reported in connection with a buried tanker truck that was found on the Site in the 1980's. No specific locations of transformers or the former buried tank are available, however no other detections of PCBs exceeding SCOs were reported.

- Several trace detections of PFAS compounds were reported in the sediment samples, however none exceeded the most stringent (UNR) guidance values.
- Refer to *Analytical Data Summary Tables 11 – 15* for additional information.

Surface Water:

- No exceedances of surface water standards or guidance values were reported, with the exceptions of three metals (copper, nickel and sodium) which occur naturally and generally do not trigger a heightened regulatory concern.
- Refer to *Analytical Data Summary Tables 16 – 20* for additional information.

5.0 INVESTIGATION-DERIVED WASTE (IDW) MANAGEMENT PROGRAM

The subsurface investigation effort resulted in generation of the following regulated wastes:

- Soil cuttings from the monitoring wells.
- Equipment decontamination and monitoring well purge waters.

The soils were temporarily staged on polyethylene sheeting and the decontamination and purge waters were contained in drums.

The wastes were removed from the site on September 12, 2024 by Paragon Environmental Construction (PEC), a DEC Part 364 permitted waste hauler[16] and transported to Industrial Oil Tank Service, Inc. for disposal. Disposal documentation (i.e., non-hazardous waste manifest) is included in Appendix 7.

6.0 SOIL VAPOR INTRUSION CONSIDERATIONS

The potential for adverse impacts in connection with soil vapor intrusion, at the Site is considered to be low based on the following:

- The analytical data indicates trace or non-detect levels of volatile organic compounds (VOCs). All VOC concentrations were below their associated standards, criteria and guidance (SCG) values, with the following exceptions:
  - Acetone was reported in a pond outlet sediment sample at 0.081 parts per million (ppm), which slightly exceeds the most stringent SCG of 0.05 ppm for unrestricted site use.

[16] DEC Part 364 Permit No. 7A-516.

- Trichloroethene was detected in the groundwater, in MW-5 at 5.5 parts per billion (ppb), which barely exceeds the DEC standard of 5 ppb.

- Overburden soils in the former waste storage/fill and down-gradient[17] (i.e., former lagoon) areas of the site are primarily fine-grained (i.e., silt and clay) and therefore can be expected to be relatively resistant to extensive soil vapor or groundwater movement (i.e., as compared to sands and gravel).
- The former cement plant buildings are abandoned and open to outside air flow.

7.0 CONCLUSIONS

Based on the field data and analytical results from the Site Characterization investigation, we conclude the following:

- No indications of any widespread presence of significant contamination were encountered within the areas of concern. Regulated constituent levels were generally low, with the majority of reported concentrations below (i.e., in compliance with) applicable standards, criteria and guidance (SCG). Many of the metals that were reported are known to occur naturally.
- Bedrock is present at relatively shallow depths (i.e., 4 to 6 feet) in the upland areas and the depths to rock generally increase proceeding to the south and east. No groundwater was encountered in the upland borings and contaminant levels in the shallow overburden soils were reported to be "non-detect" or at only trace to low concentrations. This information, in conjunction with the analytical results for the two groundwater monitoring wells located in the lower (down-gradient) area of the Site, suggest that impacts to groundwater are minimal.
- Relatively fine-grained soils, which restrict extensive horizontal and vertical migration of contamination are present in the lower, downgradient (former lagoon) area of the Site. This soil profile, in combination with the analytical data within these areas generally suggests a low potential for off-site migration of constituents through the groundwater or surface swale. The low or "non-detect" constituent levels in the downgradient surface water and sediment samples (i.e., SW-5 & 6 and SS-5 & 6) further support this determination.
- No exceedances of SCGs were reported for the surface water samples, further suggesting the potential for exposure is minimal. However, slight exceedances of the most stringent (Unrestricted Site Use [UNR]) cleanup objectives were reported for a sediment sample obtained at the pond's discharge into the perimeter drainage swale.

[17] Based on site topography (Sheet SC-1).

- The closest off-site properties, which include a housing development to the southeast and school to the south are connected to the public water supply. However, the pond which is located along the southern border of the Site extends on to the neighboring school property and residual constituents, including a PCB aroclor were reported at levels exceeding SCG's at the pond's outlet. As such, additional sediment sampling and analysis, within the pond appears warranted.

8.0 RECOMMENDATIONS

Our recommendations are as follows:

- A copy of this updated report should be provided to the DEC.

- A focused sampling and analysis program, of sediment within the pond should be performed, including depth-specific samples taken along the interior and upland (within 10 feet) shoreline of the pond. A work plan for the pond sampling program was submitted to the DEC in December 2024[18] and at the Department's request, has been further expanded to include bedrock well installation, groundwater and surface water sampling programs. The updated work plan[19] is being submitted to the DEC concurrently with this revised report.

- The implementation of measures to restrict access to the Site should be continued, including but not necessarily limited to posted signs, barriers at building access points and security measures such as daily/periodic patrols, utilization of cameras and ticketing or arresting of trespassers by police agencies. The installation of additional perimeter barriers (e.g., fencing or earthen barriers) at strategic locations should also be considered.

- Based on the industrial history of the site and analytical data, any planned, future disturbances of soils (e.g., for redevelopment) should include a site management program governing the handling and disposition of any disturbed media. No soils should be removed from the Site, to any off-site locations other than a permitted landfill unless a testing program is implemented and authorization obtained from the DEC pursuant to current Part 360[20] requirements.

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[18] Pond Sediment Sampling and Analysis Work Plan for the Alpha Portland (Otisca Industries) Site [DEC Site No. 734006], prepared by TDK, dated December 3, 2024.

[19] Expanded Site Characterization Work Plan for the Alpha Portland (Otisca Industries) Site [DEC Site No. 734006], prepared by TDK, dated February 5, 2025.

[20] 6 NYCRR Part 360 – *Solid Waste Management Facilities General Requirements*.

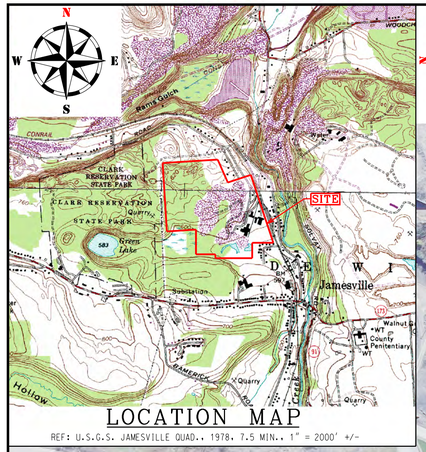
- Note that the above recommendation does not include any imported construction and demolition (C&D) materials (e.g., concrete, asphalt millings) which may be processed on the property for re-use under the DEC's C&D processing facility registration program.

- Adherence to a Community Air Monitoring Program (CAMP), based on applicable New York State Department of Health criteria is required during any future ground intrusive activities at the Site.

REPORT FIGURES

OVERALL SITE PLAN
[SHEET OP-1]

SITE CHARACTERIZATION PLAN
[SHEET SC-1]



LOCATION MAP

REF: U.S.G.S. JAMESVILLE QUAD., 1978, 7.5 MIN., 1" = 2000' +/-

BUTTERNUT CREEK

JAMESVILLE ROAD

CSX RAILROAD

NYS RT. 173 (EAST SENECA TURNPIKE)

SHAWASSIA ST.

RESIDENCES

PUBLIC WATER AREA

REFER TO SITE CHARACTERIZATION PLAN SHEET SC-1 FOR MORE INFORMATION

LEASED CEMENT SILOS

FORMER MAIN PLANT

FORMER KILN LOCATION

079.-04-01.0
ALPHA OMEGA PRODUCTS LLC

GATE

QUARRY ACCESS DRIVE

OGLE ROAD

JAMESVILLE ELEMENTARY SCHOOL

FEDERAL WETLAND PUBHx

SITE BOUNDARY

FORMER LIMESTONE MINE (DEC NO. 70626)

083.-01-07.0
ALPHA OMEGA PRODUCTS, LLC

FEDERAL WETLAND PSSIE/PEMIE

083.-01-06.0
NATIONAL GRID

CLARK RESERVATION STATE PARK

NOTE:

ALL LOCATIONS, STOCKPILES, DEBRIS LIMITS AND SAMPLE LOCATIONS ARE APPROXIMATE.

KEY

EXISTING

- PROPERTY LINE
- G — NATURAL GAS MAIN
- OE — OVERHEAD ELECTRIC
- PP ⌀ — POWER POLE
- DRAINAGE SWALE

⚠ OVERALL SITE PLAN

1" = 200' SCALE: 200 0 200 400 FEET

BASE MAP REFERENCES:

1. AERIAL PHOTO PROVIDED BY NEW YORK STATE STATEWIDE DIGITAL ORTHOIMAGERY PROGRAM: PHOTO TAKEN APRIL 2018.
2. TAX MAP PROVIDED BY SYRACUSE-ONONDAGA COUNTY GIS ON THE WEB, DATED 2021.
3. "ALPHA PIT FILLING AND GRADING - OVERALL SITE PLAN" AS PREPARED BY KEPLINGER FREEMAN ASSOCIATES: PROJECT NO. 37046: SHEET NO. L1.0: LAST REVISION DATE: JUNE 24, 2020.
4. SITE PLAN/ CONTAMINATION AREA A (FIGURES 2 AND 3) INCLUDED WITH ALPHA PORTLAND CEMENT CO. SITE CLOSURE WORK PLAN, PREPARED BY KEITH A. SCHIMEL, PH.D.,P.E., DATED APRIL 1987.
5. SITE MAP (FIGURE 2) INCLUDED WITH FINAL SITE INSPECTION REPORT- ALPHA PORTLAND CEMENT, JAMESVILLE, NEW YORK, PREPARED BY ROY F. WESTON, INC., DATED FEBRUARY 11, 1994.
6. PCB SCREENING SAMPLE LOCATIONS PLAN (FIGURE 1) INCLUDED WITH ALPHA JAMESVILLE CORPORATION CKD CHARACTERIZATION PLAN, PREPARED BY O'BRIEN & GERE, DATED NOVEMBER 6, 2009.

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REVISIONS: ⚠ PER SITE CHARACTERIZATION INV. DATE: 06/26/24

NOTE: NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

PROJECT: ALPHA PORTLAND (OTISCA INDUSTRIES) (DEC SITE NO. 734006)

CLIENT: ALPHA-OMEGA PRODUCTS, LLC

LOCATION: OGLE ROAD, TOWN OF DEWITT, ONONDAGA COUNTY, NEW YORK

DRAWING TITLE: OVERALL SITE PLAN

PROJECT No.: 2021063
SCALE: AS NOTED
DATE: 05/12/22
ENG'D BY: JCH
DRAWN BY: DKC/NAR
CHECKED BY: JED

SHEET NO. OP-1

PUBLIC WATER AREA

TO BUTTERNUT CREEK

SW-6/ SS-6

SIAWASSIA STREET

RESIDENCES

PUBLIC WATER AREA

CSX RAILROAD

FORMER MACHINE SHOP LOCATION

REGULATED DEBRIS AREA (RAILROAD TIES, USED TIRES)

MW-4

LEASED CEMENT SILOS

MW-3

SW-5/ SS-5

FORMER "LAGOON" AREA

JAMESVILLE ELEMENTARY SCHOOL

FORMER BUILDING LOCATION (TYP.)

COAL FLY ASH AND "COAL LIKE MATERIAL" STOCKPILES

FORMER MAIN PLANT

SS-4/ SW-4

SB-4

FORMER "LANDFILL"/QUARRY AREA (REPORTED FORMER BURIED TANKER LOCATION)

APPROXIMATE RANGE OF ANTICIPATED GROUNDWATER FLOW DIRECTIONS

TB-3

TB-1

CEMENT KILN "CLINKER" STOCKPILE

DRAINAGE SWALE (TYP.)

SW-3/ SS-3

MW-5

TB-5

SW-2/ SS-2

SB-2

MW-1

SB-1

TB-2

MW-2

FEDERAL WETLAND PUBHx

HISTORIC CKD STOCKPILE AREA

REGULATED DEBRIS AREA (TRANSITE PANELS, USED TIRES)

TB-4

HISTORIC CKD FILL AREA

FORMER KILN LOCATION

FORMER WASTE STORAGE AREA

HISTORIC CKD/ FILL AREA

NATURAL GAS MAIN (APPROXIMATE)

OVERHEAD ELECTRIC (APPROXIMATE)

SW-1/ SS-1

SITE BOUNDARY

GRADED CEMENT KILN DUST (CKD)

FEDERAL WETLAND PSSIE/PEMIE

NOTE:

ALL LOCATIONS, STOCKPILES, DEBRIS LIMITS AND SAMPLE LOCATIONS ARE APPROXIMATE.

KEY

EXISTING

- PROPERTY LINE
- G — NATURAL GAS MAIN
- OE — OVERHEAD ELECTRIC
- PP — POWER POLE
- DRAINAGE SWALE
- TB-1 — SOIL BORING LOCATION (1985)
- TB-4 — MONITORING WELL LOCATION (1985)
- CKD/FILL SAMPLE LOCATION (PCB ANALYSIS - 2009)
- MW-1 — OVERBURDEN MONITORING WELL LOCATION (NOV-DEC 2023)
- SW-1/ SS-1 — SURFACE WATER/ SEDIMENT SAMPLE LOCATION (DEC 2023)
- SB-1 / MW-1 — SOIL BORING LOCATION (NOV-DEC 2023)

⚠⚠ AERIAL SITE PLAN

1" = 100' SCALE — 100 0 100 200 FEET

BASE MAP REFERENCES:

1. AERIAL PHOTO PROVIDED BY NEW YORK STATE STATEWIDE DIGITAL ORTHOIMAGERY PROGRAM: PHOTO TAKEN APRIL 2018.
2. TAX MAP PROVIDED BY SYRACUSE-ONONDAGA COUNTY GIS ON THE WEB, DATED 2021.
3. "ALPHA PIT FILLING AND GRADING - OVERALL SITE PLAN" AS PREPARED BY KEPLINGER FREEMAN ASSOCIATES; PROJECT No. 37046; SHEET No. L1.0; LAST REVISION DATE: JUNE 24, 2020.
4. SITE PLAN/ CONTAMINATION AREA A (FIGURES 2 AND 3) INCLUDED WITH ALPHA PORTLAND CEMENT CO. SITE CLOSURE WORK PLAN, PREPARED BY KEITH A. SCHIMEL, PH.D.,P.E., DATED APRIL 1987.
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6. PCB SCREENING SAMPLE LOCATIONS PLAN (FIGURE 1) INCLUDED WITH ALPHA JAMESVILLE CORPORATION CKD CHARACTERIZATION PLAN, PREPARED BY O'BRIEN & GERE, DATED NOVEMBER 6, 2009.
7. FIELD MAPPING BY TDK ENGINEERING NOV-DEC 2023.
8. "FEMA LIDAR: FRANKLIN AND ST. LAWRENCE AND ONEIDA SUB-BASIN NY", DATED 2016-2017, PREPARED BY NOAA, DATED MARCH 29, 2024.

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REVISIONS:
⚠ PER DEC COMMENTS - 09/16/22
⚠ PER SITE CHARACTERIZATION INV. - 06/26/24

NOTE: NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK STATE EDUCATION LAW.

PROJECT: ALPHA PORTLAND (OTISCA INDUSTRIES) (DEC SITE NO. 734006)
CLIENT: ALPHA-OMEGA PRODUCTS, LLC
LOCATION: OGLE ROAD, TOWN OF DEWITT, ONONDAGA COUNTY, NEW YORK

DRAWING TITLE: SITE CHARACTERIZATION PLAN

PROJECT No.: 2021063
SCALE: AS NOTED
DATE: 05/12/22
ENG'D BY: JCH
DRAWN BY: ALP
CHECKED BY: JED

SHEET NO. SC-1

SOIL BORING LOGS

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SOIL BORING LOG

Site Name: Alpha Portland (Otisca Industries) Site
DEC Site No.: 734006
TDK Job # : 2021063
Boring: **MW-1**
Date: 11/28/2023
Ground Surface Elev.: 598+/-[4]
Groundwater Elev.: <585

Depth (ft)[1]	Sample Depth (ft)	Recovery Length (in)	PID (ppm)	Analytical Sample			Description (USCS Classification)
				Depth[1]	Method	G or C	
1	0.0 -	18	0				Gray Silt, with little to some fine-coarse Gravel (SM/GP)
2	2.0						
3	2.0 -	16	0	2'	See Note[3]	G	
4	4.0						
5	4.0 -	2	0				Gray/White Rock fragments with intermittent lenses of hard silt.
6	6.0						
7	6.0 -	2	0				
8	8.0						
9	8.0 -	NR[2]	-/-				
10	10.0						
11	10.0 -	8	0				
12	12.0						
13	12.0 -						
14	14.0						Refusal at 13 ft. (Bottom of Boring)
15	14.0 -						
16	16.0						
17	16.0 -						
18	18.0						
19	18.0 -						
20	20.0						

G = Grab **C= Composite**
NR = No Recovery **ppm = Parts per Million**

Monitoring Well Construction Details:

Diameter / Material			Rim PVC Elevation	
Bottom Depth			Bottom Elevation	
Screen Size				
Screened Interval		(Depths)		(Elevations)
Filter Sand Interval		(Depths)		(Elevations)
Bentonite Interval		(Depths)		(Elevations)

[1] Refers to depth below ground surface.
[2] Advanced augers from 8'-10' without sampling.
[3] VOCs, SVOCs, Metals, PCBs, PFAS.

"FEMA LIDAR: Franklin and St. Lawrence and Oneida Sub-Basin NY", 2016-2017, prepared by NOAA, dated March 29, 2024.

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SOIL BORING LOG

Site Name:	Alpha Portland (Otisca Industries) Site
DEC Site No.:	734006
TDK Job # :	2021063
Boring:	**MW-2**
Date:	11/29/2023
Ground Surface Elev.:	604+/-[3]
Groundwater Elev.:	<579

Depth (ft)[1]	Sample Depth (ft)	Recovery Length (in)	PID (ppm)	Analytical Sample			Description (USCS Classification)
				Depth[1]	Method	G or C	
1	0.0 -	4	0				Silt, little Clay, little fine Gravel with trace Brick and Wood fragments (Fill)
2	2.0						
3	2.0 -	16	0	2'	See Note[2]	G	
4	4.0						
5	4.0 -	5	0				
6	6.0						
7	6.0 -	NR	0				
8	8.0						
9	8.0 -	5	0				
10	10.0						
11	10.0 -	6	0				Brown Clay, little Silt (CL)
12	12.0						
13	12.0 -	---					
14	14.0						
15	14.0 -	3 (15'-17')	0				
16	16.0						
17	16.0 -	3	0				
18	18.0						
19	18.0 -	---					Gray/White Rock fragments (Cont'd)
20	20.0						

G = Grab **C= Composite**
NR = No Recovery **ppm = Parts per Million**

Monitoring Well Construction Details:

Diameter / Material			Rim PVC Elevation	
Bottom Depth			Bottom Elevation	
Screen Size				
Screened Interval		(Depths)		(Elevations)
Filter Sand Interval		(Depths)		(Elevations)
Bentonite Interval		(Depths)		(Elevations)

[1] Refers to depth below ground surface.
[2] VOCs, SVOCs, Metals, PCBs, PFAS.
[3] "FEMA LIDAR: Franklin and St. Lawrence and Oneida Sub-Basin NY", 2016-2017, prepared by NOAA, dated March 29, 2024.

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SOIL BORING LOG

Site Name: Alpha Portland (Otisca Industries) Site
DEC Site No.: 734006
TDK Job # : 2021063
Boring: **MW-2**
Date: 11/29/2023
Ground Surface Elev.: 604+/-[2]
Groundwater Elev.: <579

Depth (ft)[1]	Sample Depth (ft)	Recovery Length (in)	PID (ppm)	Analytical Sample			Description (USCS Classification)
				Depth[1]	Method	G or C	
21	20.0 -	3	0				Gray/White Rock fragments
22	22.0						
23							
24							
25	25.0 - 25.4'	<3	0				Gray Bedrock at 25' +/-
26							Refusal at 25.4'
27							(Bottom of Boring)
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							

G = Grab **C= Composite**
NR = No Recovery **ppm = Parts per Million**

Monitoring Well Construction Details:

Diameter / Material _____ Rim PVC Elevation _____
Bottom Depth _____ Bottom Elevation _____
Screen Size _____
Screened Interval _____ (Depths) _____ (Elevations)
Filter Sand Interval _____ (Depths) _____ (Elevations)
Bentonite Interval _____ (Depths) _____ (Elevations)

[1] Depths refer to depth below ground surface

[2] "FEMA LIDAR: Franklin and St. Lawrence and Oneida Sub-Basin NY", 2016-2017, prepared by NOAA, dated March 29, 2024.

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SOIL BORING LOG

Site Name: Alpha Portland (Otisca Industries) Site
DEC Site No.: 734006
TDK Job # : 2021063
Boring: **MW-3**
Date: 12/1/2023
Ground Surface Elev.: 570+/-[3]
Groundwater Elev.: 565+/-

Depth (ft)[1]	Sample Depth (ft)	Recovery Length (in)	PID (ppm)	Analytical Sample			Description (USCS Classification)
				Depth[1]	Method	G or C	
1	0.0 -	20	0				Gray fine-medium Sand (SM)
2	2.0						
3	2.0 -	18	0				
4	4.0						Brown Clay and Silt (CL)
5	4.0 -	16	0				
6	6.0						
7	6.0 -	12	0				Gray very fine Sand (ML)
8	8.0						
9	8.0 -	15	0				(Brown 8'-10')
10	10.0						
11	10.0 -	14	0				Gray Silt, little Clay, little fine Sand (ML/CL)
12	12.0						
13	12.0 -	16	0				
14	14.0						
15	14.0 -						Bottom of boring at 14'
16	16.0						
17	16.0 -						
18	18.0						
19	18.0 -						
20	20.0						

G = Grab **C= Composite**
NR = No Recovery **ppm = Parts per Million**

Monitoring Well Construction Details:

Diameter / Material	2"/PVC		Rim PVC Elevation	
Bottom Depth	14.0'		Bottom Elevation	
Screen Size	10 Slot			
Screened Interval	14.0' - 4.0'	(Depths)		(Elevations)
Filter Sand Interval	14.0' - 3.0'	(Depths)		(Elevations)
Bentonite Interval	3.0' - 2.0'	(Depths)		(Elevations)

[1] Refers to depth below ground surface.

[2] Groundwater samples obtained on 1/16/24 (VOCs, SVOCs, Metals, PCBs, PFAS).

[3] "FEMA LIDAR: Franklin and St. Lawrence and Oneida Sub-Basin NY", 2016-2017, prepared by NOAA, dated March 29, 2024.

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SOIL BORING LOG

Site Name: Alpha Portland (Otisca Industries) Site
DEC Site No.: 734006
TDK Job # : 2021063
Boring: **MW-4**
Date: 11/28/2023
Ground Surface Elev.: 593+/-[4]
Groundwater Elev.: <588

Depth (ft)[1]	Sample Depth (ft)	Recovery Length (in)	PID (ppm)	Analytical Sample			Description (USCS Classification)
				Depth[1]	Method	G or C	
1	0.0 -	18	0				Dark Gray Silt, little fine Sand, little fine to medium gravel (Fill). Black "Stained" Soil at 2'.
2	2.0						
3	2.0 -	8	0	2'	See Note[2]	G	
4	4.0						Gray hard Silt, little fine-coarse Gravel (SM/GP)
5	4.0 -	3 (4.0' - 4.5')	0				
6	6.0						Dark Gray Limestone Bedrock[3]
7	6.0 -						
8	8.0						
9	8.0 -						
10	10.0						
11	10.0 -						(Bottom of Boring)
12	12.0						
13	12.0 -						
14	14.0						
15	14.0 -						
16	16.0						
17	16.0 -						
18	18.0						
19	18.0 -						
20	20.0						

G = Grab **C= Composite**
NR = No Recovery **ppm = Parts per Million**

Monitoring Well Construction Details:

Diameter / Material _____ Rim PVC Elevation _____
Bottom Depth _____ Bottom Elevation _____
Screen Size _____
Screened Interval _____ (Depths) _____ (Elevations)
Filter Sand Interval _____ (Depths) _____ (Elevations)
Bentonite Interval _____ (Depths) _____ (Elevations)

[1] Refers to depth below ground surface.
[2] VOCs, SVOCs, Metals, PCBs, PFAS.
[3] Cored Bedrock from 4.5' to 9.5'

"FEMA LIDAR: Franklin and St. Lawrence and Oneida Sub-Basin NY", 2016-2017, prepared by NOAA, dated March 29, 2024.

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SOIL BORING LOG

Site Name: Alpha Portland (Otisca Industries) Site
DEC Site No.: 734006
TDK Job # : 2021063
Boring: **MW-5**
Date: 11/30/2023
Ground Surface Elev.: 570+/-[3]
Groundwater Elev.: 565+/-

Depth (ft)[1]	Sample Depth (ft)	Recovery Length (in)	PID (ppm)	Analytical Sample			Description (USCS Classification)
				Depth[1]	Method	G or C	
1	0.0 -	20	0				Gray Silt and fine Sand, little to some fine-medium Gravel (SM/GM)
2	2.0						
3	2.0 -	14	0				
4	4.0						
5	4.0 -	16	0				
6	6.0						
7	6.0 -	6	0				Gray Silt and fine-medium Gravel (GM)
8	8.0						
9	8.0 -	6	0				
10	10.0						
11	10.0 -	4	0				Gray Silt, little fine Gravel (GM)
12	12.0						
13	12.0 -	5	0				
14	14.0						(Brown Peat 13.5' - 14.0')
15	14.0 -						Bottom of Boring at 14.0'
16	16.0						
17	16.0 -						
18	18.0						
19	18.0 -						
20	20.0						

G = Grab **C= Composite**
NR = No Recovery **ppm = Parts per Million**

Monitoring Well Construction Details:

Diameter / Material	2"/PVC		Rim PVC Elevation	
Bottom Depth	14.0'		Bottom Elevation	
Screen Size	10 Slot			
Screened Interval	14.0' - 4.0'	(Depths)		(Elevations)
Filter Sand Interval	14.0' - 3.0'	(Depths)		(Elevations)
Bentonite Interval	3.0' - 2.0'	(Depths)		(Elevations)

[1] Refers to depth below ground surface.

[2] Groundwater samples obtained on 1/17/24 (VOCs, SVOCs, Metals, PCBs, PFAS).

[3] "FEMA LIDAR: Franklin and St. Lawrence and Oneida Sub-Basin NY", 2016-2017, prepared by NOAA, dated March 29, 2024.

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SOIL BORING LOG

Site Name: Alpha Portland (Otisca Industries) Site
DEC Site No.: 734006
TDK Job # : 2021063
Boring: **SB-1**
Date: 11/28/2023
Ground Surface Elev.: 605+/-[3]
Groundwater Elev.: <589

Depth (ft)[1]	Sample Depth (ft)	Recovery Length (in)	PID (ppm)	Analytical Sample			Description (USCS Classification)
				Depth[1]	Method	G or C	
1	0.0 -	18	0				Dark Gray Silt and fine Gravel, little fine Sand, little Clay (GM). Black "Stained" Soil at 2'.
2	2.0						
3	2.0 -	2	0	2'	See Note[2]	G	
4	4.0						
5	4.0 -	8	0				Gray Rock fragments with intermittent lenses of hard Silt
6	6.0						
7	6.0 -	3	0				
8	8.0						
9	8.0 -	3	0				
10	10.0						
11	10.0 -	3	0				
12	12.0						
13	12.0 -	3	0				
14	14.0						
15	14.0 -	3	0				
16	16.0						
17	16.0 -						Refusal at 16.4' (Bottom of boring)
18	18.0						
19	18.0 -						
20	20.0						

G = Grab **C= Composite**
NR = No Recovery **ppm = Parts per Million**

Monitoring Well Construction Details:

Diameter / Material		Rim PVC Elevation	
Bottom Depth		Bottom Elevation	
Screen Size			
Screened Interval	(Depths)		(Elevations)
Filter Sand Interval	(Depths)		(Elevations)
Bentonite Interval	(Depths)		(Elevations)

[1] Refers to depth below ground surface.
[2] VOCs, SVOCs, Metals, PCBs, PFAS.
[3] "FEMA LIDAR: Franklin and St. Lawrence and Oneida Sub-Basin NY", 2016-2017, prepared by NOAA, dated March 29, 2024.

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SOIL BORING LOG

Site Name: Alpha Portland (Otisca Industries) Site
DEC Site No.: 734006
TDK Job # : 2021063
Boring: **SB-2**
Date: 11/30/2023
Ground Surface Elev.: 598+/-[3]
Groundwater Elev.: <590

Depth (ft)[1]	Sample Depth (ft)	Recovery Length (in)	PID (ppm)	Analytical Sample			Description (USCS Classification)
				Depth[1]	Method	G or C	
1	0.0 -	20	0				Silt and Clay, little fine Gravel (CL)
2	2.0						
3	2.0 -	13	0	2'	See Note[2]	G	
4	4.0						
5	4.0 -	12	0				
6	6.0						
7	6.0 -	7	0				
8	8.0						Fractured Rock
9	8.0 -						Refusal at 8'/Bottom of boring
10	10.0						
11	10.0 -						
12	12.0						
13	12.0 -						
14	14.0						
15	14.0 -						
16	16.0						
17	16.0 -						
18	18.0						
19	18.0 -						
20	20.0						

G = Grab **C= Composite**
NR = No Recovery **ppm = Parts per Million**

Monitoring Well Construction Details:

Diameter / Material _____ Rim PVC Elevation _____
Bottom Depth _____ Bottom Elevation _____
Screen Size _____
Screened Interval _____ (Depths) _____ (Elevations)
Filter Sand Interval _____ (Depths) _____ (Elevations)
Bentonite Interval _____ (Depths) _____ (Elevations)

[1] Refers to depth below ground surface.
[2] VOCs, SVOCs, Metals, PCBs, PFAS.
[3] "FEMA LIDAR: Franklin and St. Lawrence and Oneida Sub-Basin NY", 2016-2017, prepared by NOAA, dated March 29, 2024.

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SOIL BORING LOG

Site Name: Alpha Portland (Otisca Industries) Site
DEC Site No.: 734006
TDK Job # : 2021063
Boring: **SB-4**
Date: 12/4/2023
Ground Surface Elev.: 569+/-[3]
Groundwater Elev.: 565+/-

Depth (ft)[1]	Sample Depth (ft)	Recovery Length (in)	PID (ppm)	Analytical Sample			Description (USCS Classification)
				Depth[1]	Method	G or C	
1	0.0 -	18	0				Gray fine-medium Sand, little fine Gravel (SP)
2	2.0						
3	2.0 -	6	0				
4	4.0						
5	4.0 -	18	0	4'	See Note[2]	G	Dark brown Silt and fine Sand, little Clay, little fine Gravel (SM/CL)
6	6.0						
7	6.0 -	3	0				
8	8.0						
9	8.0 -	1	0				Rock fragments
10	10.0						
11	10.0 -	9	0				Gray Clay, little Silt (CL)
12	12.0						
13	12.0 -	5	0				
14	14.0						Gray fine Gravel, little fine Sand
15	14.0 -						Bottom of Boring at 14.0'
16	16.0						
17	16.0 -						
18	18.0						
19	18.0 -						
20	20.0						

G = Grab **C= Composite**
NR = No Recovery **ppm = Parts per Million**

Monitoring Well Construction Details:

Diameter / Material _____ Rim PVC Elevation _____
Bottom Depth _____ Bottom Elevation _____
Screen Size _____
Screened Interval _____ (Depths) _____ (Elevations)
Filter Sand Interval _____ (Depths) _____ (Elevations)
Bentonite Interval _____ (Depths) _____ (Elevations)

[1] Refers to depth below ground surface.
[2] VOCs, SVOCs, Metals, PCBs, PFAS.
[3] "FEMA LIDAR: Franklin and St. Lawrence and Oneida Sub-Basin NY", 2016-2017, prepared by NOAA, dated March 29, 2024.

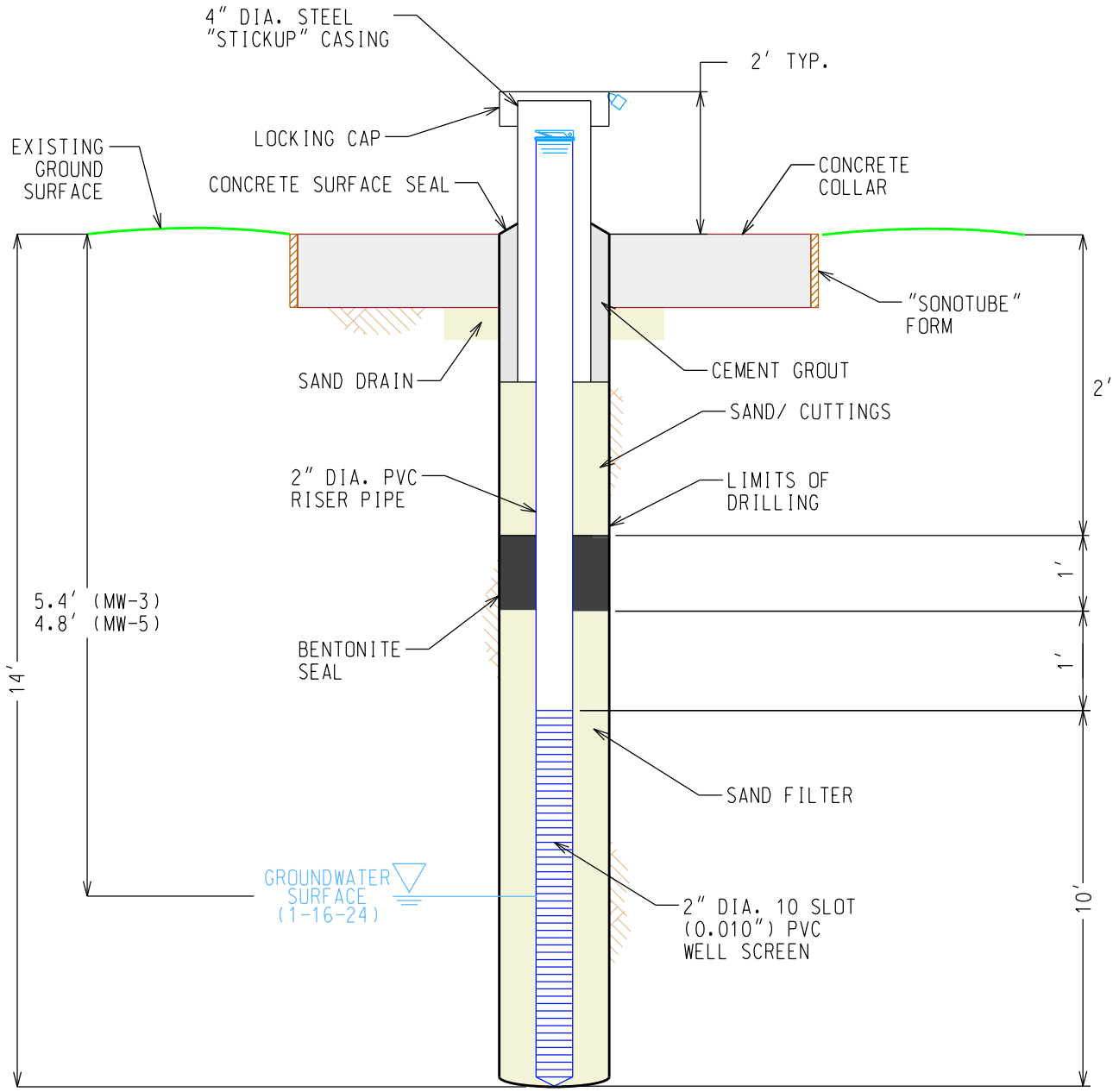
PHOTOGRAPH OF BEDROCK CORE

SITE CHARACTERIZATION PROGRAM – ALPHA PORTLAND (OTISCA INDUSTRIES) SITE
DEC SITE NO. 734006, TOWN OF DEWITT, ONONDAGA COUNTY, NY
TDK PROJECT NO.: 2021063

PHOTO 1:
BEDROCK CORE RECOVERY – MW-4 (5' – 9')



MONITORING WELL CONSTRUCTION DETAIL



MONITORING WELL CONSTRUCTION DETAIL (MW-3 & MW-5)

NOT TO SCALE

TDK Engineering Associates, PC

19 Genesee Street
Camillus, New York 13031
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DRAWING TITLE:
MONITORING WELL DETAIL

PROJECT: SITE CHARACTERIZATION PROGRAM
ALPHA PORTLAND (OTISCA INDUSTRIES) SITE

CLIENT:
ALPHA OMEGA PRODUCTS, LLC

LOCATION:
OGLE ROAD, TOWN OF DEWITT, ONONDAGA COUNTY, NEW YORK

PROJECT No.:	2021063
SCALE:	AS NOTED
DATE:	04/02/24
ENG'D BY:	JCH
DRAWN BY:	ALP
CHECKED BY:	JED

SHEET NO.
OW-1

GROUNDWATER SAMPLING FIELD LOGS

Miller Environmental Group, Inc. | Well Development Purge Log | **Former Alpha Portland Site # 2021063**

Location: ~~Former Alpha Portland~~ Well No.: MW-5 Date: 01-16-2024 Job No.: NY1224 0032 Page 1 of 2

Equipment: YSI DSS Pro

Personnel: Jonathan Wilkins & Carl Kayko

Date and Time Purging Starts: 01-16-2024 @ 11:02

Total Well Depth: 16.68' Screen Interval: 4'-14'

Static Water Level: 6.75 Depth to Product: N/A

Well Condition (Circle One) If Fair or Poor Explain Reason

(Good) Fair Poor

Pump Type: Peristaltic

Purge Start Time: 11:02

Purge Stop Time: 12:32

Water Column: 9.93' Total Depth of Product: N/A

Pump Rate (mL/min): 100

Well Casing Diameter: 2"

Total Purge Volume (Gal.) 5.00

~~Bailer Sampling~~ ☐ Low Flow Method ☒

Reason Purging/ Development Stopped: Dry Well ☐ Parameter Stabilization ☐ 1 Hour ☒

Time	Water Depth (ft)	Volume Recovered (gal)	Temp. (°C) +/- 10%	pH (Units) +/- 0.2	ORP (mV) +/- 10%	Conductivity (ms/cm) +/- 10%	Turbidity (NTU) +/- 10%	Disolved Oxygen (mg/L) +/- 10%	Comments
									In-Well Tubing Depth: 13'
11:02	16.68	0.00	9.5	12.07	-101.8	1832	765	19.2	Light Brown in Color
11:07	16.68	.25	9.5	12.08	-103.7	1845	761	18.3	No Odor
11:10	16.68	.40	9.4	12.08	-107.3	1863	772	10.4	
11:13	16.68	.75	9.4	12.12	-108.4	1871	753	7.1	
11:17	16.68	.95	9.3	12.15	-111.9	1887	764	6.5	
11:22	16.68	1.25	9.3	12.18	-114.1	1893	785	1.2	
11:27	16.68	1.5	9.3	12.18	-115.1	1910	777	.44	
11:32	16.68	1.75	9.3	12.53	-118.7	1906	745	3.6	
11:37	16.68	2.00	9.3	12.26	-123.9	1886	643	0.28	
11:42	16.68	2.25	9.4	12.26	-129.4	1846	651	0.19	
11:47	16.68	~~2.50~~ 2.50	9.6	12.23	-131.9	1834	645	0.15	
11:52	16.68	2.25	9.6	12.27	-136.5	1767	583	0.06	

2.50

Location:			Well No.:			Date:			Job No.:	Page 2 of 2
Time	Water Depth (ft)	Volume Recovered (gal)	Temp. (°C) +/- 10%	pH (Units) +/- 0.2	ORP (mV) +/- 10%	Conductivity (ms/cm) +/- 10%	Turbidity (NTU) +/- 10%	Disolved Oxygen (mg/L) +/- 10%		Comments In-Well Tubing Depth: 13'
1157	16.68	2.50	9.5	12.34	-138.6	1734	575	0.02	—	
1202	16.68	2.75	9.5	12.27	-138.9	1716	563	0.01	—	
1207	16.68	3.00	9.2	12.30	-140.1	1696	558	0.00	—	
1212	16.68	3.25	9.4	12.36	-141.1	1680	550	0.00	—	
1217	16.68	4.00	9.1	12.38	-141.3	1665	556	0.00	—	
1222	16.68	4.25	9.2	12.37	-142.7	1654	547	0.00	—	Samples Collected at the MW-5 Location:
1227	16.68	4.75	9.3	12.35	-144.0	1639	550	0.00	—	
1232	16.68	5.00	9.2	12.34	-144.7	1629	546	0.00	—	-MW-5 -@ 12:35 -MW-5FD @12:40 -MS -@ 12:45 -MSD -@ 12:50

Miller Environmental Group, Inc. | Well Development Purge Log | **Former Alpha Portland Site # 2021063**

Location: Former Alpha Portland | Well No.: MW-3 | Date: 01-16-24 | Job No.: NY1224/0032 | Page 1 of 2

Equipment: YSI DSS PRO

Personnel: Tamlan Wilkins & Carl Kavko

Date and Time Purging Starts: 01-16-2024 @ 14:00

Total Well Depth: 16.65' | Screen Interval: 4'-14'

Static Water Level: 7.40' | Depth to Product: N/A

Well Condition (Circle One) / If Fair or Poor Explain Reason: (Good) Fair Poor

Pump Type: Peristaltic

Purge Start Time: 1400

Purge Stop Time: 1530

Water Column: 9.25' | Total Depth of Product: N/A

Pump Rate (mL/min): 100

Well Casing Diameter: 2"

Total Purge Volume (Gal.) 4.5

Bailer Sampling ☐ | Low Flow Method ☒

Reason Purging/ Development Stopped: Dry Well ☐ | Parameter Stabilization ☐ 1 Hour ☒

Time	Water Depth (ft)	Volume Recovered (gal)	Temp. (°C) +/- 10%	pH (Units) +/- 0.2	ORP (mV) +/- 10%	Conductivity (ms/cm) +/- 10%	Turbidity (NTU) +/- 10%	Disolved Oxygen (mg/L) +/- 10%	Comments / In-Well Tubing Depth:
1400	7.40	0.00	8.3	7.27	-50.9	465.9	937	0.35	LIGHT BROWN IN COLOR
1405	7.40	0.25	8.0	7.29	-51.3	479.3	904	0.34	W/ ORANGE FLAKES
1410	7.39	0.50	8.1	7.32	-52.5	482.5	891	0.34	
1415	8.42	0.75	8.1	7.71	-47.0	483.9	895	0.23	- NO ODOR
1420	8.68	1.00	7.9	7.56	-44.6	476.0	891	0.18	
1425	8.87	1.25	7.8	7.44	-43.6	459.5	885	0.13	
1430	9.37	1.50	8.1	7.57	-39.4	427.5	881	0.20	
1435	9.61	1.75	8.0	7.48	-40.2	401.5	883	0.20	
1440	9.68	2.00	8.0	8.38	56.3	312.2	887	0.05	
1445	9.78	2.25	8.0	9.30	-59.3	274.3	885	0.04	
1450	9.98	2.50	8.1	9.22	-55.4	279.8	876	0.03	
1455	10.08	2.75	8.1	9.33	-54.5	263.8	879	0.03	

Location: Former Alpha Portland | Well No.: MW-3 | Date: 01-16-2024 | Job No.: NY1224 0032 | Page 2 of 2

Time	Water Depth (ft)	Volume Recovered (gal)	Temp. (°C) +/- 10%	pH (Units) +/- 0.2	ORP (mV) +/- 10%	Conductivity (ms/cm) +/- 10%	Turbidity (NTU) +/- 10%	Disolved Oxygen (mg/L) +/- 10%		Comments
										In-Well Tubing Depth: 13'
1500	10.43	3.00	8.4	9.39	-61.4	284.8	883	0.05	—	
1505	10.54	3.25	8.2	9.09	-61.0	278.9	873	0.08	—	
1510	10.68	3.50	8.1	9.14	-60.4	261.5	881	0.15	—	
1515	11.13	3.75	8.3	8.10	-57.8	258.7	871	0.16	—	
1520	11.40	4.00	8.4	7.73	-52.9	259.2	887	0.14	—	Samples Collected at MW-3
1525	11.84	4.25	8.3	6.80	-47.8	280.9	872	0.17	—	
1530	12.13	4.55	8.2	7.28	-39.2	356.7	881	0.15	—	
										- MW-3 @ 15:35
										- EQ Rinse Blank @ 15:45

LABORATORY ANALYTICAL REPORTS

SOIL BORINGS

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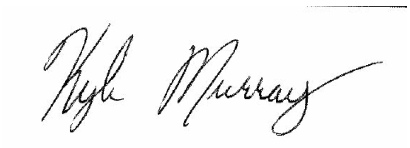
January 30, 2024

Richard Riccelli
Syracuse Sand & Gravel, LLC
6131 E Taft Road
North Syracuse, NY 13212

Project Location: NY
Client Job Number:
Project Number: 00143967 - TDK_Alpha Portland - CAT B
Laboratory Work Order Number: 23L0541

Enclosed are results of analyses for samples as received by the laboratory on December 2, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kyle A. Murray
Project Manager

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Syracuse Sand & Gravel, LLC
6131 E Taft Road
North Syracuse, NY 13212
ATTN: Richard Riccelli

REPORT DATE: 1/30/2024

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 00143967 - TDK_Alpha Portland - CAT B

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23L0541

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-1 (2)	23L0541-01	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 6020B	
				SW-846 7196A	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8260D	
				SW-846 8270E	
SB-1 (2)	23L0541-02	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 6020B	
				SW-846 7196A	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8260D	
				SW-846 8270E	
MW-4 (2)	23L0541-03	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 6020B	
				SW-846 7196A	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8260D	
				SW-846 8270E	
SB-2 (2)	23L0541-04	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 6020B	
				SW-846 7196A	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8260D	
				SW-846 8270E	
Duplicate	23L0541-05	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 6020B	
				SW-846 7196A	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8260D	
				SW-846 8270E	
Equipment Deconn	23L0541-06	Equipment Blank Water		SW-846 8260D	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

REVISED 01-30-24: Hex Cr added per client.

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SM 2540G

Qualifications:

H-06

Sample was extracted past the recommended holding time.

Analyte & Samples(s) Qualified:

% Solids
23L0541-01[MW-1 (2)]

SW-846 6010D

Qualifications:

MS-19

Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representative of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.

Analyte & Samples(s) Qualified:

Aluminum
23L0541-02[SB-1 (2)], B359903-MS1, B359903-MSD1, B359903-PS1

Calcium
23L0541-02[SB-1 (2)], B359903-MS5, B359903-MSD5, B359903-PS5

Iron
23L0541-02[SB-1 (2)], B359903-MS5, B359903-MSD5, B359903-PS5

Magnesium
23L0541-02[SB-1 (2)], B359903-MS5, B359903-MSD5, B359903-PS5

Potassium
23L0541-02[SB-1 (2)], B359903-MS1, B359903-MSD1

MS-22

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.

Analyte & Samples(s) Qualified:

Sodium
B359903-MS1

SW-846 6020B

Qualifications:

DL-05

Sample required a dilution due to high internal standard recovery of the lesser diluted digestion, reporting limit is elevated.

Analyte & Samples(s) Qualified:

Arsenic
23L0541-05[Duplicate]

Beryllium
23L0541-01[MW-1 (2)], 23L0541-02[SB-1 (2)], 23L0541-03[MW-4 (2)], 23L0541-04[SB-2 (2)], 23L0541-05[Duplicate]

M-11

The serial dilution RPD is outside of control limits. Increased variability for reported result is expected.

Analyte & Samples(s) Qualified:

Barium
B359897-SRL1

MS-04

Poor spike recovery suspected to be a result of obvious visual non-homogeneity of sample and spike aliquots.

Analyte & Samples(s) Qualified:

Antimony
23L0541-02[SB-1 (2)], B359897-MS2, B359897-MSD2

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MS-19

Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representative of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.

Analyte & Samples(s) Qualified:

Barium
23L0541-02[SB-1 (2)], B359897-MS2, B359897-MSD2, B359897-PS1

Chromium
B359897-PS1

Cobalt
B359897-PS1

Copper
B359897-PS1

Lead
B359897-PS1

Manganese
B359897-PS1

Nickel
B359897-PS1

Vanadium
B359897-PS1

Zinc
B359897-PS1

MS-22

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.

Analyte & Samples(s) Qualified:

Copper
23L0541-02[SB-1 (2)], B359897-MS1, B359897-MSD1

Z-01

Post spike recovery is outside of control limits. Possibility of matrix interference cannot be eliminated. Analysis is in control based on laboratory fortified blank and duplicate.

Analyte & Samples(s) Qualified:

Cadmium
23L0541-02[SB-1 (2)], B359897-PS1

Silver
23L0541-02[SB-1 (2)], B359897-PS1

SW-846 7196A

Qualifications:

H-10

Analysis was requested after the recommended holding time had passed.

Analyte & Samples(s) Qualified:

Hexavalent Chromium
23L0541-01[MW-1 (2)], 23L0541-02[SB-1 (2)], 23L0541-03[MW-4 (2)], 23L0541-04[SB-2 (2)], 23L0541-05[Duplicate]

MS-16

For solid method SW846-7196A, the matrix spike is outside of control limits. pH and ORP results were indicative of reducing conditions. Reanalysis is not required. Analysis is in control based on LCS recoveries.

Analyte & Samples(s) Qualified:

Hexavalent Chromium
23L0541-02[SB-1 (2)], B364445-MS1, B364445-MSD1

SW-846 8260D

Qualifications:

L-07

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:

Bromomethane
B359857-BS1

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MS-12A

Matrix spike and spike duplicate recovery is outside of control limits on the high side.

Analyte & Samples(s) Qualified:

Acetone
B359857-MS2, B359857-MSD2

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:

1,2,4-Trichlorobenzene
23L0541-06[Equipment Deconn], B359877-BLK1, B359877-BS1, B359877-BSD1, S097384-CCV1

1,2-Dibromo-3-chloropropane (DBCP)
23L0541-06[Equipment Deconn], B359877-BLK1, B359877-BS1, B359877-BSD1, S097384-CCV1

Acetone
23L0541-06[Equipment Deconn], B359877-BLK1, B359877-BS1, B359877-BSD1, S097384-CCV1

Carbon Tetrachloride
23L0541-01[MW-1 (2)], 23L0541-02[SB-1 (2)], 23L0541-03[MW-4 (2)], 23L0541-04[SB-2 (2)], 23L0541-05[Duplicate], B359857-BLK1, B359857-BS1, B359857-BSD1, B359857-MS2, B359857-MSD2, S097380-CCV1

Cyclohexane
23L0541-01[MW-1 (2)], 23L0541-02[SB-1 (2)], 23L0541-03[MW-4 (2)], 23L0541-04[SB-2 (2)], 23L0541-05[Duplicate], B359857-BLK1, B359857-BS1, B359857-BSD1, B359857-MS2, B359857-MSD2, S097380-CCV1

Dichlorodifluoromethane (Freon 12)
23L0541-01[MW-1 (2)], 23L0541-02[SB-1 (2)], 23L0541-03[MW-4 (2)], 23L0541-04[SB-2 (2)], 23L0541-05[Duplicate], B359857-BLK1, B359857-BS1, B359857-BSD1, B359857-MS2, B359857-MSD2, S097380-CCV1

V-20

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:

Bromomethane
B359857-BS1, B359857-BSD1, B359857-MS2, B359857-MSD2, B359877-BS1, B359877-BSD1, S097380-CCV1, S097384-CCV1

V-36

Initial calibration verification (ICV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:

Acetone
B359857-BS1, B359857-BSD1, B359857-MS2, B359857-MSD2, S097380-CCV1

SW-846 8270E

Qualifications:

MS-07A

Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.

Analyte & Samples(s) Qualified:

4-Chloroaniline
B359939-MS1, B359939-MSD1

Hexachlorocyclopentadiene
B359939-MS1, B359939-MSD1

R-05

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.

Analyte & Samples(s) Qualified:

3,3-Dichlorobenzidine
B359939-BS1, B359939-BSD1

3-Nitroaniline
B359939-BS1, B359939-BSD1

4-Chloroaniline
B359939-BS1, B359939-BSD1

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S-19

Surrogate recovery is outside of control limits, matrix interference suspected. Reanalysis yielded similar surrogate non-conformance.

Analyte & Samples(s) Qualified:

2,4,6-Tribromophenol
23L0541-03[MW-4 (2)], 23L0541-03RE1[MW-4 (2)]

2-Fluorophenol
23L0541-03[MW-4 (2)], 23L0541-03RE1[MW-4 (2)]

V-04

Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria. Reported result is estimated.

Analyte & Samples(s) Qualified:

Benzo(a)anthracene
B359939-BS1, B359939-MS1

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:

Atrazine
23L0541-03RE1[MW-4 (2)]

Benzo(a)anthracene
B359939-BS1, B359939-MS1

Caprolactam
23L0541-03RE1[MW-4 (2)]

Di-n-octylphthalate
23L0541-01[MW-1 (2)], 23L0541-02[SB-1 (2)], 23L0541-03[MW-4 (2)], 23L0541-04[SB-2 (2)], 23L0541-05[Duplicate], B359939-BLK1, B359939-BS1, B359939-BSD1, B359939-MS1, B359939-MSD1, S097499-CCV1

Pentachlorophenol
B359939-BS1, B359939-MS1

V-06

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for this compound.

Analyte & Samples(s) Qualified:

Atrazine
23L0541-01[MW-1 (2)], 23L0541-02[SB-1 (2)], 23L0541-03[MW-4 (2)], 23L0541-04[SB-2 (2)], 23L0541-05[Duplicate], B359939-BLK1, B359939-BS1, B359939-BSD1, B359939-MS1, B359939-MSD1, B360416-BLK1, B360416-BS1, B360416-BSD1, S097499-CCV2, S097699-CCV2

Caprolactam
23L0541-01[MW-1 (2)], 23L0541-02[SB-1 (2)], 23L0541-03[MW-4 (2)], 23L0541-04[SB-2 (2)], 23L0541-05[Duplicate], B359939-BLK1, B359939-BS1, B359939-BSD1, B359939-MS1, B359939-MSD1, B360416-BLK1, B360416-BS1, B360416-BSD1, S097499-CCV2, S097699-CCV2

V-34

Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

Analyte & Samples(s) Qualified:

Benzaldehyde
23L0541-01[MW-1 (2)], 23L0541-02[SB-1 (2)], 23L0541-03[MW-4 (2)], 23L0541-03RE1[MW-4 (2)], 23L0541-04[SB-2 (2)], 23L0541-05[Duplicate], B359939-BLK1, B359939-BS1, B359939-BSD1, B359939-MS1, B359939-MSD1, B360416-BLK1, B360416-BS1, B360416-BSD1, S097351-ICV1, S097499-CCV2, S097699-CCV2

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: MW-1 (2) | Sampled: 11/28/2023 15:30

Sample ID: 23L0541-01

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	0.019	0.11	0.010	mg/Kg dry	1	J	SW-846 8260D	12/6/23	12/6/23 7:17	MFF
Benzene	ND	0.0022	0.00064	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
Bromochloromethane	ND	0.0022	0.00086	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
Bromodichloromethane	ND	0.0022	0.00058	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
Bromoform	ND	0.0022	0.00068	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
Bromomethane	ND	0.011	0.0019	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
2-Butanone (MEK)	ND	0.044	0.0069	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
Carbon Disulfide	ND	0.011	0.0089	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
Carbon Tetrachloride	ND	0.0022	0.00087	mg/Kg dry	1	V-05	SW-846 8260D	12/6/23	12/6/23 7:17	MFF
Chlorobenzene	ND	0.0022	0.00062	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
Chlorodibromomethane	ND	0.0011	0.00070	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
Chloroethane	ND	0.022	0.0012	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
Chloroform	ND	0.0044	0.00069	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
Chloromethane	ND	0.011	0.0011	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
Cyclohexane	ND	0.011	0.0045	mg/Kg dry	1	V-05	SW-846 8260D	12/6/23	12/6/23 7:17	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0022	0.00088	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
1,2-Dibromoethane (EDB)	ND	0.0011	0.00085	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
1,2-Dichlorobenzene	ND	0.0022	0.00059	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
1,3-Dichlorobenzene	ND	0.0022	0.00061	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
1,4-Dichlorobenzene	ND	0.0022	0.00067	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.022	0.0011	mg/Kg dry	1	V-05	SW-846 8260D	12/6/23	12/6/23 7:17	MFF
1,1-Dichloroethane	ND	0.0022	0.00076	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
1,2-Dichloroethane	ND	0.0022	0.00074	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
1,1-Dichloroethylene	ND	0.0044	0.00091	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
cis-1,2-Dichloroethylene	ND	0.0022	0.00070	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
trans-1,2-Dichloroethylene	ND	0.0022	0.00081	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
1,2-Dichloropropane	ND	0.0022	0.00069	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
cis-1,3-Dichloropropene	ND	0.0011	0.00062	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
trans-1,3-Dichloropropene	ND	0.0011	0.00067	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
1,4-Dioxane	ND	0.11	0.050	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
Ethylbenzene	ND	0.0022	0.00066	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
2-Hexanone (MBK)	ND	0.022	0.0056	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
Isopropylbenzene (Cumene)	ND	0.0022	0.00069	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
Methyl Acetate	ND	0.0022	0.0016	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0044	0.00074	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
Methyl Cyclohexane	ND	0.0044	0.00086	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
Methylene Chloride	ND	0.022	0.0011	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.022	0.0049	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
Styrene	ND	0.0022	0.00055	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
1,1,2,2-Tetrachloroethane	ND	0.0011	0.00061	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
Tetrachloroethylene	ND	0.0022	0.00093	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
Toluene	0.0011	0.0022	0.00075	mg/Kg dry	1	J	SW-846 8260D	12/6/23	12/6/23 7:17	MFF
1,2,3-Trichlorobenzene	ND	0.0022	0.00063	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
1,2,4-Trichlorobenzene	ND	0.0022	0.00067	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: MW-1 (2) | Sampled: 11/28/2023 15:30

Sample ID: 23L0541-01

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	0.0022	0.00085	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
1,1,2-Trichloroethane	ND	0.0022	0.00059	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
Trichloroethylene	ND	0.0022	0.00089	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
Trichlorofluoromethane (Freon 11)	ND	0.011	0.00082	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.011	0.00095	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
Vinyl Chloride	ND	0.011	0.00082	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF
Xylenes (total)	ND	0.0022	0.0022	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 7:17	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	91.6	70-130		12/6/23 7:17
Toluene-d8	100	70-130		12/6/23 7:17
4-Bromofluorobenzene	98.8	70-130		12/6/23 7:17

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: MW-1 (2) | Sampled: 11/28/2023 15:30

Sample ID: 23L0541-01

Sample Matrix: Soil

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	mg/Kg dry			1			SW-846 8260D	12/6/23	12/6/23 7:17	MFF

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: MW-1 (2) | Sampled: 11/28/2023 15:30

Sample ID: 23L0541-01

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Atrazine	ND	0.72	0.050	mg/Kg dry	1	V-06	SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Benzaldehyde	ND	0.37	0.035	mg/Kg dry	1	V-34	SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Biphenyl	ND	0.72	0.057	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Caprolactam	ND	0.37	0.052	mg/Kg dry	1	V-06	SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Acenaphthene	ND	0.18	0.070	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Acenaphthylene	ND	0.18	0.072	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Acetophenone	ND	0.37	0.072	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Anthracene	ND	0.18	0.071	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Benzo(a)anthracene	ND	0.18	0.066	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Benzo(a)pyrene	ND	0.18	0.061	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Benzo(b)fluoranthene	ND	0.18	0.062	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Benzo(g,h,i)perylene	ND	0.18	0.077	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Benzo(k)fluoranthene	ND	0.18	0.066	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Bis(2-chloroethoxy)methane	ND	0.37	0.072	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Bis(2-chloroethyl)ether	ND	0.37	0.077	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Bis(2-chloroisopropyl)ether	ND	0.37	0.15	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Bis(2-Ethylhexyl)phthalate	ND	0.37	0.075	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
4-Bromophenylphenylether	ND	0.37	0.076	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Butylbenzylphthalate	ND	0.37	0.069	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Carbazole	ND	0.18	0.071	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
4-Chloroaniline	ND	0.71	0.065	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
4-Chloro-3-methylphenol	ND	0.71	0.072	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
2-Chloronaphthalene	ND	0.37	0.065	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
2-Chlorophenol	ND	0.37	0.074	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
4-Chlorophenylphenylether	ND	0.37	0.071	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Chrysene	ND	0.18	0.066	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Dibenz(a,h)anthracene	ND	0.18	0.071	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Dibenzofuran	ND	0.37	0.072	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Di-n-butylphthalate	ND	0.37	0.067	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
3,3-Dichlorobenzidine	ND	0.18	0.048	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
2,4-Dichlorophenol	ND	0.37	0.071	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Diethylphthalate	ND	0.37	0.071	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
2,4-Dimethylphenol	ND	0.37	0.096	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Dimethylphthalate	ND	0.37	0.075	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
4,6-Dinitro-2-methylphenol	ND	0.37	0.30	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
2,4-Dinitrophenol	ND	0.71	0.32	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
2,4-Dinitrotoluene	ND	0.37	0.073	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
2,6-Dinitrotoluene	ND	0.37	0.083	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Di-n-octylphthalate	ND	0.37	0.073	mg/Kg dry	1	V-05	SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Fluoranthene	ND	0.18	0.065	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Fluorene	ND	0.18	0.071	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Hexachlorobenzene	ND	0.37	0.076	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Hexachlorobutadiene	ND	0.37	0.074	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Hexachlorocyclopentadiene	ND	0.37	0.24	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: MW-1 (2) | Sampled: 11/28/2023 15:30

Sample ID: 23L0541-01

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachloroethane	ND	0.37	0.072	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Indeno(1,2,3-cd)pyrene	ND	0.18	0.080	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Isophorone	ND	0.37	0.075	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
2-Methylnaphthalene	ND	0.18	0.072	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
2-Methylphenol	ND	0.37	0.073	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
3/4-Methylphenol	ND	0.37	0.080	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Naphthalene	ND	0.18	0.073	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
2-Nitroaniline	ND	0.37	0.073	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
3-Nitroaniline	ND	0.37	0.086	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
4-Nitroaniline	ND	0.37	0.062	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Nitrobenzene	ND	0.37	0.079	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
2-Nitrophenol	ND	0.37	0.076	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
4-Nitrophenol	ND	0.71	0.15	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
N-Nitrosodiphenylamine/Diphenylamine	ND	0.37	0.074	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
N-Nitrosodi-n-propylamine	ND	0.37	0.079	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Pentachlorophenol	ND	0.37	0.16	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Phenanthrene	ND	0.18	0.072	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Phenol	ND	0.37	0.085	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Pyrene	ND	0.18	0.073	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
1,2,4,5-Tetrachlorobenzene	ND	0.37	0.075	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
2,4,5-Trichlorophenol	ND	0.37	0.071	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2
2,4,6-Trichlorophenol	ND	0.37	0.070	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:20	AR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	55.2	30-130		12/8/23 18:20
Phenol-d6	56.2	30-130		12/8/23 18:20
Nitrobenzene-d5	66.8	30-130		12/8/23 18:20
2-Fluorobiphenyl	71.7	30-130		12/8/23 18:20
2,4,6-Tribromophenol	64.5	30-130		12/8/23 18:20
p-Terphenyl-d14	78.1	30-130		12/8/23 18:20

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: MW-1 (2) | Sampled: 11/28/2023 15:30

Sample ID: 23L0541-01

Sample Matrix: Soil

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.054	0.022	mg/Kg dry	1		SW-846 8270E	12/7/23	12/13/23 17:38	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,4-Dioxane-d8	37.4	15-110		12/13/23 17:38

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: MW-1 (2) | Sampled: 11/28/2023 15:30

Sample ID: 23L0541-01

Sample Matrix: Soil

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
9-Octadecenamide, (Z)-	1.5	mg/Kg dry	719934	7.872	1	000301-02-0	95	SW-846 8270E	12/6/23	12/8/23 18:20	AR2
Tentatively Identified Compounds	0.0	mg/Kg dry			1	NA		SW-846 8270E	12/6/23	12/8/23 18:20	AR2

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: MW-1 (2) | Sampled: 11/28/2023 15:30

Sample ID: 23L0541-01

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.089	0.023	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 18:46	SFM
Aroclor-1221 [1]	ND	0.089	0.048	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 18:46	SFM
Aroclor-1232 [1]	ND	0.089	0.029	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 18:46	SFM
Aroclor-1242 [1]	ND	0.089	0.027	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 18:46	SFM
Aroclor-1248 [1]	ND	0.089	0.022	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 18:46	SFM
Aroclor-1254 [1]	ND	0.089	0.027	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 18:46	SFM
Aroclor-1260 [2]	ND	0.089	0.023	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 18:46	SFM
Aroclor-1262 [1]	ND	0.089	0.027	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 18:46	SFM
Aroclor-1268 [1]	ND	0.089	0.029	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 18:46	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	115	30-150		12/8/23 18:46
Decachlorobiphenyl [2]	117	30-150		12/8/23 18:46
Tetrachloro-m-xylene [1]	114	30-150		12/8/23 18:46
Tetrachloro-m-xylene [2]	109	30-150		12/8/23 18:46

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: MW-1 (2) | Sampled: 11/28/2023 15:30

Sample ID: 23L0541-01

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	4100	18	4.0	mg/Kg dry	1		SW-846 6010D	12/6/23	12/8/23 12:59	MJH
Antimony	ND	1.9		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:40	AAJ
Arsenic	4.2	0.90		mg/Kg dry	25		SW-846 6020B	12/6/23	12/16/23 13:05	NC
Beryllium	ND	5.4		mg/Kg dry	100	DL-05	SW-846 6020B	12/6/23	12/13/23 16:00	AAJ
Calcium	240000	360	130	mg/Kg dry	20		SW-846 6010D	12/6/23	12/12/23 15:15	HNN
Chromium	8.6	4.5		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:40	AAJ
Cobalt	4.2	1.8		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:40	AAJ
Copper	9.2	4.5		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:40	AAJ
Iron	9000	360	71	mg/Kg dry	20		SW-846 6010D	12/6/23	12/12/23 15:15	HNN
Lead	18	1.8		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:40	AAJ
Magnesium	45000	360	49	mg/Kg dry	20		SW-846 6010D	12/6/23	12/12/23 15:15	HNN
Manganese	ND	470		mg/Kg dry	500		SW-846 6020B	12/6/23	12/13/23 16:31	AAJ
Mercury	0.10	0.027	0.012	mg/Kg dry	1		SW-846 7471B	12/7/23	12/8/23 9:40	AV
Nickel	16	4.5		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:40	AAJ
Potassium	940	180	47	mg/Kg dry	1		SW-846 6010D	12/6/23	12/8/23 12:59	MJH
Selenium	ND	1.4		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:40	AAJ
Silver	ND	0.090		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:40	AAJ
Sodium	130	180	39	mg/Kg dry	1	J	SW-846 6010D	12/6/23	12/8/23 12:59	MJH
Thallium	0.33	0.090		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:40	AAJ
Vanadium	9.9	9.0		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:40	AAJ
Zinc	35	9.0		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:40	AAJ
Barium	44	9.0		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:40	AAJ
Cadmium	ND	0.36		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:40	AAJ

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: MW-1 (2) | Sampled: 11/28/2023 15:30

Sample ID: 23L0541-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	90.1			% Wt	1	H-06	SM 2540G	12/6/23	12/6/23 9:13	DV
Hexavalent Chromium	ND	0.17	0.12	mg/Kg dry	1	H-10	SW-846 7196A	1/29/24	1/30/24 8:20	LL

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: SB-1 (2) | Sampled: 11/29/2023 09:15

Sample ID: 23L0541-02

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.13	0.012	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
Benzene	ND	0.0027	0.00078	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
Bromochloromethane	ND	0.0027	0.0011	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
Bromodichloromethane	ND	0.0027	0.00070	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
Bromoform	ND	0.0027	0.00082	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
Bromomethane	ND	0.013	0.0023	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
2-Butanone (MEK)	ND	0.054	0.0084	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
Carbon Disulfide	ND	0.013	0.011	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
Carbon Tetrachloride	ND	0.0027	0.0011	mg/Kg dry	1	V-05	SW-846 8260D	12/6/23	12/6/23 9:04	MFF
Chlorobenzene	ND	0.0027	0.00075	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
Chlorodibromomethane	ND	0.0013	0.00085	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
Chloroethane	ND	0.027	0.0015	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
Chloroform	ND	0.0054	0.00084	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
Chloromethane	ND	0.013	0.0013	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
Cyclohexane	ND	0.013	0.0055	mg/Kg dry	1	V-05	SW-846 8260D	12/6/23	12/6/23 9:04	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0027	0.0011	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
1,2-Dibromoethane (EDB)	ND	0.0013	0.0010	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
1,2-Dichlorobenzene	ND	0.0027	0.00071	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
1,3-Dichlorobenzene	ND	0.0027	0.00074	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
1,4-Dichlorobenzene	ND	0.0027	0.00081	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.027	0.0014	mg/Kg dry	1	V-05	SW-846 8260D	12/6/23	12/6/23 9:04	MFF
1,1-Dichloroethane	ND	0.0027	0.00092	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
1,2-Dichloroethane	ND	0.0027	0.00090	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
1,1-Dichloroethylene	ND	0.0054	0.0011	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
cis-1,2-Dichloroethylene	ND	0.0027	0.00086	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
trans-1,2-Dichloroethylene	ND	0.0027	0.00098	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
1,2-Dichloropropane	ND	0.0027	0.00083	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
cis-1,3-Dichloropropene	ND	0.0013	0.00075	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
trans-1,3-Dichloropropene	ND	0.0013	0.00082	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
1,4-Dioxane	ND	0.13	0.061	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
Ethylbenzene	ND	0.0027	0.00080	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
2-Hexanone (MBK)	ND	0.027	0.0068	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
Isopropylbenzene (Cumene)	ND	0.0027	0.00084	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
Methyl Acetate	ND	0.0027	0.0019	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0054	0.00090	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
Methyl Cyclohexane	ND	0.0054	0.0010	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
Methylene Chloride	ND	0.027	0.0013	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.027	0.0059	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
Styrene	ND	0.0027	0.00066	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
1,1,2,2-Tetrachloroethane	ND	0.0013	0.00074	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
Tetrachloroethylene	ND	0.0027	0.0011	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
Toluene	ND	0.0027	0.00091	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
1,2,3-Trichlorobenzene	ND	0.0027	0.00076	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
1,2,4-Trichlorobenzene	ND	0.0027	0.00081	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: SB-1 (2) | Sampled: 11/29/2023 09:15

Sample ID: 23L0541-02

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	0.0027	0.0010	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
1,1,2-Trichloroethane	ND	0.0027	0.00072	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
Trichloroethylene	ND	0.0027	0.0011	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
Trichlorofluoromethane (Freon 11)	ND	0.013	0.0010	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.013	0.0012	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
Vinyl Chloride	ND	0.013	0.00099	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF
Xylenes (total)	ND	0.0027	0.0027	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:04	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	91.8	70-130		12/6/23 9:04
Toluene-d8	101	70-130		12/6/23 9:04
4-Bromofluorobenzene	99.9	70-130		12/6/23 9:04

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: SB-1 (2) | Sampled: 11/29/2023 09:15

Sample ID: 23L0541-02

Sample Matrix: Soil

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	mg/Kg dry			1			SW-846 8260D	12/6/23	12/6/23 9:04	MFF

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: SB-1 (2) | Sampled: 11/29/2023 09:15

Sample ID: 23L0541-02

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Atrazine	ND	0.75	0.052	mg/Kg dry	1	V-06	SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Benzaldehyde	ND	0.38	0.036	mg/Kg dry	1	V-34	SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Biphenyl	ND	0.75	0.059	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Caprolactam	ND	0.38	0.054	mg/Kg dry	1	V-06	SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Acenaphthene	ND	0.19	0.072	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Acenaphthylene	ND	0.19	0.074	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Acetophenone	ND	0.38	0.074	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Anthracene	0.088	0.19	0.073	mg/Kg dry	1	J	SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Benzo(a)anthracene	0.29	0.19	0.068	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Benzo(a)pyrene	0.28	0.19	0.063	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Benzo(b)fluoranthene	0.36	0.19	0.064	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Benzo(g,h,i)perylene	0.16	0.19	0.079	mg/Kg dry	1	J	SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Benzo(k)fluoranthene	0.15	0.19	0.068	mg/Kg dry	1	J	SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Bis(2-chloroethoxy)methane	ND	0.38	0.074	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Bis(2-chloroethyl)ether	ND	0.38	0.079	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Bis(2-chloroisopropyl)ether	ND	0.38	0.16	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Bis(2-Ethylhexyl)phthalate	ND	0.38	0.077	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
4-Bromophenylphenylether	ND	0.38	0.078	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Butylbenzylphthalate	ND	0.38	0.071	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Carbazole	ND	0.19	0.074	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
4-Chloroaniline	ND	0.73	0.067	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
4-Chloro-3-methylphenol	ND	0.73	0.075	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
2-Chloronaphthalene	ND	0.38	0.067	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
2-Chlorophenol	ND	0.38	0.076	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
4-Chlorophenylphenylether	ND	0.38	0.073	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Chrysene	0.30	0.19	0.068	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Dibenz(a,h)anthracene	ND	0.19	0.073	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Dibenzofuran	ND	0.38	0.074	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Di-n-butylphthalate	ND	0.38	0.069	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
3,3-Dichlorobenzidine	ND	0.19	0.050	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
2,4-Dichlorophenol	ND	0.38	0.073	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Diethylphthalate	ND	0.38	0.073	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
2,4-Dimethylphenol	ND	0.38	0.098	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Dimethylphthalate	ND	0.38	0.078	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
4,6-Dinitro-2-methylphenol	ND	0.38	0.31	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
2,4-Dinitrophenol	ND	0.73	0.33	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
2,4-Dinitrotoluene	ND	0.38	0.075	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
2,6-Dinitrotoluene	ND	0.38	0.085	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Di-n-octylphthalate	ND	0.38	0.075	mg/Kg dry	1	V-05	SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Fluoranthene	0.54	0.19	0.067	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Fluorene	ND	0.19	0.074	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Hexachlorobenzene	ND	0.38	0.078	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Hexachlorobutadiene	ND	0.38	0.076	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Hexachlorocyclopentadiene	ND	0.38	0.25	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: SB-1 (2) | Sampled: 11/29/2023 09:15

Sample ID: 23L0541-02

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachloroethane	ND	0.38	0.074	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Indeno(1,2,3-cd)pyrene	0.18	0.19	0.083	mg/Kg dry	1	J	SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Isophorone	ND	0.38	0.077	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
2-Methylnaphthalene	ND	0.19	0.074	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
2-Methylphenol	ND	0.38	0.075	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
3/4-Methylphenol	ND	0.38	0.082	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Naphthalene	ND	0.19	0.076	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
2-Nitroaniline	ND	0.38	0.075	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
3-Nitroaniline	ND	0.38	0.089	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
4-Nitroaniline	ND	0.38	0.064	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Nitrobenzene	ND	0.38	0.082	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
2-Nitrophenol	ND	0.38	0.078	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
4-Nitrophenol	ND	0.73	0.16	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
N-Nitrosodiphenylamine/Diphenylamine	ND	0.38	0.076	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
N-Nitrosodi-n-propylamine	ND	0.38	0.082	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Pentachlorophenol	ND	0.38	0.17	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Phenanthrene	0.35	0.19	0.074	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Phenol	ND	0.38	0.088	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Pyrene	0.52	0.19	0.076	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
1,2,4,5-Tetrachlorobenzene	ND	0.38	0.077	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
2,4,5-Trichlorophenol	ND	0.38	0.073	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2
2,4,6-Trichlorophenol	ND	0.38	0.072	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 18:40	AR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	62.6	30-130		12/8/23 18:40
Phenol-d6	64.2	30-130		12/8/23 18:40
Nitrobenzene-d5	74.3	30-130		12/8/23 18:40
2-Fluorobiphenyl	79.3	30-130		12/8/23 18:40
2,4,6-Tribromophenol	66.2	30-130		12/8/23 18:40
p-Terphenyl-d14	83.2	30-130		12/8/23 18:40

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: SB-1 (2) | Sampled: 11/29/2023 09:15

Sample ID: 23L0541-02

Sample Matrix: Soil

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.055	0.023	mg/Kg dry	1		SW-846 8270E	12/7/23	12/13/23 17:58	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,4-Dioxane-d8	29.2	15-110		12/13/23 17:58

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: SB-1 (2) | Sampled: 11/29/2023 09:15

Sample ID: 23L0541-02

Sample Matrix: Soil

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
9-Octadecenamide, (Z)-	1.6	mg/Kg dry	999490	7.872	1	000301-02-0	97	SW-846 8270E	12/6/23	12/8/23 18:40	AR2
Tentatively Identified Compounds	0.0	mg/Kg dry			1	NA		SW-846 8270E	12/6/23	12/8/23 18:40	AR2

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: SB-1 (2) | Sampled: 11/29/2023 09:15

Sample ID: 23L0541-02

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.089	0.023	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:03	SFM
Aroclor-1221 [1]	ND	0.089	0.048	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:03	SFM
Aroclor-1232 [1]	ND	0.089	0.029	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:03	SFM
Aroclor-1242 [1]	ND	0.089	0.027	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:03	SFM
Aroclor-1248 [1]	ND	0.089	0.022	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:03	SFM
Aroclor-1254 [2]	ND	0.089	0.027	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:03	SFM
Aroclor-1260 [1]	ND	0.089	0.024	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:03	SFM
Aroclor-1262 [1]	ND	0.089	0.027	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:03	SFM
Aroclor-1268 [1]	ND	0.089	0.029	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:03	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	90.4	30-150		12/8/23 19:03
Decachlorobiphenyl [2]	92.4	30-150		12/8/23 19:03
Tetrachloro-m-xylene [1]	92.6	30-150		12/8/23 19:03
Tetrachloro-m-xylene [2]	89.0	30-150		12/8/23 19:03

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: SB-1 (2) | Sampled: 11/29/2023 09:15

Sample ID: 23L0541-02

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	8700	18	3.9	mg/Kg dry	1	MS-19	SW-846 6010D	12/6/23	12/8/23 11:46	MJH
Antimony	ND	38		mg/Kg dry	100	MS-04	SW-846 6020B	12/6/23	12/13/23 16:03	AAJ
Arsenic	4.3	0.88		mg/Kg dry	25		SW-846 6020B	12/6/23	12/16/23 13:00	NC
Beryllium	ND	5.3		mg/Kg dry	100	DL-05	SW-846 6020B	12/6/23	12/13/23 16:03	AAJ
Calcium	84000	350	130	mg/Kg dry	20	MS-19	SW-846 6010D	12/6/23	12/12/23 14:58	HNN
Chromium	17	4.4		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:34	AAJ
Cobalt	8.5	1.8		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:34	AAJ
Copper	18	4.4		mg/Kg dry	5	MS-22	SW-846 6020B	12/6/23	12/8/23 12:34	AAJ
Iron	15000	350	70	mg/Kg dry	20	MS-19	SW-846 6010D	12/6/23	12/12/23 14:58	HNN
Lead	13	1.8		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:34	AAJ
Magnesium	45000	350	48	mg/Kg dry	20	MS-19	SW-846 6010D	12/6/23	12/12/23 14:58	HNN
Manganese	ND	460		mg/Kg dry	500		SW-846 6020B	12/6/23	12/13/23 16:33	AAJ
Mercury	0.087	0.028	0.012	mg/Kg dry	1		SW-846 7471B	12/7/23	12/8/23 9:41	AV
Nickel	23	4.4		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:34	AAJ
Potassium	1800	180	46	mg/Kg dry	1	MS-19	SW-846 6010D	12/6/23	12/8/23 11:46	MJH
Selenium	ND	1.4		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:34	AAJ
Silver	0.092	0.088		mg/Kg dry	5	Z-01	SW-846 6020B	12/6/23	12/8/23 12:34	AAJ
Sodium	86	180	39	mg/Kg dry	1	J	SW-846 6010D	12/6/23	12/8/23 11:46	MJH
Thallium	0.18	0.088		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:34	AAJ
Vanadium	19	8.8		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:34	AAJ
Zinc	35	8.8		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:34	AAJ
Barium	850	180		mg/Kg dry	100	MS-19	SW-846 6020B	12/6/23	12/13/23 16:03	AAJ
Cadmium	ND	0.35		mg/Kg dry	5	Z-01	SW-846 6020B	12/6/23	12/8/23 12:34	AAJ

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: SB-1 (2) | Sampled: 11/29/2023 09:15

Sample ID: 23L0541-02

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	89.8			% Wt	1		SM 2540G	12/6/23	12/6/23 9:13	DV
Hexavalent Chromium	ND	0.18	0.13	mg/Kg dry	1	H-10, MS-16	SW-846 7196A	1/29/24	1/30/24 8:20	LL

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: MW-4 (2) | Sampled: 11/29/2023 13:30

Sample ID: 23L0541-03

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	0.023	0.16	0.014	mg/Kg dry	1	J	SW-846 8260D	12/6/23	12/6/23 9:29	MFF
Benzene	ND	0.0032	0.00093	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
Bromochloromethane	ND	0.0032	0.0012	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
Bromodichloromethane	ND	0.0032	0.00083	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
Bromoform	ND	0.0032	0.00097	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
Bromomethane	ND	0.016	0.0028	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
2-Butanone (MEK)	ND	0.064	0.010	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
Carbon Disulfide	ND	0.016	0.013	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
Carbon Tetrachloride	ND	0.0032	0.0013	mg/Kg dry	1	V-05	SW-846 8260D	12/6/23	12/6/23 9:29	MFF
Chlorobenzene	ND	0.0032	0.00089	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
Chlorodibromomethane	ND	0.0016	0.0010	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
Chloroethane	ND	0.032	0.0018	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
Chloroform	ND	0.0064	0.0010	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
Chloromethane	ND	0.016	0.0016	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
Cyclohexane	ND	0.016	0.0065	mg/Kg dry	1	V-05	SW-846 8260D	12/6/23	12/6/23 9:29	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0032	0.0013	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
1,2-Dibromoethane (EDB)	ND	0.0016	0.0012	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
1,2-Dichlorobenzene	ND	0.0032	0.00084	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
1,3-Dichlorobenzene	ND	0.0032	0.00088	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
1,4-Dichlorobenzene	ND	0.0032	0.00096	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.032	0.0016	mg/Kg dry	1	V-05	SW-846 8260D	12/6/23	12/6/23 9:29	MFF
1,1-Dichloroethane	ND	0.0032	0.0011	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
1,2-Dichloroethane	ND	0.0032	0.0011	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
1,1-Dichloroethylene	ND	0.0064	0.0013	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
cis-1,2-Dichloroethylene	ND	0.0032	0.0010	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
trans-1,2-Dichloroethylene	ND	0.0032	0.0012	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
1,2-Dichloropropane	ND	0.0032	0.00099	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
cis-1,3-Dichloropropene	ND	0.0016	0.00089	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
trans-1,3-Dichloropropene	ND	0.0016	0.00097	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
1,4-Dioxane	ND	0.16	0.073	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
Ethylbenzene	ND	0.0032	0.00095	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
2-Hexanone (MBK)	ND	0.032	0.0080	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
Isopropylbenzene (Cumene)	ND	0.0032	0.00099	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
Methyl Acetate	ND	0.0032	0.0023	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0064	0.0011	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
Methyl Cyclohexane	ND	0.0064	0.0012	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
Methylene Chloride	ND	0.032	0.0015	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.032	0.0070	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
Styrene	ND	0.0032	0.00079	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
1,1,2,2-Tetrachloroethane	ND	0.0016	0.00088	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
Tetrachloroethylene	ND	0.0032	0.0013	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
Toluene	ND	0.0032	0.0011	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
1,2,3-Trichlorobenzene	ND	0.0032	0.00090	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
1,2,4-Trichlorobenzene	ND	0.0032	0.00097	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: MW-4 (2) | Sampled: 11/29/2023 13:30

Sample ID: 23L0541-03

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	0.0032	0.0012	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
1,1,2-Trichloroethane	ND	0.0032	0.00085	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
Trichloroethylene	ND	0.0032	0.0013	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
Trichlorofluoromethane (Freon 11)	ND	0.016	0.0012	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.016	0.0014	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
Vinyl Chloride	ND	0.016	0.0012	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF
Xylenes (total)	ND	0.0032	0.0032	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 9:29	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	88.7	70-130		12/6/23 9:29
Toluene-d8	95.0	70-130		12/6/23 9:29
4-Bromofluorobenzene	95.2	70-130		12/6/23 9:29

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: MW-4 (2) | Sampled: 11/29/2023 13:30

Sample ID: 23L0541-03

Sample Matrix: Soil

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	mg/Kg dry			1			SW-846 8260D	12/6/23	12/6/23 9:29	MFF

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: MW-4 (2) | Sampled: 11/29/2023 13:30

Sample ID: 23L0541-03

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Atrazine	ND	0.81	0.056	mg/Kg dry	1	V-05	SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Atrazine	ND	0.82	0.057	mg/Kg dry	1	V-06	SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Benzaldehyde	0.15	0.42	0.040	mg/Kg dry	1	V-34, J	SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Benzaldehyde	ND	0.41	0.039	mg/Kg dry	1	V-34	SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Biphenyl	0.16	0.82	0.065	mg/Kg dry	1	J	SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Biphenyl	0.11	0.81	0.064	mg/Kg dry	1	J	SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Caprolactam	ND	0.42	0.059	mg/Kg dry	1	V-06	SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Caprolactam	ND	0.41	0.058	mg/Kg dry	1	V-05	SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Acenaphthene	0.11	0.21	0.080	mg/Kg dry	1	J	SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Acenaphthene	ND	0.20	0.078	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Acenaphthylene	ND	0.21	0.082	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Acenaphthylene	ND	0.20	0.080	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Acetophenone	ND	0.42	0.082	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Acetophenone	ND	0.41	0.080	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Anthracene	0.17	0.21	0.080	mg/Kg dry	1	J	SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Anthracene	0.079	0.20	0.079	mg/Kg dry	1	J	SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Benzo(a)anthracene	0.43	0.21	0.075	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Benzo(a)anthracene	0.29	0.20	0.074	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Benzo(a)pyrene	0.36	0.21	0.069	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Benzo(a)pyrene	0.28	0.20	0.068	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Benzo(b)fluoranthene	0.48	0.21	0.070	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Benzo(b)fluoranthene	0.38	0.20	0.069	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Benzo(g,h,i)perylene	0.20	0.21	0.087	mg/Kg dry	1	J	SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Benzo(g,h,i)perylene	0.18	0.20	0.085	mg/Kg dry	1	J	SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Benzo(k)fluoranthene	0.19	0.21	0.075	mg/Kg dry	1	J	SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Benzo(k)fluoranthene	0.13	0.20	0.074	mg/Kg dry	1	J	SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Bis(2-chloroethoxy)methane	ND	0.42	0.082	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Bis(2-chloroethoxy)methane	ND	0.41	0.080	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Bis(2-chloroethyl)ether	ND	0.42	0.087	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Bis(2-chloroethyl)ether	ND	0.41	0.086	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Bis(2-chloroisopropyl)ether	ND	0.42	0.17	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Bis(2-chloroisopropyl)ether	ND	0.41	0.17	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Bis(2-Ethylhexyl)phthalate	ND	0.42	0.085	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Bis(2-Ethylhexyl)phthalate	ND	0.41	0.083	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
4-Bromophenylphenylether	ND	0.42	0.086	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
4-Bromophenylphenylether	ND	0.41	0.084	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Butylbenzylphthalate	ND	0.42	0.078	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Butylbenzylphthalate	ND	0.41	0.077	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Carbazole	0.12	0.21	0.081	mg/Kg dry	1	J	SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Carbazole	ND	0.20	0.079	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
4-Chloroaniline	ND	0.81	0.074	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
4-Chloroaniline	ND	0.79	0.072	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
4-Chloro-3-methylphenol	ND	0.81	0.082	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
4-Chloro-3-methylphenol	ND	0.79	0.081	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: MW-4 (2) | Sampled: 11/29/2023 13:30

Sample ID: 23L0541-03

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Chloronaphthalene	ND	0.42	0.074	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
2-Chloronaphthalene	ND	0.41	0.072	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
2-Chlorophenol	ND	0.42	0.084	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
2-Chlorophenol	ND	0.41	0.082	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
4-Chlorophenylphenylether	ND	0.42	0.080	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
4-Chlorophenylphenylether	ND	0.41	0.079	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Chrysene	0.61	0.21	0.075	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Chrysene	0.42	0.20	0.074	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Dibenz(a,h)anthracene	ND	0.21	0.080	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Dibenz(a,h)anthracene	ND	0.20	0.079	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Dibenzofuran	0.46	0.42	0.082	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Dibenzofuran	0.28	0.41	0.080	mg/Kg dry	1	J	SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Di-n-butylphthalate	ND	0.42	0.076	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Di-n-butylphthalate	ND	0.41	0.074	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
3,3-Dichlorobenzidine	ND	0.21	0.055	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
3,3-Dichlorobenzidine	ND	0.20	0.054	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
2,4-Dichlorophenol	ND	0.42	0.080	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
2,4-Dichlorophenol	ND	0.41	0.079	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Diethylphthalate	ND	0.42	0.081	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Diethylphthalate	ND	0.41	0.079	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
2,4-Dimethylphenol	ND	0.42	0.11	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
2,4-Dimethylphenol	ND	0.41	0.11	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Dimethylphthalate	ND	0.42	0.086	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Dimethylphthalate	ND	0.41	0.084	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
4,6-Dinitro-2-methylphenol	ND	0.42	0.34	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
4,6-Dinitro-2-methylphenol	ND	0.41	0.33	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
2,4-Dinitrophenol	ND	0.81	0.36	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
2,4-Dinitrophenol	ND	0.79	0.36	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
2,4-Dinitrotoluene	ND	0.42	0.083	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
2,4-Dinitrotoluene	ND	0.41	0.082	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
2,6-Dinitrotoluene	ND	0.42	0.094	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
2,6-Dinitrotoluene	ND	0.41	0.092	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Di-n-octylphthalate	ND	0.42	0.083	mg/Kg dry	1	V-05	SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Di-n-octylphthalate	ND	0.41	0.081	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Fluoranthene	0.78	0.21	0.074	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Fluoranthene	0.46	0.20	0.073	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Fluorene	0.13	0.21	0.081	mg/Kg dry	1	J	SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Fluorene	ND	0.20	0.080	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Hexachlorobenzene	ND	0.42	0.087	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Hexachlorobenzene	ND	0.41	0.085	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Hexachlorobutadiene	ND	0.42	0.084	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Hexachlorobutadiene	ND	0.41	0.082	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Hexachlorocyclopentadiene	ND	0.42	0.27	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Hexachlorocyclopentadiene	ND	0.41	0.26	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: MW-4 (2) | Sampled: 11/29/2023 13:30

Sample ID: 23L0541-03

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachloroethane	ND	0.42	0.081	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Hexachloroethane	ND	0.41	0.080	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Indeno(1,2,3-cd)pyrene	0.17	0.21	0.091	mg/Kg dry	1	J	SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Indeno(1,2,3-cd)pyrene	0.14	0.20	0.089	mg/Kg dry	1	J	SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Isophorone	ND	0.42	0.085	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Isophorone	ND	0.41	0.083	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
2-Methylnaphthalene	1.4	0.21	0.082	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
2-Methylnaphthalene	0.97	0.20	0.080	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
2-Methylphenol	ND	0.42	0.083	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
2-Methylphenol	ND	0.41	0.081	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
3/4-Methylphenol	ND	0.42	0.091	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
3/4-Methylphenol	ND	0.41	0.089	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Naphthalene	0.81	0.21	0.083	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Naphthalene	0.57	0.20	0.082	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
2-Nitroaniline	ND	0.42	0.083	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
2-Nitroaniline	ND	0.41	0.081	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
3-Nitroaniline	ND	0.42	0.098	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
3-Nitroaniline	ND	0.41	0.096	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
4-Nitroaniline	ND	0.42	0.070	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
4-Nitroaniline	ND	0.41	0.069	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Nitrobenzene	ND	0.42	0.090	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Nitrobenzene	ND	0.41	0.088	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
2-Nitrophenol	ND	0.42	0.086	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
2-Nitrophenol	ND	0.41	0.084	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
4-Nitrophenol	ND	0.81	0.17	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
4-Nitrophenol	ND	0.79	0.17	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
N-Nitrosodiphenylamine/Diphenylamine	0.14	0.42	0.084	mg/Kg dry	1	J	SW-846 8270E	12/6/23	12/8/23 19:00	AR2
N-Nitrosodiphenylamine/Diphenylamine	ND	0.41	0.082	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
N-Nitrosodi-n-propylamine	ND	0.42	0.090	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
N-Nitrosodi-n-propylamine	ND	0.41	0.088	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Pentachlorophenol	ND	0.42	0.19	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Pentachlorophenol	ND	0.41	0.18	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Phenanthrene	1.6	0.21	0.081	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Phenanthrene	0.97	0.20	0.080	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Phenol	ND	0.42	0.097	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Phenol	ND	0.41	0.095	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
Pyrene	0.72	0.21	0.083	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
Pyrene	0.41	0.20	0.082	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
1,2,4,5-Tetrachlorobenzene	ND	0.42	0.085	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
1,2,4,5-Tetrachlorobenzene	ND	0.41	0.084	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
2,4,5-Trichlorophenol	ND	0.42	0.081	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2
2,4,5-Trichlorophenol	ND	0.41	0.079	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2
2,4,6-Trichlorophenol	ND	0.42	0.079	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:00	AR2

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: MW-4 (2) | Sampled: 11/29/2023 13:30

Sample ID: 23L0541-03

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
2,4,6-Trichlorophenol	ND	0.41	0.078	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 10:34	AR2

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
2-Fluorophenol	**25.4**	*	30-130	S-19	12/8/23 19:00
2-Fluorophenol	**19.1**	*	30-130	S-19	12/13/23 10:34
Phenol-d6	48.1		30-130		12/8/23 19:00
Phenol-d6	43.3		30-130		12/13/23 10:34
Nitrobenzene-d5	61.6		30-130		12/8/23 19:00
Nitrobenzene-d5	58.7		30-130		12/13/23 10:34
2-Fluorobiphenyl	68.9		30-130		12/8/23 19:00
2-Fluorobiphenyl	67.1		30-130		12/13/23 10:34
2,4,6-Tribromophenol	**18.4**	*	30-130	S-19	12/8/23 19:00
2,4,6-Tribromophenol	**23.8**	*	30-130	S-19	12/13/23 10:34
p-Terphenyl-d14	71.7		30-130		12/8/23 19:00
p-Terphenyl-d14	58.5		30-130		12/13/23 10:34

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: MW-4 (2) | Sampled: 11/29/2023 13:30

Sample ID: 23L0541-03

Sample Matrix: Soil

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.061	0.025	mg/Kg dry	1		SW-846 8270E	12/7/23	12/13/23 18:57	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
1,4-Dioxane-d8	36.0	15-110		12/13/23 18:57	

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: MW-4 (2) | Sampled: 11/29/2023 13:30

Sample ID: 23L0541-03

Sample Matrix: Soil

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	mg/Kg dry			1			SW-846 8270E	12/6/23	12/8/23 19:00	AR2

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: MW-4 (2) | Sampled: 11/29/2023 13:30

Sample ID: 23L0541-03

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.098	0.025	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:20	SFM
Aroclor-1221 [1]	ND	0.098	0.053	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:20	SFM
Aroclor-1232 [1]	ND	0.098	0.032	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:20	SFM
Aroclor-1242 [1]	ND	0.098	0.030	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:20	SFM
Aroclor-1248 [2]	0.047	0.098	0.024	mg/Kg dry	4	J	SW-846 8082A	12/6/23	12/8/23 19:20	SFM
Aroclor-1254 [1]	ND	0.098	0.030	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:20	SFM
Aroclor-1260 [1]	ND	0.098	0.026	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:20	SFM
Aroclor-1262 [1]	ND	0.098	0.029	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:20	SFM
Aroclor-1268 [1]	ND	0.098	0.032	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:20	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	94.3	30-150		12/8/23 19:20
Decachlorobiphenyl [2]	99.0	30-150		12/8/23 19:20
Tetrachloro-m-xylene [1]	99.6	30-150		12/8/23 19:20
Tetrachloro-m-xylene [2]	94.7	30-150		12/8/23 19:20

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: MW-4 (2) | Sampled: 11/29/2023 13:30

Sample ID: 23L0541-03

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	7100	19	4.3	mg/Kg dry	1		SW-846 6010D	12/6/23	12/8/23 13:04	MJH
Antimony	ND	2.1		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:50	AAJ
Arsenic	15	0.97		mg/Kg dry	25		SW-846 6020B	12/6/23	12/16/23 13:07	NC
Beryllium	ND	5.8		mg/Kg dry	100	DL-05	SW-846 6020B	12/6/23	12/13/23 16:05	AAJ
Calcium	190000	390	140	mg/Kg dry	20		SW-846 6010D	12/6/23	12/12/23 15:20	HNN
Chromium	12	4.8		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:50	AAJ
Cobalt	5.5	1.9		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:50	AAJ
Copper	12	4.8		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:50	AAJ
Iron	14000	390	77	mg/Kg dry	20		SW-846 6010D	12/6/23	12/12/23 15:20	HNN
Lead	25	1.9		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:50	AAJ
Magnesium	11000	390	53	mg/Kg dry	20		SW-846 6010D	12/6/23	12/12/23 15:20	HNN
Manganese	ND	500		mg/Kg dry	500		SW-846 6020B	12/6/23	12/13/23 16:36	AAJ
Mercury	0.083	0.030	0.013	mg/Kg dry	1		SW-846 7471B	12/7/23	12/8/23 9:43	AV
Nickel	18	4.8		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:50	AAJ
Potassium	740	190	50	mg/Kg dry	1		SW-846 6010D	12/6/23	12/8/23 13:04	MJH
Selenium	ND	1.5		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:50	AAJ
Silver	ND	0.097		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:50	AAJ
Sodium	110	190	42	mg/Kg dry	1	J	SW-846 6010D	12/6/23	12/8/23 13:04	MJH
Thallium	0.31	0.097		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:50	AAJ
Vanadium	20	9.7		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:50	AAJ
Zinc	28	9.7		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:50	AAJ
Barium	100	9.7		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:50	AAJ
Cadmium	ND	0.39		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:50	AAJ

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: MW-4 (2) | Sampled: 11/29/2023 13:30

Sample ID: 23L0541-03

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	81.5			% Wt	1		SM 2540G	12/6/23	12/6/23 9:13	DV
Hexavalent Chromium	1.9	0.19	0.14	mg/Kg dry	1	H-10	SW-846 7196A	1/29/24	1/30/24 8:20	LL

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: SB-2 (2) | Sampled: 11/29/2023 10:05

Sample ID: 23L0541-04

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.13	0.012	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
Benzene	ND	0.0026	0.00075	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
Bromochloromethane	ND	0.0026	0.0010	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
Bromodichloromethane	ND	0.0026	0.00067	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
Bromoform	ND	0.0026	0.00078	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
Bromomethane	ND	0.013	0.0022	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
2-Butanone (MEK)	ND	0.051	0.0080	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
Carbon Disulfide	ND	0.013	0.010	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
Carbon Tetrachloride	ND	0.0026	0.0010	mg/Kg dry	1	V-05	SW-846 8260D	12/6/23	12/6/23 11:16	MFF
Chlorobenzene	ND	0.0026	0.00072	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
Chlorodibromomethane	ND	0.0013	0.00081	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
Chloroethane	ND	0.026	0.0014	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
Chloroform	ND	0.0051	0.00080	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
Chloromethane	ND	0.013	0.0013	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
Cyclohexane	ND	0.013	0.0052	mg/Kg dry	1	V-05	SW-846 8260D	12/6/23	12/6/23 11:16	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0026	0.0010	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
1,2-Dibromoethane (EDB)	ND	0.0013	0.00098	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
1,2-Dichlorobenzene	ND	0.0026	0.00068	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
1,3-Dichlorobenzene	ND	0.0026	0.00071	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
1,4-Dichlorobenzene	ND	0.0026	0.00078	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.026	0.0013	mg/Kg dry	1	V-05	SW-846 8260D	12/6/23	12/6/23 11:16	MFF
1,1-Dichloroethane	ND	0.0026	0.00088	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
1,2-Dichloroethane	ND	0.0026	0.00086	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
1,1-Dichloroethylene	ND	0.0051	0.0011	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
cis-1,2-Dichloroethylene	ND	0.0026	0.00082	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
trans-1,2-Dichloroethylene	ND	0.0026	0.00094	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
1,2-Dichloropropane	ND	0.0026	0.00080	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
cis-1,3-Dichloropropene	ND	0.0013	0.00072	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
trans-1,3-Dichloropropene	ND	0.0013	0.00078	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
1,4-Dioxane	ND	0.13	0.058	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
Ethylbenzene	ND	0.0026	0.00077	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
2-Hexanone (MBK)	ND	0.026	0.0065	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
Isopropylbenzene (Cumene)	ND	0.0026	0.00080	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
Methyl Acetate	ND	0.0026	0.0018	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0051	0.00086	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
Methyl Cyclohexane	ND	0.0051	0.0010	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
Methylene Chloride	ND	0.026	0.0012	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.026	0.0057	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
Styrene	ND	0.0026	0.00063	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
1,1,2,2-Tetrachloroethane	ND	0.0013	0.00071	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
Tetrachloroethylene	ND	0.0026	0.0011	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
Toluene	ND	0.0026	0.00087	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
1,2,3-Trichlorobenzene	ND	0.0026	0.00073	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
1,2,4-Trichlorobenzene	ND	0.0026	0.00078	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: SB-2 (2) | Sampled: 11/29/2023 10:05

Sample ID: 23L0541-04

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	0.0026	0.00098	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
1,1,2-Trichloroethane	ND	0.0026	0.00069	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
Trichloroethylene	ND	0.0026	0.0010	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
Trichlorofluoromethane (Freon 11)	ND	0.013	0.00096	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.013	0.0011	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
Vinyl Chloride	ND	0.013	0.00095	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF
Xylenes (total)	ND	0.0026	0.0026	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:16	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	90.8	70-130		12/6/23 11:16
Toluene-d8	99.8	70-130		12/6/23 11:16
4-Bromofluorobenzene	97.6	70-130		12/6/23 11:16

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: SB-2 (2) | Sampled: 11/29/2023 10:05

Sample ID: 23L0541-04

Sample Matrix: Soil

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	mg/Kg dry			1			SW-846 8260D	12/6/23	12/6/23 11:16	MFF

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: SB-2 (2) | Sampled: 11/29/2023 10:05

Sample ID: 23L0541-04

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Atrazine	ND	0.75	0.052	mg/Kg dry	1	V-06	SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Benzaldehyde	ND	0.38	0.036	mg/Kg dry	1	V-34	SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Biphenyl	ND	0.75	0.059	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Caprolactam	ND	0.38	0.054	mg/Kg dry	1	V-06	SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Acenaphthene	ND	0.19	0.073	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Acenaphthylene	ND	0.19	0.075	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Acetophenone	ND	0.38	0.075	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Anthracene	0.091	0.19	0.073	mg/Kg dry	1	J	SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Benzo(a)anthracene	0.25	0.19	0.069	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Benzo(a)pyrene	0.24	0.19	0.063	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Benzo(b)fluoranthene	0.29	0.19	0.064	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Benzo(g,h,i)perylene	0.14	0.19	0.079	mg/Kg dry	1	J	SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Benzo(k)fluoranthene	0.13	0.19	0.068	mg/Kg dry	1	J	SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Bis(2-chloroethoxy)methane	ND	0.38	0.074	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Bis(2-chloroethyl)ether	ND	0.38	0.080	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Bis(2-chloroisopropyl)ether	ND	0.38	0.16	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Bis(2-Ethylhexyl)phthalate	ND	0.38	0.078	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
4-Bromophenylphenylether	ND	0.38	0.078	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Butylbenzylphthalate	ND	0.38	0.071	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Carbazole	ND	0.19	0.074	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
4-Chloroaniline	ND	0.74	0.067	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
4-Chloro-3-methylphenol	ND	0.74	0.075	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
2-Chloronaphthalene	ND	0.38	0.067	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
2-Chlorophenol	ND	0.38	0.077	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
4-Chlorophenylphenylether	ND	0.38	0.073	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Chrysene	0.26	0.19	0.069	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Dibenz(a,h)anthracene	ND	0.19	0.073	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Dibenzofuran	ND	0.38	0.075	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Di-n-butylphthalate	ND	0.38	0.069	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
3,3-Dichlorobenzidine	ND	0.19	0.050	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
2,4-Dichlorophenol	ND	0.38	0.073	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Diethylphthalate	ND	0.38	0.073	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
2,4-Dimethylphenol	ND	0.38	0.099	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Dimethylphthalate	ND	0.38	0.078	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
4,6-Dinitro-2-methylphenol	ND	0.38	0.31	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
2,4-Dinitrophenol	ND	0.74	0.33	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
2,4-Dinitrotoluene	ND	0.38	0.076	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
2,6-Dinitrotoluene	ND	0.38	0.086	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Di-n-octylphthalate	ND	0.38	0.075	mg/Kg dry	1	V-05	SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Fluoranthene	0.52	0.19	0.068	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Fluorene	ND	0.19	0.074	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Hexachlorobenzene	ND	0.38	0.079	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Hexachlorobutadiene	ND	0.38	0.077	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Hexachlorocyclopentadiene	ND	0.38	0.25	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: SB-2 (2) | Sampled: 11/29/2023 10:05

Sample ID: 23L0541-04

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachloroethane	ND	0.38	0.074	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Indeno(1,2,3-cd)pyrene	0.12	0.19	0.083	mg/Kg dry	1	J	SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Isophorone	ND	0.38	0.078	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
2-Methylnaphthalene	ND	0.19	0.074	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
2-Methylphenol	ND	0.38	0.076	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
3/4-Methylphenol	ND	0.38	0.083	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Naphthalene	ND	0.19	0.076	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
2-Nitroaniline	ND	0.38	0.076	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
3-Nitroaniline	ND	0.38	0.090	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
4-Nitroaniline	ND	0.38	0.064	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Nitrobenzene	ND	0.38	0.082	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
2-Nitrophenol	ND	0.38	0.079	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
4-Nitrophenol	ND	0.74	0.16	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
N-Nitrosodiphenylamine/Diphenylamine	ND	0.38	0.076	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
N-Nitrosodi-n-propylamine	ND	0.38	0.082	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Pentachlorophenol	ND	0.38	0.17	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Phenanthrene	0.36	0.19	0.074	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Phenol	ND	0.38	0.088	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Pyrene	0.48	0.19	0.076	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
1,2,4,5-Tetrachlorobenzene	ND	0.38	0.078	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
2,4,5-Trichlorophenol	ND	0.38	0.074	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2
2,4,6-Trichlorophenol	ND	0.38	0.072	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:20	AR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	55.9	30-130		12/8/23 19:20
Phenol-d6	55.5	30-130		12/8/23 19:20
Nitrobenzene-d5	67.9	30-130		12/8/23 19:20
2-Fluorobiphenyl	69.3	30-130		12/8/23 19:20
2,4,6-Tribromophenol	57.0	30-130		12/8/23 19:20
p-Terphenyl-d14	72.8	30-130		12/8/23 19:20

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: SB-2 (2) | Sampled: 11/29/2023 10:05

Sample ID: 23L0541-04

Sample Matrix: Soil

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.055	0.023	mg/Kg dry	1		SW-846 8270E	12/7/23	12/13/23 19:17	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,4-Dioxane-d8	33.9	15-110		12/13/23 19:17

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: SB-2 (2) | Sampled: 11/29/2023 10:05

Sample ID: 23L0541-04

Sample Matrix: Soil

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
9-Octadecenamide, (Z)-	1.0	mg/Kg dry	629031	7.872	1	000301-02-0	95	SW-846 8270E	12/6/23	12/8/23 19:20	AR2
Tentatively Identified Compounds	0.0	mg/Kg dry			1	NA		SW-846 8270E	12/6/23	12/8/23 19:20	AR2

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: SB-2 (2) | Sampled: 11/29/2023 10:05

Sample ID: 23L0541-04

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.089	0.023	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:37	SFM
Aroclor-1221 [1]	ND	0.089	0.048	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:37	SFM
Aroclor-1232 [1]	ND	0.089	0.029	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:37	SFM
Aroclor-1242 [1]	ND	0.089	0.027	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:37	SFM
Aroclor-1248 [1]	ND	0.089	0.022	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:37	SFM
Aroclor-1254 [1]	ND	0.089	0.027	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:37	SFM
Aroclor-1260 [1]	ND	0.089	0.024	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:37	SFM
Aroclor-1262 [1]	ND	0.089	0.026	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:37	SFM
Aroclor-1268 [1]	ND	0.089	0.029	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:37	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	97.1	30-150		12/8/23 19:37
Decachlorobiphenyl [2]	99.3	30-150		12/8/23 19:37
Tetrachloro-m-xylene [1]	102	30-150		12/8/23 19:37
Tetrachloro-m-xylene [2]	97.6	30-150		12/8/23 19:37

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: SB-2 (2) | Sampled: 11/29/2023 10:05

Sample ID: 23L0541-04

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	8000	18	4.0	mg/Kg dry	1		SW-846 6010D	12/6/23	12/8/23 13:07	MJH
Antimony	ND	2.0		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:53	AAJ
Arsenic	3.7	0.90		mg/Kg dry	25		SW-846 6020B	12/6/23	12/16/23 13:09	NC
Beryllium	ND	5.4		mg/Kg dry	100	DL-05	SW-846 6020B	12/6/23	12/13/23 16:07	AAJ
Calcium	97000	360	130	mg/Kg dry	20		SW-846 6010D	12/6/23	12/12/23 15:26	HNN
Chromium	14	4.5		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:53	AAJ
Cobalt	7.8	1.8		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:53	AAJ
Copper	18	4.5		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:53	AAJ
Iron	14000	360	72	mg/Kg dry	20		SW-846 6010D	12/6/23	12/12/23 15:26	HNN
Lead	9.8	1.8		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:53	AAJ
Magnesium	52000	360	49	mg/Kg dry	20		SW-846 6010D	12/6/23	12/12/23 15:26	HNN
Manganese	ND	470		mg/Kg dry	500		SW-846 6020B	12/6/23	12/13/23 16:38	AAJ
Mercury	0.059	0.028	0.012	mg/Kg dry	1		SW-846 7471B	12/7/23	12/8/23 9:45	AV
Nickel	22	4.5		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:53	AAJ
Potassium	1900	180	47	mg/Kg dry	1		SW-846 6010D	12/6/23	12/8/23 13:07	MJH
Selenium	ND	1.4		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:53	AAJ
Silver	0.18	0.090		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:53	AAJ
Sodium	93	180	40	mg/Kg dry	1	J	SW-846 6010D	12/6/23	12/8/23 13:07	MJH
Thallium	0.14	0.090		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:53	AAJ
Vanadium	16	9.0		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:53	AAJ
Zinc	34	9.0		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:53	AAJ
Barium	780	180		mg/Kg dry	100		SW-846 6020B	12/6/23	12/13/23 16:07	AAJ
Cadmium	ND	0.36		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:53	AAJ

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: SB-2 (2) | Sampled: 11/29/2023 10:05

Sample ID: 23L0541-04

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	89.3			% Wt	1		SM 2540G	12/6/23	12/6/23 9:13	DV
Hexavalent Chromium	ND	0.18	0.13	mg/Kg dry	1	H-10	SW-846 7196A	1/29/24	1/30/24 8:20	LL

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: Duplicate | Sampled: 11/29/2023 00:00

Sample ID: 23L0541-05

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	0.011	0.12	0.011	mg/Kg dry	1	J	SW-846 8260D	12/6/23	12/6/23 11:41	MFF
Benzene	ND	0.0023	0.00068	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
Bromochloromethane	ND	0.0023	0.00091	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
Bromodichloromethane	ND	0.0023	0.00061	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
Bromoform	ND	0.0023	0.00071	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
Bromomethane	ND	0.012	0.0020	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
2-Butanone (MEK)	ND	0.047	0.0073	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
Carbon Disulfide	ND	0.012	0.0094	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
Carbon Tetrachloride	ND	0.0023	0.00092	mg/Kg dry	1	V-05	SW-846 8260D	12/6/23	12/6/23 11:41	MFF
Chlorobenzene	ND	0.0023	0.00066	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
Chlorodibromomethane	ND	0.0012	0.00074	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
Chloroethane	ND	0.023	0.0013	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
Chloroform	ND	0.0047	0.00073	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
Chloromethane	ND	0.012	0.0012	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
Cyclohexane	ND	0.012	0.0048	mg/Kg dry	1	V-05	SW-846 8260D	12/6/23	12/6/23 11:41	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0023	0.00093	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
1,2-Dibromoethane (EDB)	ND	0.0012	0.00089	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
1,2-Dichlorobenzene	ND	0.0023	0.00062	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
1,3-Dichlorobenzene	ND	0.0023	0.00064	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
1,4-Dichlorobenzene	ND	0.0023	0.00071	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.023	0.0012	mg/Kg dry	1	V-05	SW-846 8260D	12/6/23	12/6/23 11:41	MFF
1,1-Dichloroethane	ND	0.0023	0.00080	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
1,2-Dichloroethane	ND	0.0023	0.00078	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
1,1-Dichloroethylene	ND	0.0047	0.00096	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
cis-1,2-Dichloroethylene	ND	0.0023	0.00074	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
trans-1,2-Dichloroethylene	ND	0.0023	0.00085	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
1,2-Dichloropropane	ND	0.0023	0.00073	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
cis-1,3-Dichloropropene	ND	0.0012	0.00066	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
trans-1,3-Dichloropropene	ND	0.0012	0.00071	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
1,4-Dioxane	ND	0.12	0.053	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
Ethylbenzene	ND	0.0023	0.00070	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
2-Hexanone (MBK)	ND	0.023	0.0059	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
Isopropylbenzene (Cumene)	ND	0.0023	0.00073	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
Methyl Acetate	ND	0.0023	0.0017	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0047	0.00079	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
Methyl Cyclohexane	ND	0.0047	0.00091	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
Methylene Chloride	ND	0.023	0.0011	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.023	0.0052	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
Styrene	ND	0.0023	0.00058	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
1,1,2,2-Tetrachloroethane	ND	0.0012	0.00064	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
Tetrachloroethylene	ND	0.0023	0.00098	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
Toluene	ND	0.0023	0.00079	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
1,2,3-Trichlorobenzene	ND	0.0023	0.00066	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
1,2,4-Trichlorobenzene	ND	0.0023	0.00071	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: Duplicate | Sampled: 11/29/2023 00:00

Sample ID: 23L0541-05

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	0.0023	0.00089	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
1,1,2-Trichloroethane	ND	0.0023	0.00062	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
Trichloroethylene	ND	0.0023	0.00094	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
Trichlorofluoromethane (Freon 11)	ND	0.012	0.00087	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.012	0.0010	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
Vinyl Chloride	ND	0.012	0.00086	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF
Xylenes (total)	ND	0.0023	0.0023	mg/Kg dry	1		SW-846 8260D	12/6/23	12/6/23 11:41	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	92.4	70-130		12/6/23 11:41
Toluene-d8	95.9	70-130		12/6/23 11:41
4-Bromofluorobenzene	95.3	70-130		12/6/23 11:41

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: Duplicate | Sampled: 11/29/2023 00:00

Sample ID: 23L0541-05

Sample Matrix: Soil

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	mg/Kg dry			1			SW-846 8260D	12/6/23	12/6/23 11:41	MFF

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: Duplicate | Sampled: 11/29/2023 00:00

Sample ID: 23L0541-05

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Atrazine	ND	0.73	0.051	mg/Kg dry	1	V-06	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Benzaldehyde	0.072	0.37	0.036	mg/Kg dry	1	J, V-34	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Biphenyl	ND	0.73	0.058	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Caprolactam	ND	0.37	0.053	mg/Kg dry	1	V-06	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Acenaphthene	ND	0.19	0.071	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Acenaphthylene	ND	0.19	0.073	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Acetophenone	ND	0.37	0.073	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Anthracene	ND	0.19	0.072	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Benzo(a)anthracene	0.074	0.19	0.067	mg/Kg dry	1	J	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Benzo(a)pyrene	ND	0.19	0.061	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Benzo(b)fluoranthene	0.088	0.19	0.062	mg/Kg dry	1	J	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Benzo(g,h,i)perylene	ND	0.19	0.078	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Benzo(k)fluoranthene	ND	0.19	0.067	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Bis(2-chloroethoxy)methane	ND	0.37	0.073	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Bis(2-chloroethyl)ether	ND	0.37	0.078	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Bis(2-chloroisopropyl)ether	ND	0.37	0.16	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Bis(2-Ethylhexyl)phthalate	ND	0.37	0.076	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
4-Bromophenylphenylether	ND	0.37	0.077	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Butylbenzylphthalate	ND	0.37	0.070	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Carbazole	ND	0.19	0.072	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
4-Chloroaniline	ND	0.72	0.066	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
4-Chloro-3-methylphenol	ND	0.72	0.073	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
2-Chloronaphthalene	ND	0.37	0.066	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
2-Chlorophenol	ND	0.37	0.075	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
4-Chlorophenylphenylether	ND	0.37	0.072	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Chrysene	0.18	0.19	0.067	mg/Kg dry	1	J	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Dibenz(a,h)anthracene	ND	0.19	0.072	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Dibenzofuran	0.15	0.37	0.073	mg/Kg dry	1	J	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Di-n-butylphthalate	ND	0.37	0.068	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
3,3-Dichlorobenzidine	ND	0.19	0.049	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
2,4-Dichlorophenol	ND	0.37	0.072	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Diethylphthalate	ND	0.37	0.072	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
2,4-Dimethylphenol	ND	0.37	0.097	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Dimethylphthalate	ND	0.37	0.076	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
4,6-Dinitro-2-methylphenol	ND	0.37	0.30	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
2,4-Dinitrophenol	ND	0.72	0.32	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
2,4-Dinitrotoluene	ND	0.37	0.074	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
2,6-Dinitrotoluene	ND	0.37	0.084	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Di-n-octylphthalate	ND	0.37	0.074	mg/Kg dry	1	V-05	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Fluoranthene	0.097	0.19	0.066	mg/Kg dry	1	J	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Fluorene	ND	0.19	0.072	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Hexachlorobenzene	ND	0.37	0.077	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Hexachlorobutadiene	ND	0.37	0.075	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Hexachlorocyclopentadiene	ND	0.37	0.24	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: Duplicate | Sampled: 11/29/2023 00:00

Sample ID: 23L0541-05

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachloroethane	ND	0.37	0.072	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Indeno(1,2,3-cd)pyrene	ND	0.19	0.081	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Isophorone	ND	0.37	0.076	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
2-Methylnaphthalene	0.41	0.19	0.073	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
2-Methylphenol	ND	0.37	0.074	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
3/4-Methylphenol	ND	0.37	0.081	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Naphthalene	0.17	0.19	0.074	mg/Kg dry	1	J	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
2-Nitroaniline	ND	0.37	0.074	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
3-Nitroaniline	ND	0.37	0.087	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
4-Nitroaniline	ND	0.37	0.063	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Nitrobenzene	ND	0.37	0.080	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
2-Nitrophenol	ND	0.37	0.077	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
4-Nitrophenol	ND	0.72	0.15	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
N-Nitrosodiphenylamine/Diphenylamine	ND	0.37	0.075	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
N-Nitrosodi-n-propylamine	ND	0.37	0.080	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Pentachlorophenol	ND	0.37	0.17	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Phenanthrene	0.54	0.19	0.072	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Phenol	ND	0.37	0.086	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Pyrene	0.14	0.19	0.074	mg/Kg dry	1	J	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
1,2,4,5-Tetrachlorobenzene	ND	0.37	0.076	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
2,4,5-Trichlorophenol	ND	0.37	0.072	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
2,4,6-Trichlorophenol	ND	0.37	0.071	mg/Kg dry	1		SW-846 8270E	12/6/23	12/8/23 19:41	AR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	56.9	30-130		12/8/23 19:41
Phenol-d6	57.7	30-130		12/8/23 19:41
Nitrobenzene-d5	69.2	30-130		12/8/23 19:41
2-Fluorobiphenyl	73.5	30-130		12/8/23 19:41
2,4,6-Tribromophenol	59.6	30-130		12/8/23 19:41
p-Terphenyl-d14	77.6	30-130		12/8/23 19:41

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: Duplicate | Sampled: 11/29/2023 00:00

Sample ID: 23L0541-05

Sample Matrix: Soil

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.055	0.023	mg/Kg dry	1		SW-846 8270E	12/7/23	12/13/23 19:36	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,4-Dioxane-d8	38.7	15-110		12/13/23 19:36

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: Duplicate | Sampled: 11/29/2023 00:00

Sample ID: 23L0541-05

Sample Matrix: Soil

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
2-Bromo dodecane	1.3	mg/Kg dry	622254	7.542	1	013187-99-0	91	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
9H-Fluoren-9-ol	0.45	mg/Kg dry	276956	5.608	1	001689-64-1	87	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
9-Octadecenamide, (Z)-	3.7	mg/Kg dry	1720930	7.877	1	000301-02-0	97	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Dodecane, 2,6,11-trimethyl-	0.46	mg/Kg dry	283294	4.674	1	031295-56-4	90	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
eicosane	1.2	mg/Kg dry	715824	6.533	1	000112-95-8	97	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Eicosane, 10-methyl-	0.69	mg/Kg dry	287562	10.967	1	054833-23-7	90	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Heneicosane	0.62	mg/Kg dry	364723	7.169	1	000629-94-7	93	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Heptadecane	0.88	mg/Kg dry	409378	7.967	1	000629-78-7	90	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Hexadecane	0.71	mg/Kg dry	439572	5.086	1	000544-76-3	83	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Naphthalene, 1,2,3,4-tetram...	0.74	mg/Kg dry	435649	5.935	1	003031-15-0	95	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Naphthalene, 1,2-dimethyl-	0.52	mg/Kg dry	320537	4.97	1	000573-98-8	96	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Naphthalene, 1,3-dimethyl-	0.56	mg/Kg dry	349137	5.029	1	000575-41-7	97	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Naphthalene, 2,3,6-trimethyl-	0.59	mg/Kg dry	366536	5.505	1	000829-26-5	95	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Naphthalene, 2,3-dimethyl-	1.3	mg/Kg dry	808084	4.954	1	000581-40-8	98	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Nonadecane, 9-methyl-	1.1	mg/Kg dry	499764	8.443	1	013287-24-6	95	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Nonane, 5-butyl-	0.67	mg/Kg dry	394570	5.974	1	017312-63-9	94	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Octacosane	0.66	mg/Kg dry	388960	6.834	1	000630-02-4	91	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Pentadecane	0.84	mg/Kg dry	390718	9.586	1	000629-62-9	94	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Tentatively Identified Compounds	0.0	mg/Kg dry			1	NA		SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Tetradecane	0.46	mg/Kg dry	283030	5.4	1	000629-59-4	86	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Tridecane	0.36	mg/Kg dry	287568	4.409	1	000629-50-5	95	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Tridecane, 1-iodo-	0.80	mg/Kg dry	374927	8.984	1	035599-77-0	93	SW-846 8270E	12/6/23	12/8/23 19:41	AR2
Tridecane, 6-propyl-	0.72	mg/Kg dry	421649	6.247	1	055045-10-8	90	SW-846 8270E	12/6/23	12/8/23 19:41	AR2

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: Duplicate | Sampled: 11/29/2023 00:00

Sample ID: 23L0541-05

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.087	0.023	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:54	SFM
Aroclor-1221 [1]	ND	0.087	0.047	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:54	SFM
Aroclor-1232 [1]	ND	0.087	0.028	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:54	SFM
Aroclor-1242 [1]	ND	0.087	0.026	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:54	SFM
Aroclor-1248 [1]	ND	0.087	0.022	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:54	SFM
Aroclor-1254 [1]	ND	0.087	0.026	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:54	SFM
Aroclor-1260 [1]	ND	0.087	0.023	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:54	SFM
Aroclor-1262 [1]	ND	0.087	0.026	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:54	SFM
Aroclor-1268 [1]	ND	0.087	0.029	mg/Kg dry	4		SW-846 8082A	12/6/23	12/8/23 19:54	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	93.0	30-150		12/8/23 19:54
Decachlorobiphenyl [2]	94.7	30-150		12/8/23 19:54
Tetrachloro-m-xylene [1]	87.3	30-150		12/8/23 19:54
Tetrachloro-m-xylene [2]	83.7	30-150		12/8/23 19:54

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: Duplicate | Sampled: 11/29/2023 00:00

Sample ID: 23L0541-05

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	6400	18	4.0	mg/Kg dry	1		SW-846 6010D	12/6/23	12/8/23 13:23	MJH
Antimony	ND	2.0		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:57	AAJ
Arsenic	ND	0.91		mg/Kg dry	25	DL-05	SW-846 6020B	12/6/23	12/16/23 13:16	NC
Beryllium	ND	5.5		mg/Kg dry	100	DL-05	SW-846 6020B	12/6/23	12/13/23 16:10	AAJ
Calcium	160000	360	130	mg/Kg dry	20		SW-846 6010D	12/6/23	12/12/23 15:31	HNN
Chromium	14	4.5		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:57	AAJ
Cobalt	8.7	1.8		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:57	AAJ
Copper	12	4.5		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:57	AAJ
Iron	19000	360	72	mg/Kg dry	20		SW-846 6010D	12/6/23	12/12/23 15:31	HNN
Lead	26	1.8		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:57	AAJ
Magnesium	11000	360	50	mg/Kg dry	20		SW-846 6010D	12/6/23	12/12/23 15:31	HNN
Manganese	ND	470		mg/Kg dry	500		SW-846 6020B	12/6/23	12/13/23 16:40	AAJ
Mercury	0.13	0.027	0.012	mg/Kg dry	1		SW-846 7471B	12/7/23	12/8/23 9:47	AV
Nickel	27	4.5		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:57	AAJ
Potassium	1500	180	48	mg/Kg dry	1		SW-846 6010D	12/6/23	12/8/23 13:23	MJH
Selenium	ND	1.5		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:57	AAJ
Silver	ND	0.091		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:57	AAJ
Sodium	90	180	40	mg/Kg dry	1	J	SW-846 6010D	12/6/23	12/8/23 13:23	MJH
Thallium	0.47	0.091		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:57	AAJ
Vanadium	17	9.1		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:57	AAJ
Zinc	61	9.1		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:57	AAJ
Barium	94	9.1		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:57	AAJ
Cadmium	ND	0.36		mg/Kg dry	5		SW-846 6020B	12/6/23	12/8/23 12:57	AAJ

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: Duplicate | Sampled: 11/29/2023 00:00

Sample ID: 23L0541-05

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	91.5			% Wt	1		SM 2540G	12/6/23	12/6/23 9:13	DV
Hexavalent Chromium	ND	0.17	0.12	mg/Kg dry	1	H-10	SW-846 7196A	1/29/24	1/30/24 8:20	LL

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: Equipment Deconn | Sampled: 11/29/2023 15:00

Sample ID: 23L0541-06

Sample Matrix: Equipment Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	4.1	50	2.0	µg/L	1	J, V-05	SW-846 8260D	12/6/23	12/7/23 5:03	MFF
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
2-Butanone (MEK)	2.6	20	1.7	µg/L	1	J	SW-846 8260D	12/6/23	12/7/23 5:03	MFF
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1	V-05	SW-846 8260D	12/6/23	12/7/23 5:03	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
1,4-Dioxane	ND	50	18	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
Methyl Acetate	ND	1.0	0.61	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1	V-05	SW-846 8260D	12/6/23	12/7/23 5:03	MFF

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: Equipment Deconn | Sampled: 11/29/2023 15:00

Sample ID: 23L0541-06

Sample Matrix: Equipment Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	12/6/23	12/7/23 5:03	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	94.8	70-130		12/7/23 5:03
Toluene-d8	93.2	70-130		12/7/23 5:03
4-Bromofluorobenzene	83.1	70-130		12/7/23 5:03

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Project Location: NY | Sample Description: | Work Order: 23L0541

Date Received: 12/2/2023

Field Sample #: Equipment Deconn | Sampled: 11/29/2023 15:00

Sample ID: 23L0541-06

Sample Matrix: Equipment Blank Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	12/6/23	12/7/23 5:03	MFF

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Sample Extraction Data

Prep Method:% Solids **Analytical Method:SM 2540G**

Lab Number [Field ID]	Batch	Date
23L0541-01 [MW-1 (2)]	B359896	12/06/23
23L0541-02 [SB-1 (2)]	B359896	12/06/23
23L0541-03 [MW-4 (2)]	B359896	12/06/23
23L0541-04 [SB-2 (2)]	B359896	12/06/23
23L0541-05 [Duplicate]	B359896	12/06/23

Prep Method:SW-846 3050B **Analytical Method:SW-846 6010D**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L0541-01 [MW-1 (2)]	B359903	1.55	50.0	12/06/23
23L0541-02 [SB-1 (2)]	B359903	1.58	50.0	12/06/23
23L0541-03 [MW-4 (2)]	B359903	1.59	50.0	12/06/23
23L0541-04 [SB-2 (2)]	B359903	1.55	50.0	12/06/23
23L0541-05 [Duplicate]	B359903	1.50	50.0	12/06/23

Prep Method:SW-846 3050B **Analytical Method:SW-846 6020B**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L0541-01 [MW-1 (2)]	B359897	1.55	50.0	12/06/23
23L0541-02 [SB-1 (2)]	B359897	1.58	50.0	12/06/23
23L0541-03 [MW-4 (2)]	B359897	1.59	50.0	12/06/23
23L0541-04 [SB-2 (2)]	B359897	1.55	50.0	12/06/23
23L0541-05 [Duplicate]	B359897	1.50	50.0	12/06/23

Prep Method:SW-846 3060A **Analytical Method:SW-846 7196A**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L0541-01 [MW-1 (2)]	B364445	2.56	100	01/29/24
23L0541-02 [SB-1 (2)]	B364445	2.51	100	01/29/24
23L0541-03 [MW-4 (2)]	B364445	2.52	100	01/29/24
23L0541-04 [SB-2 (2)]	B364445	2.55	100	01/29/24
23L0541-05 [Duplicate]	B364445	2.56	100	01/29/24

Prep Method:SW-846 7471 **Analytical Method:SW-846 7471B**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L0541-01 [MW-1 (2)]	B360091	0.606	50.0	12/07/23
23L0541-02 [SB-1 (2)]	B360091	0.606	50.0	12/07/23
23L0541-03 [MW-4 (2)]	B360091	0.605	50.0	12/07/23
23L0541-04 [SB-2 (2)]	B360091	0.603	50.0	12/07/23
23L0541-05 [Duplicate]	B360091	0.602	50.0	12/07/23

Prep Method:SW-846 3546 **Analytical Method:SW-846 8082A**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L0541-01 [MW-1 (2)]	B359941	10.0	10.0	12/06/23
23L0541-02 [SB-1 (2)]	B359941	10.0	10.0	12/06/23
23L0541-03 [MW-4 (2)]	B359941	10.0	10.0	12/06/23
23L0541-04 [SB-2 (2)]	B359941	10.1	10.0	12/06/23

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Sample Extraction Data

Prep Method:SW-846 3546 **Analytical Method:SW-846 8082A**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L0541-05 [Duplicate]	B359941	10.0	10.0	12/06/23

Prep Method:SW-846 5035 **Analytical Method:SW-846 8260D**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L0541-01 [MW-1 (2)]	B359857	5.02	10.0	12/06/23
23L0541-02 [SB-1 (2)]	B359857	4.14	10.0	12/06/23
23L0541-03 [MW-4 (2)]	B359857	3.85	10.0	12/06/23
23L0541-04 [SB-2 (2)]	B359857	4.36	10.0	12/06/23
23L0541-05 [Duplicate]	B359857	4.68	10.0	12/06/23

Prep Method:SW-846 5030B **Analytical Method:SW-846 8260D**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23L0541-06 [Equipment Deconn]	B359877	5	5.00	12/06/23

Prep Method:SW-846 3546 **Analytical Method:SW-846 8270E**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L0541-01 [MW-1 (2)]	B359939	30.8	1.00	12/06/23
23L0541-02 [SB-1 (2)]	B359939	30.0	1.00	12/06/23
23L0541-03 [MW-4 (2)]	B359939	30.0	1.00	12/06/23
23L0541-04 [SB-2 (2)]	B359939	30.0	1.00	12/06/23
23L0541-05 [Duplicate]	B359939	30.0	1.00	12/06/23

Prep Method:SW-846 3546 **Analytical Method:SW-846 8270E**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L0541-01 [MW-1 (2)]	B360104	20.4	1.00	12/07/23
23L0541-02 [SB-1 (2)]	B360104	20.3	1.00	12/07/23
23L0541-03 [MW-4 (2)]	B360104	20.2	1.00	12/07/23
23L0541-04 [SB-2 (2)]	B360104	20.5	1.00	12/07/23
23L0541-05 [Duplicate]	B360104	20.0	1.00	12/07/23

Prep Method:SW-846 3546 **Analytical Method:SW-846 8270E**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L0541-03RE1 [MW-4 (2)]	B360416	30.6	1.00	12/11/23

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B359857 - SW-846 5035										
Blank (B359857-BLK1)				Prepared & Analyzed: 12/06/23						
Acetone	ND	0.10	mg/Kg wet							
Benzene	ND	0.0020	mg/Kg wet							
Bromochloromethane	ND	0.0020	mg/Kg wet							
Bromodichloromethane	ND	0.0020	mg/Kg wet							
Bromoform	ND	0.0020	mg/Kg wet							
Bromomethane	ND	0.010	mg/Kg wet							
2-Butanone (MEK)	ND	0.040	mg/Kg wet							
Carbon Disulfide	ND	0.010	mg/Kg wet							
Carbon Tetrachloride	ND	0.0020	mg/Kg wet							V-05
Chlorobenzene	ND	0.0020	mg/Kg wet							
Chlorodibromomethane	ND	0.0010	mg/Kg wet							
Chloroethane	ND	0.020	mg/Kg wet							
Chloroform	ND	0.0040	mg/Kg wet							
Chloromethane	ND	0.010	mg/Kg wet							
Cyclohexane	ND	0.010	mg/Kg wet							V-05
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg wet							
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet							
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg wet							V-05
1,1-Dichloroethane	ND	0.0020	mg/Kg wet							
1,2-Dichloroethane	ND	0.0020	mg/Kg wet							
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet							
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
1,2-Dichloropropane	ND	0.0020	mg/Kg wet							
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
1,4-Dioxane	ND	0.10	mg/Kg wet							
Ethylbenzene	ND	0.0020	mg/Kg wet							
2-Hexanone (MBK)	ND	0.020	mg/Kg wet							
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet							
Methyl Acetate	ND	0.0020	mg/Kg wet							
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet							
Methyl Cyclohexane	ND	0.0040	mg/Kg wet							
Methylene Chloride	ND	0.020	mg/Kg wet							
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet							
Styrene	ND	0.0020	mg/Kg wet							
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet							
Tetrachloroethylene	ND	0.0020	mg/Kg wet							
Toluene	ND	0.0020	mg/Kg wet							
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet							
Trichloroethylene	ND	0.0020	mg/Kg wet							
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	mg/Kg wet							
Vinyl Chloride	ND	0.010	mg/Kg wet							
m+p Xylene	ND	0.0040	mg/Kg wet							

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B359857 - SW-846 5035												
Blank (B359857-BLK1)				Prepared & Analyzed: 12/06/23								
o-Xylene	ND	0.0020	mg/Kg wet									
Xylenes (total)	ND	0.0020	mg/Kg wet									
Surrogate: 1,2-Dichloroethane-d4	*0.0449*		mg/Kg wet	0.0500		89.8		70-130				
Surrogate: Toluene-d8	*0.0478*		mg/Kg wet	0.0500		95.7		70-130				
Surrogate: 4-Bromofluorobenzene	*0.0496*		mg/Kg wet	0.0500		99.2		70-130				
LCS (B359857-BS1)				Prepared & Analyzed: 12/06/23								
Acetone	0.182	0.10	mg/Kg wet	0.200		91.1		70-160			V-36	†
Benzene	0.0188	0.0020	mg/Kg wet	0.0200		94.0		70-130				
Bromochloromethane	0.0202	0.0020	mg/Kg wet	0.0200		101		70-130				
Bromodichloromethane	0.0184	0.0020	mg/Kg wet	0.0200		91.8		70-130				
Bromoform	0.0190	0.0020	mg/Kg wet	0.0200		95.1		70-130				
Bromomethane	0.0268	0.010	mg/Kg wet	0.0200		**134**	*	40-130			L-07, V-20	†
2-Butanone (MEK)	0.175	0.040	mg/Kg wet	0.200		87.6		70-160				†
Carbon Disulfide	0.168	0.010	mg/Kg wet	0.200		84.0		70-130				
Carbon Tetrachloride	0.0167	0.0020	mg/Kg wet	0.0200		83.7		70-130			V-05	
Chlorobenzene	0.0200	0.0020	mg/Kg wet	0.0200		100		70-130				
Chlorodibromomethane	0.0195	0.0010	mg/Kg wet	0.0200		97.7		70-130				
Chloroethane	0.0206	0.020	mg/Kg wet	0.0200		103		70-130				
Chloroform	0.0189	0.0040	mg/Kg wet	0.0200		94.5		70-130				
Chloromethane	0.0176	0.010	mg/Kg wet	0.0200		87.9		70-130				
Cyclohexane	0.0159	0.010	mg/Kg wet	0.0200		79.4		70-130			V-05	
1,2-Dibromo-3-chloropropane (DBCP)	0.0165	0.0020	mg/Kg wet	0.0200		82.5		70-130				
1,2-Dibromoethane (EDB)	0.0209	0.0010	mg/Kg wet	0.0200		104		70-130				
1,2-Dichlorobenzene	0.0196	0.0020	mg/Kg wet	0.0200		98.1		70-130				
1,3-Dichlorobenzene	0.0191	0.0020	mg/Kg wet	0.0200		95.6		70-130				
1,4-Dichlorobenzene	0.0190	0.0020	mg/Kg wet	0.0200		95.1		70-130				
Dichlorodifluoromethane (Freon 12)	0.0117	0.020	mg/Kg wet	0.0200		58.4		40-160			V-05, J	†
1,1-Dichloroethane	0.0184	0.0020	mg/Kg wet	0.0200		92.0		70-130				
1,2-Dichloroethane	0.0191	0.0020	mg/Kg wet	0.0200		95.4		70-130				
1,1-Dichloroethylene	0.0190	0.0040	mg/Kg wet	0.0200		95.0		70-130				
cis-1,2-Dichloroethylene	0.0190	0.0020	mg/Kg wet	0.0200		95.2		70-130				
trans-1,2-Dichloroethylene	0.0183	0.0020	mg/Kg wet	0.0200		91.4		70-130				
1,2-Dichloropropane	0.0197	0.0020	mg/Kg wet	0.0200		98.3		70-130				
cis-1,3-Dichloropropene	0.0186	0.0010	mg/Kg wet	0.0200		92.8		70-130				
trans-1,3-Dichloropropene	0.0178	0.0010	mg/Kg wet	0.0200		88.9		70-130				
1,4-Dioxane	0.216	0.10	mg/Kg wet	0.200		108		40-160				†
Ethylbenzene	0.0207	0.0020	mg/Kg wet	0.0200		104		70-130				
2-Hexanone (MBK)	0.188	0.020	mg/Kg wet	0.200		93.9		70-160				†
Isopropylbenzene (Cumene)	0.0216	0.0020	mg/Kg wet	0.0200		108		70-130				
Methyl Acetate	0.0186	0.0020	mg/Kg wet	0.0200		92.8		70-130				
Methyl tert-Butyl Ether (MTBE)	0.0170	0.0040	mg/Kg wet	0.0200		84.8		70-130				
Methyl Cyclohexane	0.0181	0.0040	mg/Kg wet	0.0200		90.7		70-130				
Methylene Chloride	0.0185	0.020	mg/Kg wet	0.0200		92.4		40-160			J	†
4-Methyl-2-pentanone (MIBK)	0.193	0.020	mg/Kg wet	0.200		96.5		70-160				†
Styrene	0.0214	0.0020	mg/Kg wet	0.0200		107		70-130				
1,1,2,2-Tetrachloroethane	0.0212	0.0010	mg/Kg wet	0.0200		106		70-130				
Tetrachloroethylene	0.0215	0.0020	mg/Kg wet	0.0200		108		70-130				
Toluene	0.0206	0.0020	mg/Kg wet	0.0200		103		70-130				
1,2,3-Trichlorobenzene	0.0189	0.0020	mg/Kg wet	0.0200		94.4		70-130				
1,2,4-Trichlorobenzene	0.0183	0.0020	mg/Kg wet	0.0200		91.6		70-130				
1,1,1-Trichloroethane	0.0183	0.0020	mg/Kg wet	0.0200		91.4		70-130				

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B359857 - SW-846 5035											
LCS (B359857-BS1)				Prepared & Analyzed: 12/06/23							
1,1,2-Trichloroethane	0.0204	0.0020	mg/Kg wet	0.0200		102	70-130				
Trichloroethylene	0.0198	0.0020	mg/Kg wet	0.0200		99.1	70-130				
Trichlorofluoromethane (Freon 11)	0.0196	0.010	mg/Kg wet	0.0200		97.9	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0197	0.010	mg/Kg wet	0.0200		98.5	70-130				
Vinyl Chloride	0.0173	0.010	mg/Kg wet	0.0200		86.7	40-130				†
m+p Xylene	0.0432	0.0040	mg/Kg wet	0.0400		108	70-130				
o-Xylene	0.0209	0.0020	mg/Kg wet	0.0200		105	70-130				
Surrogate: 1,2-Dichloroethane-d4	*0.0440*		mg/Kg wet	0.0500		87.9	70-130				
Surrogate: Toluene-d8	*0.0510*		mg/Kg wet	0.0500		102	70-130				
Surrogate: 4-Bromofluorobenzene	*0.0493*		mg/Kg wet	0.0500		98.7	70-130				
LCS Dup (B359857-BSD1)				Prepared & Analyzed: 12/06/23							
Acetone	0.190	0.10	mg/Kg wet	0.200		94.9	70-160	4.10	25	V-36	†
Benzene	0.0185	0.0020	mg/Kg wet	0.0200		92.7	70-130	1.39	25		
Bromochloromethane	0.0199	0.0020	mg/Kg wet	0.0200		99.6	70-130	1.20	25		
Bromodichloromethane	0.0183	0.0020	mg/Kg wet	0.0200		91.7	70-130	0.109	25		
Bromoform	0.0198	0.0020	mg/Kg wet	0.0200		98.8	70-130	3.82	25		
Bromomethane	0.0253	0.010	mg/Kg wet	0.0200		126	40-130	5.77	25	V-20	†
2-Butanone (MEK)	0.180	0.040	mg/Kg wet	0.200		89.8	70-160	2.51	25		†
Carbon Disulfide	0.163	0.010	mg/Kg wet	0.200		81.4	70-130	3.17	25		
Carbon Tetrachloride	0.0153	0.0020	mg/Kg wet	0.0200		76.3	70-130	9.25	25	V-05	
Chlorobenzene	0.0201	0.0020	mg/Kg wet	0.0200		101	70-130	0.598	25		
Chlorodibromomethane	0.0197	0.0010	mg/Kg wet	0.0200		98.6	70-130	0.917	25		
Chloroethane	0.0198	0.020	mg/Kg wet	0.0200		99.1	70-130	3.96	25	J	
Chloroform	0.0184	0.0040	mg/Kg wet	0.0200		92.1	70-130	2.57	25		
Chloromethane	0.0168	0.010	mg/Kg wet	0.0200		83.8	70-130	4.78	25		
Cyclohexane	0.0155	0.010	mg/Kg wet	0.0200		77.5	70-130	2.42	25	V-05	
1,2-Dibromo-3-chloropropane (DBCP)	0.0164	0.0020	mg/Kg wet	0.0200		82.2	70-130	0.364	25		
1,2-Dibromoethane (EDB)	0.0211	0.0010	mg/Kg wet	0.0200		105	70-130	1.05	25		
1,2-Dichlorobenzene	0.0195	0.0020	mg/Kg wet	0.0200		97.4	70-130	0.716	25		
1,3-Dichlorobenzene	0.0186	0.0020	mg/Kg wet	0.0200		93.0	70-130	2.76	25		
1,4-Dichlorobenzene	0.0188	0.0020	mg/Kg wet	0.0200		94.0	70-130	1.16	25		
Dichlorodifluoromethane (Freon 12)	0.0110	0.020	mg/Kg wet	0.0200		55.1	40-160	5.81	25	V-05, J	†
1,1-Dichloroethane	0.0182	0.0020	mg/Kg wet	0.0200		91.1	70-130	0.983	25		
1,2-Dichloroethane	0.0193	0.0020	mg/Kg wet	0.0200		96.3	70-130	0.939	25		
1,1-Dichloroethylene	0.0185	0.0040	mg/Kg wet	0.0200		92.3	70-130	2.88	25		
cis-1,2-Dichloroethylene	0.0188	0.0020	mg/Kg wet	0.0200		93.9	70-130	1.37	25		
trans-1,2-Dichloroethylene	0.0179	0.0020	mg/Kg wet	0.0200		89.3	70-130	2.32	25		
1,2-Dichloropropane	0.0200	0.0020	mg/Kg wet	0.0200		99.9	70-130	1.61	25		
cis-1,3-Dichloropropene	0.0186	0.0010	mg/Kg wet	0.0200		92.9	70-130	0.108	25		
trans-1,3-Dichloropropene	0.0182	0.0010	mg/Kg wet	0.0200		90.8	70-130	2.11	25		
1,4-Dioxane	0.223	0.10	mg/Kg wet	0.200		111	40-160	3.03	50		† ‡
Ethylbenzene	0.0206	0.0020	mg/Kg wet	0.0200		103	70-130	0.775	25		
2-Hexanone (MBK)	0.193	0.020	mg/Kg wet	0.200		96.7	70-160	2.94	25		†
Isopropylbenzene (Cumene)	0.0213	0.0020	mg/Kg wet	0.0200		106	70-130	1.49	25		
Methyl Acetate	0.0193	0.0020	mg/Kg wet	0.0200		96.6	70-130	4.01	25		
Methyl tert-Butyl Ether (MTBE)	0.0172	0.0040	mg/Kg wet	0.0200		85.8	70-130	1.17	25		
Methyl Cyclohexane	0.0178	0.0040	mg/Kg wet	0.0200		88.8	70-130	2.12	25		
Methylene Chloride	0.0182	0.020	mg/Kg wet	0.0200		91.2	40-160	1.31	25	J	†
4-Methyl-2-pentanone (MIBK)	0.200	0.020	mg/Kg wet	0.200		100	70-160	3.52	25		†
Styrene	0.0212	0.0020	mg/Kg wet	0.0200		106	70-130	1.03	25		
1,1,2,2-Tetrachloroethane	0.0216	0.0010	mg/Kg wet	0.0200		108	70-130	1.50	25		

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B359857 - SW-846 5035											
LCS Dup (B359857-BSD1)				Prepared & Analyzed: 12/06/23							
Tetrachloroethylene	0.0213	0.0020	mg/Kg wet	0.0200		106		70-130	0.935	25	
Toluene	0.0204	0.0020	mg/Kg wet	0.0200		102		70-130	0.978	25	
1,2,3-Trichlorobenzene	0.0184	0.0020	mg/Kg wet	0.0200		92.2		70-130	2.36	25	
1,2,4-Trichlorobenzene	0.0178	0.0020	mg/Kg wet	0.0200		88.9		70-130	2.99	25	
1,1,1-Trichloroethane	0.0180	0.0020	mg/Kg wet	0.0200		90.0		70-130	1.54	25	
1,1,2-Trichloroethane	0.0210	0.0020	mg/Kg wet	0.0200		105		70-130	2.80	25	
Trichloroethylene	0.0194	0.0020	mg/Kg wet	0.0200		97.2		70-130	1.94	25	
Trichlorofluoromethane (Freon 11)	0.0187	0.010	mg/Kg wet	0.0200		93.4		70-130	4.70	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0189	0.010	mg/Kg wet	0.0200		94.4		70-130	4.25	25	
Vinyl Chloride	0.0164	0.010	mg/Kg wet	0.0200		81.8		40-130	5.82	25	†
m+p Xylene	0.0427	0.0040	mg/Kg wet	0.0400		107		70-130	1.16	25	
o-Xylene	0.0207	0.0020	mg/Kg wet	0.0200		104		70-130	0.961	25	
Surrogate: 1,2-Dichloroethane-d4	*0.0444*		mg/Kg wet	0.0500		88.7		70-130			
Surrogate: Toluene-d8	*0.0496*		mg/Kg wet	0.0500		99.2		70-130			
Surrogate: 4-Bromofluorobenzene	*0.0493*		mg/Kg wet	0.0500		98.6		70-130			
Matrix Spike (B359857-MS2)	**Source: 23L0541-02**			Prepared & Analyzed: 12/06/23							
Acetone	0.396	0.14	mg/Kg dry	0.290	ND	**136**	*	70-130			MS-12A, V-36
Benzene	0.0276	0.0029	mg/Kg dry	0.0290	ND	95.2		70-130			
Bromochloromethane	0.0295	0.0029	mg/Kg dry	0.0290	ND	102		70-130			
Bromodichloromethane	0.0276	0.0029	mg/Kg dry	0.0290	ND	95.2		70-130			
Bromoform	0.0304	0.0029	mg/Kg dry	0.0290	ND	105		70-130			
Bromomethane	0.0213	0.014	mg/Kg dry	0.0290	ND	73.4		70-130			V-20
2-Butanone (MEK)	0.298	0.058	mg/Kg dry	0.290	ND	103		70-130			
Carbon Disulfide	0.0224	0.014	mg/Kg dry	0.0290	ND	77.2		70-130			
Carbon Tetrachloride	0.0247	0.0029	mg/Kg dry	0.0290	ND	85.1		70-130			V-05
Chlorobenzene	0.0297	0.0029	mg/Kg dry	0.0290	ND	102		70-130			
Chlorodibromomethane	0.0288	0.0014	mg/Kg dry	0.0290	ND	99.2		70-130			
Chloroethane	0.0262	0.029	mg/Kg dry	0.0290	ND	90.3		70-130			J
Chloroform	0.0277	0.0058	mg/Kg dry	0.0290	ND	95.4		70-130			
Chloromethane	0.0212	0.014	mg/Kg dry	0.0290	ND	73.0		70-130			
Cyclohexane	0.0237	0.014	mg/Kg dry	0.0290	ND	81.9		70-130			V-05
1,2-Dibromo-3-chloropropane (DBCP)	0.0253	0.0029	mg/Kg dry	0.0290	ND	87.1		70-130			
1,2-Dibromoethane (EDB)	0.0300	0.0014	mg/Kg dry	0.0290	ND	103		70-130			
1,2-Dichlorobenzene	0.0306	0.0029	mg/Kg dry	0.0290	ND	106		70-130			
1,3-Dichlorobenzene	0.0298	0.0029	mg/Kg dry	0.0290	ND	103		70-130			
1,4-Dichlorobenzene	0.0295	0.0029	mg/Kg dry	0.0290	ND	102		70-130			
Dichlorodifluoromethane (Freon 12)	0.0238	0.029	mg/Kg dry	0.0290	ND	82.0		70-130			J, V-05
1,1-Dichloroethane	0.0285	0.0029	mg/Kg dry	0.0290	ND	98.2		70-130			
1,2-Dichloroethane	0.0284	0.0029	mg/Kg dry	0.0290	ND	98.1		70-130			
1,1-Dichloroethylene	0.0295	0.0058	mg/Kg dry	0.0290	ND	102		70-130			
cis-1,2-Dichloroethylene	0.0289	0.0029	mg/Kg dry	0.0290	ND	99.7		70-130			
trans-1,2-Dichloroethylene	0.0264	0.0029	mg/Kg dry	0.0290	ND	91.2		70-130			
1,2-Dichloropropane	0.0302	0.0029	mg/Kg dry	0.0290	ND	104		70-130			
cis-1,3-Dichloropropene	0.0251	0.0014	mg/Kg dry	0.0290	ND	86.7		70-130			
trans-1,3-Dichloropropene	0.0262	0.0014	mg/Kg dry	0.0290	ND	90.4		70-130			
1,4-Dioxane	0.281	0.14	mg/Kg dry	0.290	ND	97.1		70-130			
Ethylbenzene	0.0315	0.0029	mg/Kg dry	0.0290	ND	108		70-130			
2-Hexanone (MBK)	0.307	0.029	mg/Kg dry	0.290	ND	106		70-130			
Isopropylbenzene (Cumene)	0.0330	0.0029	mg/Kg dry	0.0290	ND	114		70-130			
Methyl Acetate	0.0327	0.0029	mg/Kg dry	0.0290	ND	113		70-130			
Methyl tert-Butyl Ether (MTBE)	0.0237	0.0058	mg/Kg dry	0.0290	ND	81.7		70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B359857 - SW-846 5035											
Matrix Spike (B359857-MS2)		**Source: 23L0541-02**		Prepared & Analyzed: 12/06/23							
Methyl Cyclohexane	0.0277	0.0058	mg/Kg dry	0.0290	ND	95.5		70-130			
Methylene Chloride	0.0265	0.029	mg/Kg dry	0.0290	ND	91.4		70-130			J
4-Methyl-2-pentanone (MIBK)	0.316	0.029	mg/Kg dry	0.290	ND	109		70-130			
Styrene	0.0319	0.0029	mg/Kg dry	0.0290	ND	110		70-130			
1,1,2,2-Tetrachloroethane	0.0342	0.0014	mg/Kg dry	0.0290	ND	118		70-130			
Tetrachloroethylene	0.0324	0.0029	mg/Kg dry	0.0290	ND	112		70-130			
Toluene	0.0323	0.0029	mg/Kg dry	0.0290	ND	111		70-130			
1,2,3-Trichlorobenzene	0.0258	0.0029	mg/Kg dry	0.0290	ND	89.1		70-130			
1,2,4-Trichlorobenzene	0.0261	0.0029	mg/Kg dry	0.0290	ND	90.0		70-130			
1,1,1-Trichloroethane	0.0283	0.0029	mg/Kg dry	0.0290	ND	97.6		70-130			
1,1,2-Trichloroethane	0.0324	0.0029	mg/Kg dry	0.0290	ND	112		70-130			
Trichloroethylene	0.0301	0.0029	mg/Kg dry	0.0290	ND	104		70-130			
Trichlorofluoromethane (Freon 11)	0.0308	0.014	mg/Kg dry	0.0290	ND	106		70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0331	0.014	mg/Kg dry	0.0290	ND	114		70-130			
Vinyl Chloride	0.0225	0.014	mg/Kg dry	0.0290	ND	77.7		70-130			
m+p Xylene	0.0636	0.0058	mg/Kg dry	0.0580	ND	110		70-130			
o-Xylene	0.0318	0.0029	mg/Kg dry	0.0290	ND	110		70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.0642*		mg/Kg dry	0.0725		88.6		70-130			
Surrogate: Toluene-d8	*0.0710*		mg/Kg dry	0.0725		98.0		70-130			
Surrogate: 4-Bromofluorobenzene	*0.0698*		mg/Kg dry	0.0725		96.2		70-130			
Matrix Spike Dup (B359857-MSD2)		**Source: 23L0541-02**		Prepared & Analyzed: 12/06/23							
Acetone	0.361	0.13	mg/Kg dry	0.266	ND	**136**	*	70-130	9.25	30	MS-12A, V-36
Benzene	0.0257	0.0027	mg/Kg dry	0.0266	ND	96.8		70-130	7.05	30	
Bromochloromethane	0.0272	0.0027	mg/Kg dry	0.0266	ND	102		70-130	8.03	30	
Bromodichloromethane	0.0257	0.0027	mg/Kg dry	0.0266	ND	96.8		70-130	7.05	30	
Bromoform	0.0278	0.0027	mg/Kg dry	0.0266	ND	105		70-130	9.00	30	
Bromomethane	0.0191	0.013	mg/Kg dry	0.0266	ND	71.8		70-130	10.9	30	V-20
2-Butanone (MEK)	0.268	0.053	mg/Kg dry	0.266	ND	101		70-130	10.7	30	
Carbon Disulfide	0.0205	0.013	mg/Kg dry	0.0266	ND	77.1		70-130	8.85	30	
Carbon Tetrachloride	0.0232	0.0027	mg/Kg dry	0.0266	ND	87.2		70-130	6.28	30	V-05
Chlorobenzene	0.0278	0.0027	mg/Kg dry	0.0266	ND	104		70-130	6.59	30	
Chlorodibromomethane	0.0270	0.0013	mg/Kg dry	0.0266	ND	102		70-130	6.13	30	
Chloroethane	0.0231	0.027	mg/Kg dry	0.0266	ND	86.9		70-130	12.5	30	J
Chloroform	0.0259	0.0053	mg/Kg dry	0.0266	ND	97.6		70-130	6.44	30	
Chloromethane	0.0195	0.013	mg/Kg dry	0.0266	ND	73.4		70-130	8.17	30	
Cyclohexane	0.0219	0.013	mg/Kg dry	0.0266	ND	82.4		70-130	8.11	30	V-05
1,2-Dibromo-3-chloropropane (DBCP)	0.0229	0.0027	mg/Kg dry	0.0266	ND	86.2		70-130	9.75	30	
1,2-Dibromoethane (EDB)	0.0289	0.0013	mg/Kg dry	0.0266	ND	109		70-130	3.54	30	
1,2-Dichlorobenzene	0.0275	0.0027	mg/Kg dry	0.0266	ND	104		70-130	10.5	30	
1,3-Dichlorobenzene	0.0273	0.0027	mg/Kg dry	0.0266	ND	103		70-130	8.62	30	
1,4-Dichlorobenzene	0.0268	0.0027	mg/Kg dry	0.0266	ND	101		70-130	9.41	30	
Dichlorodifluoromethane (Freon 12)	0.0212	0.027	mg/Kg dry	0.0266	ND	79.7		70-130	11.6	30	V-05, J
1,1-Dichloroethane	0.0263	0.0027	mg/Kg dry	0.0266	ND	98.8		70-130	8.11	30	
1,2-Dichloroethane	0.0263	0.0027	mg/Kg dry	0.0266	ND	99.1		70-130	7.70	30	
1,1-Dichloroethylene	0.0268	0.0053	mg/Kg dry	0.0266	ND	101		70-130	9.31	30	
cis-1,2-Dichloroethylene	0.0268	0.0027	mg/Kg dry	0.0266	ND	101		70-130	7.42	30	
trans-1,2-Dichloroethylene	0.0248	0.0027	mg/Kg dry	0.0266	ND	93.3		70-130	6.44	30	
1,2-Dichloropropane	0.0278	0.0027	mg/Kg dry	0.0266	ND	104		70-130	8.24	30	
cis-1,3-Dichloropropene	0.0238	0.0013	mg/Kg dry	0.0266	ND	89.7		70-130	5.32	30	
trans-1,3-Dichloropropene	0.0251	0.0013	mg/Kg dry	0.0266	ND	94.6		70-130	4.18	30	
1,4-Dioxane	0.258	0.13	mg/Kg dry	0.266	ND	96.9		70-130	8.86	30	

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B359857 - SW-846 5035										
Matrix Spike Dup (B359857-MSD2)	**Source: 23L0541-02**			Prepared & Analyzed: 12/06/23						
Ethylbenzene	0.0292	0.0027	mg/Kg dry	0.0266	ND	110	70-130	7.44	30	
2-Hexanone (MBK)	0.278	0.027	mg/Kg dry	0.266	ND	105	70-130	10.0	30	
Isopropylbenzene (Cumene)	0.0311	0.0027	mg/Kg dry	0.0266	ND	117	70-130	5.86	30	
Methyl Acetate	0.0299	0.0027	mg/Kg dry	0.0266	ND	112	70-130	9.07	30	
Methyl tert-Butyl Ether (MTBE)	0.0215	0.0053	mg/Kg dry	0.0266	ND	81.0	70-130	9.58	30	
Methyl Cyclohexane	0.0260	0.0053	mg/Kg dry	0.0266	ND	97.9	70-130	6.24	30	
Methylene Chloride	0.0236	0.027	mg/Kg dry	0.0266	ND	88.8	70-130	11.6	30	J
4-Methyl-2-pentanone (MIBK)	0.287	0.027	mg/Kg dry	0.266	ND	108	70-130	9.71	30	
Styrene	0.0299	0.0027	mg/Kg dry	0.0266	ND	113	70-130	6.20	30	
1,1,2,2-Tetrachloroethane	0.0316	0.0013	mg/Kg dry	0.0266	ND	119	70-130	7.96	30	
Tetrachloroethylene	0.0300	0.0027	mg/Kg dry	0.0266	ND	113	70-130	7.74	30	
Toluene	0.0298	0.0027	mg/Kg dry	0.0266	ND	112	70-130	8.09	30	
1,2,3-Trichlorobenzene	0.0253	0.0027	mg/Kg dry	0.0266	ND	95.2	70-130	2.10	30	
1,2,4-Trichlorobenzene	0.0252	0.0027	mg/Kg dry	0.0266	ND	95.0	70-130	3.32	30	
1,1,1-Trichloroethane	0.0261	0.0027	mg/Kg dry	0.0266	ND	98.2	70-130	8.11	30	
1,1,2-Trichloroethane	0.0301	0.0027	mg/Kg dry	0.0266	ND	113	70-130	7.30	30	
Trichloroethylene	0.0282	0.0027	mg/Kg dry	0.0266	ND	106	70-130	6.72	30	
Trichlorofluoromethane (Freon 11)	0.0283	0.013	mg/Kg dry	0.0266	ND	107	70-130	8.44	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0308	0.013	mg/Kg dry	0.0266	ND	116	70-130	7.42	30	
Vinyl Chloride	0.0205	0.013	mg/Kg dry	0.0266	ND	77.3	70-130	9.23	30	
m+p Xylene	0.0593	0.0053	mg/Kg dry	0.0531	ND	112	70-130	7.00	30	
o-Xylene	0.0295	0.0027	mg/Kg dry	0.0266	ND	111	70-130	7.63	30	
Surrogate: 1,2-Dichloroethane-d4	*0.0593*		mg/Kg dry	0.0664		89.3	70-130			
Surrogate: Toluene-d8	*0.0658*		mg/Kg dry	0.0664		99.0	70-130			
Surrogate: 4-Bromofluorobenzene	*0.0644*		mg/Kg dry	0.0664		97.0	70-130			
Batch B359877 - SW-846 5030B										
Blank (B359877-BLK1)				Prepared: 12/06/23 Analyzed: 12/07/23						
Acetone	ND	50	µg/L							V-05
Benzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
Carbon Disulfide	ND	5.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
Cyclohexane	ND	5.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							V-05
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B359877 - SW-846 5030B											
Blank (B359877-BLK1)				Prepared: 12/06/23 Analyzed: 12/07/23							
1,1-Dichloroethylene	ND	1.0	µg/L								
cis-1,2-Dichloroethylene	ND	1.0	µg/L								
trans-1,2-Dichloroethylene	ND	1.0	µg/L								
1,2-Dichloropropane	ND	1.0	µg/L								
cis-1,3-Dichloropropene	ND	0.50	µg/L								
trans-1,3-Dichloropropene	ND	0.50	µg/L								
1,4-Dioxane	ND	50	µg/L								
Ethylbenzene	ND	1.0	µg/L								
2-Hexanone (MBK)	ND	10	µg/L								
Isopropylbenzene (Cumene)	ND	1.0	µg/L								
Methyl Acetate	ND	1.0	µg/L								
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L								
Methyl Cyclohexane	ND	1.0	µg/L								
Methylene Chloride	ND	5.0	µg/L								
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L								
Styrene	ND	1.0	µg/L								
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L								
Tetrachloroethylene	ND	1.0	µg/L								
Toluene	ND	1.0	µg/L								
1,2,3-Trichlorobenzene	ND	5.0	µg/L								
1,2,4-Trichlorobenzene	ND	1.0	µg/L							V-05	
1,1,1-Trichloroethane	ND	1.0	µg/L								
1,1,2-Trichloroethane	ND	1.0	µg/L								
Trichloroethylene	ND	1.0	µg/L								
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L								
Vinyl Chloride	ND	2.0	µg/L								
m+p Xylene	ND	2.0	µg/L								
o-Xylene	ND	1.0	µg/L								
Xylenes (total)	ND	1.0	µg/L								
Surrogate: 1,2-Dichloroethane-d4	*24.3*		µg/L	25.0		97.2	70-130				
Surrogate: Toluene-d8	*24.7*		µg/L	25.0		98.9	70-130				
Surrogate: 4-Bromofluorobenzene	*21.0*		µg/L	25.0		84.2	70-130				
LCS (B359877-BS1)				Prepared & Analyzed: 12/06/23							
Acetone	85.1	50	µg/L	100		85.1	70-160			V-05	†
Benzene	11.3	1.0	µg/L	10.0		113	70-130				
Bromochloromethane	11.4	1.0	µg/L	10.0		114	70-130				
Bromodichloromethane	9.94	0.50	µg/L	10.0		99.4	70-130				
Bromoform	8.37	1.0	µg/L	10.0		83.7	70-130				
Bromomethane	13.0	2.0	µg/L	10.0		130	40-160			V-20	†
2-Butanone (MEK)	95.8	20	µg/L	100		95.8	40-160				†
Carbon Disulfide	106	5.0	µg/L	100		106	70-130				
Carbon Tetrachloride	9.95	5.0	µg/L	10.0		99.5	70-130				
Chlorobenzene	11.0	1.0	µg/L	10.0		110	70-130				
Chlorodibromomethane	9.72	0.50	µg/L	10.0		97.2	70-130				
Chloroethane	10.4	2.0	µg/L	10.0		104	70-130				
Chloroform	10.5	2.0	µg/L	10.0		105	70-130				
Chloromethane	9.94	2.0	µg/L	10.0		99.4	40-160				†
Cyclohexane	9.87	5.0	µg/L	10.0		98.7	70-130				
1,2-Dibromo-3-chloropropane (DBCP)	7.98	5.0	µg/L	10.0		79.8	70-130			V-05	
1,2-Dibromoethane (EDB)	10.2	0.50	µg/L	10.0		102	70-130				

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B359877 - SW-846 5030B											
LCS (B359877-BS1)				Prepared & Analyzed: 12/06/23							
1,2-Dichlorobenzene	10.6	1.0	µg/L	10.0		106	70-130				
1,3-Dichlorobenzene	10.7	1.0	µg/L	10.0		107	70-130				
1,4-Dichlorobenzene	10.6	1.0	µg/L	10.0		106	70-130				
Dichlorodifluoromethane (Freon 12)	11.7	2.0	µg/L	10.0		117	40-160				†
1,1-Dichloroethane	10.3	1.0	µg/L	10.0		103	70-130				
1,2-Dichloroethane	9.52	1.0	µg/L	10.0		95.2	70-130				
1,1-Dichloroethylene	9.44	1.0	µg/L	10.0		94.4	70-130				
cis-1,2-Dichloroethylene	9.86	1.0	µg/L	10.0		98.6	70-130				
trans-1,2-Dichloroethylene	9.73	1.0	µg/L	10.0		97.3	70-130				
1,2-Dichloropropane	11.0	1.0	µg/L	10.0		110	70-130				
cis-1,3-Dichloropropene	9.95	0.50	µg/L	10.0		99.5	70-130				
trans-1,3-Dichloropropene	9.63	0.50	µg/L	10.0		96.3	70-130				
1,4-Dioxane	81.7	50	µg/L	100		81.7	40-130				†
Ethylbenzene	10.0	1.0	µg/L	10.0		100	70-130				
2-Hexanone (MBK)	84.6	10	µg/L	100		84.6	70-160				†
Isopropylbenzene (Cumene)	9.31	1.0	µg/L	10.0		93.1	70-130				
Methyl Acetate	10.6	1.0	µg/L	10.0		106	70-130				
Methyl tert-Butyl Ether (MTBE)	9.45	1.0	µg/L	10.0		94.5	70-130				
Methyl Cyclohexane	9.87	1.0	µg/L	10.0		98.7	70-130				
Methylene Chloride	9.59	5.0	µg/L	10.0		95.9	70-130				
4-Methyl-2-pentanone (MIBK)	88.0	10	µg/L	100		88.0	70-160				†
Styrene	9.82	1.0	µg/L	10.0		98.2	70-130				
1,1,2,2-Tetrachloroethane	9.99	0.50	µg/L	10.0		99.9	70-130				
Tetrachloroethylene	10.5	1.0	µg/L	10.0		105	70-130				
Toluene	11.0	1.0	µg/L	10.0		110	70-130				
1,2,3-Trichlorobenzene	7.71	5.0	µg/L	10.0		77.1	70-130				
1,2,4-Trichlorobenzene	7.07	1.0	µg/L	10.0		70.7	70-130			V-05	
1,1,1-Trichloroethane	10.0	1.0	µg/L	10.0		100	70-130				
1,1,2-Trichloroethane	10.8	1.0	µg/L	10.0		108	70-130				
Trichloroethylene	10.3	1.0	µg/L	10.0		103	70-130				
Trichlorofluoromethane (Freon 11)	9.97	2.0	µg/L	10.0		99.7	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.1	1.0	µg/L	10.0		101	70-130				
Vinyl Chloride	12.2	2.0	µg/L	10.0		122	40-160				†
m+p Xylene	19.9	2.0	µg/L	20.0		99.4	70-130				
o-Xylene	9.54	1.0	µg/L	10.0		95.4	70-130				
Xylenes (total)	29.4	1.0	µg/L	30.0		98.0	0-200				
Surrogate: 1,2-Dichloroethane-d4	*24.2*		µg/L	25.0		96.8	70-130				
Surrogate: Toluene-d8	*26.2*		µg/L	25.0		105	70-130				
Surrogate: 4-Bromofluorobenzene	*23.1*		µg/L	25.0		92.4	70-130				
LCS Dup (B359877-BSD1)				Prepared & Analyzed: 12/06/23							
Acetone	75.6	50	µg/L	100		75.6	70-160	11.8	25	V-05	†
Benzene	11.1	1.0	µg/L	10.0		111	70-130	1.70	25		
Bromochloromethane	10.7	1.0	µg/L	10.0		107	70-130	6.78	25		
Bromodichloromethane	9.49	0.50	µg/L	10.0		94.9	70-130	4.63	25		
Bromoform	8.27	1.0	µg/L	10.0		82.7	70-130	1.20	25		
Bromomethane	12.5	2.0	µg/L	10.0		125	40-160	3.91	25	V-20	†
2-Butanone (MEK)	87.1	20	µg/L	100		87.1	40-160	9.55	25		†
Carbon Disulfide	101	5.0	µg/L	100		101	70-130	5.36	25		
Carbon Tetrachloride	9.71	5.0	µg/L	10.0		97.1	70-130	2.44	25		
Chlorobenzene	11.0	1.0	µg/L	10.0		110	70-130	0.365	25		
Chlorodibromomethane	9.29	0.50	µg/L	10.0		92.9	70-130	4.52	25		

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B359877 - SW-846 5030B											
LCS Dup (B359877-BSD1)				Prepared & Analyzed: 12/06/23							
Chloroethane	9.76	2.0	µg/L	10.0		97.6	70-130	6.73	25		
Chloroform	10.0	2.0	µg/L	10.0		100	70-130	4.57	25		
Chloromethane	9.81	2.0	µg/L	10.0		98.1	40-160	1.32	25		†
Cyclohexane	9.93	5.0	µg/L	10.0		99.3	70-130	0.606	25		
1,2-Dibromo-3-chloropropane (DBCP)	8.12	5.0	µg/L	10.0		81.2	70-130	1.74	25	V-05	
1,2-Dibromoethane (EDB)	9.74	0.50	µg/L	10.0		97.4	70-130	4.91	25		
1,2-Dichlorobenzene	10.7	1.0	µg/L	10.0		107	70-130	0.842	25		
1,3-Dichlorobenzene	10.4	1.0	µg/L	10.0		104	70-130	2.65	25		
1,4-Dichlorobenzene	9.90	1.0	µg/L	10.0		99.0	70-130	7.21	25		
Dichlorodifluoromethane (Freon 12)	11.2	2.0	µg/L	10.0		112	40-160	5.07	25		†
1,1-Dichloroethane	10.0	1.0	µg/L	10.0		100	70-130	2.65	25		
1,2-Dichloroethane	8.92	1.0	µg/L	10.0		89.2	70-130	6.51	25		
1,1-Dichloroethylene	9.10	1.0	µg/L	10.0		91.0	70-130	3.67	25		
cis-1,2-Dichloroethylene	9.57	1.0	µg/L	10.0		95.7	70-130	2.99	25		
trans-1,2-Dichloroethylene	9.21	1.0	µg/L	10.0		92.1	70-130	5.49	25		
1,2-Dichloropropane	10.5	1.0	µg/L	10.0		105	70-130	5.11	25		
cis-1,3-Dichloropropene	9.37	0.50	µg/L	10.0		93.7	70-130	6.00	25		
trans-1,3-Dichloropropene	9.09	0.50	µg/L	10.0		90.9	70-130	5.77	25		
1,4-Dioxane	69.4	50	µg/L	100		69.4	40-130	16.4	50		† ‡
Ethylbenzene	10.1	1.0	µg/L	10.0		101	70-130	0.199	25		
2-Hexanone (MBK)	73.6	10	µg/L	100		73.6	70-160	13.8	25		†
Isopropylbenzene (Cumene)	9.38	1.0	µg/L	10.0		93.8	70-130	0.749	25		
Methyl Acetate	9.80	1.0	µg/L	10.0		98.0	70-130	7.65	25		
Methyl tert-Butyl Ether (MTBE)	9.27	1.0	µg/L	10.0		92.7	70-130	1.92	25		
Methyl Cyclohexane	9.42	1.0	µg/L	10.0		94.2	70-130	4.67	25		
Methylene Chloride	9.30	5.0	µg/L	10.0		93.0	70-130	3.07	25		
4-Methyl-2-pentanone (MIBK)	79.8	10	µg/L	100		79.8	70-160	9.79	25		†
Styrene	9.87	1.0	µg/L	10.0		98.7	70-130	0.508	25		
1,1,2,2-Tetrachloroethane	9.75	0.50	µg/L	10.0		97.5	70-130	2.43	25		
Tetrachloroethylene	10.2	1.0	µg/L	10.0		102	70-130	2.69	25		
Toluene	10.4	1.0	µg/L	10.0		104	70-130	5.69	25		
1,2,3-Trichlorobenzene	7.93	5.0	µg/L	10.0		79.3	70-130	2.81	25		
1,2,4-Trichlorobenzene	7.23	1.0	µg/L	10.0		72.3	70-130	2.24	25	V-05	
1,1,1-Trichloroethane	9.71	1.0	µg/L	10.0		97.1	70-130	3.24	25		
1,1,2-Trichloroethane	10.1	1.0	µg/L	10.0		101	70-130	6.49	25		
Trichloroethylene	9.88	1.0	µg/L	10.0		98.8	70-130	4.55	25		
Trichlorofluoromethane (Freon 11)	9.35	2.0	µg/L	10.0		93.5	70-130	6.42	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.74	1.0	µg/L	10.0		97.4	70-130	3.23	25		
Vinyl Chloride	11.7	2.0	µg/L	10.0		117	40-160	3.94	25		†
m+p Xylene	19.9	2.0	µg/L	20.0		99.7	70-130	0.352	25		
o-Xylene	9.72	1.0	µg/L	10.0		97.2	70-130	1.87	25		
Xylenes (total)	29.7	1.0	µg/L	30.0		98.9	0-200	0.846			
Surrogate: 1,2-Dichloroethane-d4	*22.4*		µg/L	25.0		89.6	70-130				
Surrogate: Toluene-d8	*25.4*		µg/L	25.0		101	70-130				
Surrogate: 4-Bromofluorobenzene	*23.2*		µg/L	25.0		92.8	70-130				

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QUALITY CONTROL

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B359857 - SW-846 5035										
Blank (B359857-BLK1)				Prepared & Analyzed: 12/06/23						
No TICs Found	0.0		mg/Kg wet							
Batch B359877 - SW-846 5030B										
Blank (B359877-BLK1)				Prepared: 12/06/23 Analyzed: 12/07/23						
No TICs Found	0.0		µg/L							

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B359939 - SW-846 3546										
Blank (B359939-BLK1)				Prepared: 12/06/23 Analyzed: 12/08/23						
Atrazine	ND	0.67	mg/Kg wet							V-06
Benzaldehyde	ND	0.34	mg/Kg wet							V-34
Biphenyl	ND	0.67	mg/Kg wet							
Caprolactam	ND	0.34	mg/Kg wet							V-06
Acenaphthene	ND	0.17	mg/Kg wet							
Acenaphthylene	ND	0.17	mg/Kg wet							
Acetophenone	ND	0.34	mg/Kg wet							
Anthracene	ND	0.17	mg/Kg wet							
Benzo(a)anthracene	ND	0.17	mg/Kg wet							
Benzo(a)pyrene	ND	0.17	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.17	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.17	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.17	mg/Kg wet							
Bis(2-chloroethoxy)methane	ND	0.34	mg/Kg wet							
Bis(2-chloroethyl)ether	ND	0.34	mg/Kg wet							
Bis(2-chloroisopropyl)ether	ND	0.34	mg/Kg wet							
Bis(2-Ethylhexyl)phthalate	ND	0.34	mg/Kg wet							
4-Bromophenylphenylether	ND	0.34	mg/Kg wet							
Butylbenzylphthalate	ND	0.34	mg/Kg wet							
Carbazole	ND	0.17	mg/Kg wet							
4-Chloroaniline	ND	0.66	mg/Kg wet							
4-Chloro-3-methylphenol	ND	0.66	mg/Kg wet							
2-Chloronaphthalene	ND	0.34	mg/Kg wet							
2-Chlorophenol	ND	0.34	mg/Kg wet							
4-Chlorophenylphenylether	ND	0.34	mg/Kg wet							
Chrysene	ND	0.17	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.17	mg/Kg wet							
Dibenzofuran	ND	0.34	mg/Kg wet							
Di-n-butylphthalate	ND	0.34	mg/Kg wet							
3,3-Dichlorobenzidine	ND	0.17	mg/Kg wet							
2,4-Dichlorophenol	ND	0.34	mg/Kg wet							
Diethylphthalate	ND	0.34	mg/Kg wet							
2,4-Dimethylphenol	ND	0.34	mg/Kg wet							
Dimethylphthalate	ND	0.34	mg/Kg wet							
4,6-Dinitro-2-methylphenol	ND	0.34	mg/Kg wet							
2,4-Dinitrophenol	ND	0.66	mg/Kg wet							
2,4-Dinitrotoluene	ND	0.34	mg/Kg wet							
2,6-Dinitrotoluene	ND	0.34	mg/Kg wet							
Di-n-octylphthalate	ND	0.34	mg/Kg wet							V-05
Fluoranthene	ND	0.17	mg/Kg wet							
Fluorene	ND	0.17	mg/Kg wet							
Hexachlorobenzene	ND	0.34	mg/Kg wet							
Hexachlorobutadiene	ND	0.34	mg/Kg wet							
Hexachlorocyclopentadiene	ND	0.34	mg/Kg wet							
Hexachloroethane	ND	0.34	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.17	mg/Kg wet							
Isophorone	ND	0.34	mg/Kg wet							
2-Methylnaphthalene	ND	0.17	mg/Kg wet							
2-Methylphenol	ND	0.34	mg/Kg wet							
3/4-Methylphenol	ND	0.34	mg/Kg wet							
Naphthalene	ND	0.17	mg/Kg wet							
2-Nitroaniline	ND	0.34	mg/Kg wet							

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B359939 - SW-846 3546											
Blank (B359939-BLK1)				Prepared: 12/06/23 Analyzed: 12/08/23							
3-Nitroaniline	ND	0.34	mg/Kg wet								
4-Nitroaniline	ND	0.34	mg/Kg wet								
Nitrobenzene	ND	0.34	mg/Kg wet								
2-Nitrophenol	ND	0.34	mg/Kg wet								
4-Nitrophenol	ND	0.66	mg/Kg wet								
N-Nitrosodiphenylamine/Diphenylamine	ND	0.34	mg/Kg wet								
N-Nitrosodi-n-propylamine	ND	0.34	mg/Kg wet								
Pentachlorophenol	ND	0.34	mg/Kg wet								
Phenanthrene	ND	0.17	mg/Kg wet								
Phenol	ND	0.34	mg/Kg wet								
Pyrene	ND	0.17	mg/Kg wet								
1,2,4,5-Tetrachlorobenzene	ND	0.34	mg/Kg wet								
2,4,5-Trichlorophenol	ND	0.34	mg/Kg wet								
2,4,6-Trichlorophenol	ND	0.34	mg/Kg wet								
Surrogate: 2-Fluorophenol	*3.79*		mg/Kg wet	6.62		57.2	30-130				
Surrogate: Phenol-d6	*3.82*		mg/Kg wet	6.62		57.8	30-130				
Surrogate: Nitrobenzene-d5	*2.20*		mg/Kg wet	3.31		66.5	30-130				
Surrogate: 2-Fluorobiphenyl	*2.38*		mg/Kg wet	3.31		72.0	30-130				
Surrogate: 2,4,6-Tribromophenol	*4.34*		mg/Kg wet	6.62		65.5	30-130				
Surrogate: p-Terphenyl-d14	*2.58*		mg/Kg wet	3.31		78.0	30-130				
LCS (B359939-BS1)				Prepared: 12/06/23 Analyzed: 12/08/23							
Atrazine	1.44	0.67	mg/Kg wet	1.66		86.9	40-140			V-06	
Benzaldehyde	0.901	0.34	mg/Kg wet	1.66		54.3	40-140			V-34	
Biphenyl	1.31	0.67	mg/Kg wet	1.66		78.6	40-140				
Caprolactam	1.50	0.34	mg/Kg wet	1.66		90.2	40-140			V-06	
Acenaphthene	1.26	0.17	mg/Kg wet	1.66		75.7	40-140				
Acenaphthylene	1.33	0.17	mg/Kg wet	1.66		79.9	40-140				
Acetophenone	1.23	0.34	mg/Kg wet	1.66		74.2	40-140				
Anthracene	1.36	0.17	mg/Kg wet	1.66		81.6	40-140				
Benzo(a)anthracene	1.39	0.17	mg/Kg wet	1.66		83.8	40-140			V-04, V-05	
Benzo(a)pyrene	1.36	0.17	mg/Kg wet	1.66		82.1	40-140				
Benzo(b)fluoranthene	1.36	0.17	mg/Kg wet	1.66		81.8	40-140				
Benzo(g,h,i)perylene	1.41	0.17	mg/Kg wet	1.66		84.7	40-140				
Benzo(k)fluoranthene	1.45	0.17	mg/Kg wet	1.66		87.4	40-140				
Bis(2-chloroethoxy)methane	1.25	0.34	mg/Kg wet	1.66		75.3	40-140				
Bis(2-chloroethyl)ether	1.19	0.34	mg/Kg wet	1.66		71.6	40-140				
Bis(2-chloroisopropyl)ether	1.39	0.34	mg/Kg wet	1.66		83.6	40-140				
Bis(2-Ethylhexyl)phthalate	1.29	0.34	mg/Kg wet	1.66		77.8	40-140				
4-Bromophenylphenylether	1.35	0.34	mg/Kg wet	1.66		81.2	40-140				
Butylbenzylphthalate	1.25	0.34	mg/Kg wet	1.66		75.4	40-140				
Carbazole	1.37	0.17	mg/Kg wet	1.66		82.3	40-140				
4-Chloroaniline	0.863	0.66	mg/Kg wet	1.66		52.0	10-140			R-05	†
4-Chloro-3-methylphenol	1.24	0.66	mg/Kg wet	1.66		74.7	30-130				
2-Chloronaphthalene	1.23	0.34	mg/Kg wet	1.66		74.2	40-140				
2-Chlorophenol	1.19	0.34	mg/Kg wet	1.66		71.9	30-130				
4-Chlorophenylphenylether	1.30	0.34	mg/Kg wet	1.66		78.0	40-140				
Chrysene	1.39	0.17	mg/Kg wet	1.66		83.8	40-140				
Dibenz(a,h)anthracene	1.35	0.17	mg/Kg wet	1.66		81.2	40-140				
Dibenzofuran	1.32	0.34	mg/Kg wet	1.66		79.3	40-140				
Di-n-butylphthalate	1.30	0.34	mg/Kg wet	1.66		78.0	40-140				
3,3-Dichlorobenzidine	1.23	0.17	mg/Kg wet	1.66		74.1	20-140			R-05	†

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B359939 - SW-846 3546										
LCS (B359939-BS1)				Prepared: 12/06/23 Analyzed: 12/08/23						
2,4-Dichlorophenol	1.28	0.34	mg/Kg wet	1.66		77.3	30-130			
Diethylphthalate	1.23	0.34	mg/Kg wet	1.66		74.1	40-140			
2,4-Dimethylphenol	1.03	0.34	mg/Kg wet	1.66		62.1	30-130			
Dimethylphthalate	1.24	0.34	mg/Kg wet	1.66		74.9	40-140			
4,6-Dinitro-2-methylphenol	1.47	0.34	mg/Kg wet	1.66		88.4	30-130			
2,4-Dinitrophenol	0.965	0.66	mg/Kg wet	1.66		58.1	30-130			
2,4-Dinitrotoluene	1.28	0.34	mg/Kg wet	1.66		76.9	40-140			
2,6-Dinitrotoluene	1.31	0.34	mg/Kg wet	1.66		79.0	40-140			
Di-n-octylphthalate	1.10	0.34	mg/Kg wet	1.66		66.4	40-140			V-05
Fluoranthene	1.32	0.17	mg/Kg wet	1.66		79.5	40-140			
Fluorene	1.26	0.17	mg/Kg wet	1.66		75.7	40-140			
Hexachlorobenzene	1.43	0.34	mg/Kg wet	1.66		86.3	40-140			
Hexachlorobutadiene	1.11	0.34	mg/Kg wet	1.66		66.7	40-140			
Hexachlorocyclopentadiene	1.05	0.34	mg/Kg wet	1.66		63.1	40-140			
Hexachloroethane	1.06	0.34	mg/Kg wet	1.66		63.6	40-140			
Indeno(1,2,3-cd)pyrene	1.36	0.17	mg/Kg wet	1.66		81.6	40-140			
Isophorone	1.27	0.34	mg/Kg wet	1.66		76.2	40-140			
2-Methylnaphthalene	1.15	0.17	mg/Kg wet	1.66		69.0	40-140			
2-Methylphenol	1.23	0.34	mg/Kg wet	1.66		74.1	30-130			
3/4-Methylphenol	1.28	0.34	mg/Kg wet	1.66		77.2	30-130			
Naphthalene	1.17	0.17	mg/Kg wet	1.66		70.6	40-140			
2-Nitroaniline	1.33	0.34	mg/Kg wet	1.66		80.3	40-140			
3-Nitroaniline	1.14	0.34	mg/Kg wet	1.66		68.5	30-140			R-05 †
4-Nitroaniline	1.18	0.34	mg/Kg wet	1.66		71.1	40-140			
Nitrobenzene	1.18	0.34	mg/Kg wet	1.66		71.2	40-140			
2-Nitrophenol	1.22	0.34	mg/Kg wet	1.66		73.3	30-130			
4-Nitrophenol	1.42	0.66	mg/Kg wet	1.66		85.6	30-130			
N-Nitrosodiphenylamine/Diphenylamine	1.59	0.34	mg/Kg wet	1.66		95.5	40-140			
N-Nitrosodi-n-propylamine	1.27	0.34	mg/Kg wet	1.66		76.7	40-140			
Pentachlorophenol	1.17	0.34	mg/Kg wet	1.66		70.2	30-130			V-05
Phenanthrene	1.36	0.17	mg/Kg wet	1.66		81.8	40-140			
Phenol	1.22	0.34	mg/Kg wet	1.66		73.7	30-130			
Pyrene	1.31	0.17	mg/Kg wet	1.66		78.6	40-140			
1,2,4,5-Tetrachlorobenzene	1.28	0.34	mg/Kg wet	1.66		77.1	40-140			
2,4,5-Trichlorophenol	1.36	0.34	mg/Kg wet	1.66		81.9	30-130			
2,4,6-Trichlorophenol	1.35	0.34	mg/Kg wet	1.66		81.5	30-130			
Surrogate: 2-Fluorophenol	*4.42*		mg/Kg wet	6.64		66.5	30-130			
Surrogate: Phenol-d6	*4.64*		mg/Kg wet	6.64		69.8	30-130			
Surrogate: Nitrobenzene-d5	*2.52*		mg/Kg wet	3.32		75.9	30-130			
Surrogate: 2-Fluorobiphenyl	*2.81*		mg/Kg wet	3.32		84.7	30-130			
Surrogate: 2,4,6-Tribromophenol	*5.02*		mg/Kg wet	6.64		75.5	30-130			
Surrogate: p-Terphenyl-d14	*2.76*		mg/Kg wet	3.32		83.0	30-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD		RPD Limit	Notes	
Batch B359939 - SW-846 3546												
LCS Dup (B359939-BSD1)				Prepared: 12/06/23 Analyzed: 12/08/23								
Atrazine	1.32	0.67	mg/Kg wet	1.66		79.8	40-140	8.80		30	V-06	
Benzaldehyde	0.909	0.34	mg/Kg wet	1.66		54.9	40-140	0.841		20	V-34	
Biphenyl	1.20	0.67	mg/Kg wet	1.66		72.6	40-140	8.32		20		
Caprolactam	1.44	0.34	mg/Kg wet	1.66		87.1	40-140	3.87		20	V-06	
Acenaphthene	1.17	0.17	mg/Kg wet	1.66		70.7	40-140	7.13		30		
Acenaphthylene	1.23	0.17	mg/Kg wet	1.66		74.3	40-140	7.57		30		
Acetophenone	1.24	0.34	mg/Kg wet	1.66		74.9	40-140	0.607		30		
Anthracene	1.24	0.17	mg/Kg wet	1.66		75.1	40-140	8.60		30		
Benzo(a)anthracene	1.29	0.17	mg/Kg wet	1.66		78.0	40-140	7.47		30		
Benzo(a)pyrene	1.27	0.17	mg/Kg wet	1.66		76.5	40-140	7.47		30		
Benzo(b)fluoranthene	1.25	0.17	mg/Kg wet	1.66		75.7	40-140	8.10		30		
Benzo(g,h,i)perylene	1.28	0.17	mg/Kg wet	1.66		77.5	40-140	9.18		30		
Benzo(k)fluoranthene	1.34	0.17	mg/Kg wet	1.66		80.9	40-140	8.10		30		
Bis(2-chloroethoxy)methane	1.21	0.34	mg/Kg wet	1.66		72.9	40-140	3.60		30		
Bis(2-chloroethyl)ether	1.19	0.34	mg/Kg wet	1.66		72.2	40-140	0.392		30		
Bis(2-chloroisopropyl)ether	1.40	0.34	mg/Kg wet	1.66		84.6	40-140	0.881		30		
Bis(2-Ethylhexyl)phthalate	1.20	0.34	mg/Kg wet	1.66		72.4	40-140	7.58		30		
4-Bromophenylphenylether	1.25	0.34	mg/Kg wet	1.66		75.5	40-140	7.56		30		
Butylbenzylphthalate	1.18	0.34	mg/Kg wet	1.66		71.5	40-140	5.64		30		
Carbazole	1.23	0.17	mg/Kg wet	1.66		74.6	40-140	10.2		30		
4-Chloroaniline	0.449	0.66	mg/Kg wet	1.66		27.1	10-140	**63.2**	*	30	J, R-05	†
4-Chloro-3-methylphenol	1.20	0.66	mg/Kg wet	1.66		72.4	30-130	3.43		30		
2-Chloronaphthalene	1.14	0.34	mg/Kg wet	1.66		68.8	40-140	7.85		30		
2-Chlorophenol	1.20	0.34	mg/Kg wet	1.66		72.3	30-130	0.334		30		
4-Chlorophenylphenylether	1.18	0.34	mg/Kg wet	1.66		71.5	40-140	9.11		30		
Chrysene	1.29	0.17	mg/Kg wet	1.66		78.0	40-140	7.47		30		
Dibenz(a,h)anthracene	1.21	0.17	mg/Kg wet	1.66		72.8	40-140	11.3		30		
Dibenzofuran	1.22	0.34	mg/Kg wet	1.66		73.6	40-140	7.81		30		
Di-n-butylphthalate	1.17	0.34	mg/Kg wet	1.66		70.6	40-140	10.4		30		
3,3-Dichlorobenzidine	0.735	0.17	mg/Kg wet	1.66		44.4	20-140	**50.4**	*	50	R-05	† ‡
2,4-Dichlorophenol	1.23	0.34	mg/Kg wet	1.66		74.5	30-130	4.07		30		
Diethylphthalate	1.13	0.34	mg/Kg wet	1.66		68.0	40-140	8.92		30		
2,4-Dimethylphenol	0.997	0.34	mg/Kg wet	1.66		60.2	30-130	3.37		30		
Dimethylphthalate	1.15	0.34	mg/Kg wet	1.66		69.6	40-140	7.67		30		
4,6-Dinitro-2-methylphenol	1.35	0.34	mg/Kg wet	1.66		81.5	30-130	8.55		30		
2,4-Dinitrophenol	0.854	0.66	mg/Kg wet	1.66		51.6	30-130	12.3		30		
2,4-Dinitrotoluene	1.19	0.34	mg/Kg wet	1.66		72.0	40-140	6.94		30		
2,6-Dinitrotoluene	1.20	0.34	mg/Kg wet	1.66		72.6	40-140	8.74		30		
Di-n-octylphthalate	1.02	0.34	mg/Kg wet	1.66		61.5	40-140	8.09		30	V-05	
Fluoranthene	1.19	0.17	mg/Kg wet	1.66		72.1	40-140	10.0		30		
Fluorene	1.17	0.17	mg/Kg wet	1.66		70.7	40-140	7.21		30		
Hexachlorobenzene	1.30	0.34	mg/Kg wet	1.66		78.5	40-140	9.75		30		
Hexachlorobutadiene	1.07	0.34	mg/Kg wet	1.66		64.4	40-140	3.84		30		
Hexachlorocyclopentadiene	0.963	0.34	mg/Kg wet	1.66		58.2	40-140	8.38		30		
Hexachloroethane	1.06	0.34	mg/Kg wet	1.66		63.9	40-140	0.233		30		
Indeno(1,2,3-cd)pyrene	1.27	0.17	mg/Kg wet	1.66		76.8	40-140	6.49		30		
Isophorone	1.23	0.34	mg/Kg wet	1.66		74.4	40-140	2.67		30		
2-Methylnaphthalene	1.13	0.17	mg/Kg wet	1.66		68.3	40-140	1.38		30		
2-Methylphenol	1.23	0.34	mg/Kg wet	1.66		74.1	30-130	0.332		30		
3/4-Methylphenol	1.26	0.34	mg/Kg wet	1.66		76.1	30-130	1.71		30		
Naphthalene	1.16	0.17	mg/Kg wet	1.66		70.3	40-140	0.701		30		
2-Nitroaniline	1.22	0.34	mg/Kg wet	1.66		73.8	40-140	8.77		30		

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD		RPD Limit	Notes	
Batch B359939 - SW-846 3546												
LCS Dup (B359939-BSD1)				Prepared: 12/06/23 Analyzed: 12/08/23								
3-Nitroaniline	0.839	0.34	mg/Kg wet	1.66		50.7	30-140	**30.2**	*	30	R-05	†
4-Nitroaniline	1.05	0.34	mg/Kg wet	1.66		63.7	40-140	11.3		30		
Nitrobenzene	1.16	0.34	mg/Kg wet	1.66		69.8	40-140	2.26		30		
2-Nitrophenol	1.20	0.34	mg/Kg wet	1.66		72.5	30-130	1.32		30		
4-Nitrophenol	1.31	0.66	mg/Kg wet	1.66		79.4	30-130	7.87		50		‡
N-Nitrosodiphenylamine/Diphenylamine	1.47	0.34	mg/Kg wet	1.66		88.9	40-140	7.45		30		
N-Nitrosodi-n-propylamine	1.27	0.34	mg/Kg wet	1.66		76.7	40-140	0.358		30		
Pentachlorophenol	1.03	0.34	mg/Kg wet	1.66		62.2	30-130	12.5		30		
Phenanthrene	1.24	0.17	mg/Kg wet	1.66		75.0	40-140	8.96		30		
Phenol	1.20	0.34	mg/Kg wet	1.66		72.5	30-130	2.03		30		
Pyrene	1.24	0.17	mg/Kg wet	1.66		75.0	40-140	5.04		30		
1,2,4,5-Tetrachlorobenzene	1.19	0.34	mg/Kg wet	1.66		72.0	40-140	7.09		30		
2,4,5-Trichlorophenol	1.24	0.34	mg/Kg wet	1.66		75.0	30-130	9.05		30		
2,4,6-Trichlorophenol	1.24	0.34	mg/Kg wet	1.66		74.8	30-130	8.93		30		
Surrogate: 2-Fluorophenol	*4.35*		mg/Kg wet	6.62		65.6	30-130					
Surrogate: Phenol-d6	*4.52*		mg/Kg wet	6.62		68.3	30-130					
Surrogate: Nitrobenzene-d5	*2.44*		mg/Kg wet	3.31		73.8	30-130					
Surrogate: 2-Fluorobiphenyl	*2.58*		mg/Kg wet	3.31		77.8	30-130					
Surrogate: 2,4,6-Tribromophenol	*4.52*		mg/Kg wet	6.62		68.3	30-130					
Surrogate: p-Terphenyl-d14	*2.60*		mg/Kg wet	3.31		78.7	30-130					
Matrix Spike (B359939-MS1)		**Source: 23L0541-02**		Prepared: 12/06/23 Analyzed: 12/08/23								
Atrazine	1.64	0.74	mg/Kg dry	1.84	ND	88.8	40-140				V-06	
Benzaldehyde	0.937	0.38	mg/Kg dry	1.84	ND	50.9	40-140				V-34	
Biphenyl	1.35	0.74	mg/Kg dry	1.84	ND	73.2	40-140					
Caprolactam	1.56	0.38	mg/Kg dry	1.84	ND	84.7	40-140				V-06	
Acenaphthene	1.33	0.19	mg/Kg dry	1.84	ND	72.4	40-140					
Acenaphthylene	1.39	0.19	mg/Kg dry	1.84	ND	75.5	40-140					
Acetophenone	1.25	0.38	mg/Kg dry	1.84	ND	67.7	40-140					
Anthracene	1.46	0.19	mg/Kg dry	1.84	0.0876	74.5	40-140					
Benzo(a)anthracene	1.66	0.19	mg/Kg dry	1.84	0.287	74.5	40-140				V-04, V-05	
Benzo(a)pyrene	1.62	0.19	mg/Kg dry	1.84	0.281	72.6	40-140					
Benzo(b)fluoranthene	1.65	0.19	mg/Kg dry	1.84	0.360	70.2	40-140					
Benzo(g,h,i)perylene	1.44	0.19	mg/Kg dry	1.84	0.163	69.2	40-140					
Benzo(k)fluoranthene	1.64	0.19	mg/Kg dry	1.84	0.151	80.7	40-140					
Bis(2-chloroethoxy)methane	1.30	0.38	mg/Kg dry	1.84	ND	70.7	40-140					
Bis(2-chloroethyl)ether	1.19	0.38	mg/Kg dry	1.84	ND	64.7	40-140					
Bis(2-chloroisopropyl)ether	1.40	0.38	mg/Kg dry	1.84	ND	75.9	40-140					
Bis(2-Ethylhexyl)phthalate	1.42	0.38	mg/Kg dry	1.84	ND	77.0	40-140					
4-Bromophenylphenylether	1.36	0.38	mg/Kg dry	1.84	ND	74.0	40-140					
Butylbenzylphthalate	1.37	0.38	mg/Kg dry	1.84	ND	74.5	40-140					
Carbazole	1.49	0.19	mg/Kg dry	1.84	ND	81.0	40-140					
4-Chloroaniline	0.691	0.73	mg/Kg dry	1.84	ND	**37.5**	40-140		*		J, MS-07A	
4-Chloro-3-methylphenol	1.29	0.73	mg/Kg dry	1.84	ND	70.0	30-130					
2-Chloronaphthalene	1.16	0.38	mg/Kg dry	1.84	ND	63.0	40-140					
2-Chlorophenol	1.19	0.38	mg/Kg dry	1.84	ND	64.8	30-130					
4-Chlorophenylphenylether	1.35	0.38	mg/Kg dry	1.84	ND	73.3	40-140					
Chrysene	1.66	0.19	mg/Kg dry	1.84	0.303	73.6	40-140					
Dibenz(a,h)anthracene	1.22	0.19	mg/Kg dry	1.84	ND	66.3	40-140					
Dibenzofuran	1.38	0.38	mg/Kg dry	1.84	ND	75.1	40-140					
Di-n-butylphthalate	1.37	0.38	mg/Kg dry	1.84	ND	74.1	40-140					
3,3-Dichlorobenzidine	1.07	0.19	mg/Kg dry	1.84	ND	57.8	40-140					

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B359939 - SW-846 3546											
Matrix Spike (B359939-MS1)		**Source: 23L0541-02**		Prepared: 12/06/23 Analyzed: 12/08/23							
2,4-Dichlorophenol	1.33	0.38	mg/Kg dry	1.84	ND	72.4		30-130			
Diethylphthalate	1.32	0.38	mg/Kg dry	1.84	ND	71.7		40-140			
2,4-Dimethylphenol	1.08	0.38	mg/Kg dry	1.84	ND	58.6		30-130			
Dimethylphthalate	1.35	0.38	mg/Kg dry	1.84	ND	73.3		40-140			
4,6-Dinitro-2-methylphenol	1.20	0.38	mg/Kg dry	1.84	ND	65.2		30-130			
2,4-Dinitrophenol	0.838	0.73	mg/Kg dry	1.84	ND	45.4		30-130			
2,4-Dinitrotoluene	1.39	0.38	mg/Kg dry	1.84	ND	75.7		40-140			
2,6-Dinitrotoluene	1.42	0.38	mg/Kg dry	1.84	ND	77.3		40-140			
Di-n-octylphthalate	1.23	0.38	mg/Kg dry	1.84	ND	67.0		40-140			V-05
Fluoranthene	1.89	0.19	mg/Kg dry	1.84	0.537	73.2		40-140			
Fluorene	1.36	0.19	mg/Kg dry	1.84	ND	73.7		40-140			
Hexachlorobenzene	1.44	0.38	mg/Kg dry	1.84	ND	77.9		40-140			
Hexachlorobutadiene	1.20	0.38	mg/Kg dry	1.84	ND	65.1		40-140			
Hexachlorocyclopentadiene	0.452	0.38	mg/Kg dry	1.84	ND	**24.5**	*	30-130			MS-07A
Hexachloroethane	1.04	0.38	mg/Kg dry	1.84	ND	56.6		40-140			
Indeno(1,2,3-cd)pyrene	1.42	0.19	mg/Kg dry	1.84	0.184	66.9		40-140			
Isophorone	1.35	0.38	mg/Kg dry	1.84	ND	73.0		40-140			
2-Methylnaphthalene	1.24	0.19	mg/Kg dry	1.84	ND	67.2		40-140			
2-Methylphenol	1.22	0.38	mg/Kg dry	1.84	ND	66.3		30-130			
3/4-Methylphenol	1.28	0.38	mg/Kg dry	1.84	ND	69.4		30-130			
Naphthalene	1.28	0.19	mg/Kg dry	1.84	ND	69.2		40-140			
2-Nitroaniline	1.39	0.38	mg/Kg dry	1.84	ND	75.3		40-140			
3-Nitroaniline	1.22	0.38	mg/Kg dry	1.84	ND	66.2		40-140			
4-Nitroaniline	1.30	0.38	mg/Kg dry	1.84	ND	70.5		40-140			
Nitrobenzene	1.26	0.38	mg/Kg dry	1.84	ND	68.4		40-140			
2-Nitrophenol	1.30	0.38	mg/Kg dry	1.84	ND	70.3		30-130			
4-Nitrophenol	1.59	0.73	mg/Kg dry	1.84	ND	86.1		30-130			
N-Nitrosodiphenylamine/Diphenylamine	1.60	0.38	mg/Kg dry	1.84	ND	86.9		40-140			
N-Nitrosodi-n-propylamine	1.24	0.38	mg/Kg dry	1.84	ND	67.5		40-140			
Pentachlorophenol	0.631	0.38	mg/Kg dry	1.84	ND	34.3		30-130			V-05
Phenanthrene	1.66	0.19	mg/Kg dry	1.84	0.353	70.8		40-140			
Phenol	1.22	0.38	mg/Kg dry	1.84	ND	65.9		30-130			
Pyrene	1.77	0.19	mg/Kg dry	1.84	0.521	67.8		40-140			
1,2,4,5-Tetrachlorobenzene	1.34	0.38	mg/Kg dry	1.84	ND	72.6		40-140			
2,4,5-Trichlorophenol	1.39	0.38	mg/Kg dry	1.84	ND	75.4		30-130			
2,4,6-Trichlorophenol	1.36	0.38	mg/Kg dry	1.84	ND	73.6		30-130			
Surrogate: 2-Fluorophenol	*4.39*		mg/Kg dry	7.37		59.5		30-130			
Surrogate: Phenol-d6	*4.54*		mg/Kg dry	7.37		61.6		30-130			
Surrogate: Nitrobenzene-d5	*2.61*		mg/Kg dry	3.69		70.9		30-130			
Surrogate: 2-Fluorobiphenyl	*2.90*		mg/Kg dry	3.69		78.6		30-130			
Surrogate: 2,4,6-Tribromophenol	*5.02*		mg/Kg dry	7.37		68.1		30-130			
Surrogate: p-Terphenyl-d14	*2.95*		mg/Kg dry	3.69		80.0		30-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B359939 - SW-846 3546											
Matrix Spike Dup (B359939-MSD1)	**Source: 23L0541-02**			Prepared: 12/06/23 Analyzed: 12/08/23							
Atrazine	1.54	0.73	mg/Kg dry	1.81	ND	85.0		40-140	6.01	30	V-06
Benzaldehyde	0.907	0.37	mg/Kg dry	1.81	ND	50.0		40-140	3.27	30	V-34
Biphenyl	1.29	0.73	mg/Kg dry	1.81	ND	70.9		40-140	4.80	30	
Caprolactam	1.52	0.37	mg/Kg dry	1.81	ND	83.7		40-140	2.73	30	V-06
Acenaphthene	1.27	0.18	mg/Kg dry	1.81	ND	69.8		40-140	5.27	30	
Acenaphthylene	1.32	0.18	mg/Kg dry	1.81	ND	72.8		40-140	5.26	30	
Acetophenone	1.21	0.37	mg/Kg dry	1.81	ND	66.6		40-140	3.34	30	
Anthracene	1.36	0.18	mg/Kg dry	1.81	0.0876	70.3		40-140	6.95	30	
Benzo(a)anthracene	1.51	0.18	mg/Kg dry	1.81	0.287	67.3		40-140	9.66	30	
Benzo(a)pyrene	1.46	0.18	mg/Kg dry	1.81	0.281	64.9		40-140	10.5	30	
Benzo(b)fluoranthene	1.45	0.18	mg/Kg dry	1.81	0.360	60.1		40-140	13.1	30	
Benzo(g,h,i)perylene	1.29	0.18	mg/Kg dry	1.81	0.163	62.4		40-140	10.6	30	
Benzo(k)fluoranthene	1.48	0.18	mg/Kg dry	1.81	0.151	73.5		40-140	9.96	30	
Bis(2-chloroethoxy)methane	1.25	0.37	mg/Kg dry	1.81	ND	68.9		40-140	4.33	30	
Bis(2-chloroethyl)ether	1.17	0.37	mg/Kg dry	1.81	ND	64.3		40-140	2.17	30	
Bis(2-chloroisopropyl)ether	1.36	0.37	mg/Kg dry	1.81	ND	75.3		40-140	2.49	30	
Bis(2-Ethylhexyl)phthalate	1.37	0.37	mg/Kg dry	1.81	ND	75.7		40-140	3.29	30	
4-Bromophenylphenylether	1.26	0.37	mg/Kg dry	1.81	ND	69.4		40-140	8.11	30	
Butylbenzylphthalate	1.34	0.37	mg/Kg dry	1.81	ND	74.0		40-140	2.40	30	
Carbazole	1.40	0.18	mg/Kg dry	1.81	ND	77.5		40-140	6.03	30	
4-Chloroaniline	0.715	0.72	mg/Kg dry	1.81	ND	**39.4**	*	40-140	3.35	30	J, MS-07A
4-Chloro-3-methylphenol	1.25	0.72	mg/Kg dry	1.81	ND	68.7		30-130	3.57	30	
2-Chloronaphthalene	1.15	0.37	mg/Kg dry	1.81	ND	63.3		40-140	1.14	30	
2-Chlorophenol	1.17	0.37	mg/Kg dry	1.81	ND	64.5		30-130	2.07	30	
4-Chlorophenylphenylether	1.27	0.37	mg/Kg dry	1.81	ND	70.0		40-140	6.30	30	
Chrysene	1.53	0.18	mg/Kg dry	1.81	0.303	67.6		40-140	8.13	30	
Dibenz(a,h)anthracene	1.13	0.18	mg/Kg dry	1.81	ND	62.1		40-140	8.18	30	
Dibenzofuran	1.33	0.37	mg/Kg dry	1.81	ND	73.1		40-140	4.26	30	
Di-n-butylphthalate	1.27	0.37	mg/Kg dry	1.81	ND	70.1		40-140	7.13	30	
3,3-Dichlorobenzidine	0.965	0.18	mg/Kg dry	1.81	ND	53.2		40-140	10.0	30	
2,4-Dichlorophenol	1.27	0.37	mg/Kg dry	1.81	ND	70.1		30-130	4.81	30	
Diethylphthalate	1.26	0.37	mg/Kg dry	1.81	ND	69.3		40-140	5.04	30	
2,4-Dimethylphenol	1.04	0.37	mg/Kg dry	1.81	ND	57.6		30-130	3.40	30	
Dimethylphthalate	1.28	0.37	mg/Kg dry	1.81	ND	70.4		40-140	5.71	30	
4,6-Dinitro-2-methylphenol	1.32	0.37	mg/Kg dry	1.81	ND	72.7		30-130	9.24	30	
2,4-Dinitrophenol	0.980	0.72	mg/Kg dry	1.81	ND	54.1		30-130	15.7	30	
2,4-Dinitrotoluene	1.31	0.37	mg/Kg dry	1.81	ND	72.4		40-140	6.07	30	
2,6-Dinitrotoluene	1.32	0.37	mg/Kg dry	1.81	ND	73.0		40-140	7.31	30	
Di-n-octylphthalate	1.14	0.37	mg/Kg dry	1.81	ND	62.9		40-140	7.99	30	V-05
Fluoranthene	1.70	0.18	mg/Kg dry	1.81	0.537	64.0		40-140	10.5	30	
Fluorene	1.27	0.18	mg/Kg dry	1.81	ND	70.3		40-140	6.42	30	
Hexachlorobenzene	1.33	0.37	mg/Kg dry	1.81	ND	73.6		40-140	7.34	30	
Hexachlorobutadiene	1.13	0.37	mg/Kg dry	1.81	ND	62.6		40-140	5.56	30	
Hexachlorocyclopentadiene	0.470	0.37	mg/Kg dry	1.81	ND	**25.9**	*	30-130	3.91	30	MS-07A
Hexachloroethane	1.01	0.37	mg/Kg dry	1.81	ND	55.7		40-140	3.25	30	
Indeno(1,2,3-cd)pyrene	1.27	0.18	mg/Kg dry	1.81	0.184	59.9		40-140	10.9	30	
Isophorone	1.31	0.37	mg/Kg dry	1.81	ND	72.1		40-140	2.88	30	
2-Methylnaphthalene	1.19	0.18	mg/Kg dry	1.81	ND	65.5		40-140	4.23	30	
2-Methylphenol	1.20	0.37	mg/Kg dry	1.81	ND	66.4		30-130	1.58	30	
3/4-Methylphenol	1.22	0.37	mg/Kg dry	1.81	ND	67.5		30-130	4.45	30	
Naphthalene	1.24	0.18	mg/Kg dry	1.81	ND	68.2		40-140	3.16	30	
2-Nitroaniline	1.35	0.37	mg/Kg dry	1.81	ND	74.6		40-140	2.55	30	

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B359939 - SW-846 3546										
Matrix Spike Dup (B359939-MSD1)	**Source: 23L0541-02**			Prepared: 12/06/23 Analyzed: 12/08/23						
3-Nitroaniline	1.16	0.37	mg/Kg dry	1.81	ND	63.8	40-140	5.33	30	
4-Nitroaniline	1.24	0.37	mg/Kg dry	1.81	ND	68.6	40-140	4.43	30	
Nitrobenzene	1.20	0.37	mg/Kg dry	1.81	ND	66.3	40-140	4.85	30	
2-Nitrophenol	1.25	0.37	mg/Kg dry	1.81	ND	69.1	30-130	3.39	30	
4-Nitrophenol	1.58	0.72	mg/Kg dry	1.81	ND	87.2	30-130	0.350	30	
N-Nitrosodiphenylamine/Diphenylamine	1.48	0.37	mg/Kg dry	1.81	ND	81.8	40-140	7.69	30	
N-Nitrosodi-n-propylamine	1.22	0.37	mg/Kg dry	1.81	ND	67.5	40-140	1.61	30	
Pentachlorophenol	0.615	0.37	mg/Kg dry	1.81	ND	33.9	30-130	2.70	30	
Phenanthrene	1.50	0.18	mg/Kg dry	1.81	0.353	63.4	40-140	9.83	30	
Phenol	1.19	0.37	mg/Kg dry	1.81	ND	65.7	30-130	1.95	30	
Pyrene	1.66	0.18	mg/Kg dry	1.81	0.521	62.9	40-140	6.37	30	
1,2,4,5-Tetrachlorobenzene	1.27	0.37	mg/Kg dry	1.81	ND	70.3	40-140	4.92	30	
2,4,5-Trichlorophenol	1.30	0.37	mg/Kg dry	1.81	ND	72.0	30-130	6.28	30	
2,4,6-Trichlorophenol	1.28	0.37	mg/Kg dry	1.81	ND	70.8	30-130	5.46	30	
Surrogate: 2-Fluorophenol	*4.24*		mg/Kg dry	7.25		58.5	30-130			
Surrogate: Phenol-d6	*4.42*		mg/Kg dry	7.25		61.0	30-130			
Surrogate: Nitrobenzene-d5	*2.52*		mg/Kg dry	3.63		69.5	30-130			
Surrogate: 2-Fluorobiphenyl	*2.75*		mg/Kg dry	3.63		75.8	30-130			
Surrogate: 2,4,6-Tribromophenol	*4.73*		mg/Kg dry	7.25		65.2	30-130			
Surrogate: p-Terphenyl-d14	*2.85*		mg/Kg dry	3.63		78.5	30-130			
Batch B360416 - SW-846 3546										
Blank (B360416-BLK1)				Prepared: 12/11/23 Analyzed: 12/13/23						
Atrazine	ND	0.65	mg/Kg wet							V-06
Benzaldehyde	ND	0.33	mg/Kg wet							V-34
Biphenyl	ND	0.65	mg/Kg wet							
Caprolactam	ND	0.33	mg/Kg wet							V-06
Acenaphthene	ND	0.17	mg/Kg wet							
Acenaphthylene	ND	0.17	mg/Kg wet							
Acetophenone	ND	0.33	mg/Kg wet							
Anthracene	ND	0.17	mg/Kg wet							
Benzo(a)anthracene	ND	0.17	mg/Kg wet							
Benzo(a)pyrene	ND	0.17	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.17	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.17	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.17	mg/Kg wet							
Bis(2-chloroethoxy)methane	ND	0.33	mg/Kg wet							
Bis(2-chloroethyl)ether	ND	0.33	mg/Kg wet							
Bis(2-chloroisopropyl)ether	ND	0.33	mg/Kg wet							
Bis(2-Ethylhexyl)phthalate	ND	0.33	mg/Kg wet							
4-Bromophenylphenylether	ND	0.33	mg/Kg wet							
Butylbenzylphthalate	ND	0.33	mg/Kg wet							
Carbazole	ND	0.17	mg/Kg wet							
4-Chloroaniline	ND	0.64	mg/Kg wet							
4-Chloro-3-methylphenol	ND	0.64	mg/Kg wet							
2-Chloronaphthalene	ND	0.33	mg/Kg wet							
2-Chlorophenol	ND	0.33	mg/Kg wet							
4-Chlorophenylphenylether	ND	0.33	mg/Kg wet							
Chrysene	ND	0.17	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.17	mg/Kg wet							
Dibenzofuran	ND	0.33	mg/Kg wet							
Di-n-butylphthalate	ND	0.33	mg/Kg wet							

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B360416 - SW-846 3546										
Blank (B360416-BLK1)				Prepared: 12/11/23 Analyzed: 12/13/23						
3,3-Dichlorobenzidine	ND	0.17	mg/Kg wet							
2,4-Dichlorophenol	ND	0.33	mg/Kg wet							
Diethylphthalate	ND	0.33	mg/Kg wet							
2,4-Dimethylphenol	ND	0.33	mg/Kg wet							
Dimethylphthalate	ND	0.33	mg/Kg wet							
4,6-Dinitro-2-methylphenol	ND	0.33	mg/Kg wet							
2,4-Dinitrophenol	ND	0.64	mg/Kg wet							
2,4-Dinitrotoluene	ND	0.33	mg/Kg wet							
2,6-Dinitrotoluene	ND	0.33	mg/Kg wet							
Di-n-octylphthalate	ND	0.33	mg/Kg wet							
Fluoranthene	ND	0.17	mg/Kg wet							
Fluorene	ND	0.17	mg/Kg wet							
Hexachlorobenzene	ND	0.33	mg/Kg wet							
Hexachlorobutadiene	ND	0.33	mg/Kg wet							
Hexachlorocyclopentadiene	ND	0.33	mg/Kg wet							
Hexachloroethane	ND	0.33	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.17	mg/Kg wet							
Isophorone	ND	0.33	mg/Kg wet							
2-Methylnaphthalene	ND	0.17	mg/Kg wet							
2-Methylphenol	ND	0.33	mg/Kg wet							
3/4-Methylphenol	ND	0.33	mg/Kg wet							
Naphthalene	ND	0.17	mg/Kg wet							
2-Nitroaniline	ND	0.33	mg/Kg wet							
3-Nitroaniline	ND	0.33	mg/Kg wet							
4-Nitroaniline	ND	0.33	mg/Kg wet							
Nitrobenzene	ND	0.33	mg/Kg wet							
2-Nitrophenol	ND	0.33	mg/Kg wet							
4-Nitrophenol	ND	0.64	mg/Kg wet							
N-Nitrosodiphenylamine/Diphenylamine	ND	0.33	mg/Kg wet							
N-Nitrosodi-n-propylamine	ND	0.33	mg/Kg wet							
Pentachlorophenol	ND	0.33	mg/Kg wet							
Phenanthrene	ND	0.17	mg/Kg wet							
Phenol	ND	0.33	mg/Kg wet							
Pyrene	ND	0.17	mg/Kg wet							
1,2,4,5-Tetrachlorobenzene	ND	0.33	mg/Kg wet							
2,4,5-Trichlorophenol	ND	0.33	mg/Kg wet							
2,4,6-Trichlorophenol	ND	0.33	mg/Kg wet							
Surrogate: 2-Fluorophenol	*3.61*		mg/Kg wet	6.51		55.4	30-130			
Surrogate: Phenol-d6	*3.85*		mg/Kg wet	6.51		59.0	30-130			
Surrogate: Nitrobenzene-d5	*2.10*		mg/Kg wet	3.26		64.4	30-130			
Surrogate: 2-Fluorobiphenyl	*2.17*		mg/Kg wet	3.26		66.8	30-130			
Surrogate: 2,4,6-Tribromophenol	*3.99*		mg/Kg wet	6.51		61.2	30-130			
Surrogate: p-Terphenyl-d14	*2.37*		mg/Kg wet	3.26		72.7	30-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B360416 - SW-846 3546											
LCS (B360416-BS1)				Prepared: 12/11/23 Analyzed: 12/13/23							
Atrazine	1.27	0.66	mg/Kg wet	1.64		77.2	40-140			V-06	
Benzaldehyde	0.756	0.34	mg/Kg wet	1.64		45.9	40-140			V-34	
Biphenyl	1.10	0.66	mg/Kg wet	1.64		66.6	40-140				
Caprolactam	1.34	0.34	mg/Kg wet	1.64		81.5	40-140			V-06	
Acenaphthene	1.07	0.17	mg/Kg wet	1.64		65.1	40-140				
Acenaphthylene	1.13	0.17	mg/Kg wet	1.64		68.9	40-140				
Acetophenone	1.16	0.34	mg/Kg wet	1.64		70.6	40-140				
Anthracene	1.18	0.17	mg/Kg wet	1.64		71.7	40-140				
Benzo(a)anthracene	1.19	0.17	mg/Kg wet	1.64		72.3	40-140				
Benzo(a)pyrene	1.24	0.17	mg/Kg wet	1.64		75.3	40-140				
Benzo(b)fluoranthene	1.22	0.17	mg/Kg wet	1.64		74.0	40-140				
Benzo(g,h,i)perylene	1.23	0.17	mg/Kg wet	1.64		74.8	40-140				
Benzo(k)fluoranthene	1.30	0.17	mg/Kg wet	1.64		79.3	40-140				
Bis(2-chloroethoxy)methane	1.16	0.34	mg/Kg wet	1.64		70.3	40-140				
Bis(2-chloroethyl)ether	1.11	0.34	mg/Kg wet	1.64		67.7	40-140				
Bis(2-chloroisopropyl)ether	1.34	0.34	mg/Kg wet	1.64		81.3	40-140				
Bis(2-Ethylhexyl)phthalate	1.17	0.34	mg/Kg wet	1.64		70.9	40-140				
4-Bromophenylphenylether	1.20	0.34	mg/Kg wet	1.64		72.7	40-140				
Butylbenzylphthalate	1.09	0.34	mg/Kg wet	1.64		66.0	40-140				
Carbazole	1.15	0.17	mg/Kg wet	1.64		70.2	40-140				
4-Chloroaniline	0.748	0.65	mg/Kg wet	1.64		45.5	10-140				†
4-Chloro-3-methylphenol	1.15	0.65	mg/Kg wet	1.64		69.8	30-130				
2-Chloronaphthalene	0.972	0.34	mg/Kg wet	1.64		59.1	40-140				
2-Chlorophenol	1.09	0.34	mg/Kg wet	1.64		66.5	30-130				
4-Chlorophenylphenylether	1.13	0.34	mg/Kg wet	1.64		68.8	40-140				
Chrysene	1.19	0.17	mg/Kg wet	1.64		72.4	40-140				
Dibenz(a,h)anthracene	1.21	0.17	mg/Kg wet	1.64		73.6	40-140				
Dibenzofuran	1.13	0.34	mg/Kg wet	1.64		69.0	40-140				
Di-n-butylphthalate	1.13	0.34	mg/Kg wet	1.64		68.7	40-140				
3,3-Dichlorobenzidine	0.904	0.17	mg/Kg wet	1.64		55.0	20-140				†
2,4-Dichlorophenol	1.19	0.34	mg/Kg wet	1.64		72.1	30-130				
Diethylphthalate	1.08	0.34	mg/Kg wet	1.64		65.6	40-140				
2,4-Dimethylphenol	0.960	0.34	mg/Kg wet	1.64		58.4	30-130				
Dimethylphthalate	1.10	0.34	mg/Kg wet	1.64		66.7	40-140				
4,6-Dinitro-2-methylphenol	1.33	0.34	mg/Kg wet	1.64		80.6	30-130				
2,4-Dinitrophenol	0.843	0.65	mg/Kg wet	1.64		51.3	30-130				
2,4-Dinitrotoluene	1.11	0.34	mg/Kg wet	1.64		67.2	40-140				
2,6-Dinitrotoluene	1.13	0.34	mg/Kg wet	1.64		68.5	40-140				
Di-n-octylphthalate	1.05	0.34	mg/Kg wet	1.64		63.6	40-140				
Fluoranthene	1.14	0.17	mg/Kg wet	1.64		69.0	40-140				
Fluorene	1.08	0.17	mg/Kg wet	1.64		65.9	40-140				
Hexachlorobenzene	1.25	0.34	mg/Kg wet	1.64		75.9	40-140				
Hexachlorobutadiene	1.04	0.34	mg/Kg wet	1.64		63.1	40-140				
Hexachlorocyclopentadiene	0.852	0.34	mg/Kg wet	1.64		51.8	40-140				
Hexachloroethane	0.985	0.34	mg/Kg wet	1.64		59.9	40-140				
Indeno(1,2,3-cd)pyrene	1.23	0.17	mg/Kg wet	1.64		75.0	40-140				
Isophorone	1.18	0.34	mg/Kg wet	1.64		71.9	40-140				
2-Methylnaphthalene	1.06	0.17	mg/Kg wet	1.64		64.4	40-140				
2-Methylphenol	1.14	0.34	mg/Kg wet	1.64		69.2	30-130				
3/4-Methylphenol	1.19	0.34	mg/Kg wet	1.64		72.2	30-130				
Naphthalene	1.08	0.17	mg/Kg wet	1.64		65.6	40-140				
2-Nitroaniline	1.13	0.34	mg/Kg wet	1.64		68.7	40-140				

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B360416 - SW-846 3546											
LCS (B360416-BS1)				Prepared: 12/11/23 Analyzed: 12/13/23							
3-Nitroaniline	0.932	0.34	mg/Kg wet	1.64		56.7	30-140				†
4-Nitroaniline	1.03	0.34	mg/Kg wet	1.64		62.8	40-140				
Nitrobenzene	1.07	0.34	mg/Kg wet	1.64		65.3	40-140				
2-Nitrophenol	1.10	0.34	mg/Kg wet	1.64		67.0	30-130				
4-Nitrophenol	1.27	0.65	mg/Kg wet	1.64		77.4	30-130				
N-Nitrosodiphenylamine/Diphenylamine	1.37	0.34	mg/Kg wet	1.64		83.6	40-140				
N-Nitrosodi-n-propylamine	1.18	0.34	mg/Kg wet	1.64		71.8	40-140				
Pentachlorophenol	1.01	0.34	mg/Kg wet	1.64		61.6	30-130				
Phenanthrene	1.17	0.17	mg/Kg wet	1.64		70.8	40-140				
Phenol	1.12	0.34	mg/Kg wet	1.64		67.9	30-130				
Pyrene	1.09	0.17	mg/Kg wet	1.64		66.4	40-140				
1,2,4,5-Tetrachlorobenzene	1.09	0.34	mg/Kg wet	1.64		66.2	40-140				
2,4,5-Trichlorophenol	1.19	0.34	mg/Kg wet	1.64		72.1	30-130				
2,4,6-Trichlorophenol	1.16	0.34	mg/Kg wet	1.64		70.5	30-130				
Surrogate: 2-Fluorophenol	*3.90*		mg/Kg wet	6.58		59.3	30-130				
Surrogate: Phenol-d6	*4.17*		mg/Kg wet	6.58		63.4	30-130				
Surrogate: Nitrobenzene-d5	*2.21*		mg/Kg wet	3.29		67.3	30-130				
Surrogate: 2-Fluorobiphenyl	*2.39*		mg/Kg wet	3.29		72.5	30-130				
Surrogate: 2,4,6-Tribromophenol	*4.26*		mg/Kg wet	6.58		64.7	30-130				
Surrogate: p-Terphenyl-d14	*2.29*		mg/Kg wet	3.29		69.7	30-130				
LCS Dup (B360416-BSD1)				Prepared: 12/11/23 Analyzed: 12/13/23							
Atrazine	1.25	0.66	mg/Kg wet	1.65		75.9	40-140	1.37	30	V-06	
Benzaldehyde	0.749	0.34	mg/Kg wet	1.65		45.4	40-140	0.897	20	V-34	
Biphenyl	1.10	0.66	mg/Kg wet	1.65		66.8	40-140	0.599	20		
Caprolactam	1.33	0.34	mg/Kg wet	1.65		80.5	40-140	0.954	20	V-06	
Acenaphthene	1.08	0.17	mg/Kg wet	1.65		65.3	40-140	0.667	30		
Acenaphthylene	1.13	0.17	mg/Kg wet	1.65		68.6	40-140	0.0486	30		
Acetophenone	1.15	0.34	mg/Kg wet	1.65		69.6	40-140	1.10	30		
Anthracene	1.14	0.17	mg/Kg wet	1.65		69.0	40-140	3.42	30		
Benzo(a)anthracene	1.18	0.17	mg/Kg wet	1.65		71.4	40-140	0.978	30		
Benzo(a)pyrene	1.22	0.17	mg/Kg wet	1.65		73.9	40-140	1.47	30		
Benzo(b)fluoranthene	1.20	0.17	mg/Kg wet	1.65		72.5	40-140	1.66	30		
Benzo(g,h,i)perylene	1.21	0.17	mg/Kg wet	1.65		73.6	40-140	1.32	30		
Benzo(k)fluoranthene	1.28	0.17	mg/Kg wet	1.65		77.8	40-140	1.50	30		
Bis(2-chloroethoxy)methane	1.13	0.34	mg/Kg wet	1.65		68.5	40-140	2.18	30		
Bis(2-chloroethyl)ether	1.08	0.34	mg/Kg wet	1.65		65.6	40-140	2.85	30		
Bis(2-chloroisopropyl)ether	1.34	0.34	mg/Kg wet	1.65		81.3	40-140	0.305	30		
Bis(2-Ethylhexyl)phthalate	1.14	0.34	mg/Kg wet	1.65		68.9	40-140	2.56	30		
4-Bromophenylphenylether	1.16	0.34	mg/Kg wet	1.65		70.4	40-140	2.94	30		
Butylbenzylphthalate	1.05	0.34	mg/Kg wet	1.65		63.9	40-140	2.87	30		
Carbazole	1.14	0.17	mg/Kg wet	1.65		69.1	40-140	1.25	30		
4-Chloroaniline	0.628	0.65	mg/Kg wet	1.65		38.1	10-140	17.4	30	J	†
4-Chloro-3-methylphenol	1.11	0.65	mg/Kg wet	1.65		67.4	30-130	3.11	30		
2-Chloronaphthalene	0.989	0.34	mg/Kg wet	1.65		59.9	40-140	1.77	30		
2-Chlorophenol	1.09	0.34	mg/Kg wet	1.65		66.3	30-130	0.0283	30		
4-Chlorophenylphenylether	1.11	0.34	mg/Kg wet	1.65		67.5	40-140	1.55	30		
Chrysene	1.18	0.17	mg/Kg wet	1.65		71.4	40-140	1.12	30		
Dibenz(a,h)anthracene	1.17	0.17	mg/Kg wet	1.65		70.8	40-140	3.49	30		
Dibenzofuran	1.13	0.34	mg/Kg wet	1.65		68.2	40-140	0.778	30		
Di-n-butylphthalate	1.11	0.34	mg/Kg wet	1.65		67.5	40-140	1.40	30		
3,3-Dichlorobenzidine	0.794	0.17	mg/Kg wet	1.65		48.1	20-140	13.0	50		† ‡

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B360416 - SW-846 3546										
LCS Dup (B360416-BSD1)				Prepared: 12/11/23 Analyzed: 12/13/23						
2,4-Dichlorophenol	1.17	0.34	mg/Kg wet	1.65		71.1	30-130	1.01	30	
Diethylphthalate	1.06	0.34	mg/Kg wet	1.65		64.0	40-140	2.05	30	
2,4-Dimethylphenol	0.945	0.34	mg/Kg wet	1.65		57.3	30-130	1.61	30	
Dimethylphthalate	1.07	0.34	mg/Kg wet	1.65		64.9	40-140	2.50	30	
4,6-Dinitro-2-methylphenol	1.25	0.34	mg/Kg wet	1.65		75.6	30-130	6.05	30	
2,4-Dinitrophenol	0.815	0.65	mg/Kg wet	1.65		49.4	30-130	3.45	30	
2,4-Dinitrotoluene	1.07	0.34	mg/Kg wet	1.65		65.1	40-140	2.78	30	
2,6-Dinitrotoluene	1.11	0.34	mg/Kg wet	1.65		67.2	40-140	1.56	30	
Di-n-octylphthalate	1.01	0.34	mg/Kg wet	1.65		61.1	40-140	3.68	30	
Fluoranthene	1.13	0.17	mg/Kg wet	1.65		68.5	40-140	0.456	30	
Fluorene	1.08	0.17	mg/Kg wet	1.65		65.7	40-140	0.0254	30	
Hexachlorobenzene	1.20	0.34	mg/Kg wet	1.65		72.9	40-140	3.70	30	
Hexachlorobutadiene	1.05	0.34	mg/Kg wet	1.65		63.8	40-140	1.46	30	
Hexachlorocyclopentadiene	0.863	0.34	mg/Kg wet	1.65		52.3	40-140	1.25	30	
Hexachloroethane	0.973	0.34	mg/Kg wet	1.65		59.0	40-140	1.22	30	
Indeno(1,2,3-cd)pyrene	1.21	0.17	mg/Kg wet	1.65		73.3	40-140	1.99	30	
Isophorone	1.17	0.34	mg/Kg wet	1.65		71.1	40-140	0.873	30	
2-Methylnaphthalene	1.05	0.17	mg/Kg wet	1.65		63.5	40-140	1.11	30	
2-Methylphenol	1.15	0.34	mg/Kg wet	1.65		70.0	30-130	1.45	30	
3/4-Methylphenol	1.19	0.34	mg/Kg wet	1.65		71.9	30-130	0.170	30	
Naphthalene	1.07	0.17	mg/Kg wet	1.65		64.7	40-140	0.929	30	
2-Nitroaniline	1.12	0.34	mg/Kg wet	1.65		67.8	40-140	0.960	30	
3-Nitroaniline	0.894	0.34	mg/Kg wet	1.65		54.2	30-140	4.15	30	†
4-Nitroaniline	1.01	0.34	mg/Kg wet	1.65		61.3	40-140	2.06	30	
Nitrobenzene	1.08	0.34	mg/Kg wet	1.65		65.7	40-140	0.940	30	
2-Nitrophenol	1.11	0.34	mg/Kg wet	1.65		67.3	30-130	0.806	30	
4-Nitrophenol	1.24	0.65	mg/Kg wet	1.65		75.3	30-130	2.34	50	‡
N-Nitrosodiphenylamine/Diphenylamine	1.33	0.34	mg/Kg wet	1.65		80.3	40-140	3.60	30	
N-Nitrosodi-n-propylamine	1.19	0.34	mg/Kg wet	1.65		71.8	40-140	0.385	30	
Pentachlorophenol	1.00	0.34	mg/Kg wet	1.65		60.8	30-130	0.880	30	
Phenanthrene	1.13	0.17	mg/Kg wet	1.65		68.4	40-140	3.15	30	
Phenol	1.10	0.34	mg/Kg wet	1.65		66.5	30-130	1.69	30	
Pyrene	1.06	0.17	mg/Kg wet	1.65		64.3	40-140	2.94	30	
1,2,4,5-Tetrachlorobenzene	1.09	0.34	mg/Kg wet	1.65		66.2	40-140	0.299	30	
2,4,5-Trichlorophenol	1.14	0.34	mg/Kg wet	1.65		69.3	30-130	3.58	30	
2,4,6-Trichlorophenol	1.15	0.34	mg/Kg wet	1.65		69.9	30-130	0.554	30	
Surrogate: 2-Fluorophenol	*3.85*		mg/Kg wet	6.60		58.3	30-130			
Surrogate: Phenol-d6	*4.07*		mg/Kg wet	6.60		61.6	30-130			
Surrogate: Nitrobenzene-d5	*2.19*		mg/Kg wet	3.30		66.4	30-130			
Surrogate: 2-Fluorobiphenyl	*2.34*		mg/Kg wet	3.30		71.0	30-130			
Surrogate: 2,4,6-Tribromophenol	*4.19*		mg/Kg wet	6.60		63.5	30-130			
Surrogate: p-Terphenyl-d14	*2.23*		mg/Kg wet	3.30		67.6	30-130			

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QUALITY CONTROL

1,4-Dioxane by isotope dilution GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B360104 - SW-846 3546										
Blank (B360104-BLK1)				Prepared: 12/07/23 Analyzed: 12/13/23						
1,4-Dioxane	ND	0.049	mg/Kg wet							
Surrogate: 1,4-Dioxane-d8	*0.198*		mg/Kg wet	0.490		40.4	15-110			
LCS (B360104-BS1)				Prepared: 12/07/23 Analyzed: 12/13/23						
1,4-Dioxane	0.582	0.050	mg/Kg wet	0.500		116	40-140			
Surrogate: 1,4-Dioxane-d8	*0.223*		mg/Kg wet	0.500		44.7	15-110			
LCS Dup (B360104-BSD1)				Prepared: 12/07/23 Analyzed: 12/13/23						
1,4-Dioxane	0.552	0.050	mg/Kg wet	0.498		111	40-140	5.42	30	
Surrogate: 1,4-Dioxane-d8	*0.205*		mg/Kg wet	0.498		41.2	15-110			
Matrix Spike (B360104-MS1)		**Source: 23L0541-02**		Prepared: 12/07/23 Analyzed: 12/13/23						
1,4-Dioxane	0.605	0.055	mg/Kg dry	0.554	ND	109	30-140			
Surrogate: 1,4-Dioxane-d8	*0.224*		mg/Kg dry	0.554		40.5	15-110			
Matrix Spike Dup (B360104-MSD1)		**Source: 23L0541-02**		Prepared: 12/07/23 Analyzed: 12/13/23						
1,4-Dioxane	0.612	0.054	mg/Kg dry	0.540	ND	113	30-140	1.09	30	
Surrogate: 1,4-Dioxane-d8	*0.211*		mg/Kg dry	0.540		39.0	15-110			

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QUALITY CONTROL

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B359939 - SW-846 3546										
Blank (B359939-BLK1)				Prepared: 12/06/23 Analyzed: 12/08/23						
No TICs Found	0.0		mg/Kg wet							

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B359941 - SW-846 3546										
Blank (B359941-BLK1)				Prepared: 12/06/23 Analyzed: 12/08/23						
Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	*0.219*		mg/Kg wet	0.200		109	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.217*		mg/Kg wet	0.200		109	30-150			
Surrogate: Tetrachloro-m-xylene	*0.210*		mg/Kg wet	0.200		105	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.200*		mg/Kg wet	0.200		100	30-150			
LCS (B359941-BS1)				Prepared: 12/06/23 Analyzed: 12/08/23						
Aroclor-1016	0.17	0.020	mg/Kg wet	0.200		86.4	40-140			
Aroclor-1016 [2C]	0.18	0.020	mg/Kg wet	0.200		89.4	40-140			
Aroclor-1260	0.17	0.020	mg/Kg wet	0.200		85.6	40-140			
Aroclor-1260 [2C]	0.17	0.020	mg/Kg wet	0.200		84.7	40-140			
Surrogate: Decachlorobiphenyl	*0.216*		mg/Kg wet	0.200		108	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.215*		mg/Kg wet	0.200		108	30-150			
Surrogate: Tetrachloro-m-xylene	*0.207*		mg/Kg wet	0.200		103	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.199*		mg/Kg wet	0.200		99.3	30-150			
LCS Dup (B359941-BSD1)				Prepared: 12/06/23 Analyzed: 12/08/23						
Aroclor-1016	0.18	0.020	mg/Kg wet	0.200		90.3	40-140	4.33	30	
Aroclor-1016 [2C]	0.19	0.020	mg/Kg wet	0.200		93.1	40-140	4.02	30	
Aroclor-1260	0.18	0.020	mg/Kg wet	0.200		89.2	40-140	4.13	30	
Aroclor-1260 [2C]	0.18	0.020	mg/Kg wet	0.200		88.9	40-140	4.75	30	
Surrogate: Decachlorobiphenyl	*0.224*		mg/Kg wet	0.200		112	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.225*		mg/Kg wet	0.200		113	30-150			
Surrogate: Tetrachloro-m-xylene	*0.216*		mg/Kg wet	0.200		108	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.208*		mg/Kg wet	0.200		104	30-150			

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B359941 - SW-846 3546										
Matrix Spike (B359941-MS3)		**Source: 23L0541-02**		Prepared: 12/06/23 Analyzed: 12/08/23						
Aroclor-1016	0.21	0.089	mg/Kg dry	0.223	ND	94.1	40-140			
Aroclor-1016 [2C]	0.22	0.089	mg/Kg dry	0.223	ND	96.9	40-140			
Aroclor-1260	0.20	0.089	mg/Kg dry	0.223	ND	89.6	40-140			
Aroclor-1260 [2C]	0.20	0.089	mg/Kg dry	0.223	ND	88.4	40-140			
Surrogate: Decachlorobiphenyl	*0.218*		mg/Kg dry	0.223		97.7	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.222*		mg/Kg dry	0.223		99.8	30-150			
Surrogate: Tetrachloro-m-xylene	*0.216*		mg/Kg dry	0.223		96.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.209*		mg/Kg dry	0.223		93.7	30-150			
Matrix Spike Dup (B359941-MSD3)		**Source: 23L0541-02**		Prepared: 12/06/23 Analyzed: 12/08/23						
Aroclor-1016	0.22	0.089	mg/Kg dry	0.223	ND	97.6	40-140	3.70	30	
Aroclor-1016 [2C]	0.22	0.089	mg/Kg dry	0.223	ND	99.2	40-140	2.29	30	
Aroclor-1260	0.21	0.089	mg/Kg dry	0.223	ND	92.7	40-140	3.36	30	
Aroclor-1260 [2C]	0.20	0.089	mg/Kg dry	0.223	ND	89.2	40-140	0.905	30	
Surrogate: Decachlorobiphenyl	*0.224*		mg/Kg dry	0.223		100	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.228*		mg/Kg dry	0.223		102	30-150			
Surrogate: Tetrachloro-m-xylene	*0.224*		mg/Kg dry	0.223		101	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.217*		mg/Kg dry	0.223		97.4	30-150			

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B359897 - SW-846 3050B										
Blank (B359897-BLK1)				Prepared: 12/06/23 Analyzed: 12/08/23						
Antimony	ND	1.7	mg/Kg wet							
Beryllium	ND	0.24	mg/Kg wet							
Chromium	ND	4.0	mg/Kg wet							
Cobalt	ND	1.6	mg/Kg wet							
Copper	ND	4.0	mg/Kg wet							
Lead	ND	1.6	mg/Kg wet							
Manganese	ND	4.2	mg/Kg wet							
Nickel	ND	4.0	mg/Kg wet							
Selenium	ND	1.3	mg/Kg wet							
Silver	ND	0.081	mg/Kg wet							
Thallium	ND	0.081	mg/Kg wet							
Vanadium	ND	8.1	mg/Kg wet							
Zinc	ND	8.1	mg/Kg wet							
Barium	ND	8.1	mg/Kg wet							
Cadmium	ND	0.32	mg/Kg wet							
Blank (B359897-BLK3)				Prepared: 12/06/23 Analyzed: 12/16/23						
Arsenic	ND	0.16	mg/Kg wet							
LCS (B359897-BS1)				Prepared: 12/06/23 Analyzed: 12/08/23						
Antimony	95.3	22	mg/Kg wet	144		66.2	6.3-193.8			
Beryllium	155	3.0	mg/Kg wet	152		102	82.9-117.8			
Chromium	249	50	mg/Kg wet	232		107	81.5-118.5			
Cobalt	183	20	mg/Kg wet	166		110	83.1-116.9			
Copper	132	50	mg/Kg wet	124		107	83.1-116.9			
Lead	159	20	mg/Kg wet	145		109	82.1-117.9			
Manganese	433	52	mg/Kg wet	412		105	81.3-118.7			
Nickel	122	50	mg/Kg wet	108		113	85.2-117.6			
Selenium	94.0	16	mg/Kg wet	96.3		97.6	78.8-121.5			
Silver	40.1	1.0	mg/Kg wet	47.3		84.8	79.5-120.5			
Thallium	186	1.0	mg/Kg wet	172		108	80.8-118.6			
Vanadium	123	100	mg/Kg wet	118		105	77.9-122			
Zinc	371	100	mg/Kg wet	369		100	80.2-120.1			
Barium	377	100	mg/Kg wet	354		106	81.6-118.1			
Cadmium	109	4.0	mg/Kg wet	105		104	82.8-118.1			
LCS (B359897-BS3)				Prepared: 12/06/23 Analyzed: 12/16/23						
Arsenic	188	2.0	mg/Kg wet	180		104	83.1-116.9			
LCS Dup (B359897-BSD1)				Prepared: 12/06/23 Analyzed: 12/08/23						
Antimony	90.8	22	mg/Kg wet	144		63.1	6.3-193.8	4.79	30	
Beryllium	149	3.0	mg/Kg wet	152		98.3	82.9-117.8	3.76	30	
Chromium	243	50	mg/Kg wet	232		105	81.5-118.5	2.44	30	
Cobalt	180	20	mg/Kg wet	166		108	83.1-116.9	2.10	20	
Copper	130	50	mg/Kg wet	124		105	83.1-116.9	1.80	30	
Lead	156	20	mg/Kg wet	145		108	82.1-117.9	1.64	30	
Manganese	429	52	mg/Kg wet	412		104	81.3-118.7	1.03	30	
Nickel	119	50	mg/Kg wet	108		110	85.2-117.6	3.04	30	
Selenium	92.7	16	mg/Kg wet	96.3		96.3	78.8-121.5	1.39	30	
Silver	42.0	1.0	mg/Kg wet	47.3		88.8	79.5-120.5	4.53	30	
Thallium	182	1.0	mg/Kg wet	172		106	80.8-118.6	2.36	30	
Vanadium	119	100	mg/Kg wet	118		101	77.9-122	3.23	30	
Zinc	365	100	mg/Kg wet	369		98.9	80.2-120.1	1.48	30	

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B359897 - SW-846 3050B											
LCS Dup (B359897-BSD1)				Prepared: 12/06/23 Analyzed: 12/08/23							
Barium	409	100	mg/Kg wet	354		116		81.6-118.1	8.26	20	
Cadmium	107	4.0	mg/Kg wet	105		102		82.8-118.1	1.99	20	
LCS Dup (B359897-BSD3)				Prepared: 12/06/23 Analyzed: 12/16/23							
Arsenic	189	2.0	mg/Kg wet	180		105		83.1-116.9	0.800	30	
Matrix Spike (B359897-MS1)		**Source: 23L0541-02**		Prepared: 12/06/23 Analyzed: 12/08/23							
Beryllium	16.9	1.1	mg/Kg dry	17.9	ND	94.3		75-125			
Chromium	31.0	18	mg/Kg dry	17.9	16.8	79.5		75-125			
Cobalt	25.4	7.2	mg/Kg dry	17.9	8.48	94.8		75-125			
Copper	63.8	18	mg/Kg dry	35.8	18.0	**128**	*	75-125			MS-22
Lead	30.5	7.2	mg/Kg dry	17.9	13.0	97.5		75-125			
Manganese	417	19	mg/Kg dry	17.9	381	**201**	*	75-125			
Nickel	40.3	18	mg/Kg dry	17.9	23.0	97.2		75-125			
Selenium	17.2	5.7	mg/Kg dry	17.9	ND	96.4		75-125			
Silver	15.6	0.36	mg/Kg dry	17.9	0.0922	86.9		75-125			
Thallium	21.7	0.36	mg/Kg dry	17.9	0.177	120		75-125			
Vanadium	34.7	36	mg/Kg dry	17.9	18.7	89.5		75-125			
Zinc	65.3	36	mg/Kg dry	35.8	34.9	85.1		75-125			
Cadmium	17.4	1.4	mg/Kg dry	17.9	ND	97.5		75-125			
Matrix Spike (B359897-MS2)		**Source: 23L0541-02**		Prepared: 12/06/23 Analyzed: 12/13/23							
Antimony	2.86	7.7	mg/Kg dry	17.9	ND	**16.0**	*	75-125			MS-04
Barium	676	180	mg/Kg dry	17.9	850	**-974**	*	75-125			MS-19
Matrix Spike (B359897-MS4)		**Source: 23L0541-02**		Prepared: 12/06/23 Analyzed: 12/16/23							
Arsenic	21.0	0.89	mg/Kg dry	17.9	4.27	93.3		75-125			
Matrix Spike Dup (B359897-MSD1)		**Source: 23L0541-02**		Prepared: 12/06/23 Analyzed: 12/08/23							
Beryllium	18.6	1.1	mg/Kg dry	18.5	ND	100		75-125	9.66	35	
Chromium	34.0	19	mg/Kg dry	18.5	16.8	93.1		75-125	9.25	35	
Cobalt	27.6	7.4	mg/Kg dry	18.5	8.48	103		75-125	8.32	35	
Copper	51.2	19	mg/Kg dry	37.0	18.0	89.8		75-125	21.9	35	MS-22
Lead	30.1	7.4	mg/Kg dry	18.5	13.0	92.3		75-125	1.13	35	
Manganese	400	19	mg/Kg dry	18.5	381	103		75-125	4.12	35	
Nickel	41.9	19	mg/Kg dry	18.5	23.0	102		75-125	3.73	35	
Selenium	17.3	5.9	mg/Kg dry	18.5	ND	93.6		75-125	0.495	35	
Silver	16.4	0.37	mg/Kg dry	18.5	0.0922	88.0		75-125	4.73	35	
Thallium	21.7	0.37	mg/Kg dry	18.5	0.177	116		75-125	0.315	35	
Vanadium	35.1	37	mg/Kg dry	18.5	18.7	88.7		75-125	1.17	35	
Zinc	68.6	37	mg/Kg dry	37.0	34.9	91.0		75-125	4.90	35	
Cadmium	18.0	1.5	mg/Kg dry	18.5	ND	97.1		75-125	2.97	35	

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B359897 - SW-846 3050B											
Matrix Spike Dup (B359897-MSD2)	**Source: 23L0541-02**			Prepared: 12/06/23 Analyzed: 12/13/23							
Antimony	3.02	8.0	mg/Kg dry	18.5	ND	**16.3**	*	75-125		35	MS-04
Barium	735	190	mg/Kg dry	18.5	850	**-621**	*	75-125	8.41	35	MS-19
Matrix Spike Dup (B359897-MSD4)	**Source: 23L0541-02**			Prepared: 12/06/23 Analyzed: 12/16/23							
Arsenic	21.7	0.93	mg/Kg dry	18.5	4.27	94.0		75-125	3.30	35	
Post Spike (B359897-PS1)	**Source: 23L0541-02**			Prepared: 12/06/23 Analyzed: 12/08/23							
Antimony	5.18		µg/L	4.00	1.52	91.6		75-125			
Beryllium	23.7		µg/L	20.0	5.37	91.5		75-125			
Chromium	381		µg/L	20.0	479	**-489**	*	75-125			MS-19
Cobalt	218		µg/L	20.0	242	**-120**	*	75-125			MS-19
Copper	454		µg/L	40.0	512	**-145**	*	75-125			MS-19
Lead	315		µg/L	20.0	371	**-282**	*	75-125			MS-19
Manganese	9240		µg/L	20.0	10800	**-7990**	*	75-125			MS-19
Nickel	557		µg/L	20.0	654	**-483**	*	75-125			MS-19
Selenium	7.51		µg/L	8.00	-2.70	93.9		75-125			
Silver	5.40		µg/L	4.00	2.63	**69.4**	*	75-125			Z-01
Thallium	27.4		µg/L	20.0	5.04	112		75-125			
Vanadium	412		µg/L	20.0	532	**-599**	*	75-125			MS-19
Zinc	845		µg/L	40.0	993	**-369**	*	75-125			MS-19
Barium	14800		µg/L	80.0	24200	**-11700**	*	75-125			MS-19
Cadmium	14.9		µg/L	20.0	-3.71	**74.5**	*	75-125			Z-01
Dilution Check (B359897-SRL1)	**Source: 23L0541-02**			Prepared: 12/06/23 Analyzed: 12/08/23							
Antimony	ND	9.5	mg/Kg dry		ND					20	
Beryllium	0.415	1.3	mg/Kg dry		ND					20	
Chromium	15.1	22	mg/Kg dry		16.8				10.7	20	
Cobalt	8.36	8.8	mg/Kg dry		8.48				1.41	20	
Copper	19.0	22	mg/Kg dry		18.0				5.50	20	
Lead	12.7	8.8	mg/Kg dry		13.0				2.24	20	
Manganese	382	23	mg/Kg dry		381				0.260	20	
Nickel	23.8	22	mg/Kg dry		23.0				3.59	20	
Selenium	ND	7.0	mg/Kg dry		ND					20	
Silver	0.0855	0.44	mg/Kg dry		0.0922				7.53	20	
Thallium	0.161	0.44	mg/Kg dry		0.177				9.52	20	
Vanadium	16.2	44	mg/Kg dry		18.7				14.3	20	
Zinc	39.6	44	mg/Kg dry		34.9				12.8	20	
Barium	634	44	mg/Kg dry		850				**29.1**	* 20	M-11
Cadmium	ND	1.8	mg/Kg dry		ND					20	
Batch B359903 - SW-846 3050B											
Blank (B359903-BLK1)				Prepared: 12/06/23 Analyzed: 12/08/23							
Aluminum	ND	16	mg/Kg wet								
Calcium	ND	16	mg/Kg wet								
Magnesium	ND	16	mg/Kg wet								
Potassium	ND	160	mg/Kg wet								
Sodium	ND	160	mg/Kg wet								

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B359903 - SW-846 3050B											
Blank (B359903-BLK2)				Prepared: 12/06/23 Analyzed: 12/12/23							
Iron	ND	16	mg/Kg wet								
LCS (B359903-BS1)				Prepared: 12/06/23 Analyzed: 12/08/23							
Aluminum	7200	50	mg/Kg wet	8630		83.4		51.8-148.3			
Calcium	5230	50	mg/Kg wet	5340		98.0		81.6-118.5			
Magnesium	2010	50	mg/Kg wet	2150		93.7		75.8-123.7			
Potassium	1620	500	mg/Kg wet	1730		93.4		71.7-128.9			
Sodium	399	500	mg/Kg wet	462		86.4		73.4-126.6			J
LCS (B359903-BS2)				Prepared: 12/06/23 Analyzed: 12/12/23							
Iron	7060	50	mg/Kg wet	8090		87.3		59-140.9			
LCS Dup (B359903-BSD1)				Prepared: 12/06/23 Analyzed: 12/08/23							
Aluminum	7280	50	mg/Kg wet	8630		84.4		51.8-148.3	1.16	30	
Calcium	5390	50	mg/Kg wet	5340		101		81.6-118.5	2.94	30	
Magnesium	2040	50	mg/Kg wet	2150		95.1		75.8-123.7	1.42	30	
Potassium	1610	500	mg/Kg wet	1730		93.1		71.7-128.9	0.344	30	
Sodium	398	500	mg/Kg wet	462		86.1		73.4-126.6	0.295	30	J
LCS Dup (B359903-BSD2)				Prepared: 12/06/23 Analyzed: 12/12/23							
Iron	7410	50	mg/Kg wet	8090		91.6		59-140.9	4.78	30	
Matrix Spike (B359903-MS1)	**Source: 23L0541-02**			Prepared: 12/06/23 Analyzed: 12/08/23							
Aluminum	6630	18	mg/Kg dry	17.9	8710	**-11600**	*	75-125			MS-19
Potassium	1810	180	mg/Kg dry	143	1810	**4.30**	*	75-125			MS-19
Sodium	270	180	mg/Kg dry	143	85.7	**129**	*	75-125			MS-22
Matrix Spike (B359903-MS5)	**Source: 23L0541-02**			Prepared: 12/06/23 Analyzed: 12/12/23							
Calcium	146000	360	mg/Kg dry	143	83700	**43400**	*	75-125			MS-19
Iron	11700	360	mg/Kg dry	143	15400	**-2580**	*	75-125			MS-19
Magnesium	74900	360	mg/Kg dry	143	44900	**20900**	*	75-125			MS-19
Matrix Spike Dup (B359903-MSD1)	**Source: 23L0541-02**			Prepared: 12/06/23 Analyzed: 12/08/23							
Aluminum	8440	19	mg/Kg dry	18.5	8710	**-1480**	*	75-125	24.0	35	MS-19
Potassium	2120	190	mg/Kg dry	148	1810	**214**	*	75-125	15.8	35	MS-19
Sodium	264	190	mg/Kg dry	148	85.7	121		75-125	2.29	35	
Matrix Spike Dup (B359903-MSD5)	**Source: 23L0541-02**			Prepared: 12/06/23 Analyzed: 12/12/23							
Calcium	105000	370	mg/Kg dry	148	83700	**14200**	*	75-125	32.8	35	MS-19
Iron	14200	370	mg/Kg dry	148	15400	**-796**	*	75-125	19.4	35	MS-19
Magnesium	57600	370	mg/Kg dry	148	44900	**8580**	*	75-125	26.0	35	MS-19
Post Spike (B359903-PS1)	**Source: 23L0541-02**			Prepared: 12/06/23 Analyzed: 12/08/23							
Aluminum	248		mg/L	2.00	249	**-44.8**	*	75-125			MS-19
Potassium	67.5		mg/L	16.0	51.5	100		75-125			
Sodium	18.8		mg/L	16.0	2.44	102		75-125			

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B359903 - SW-846 3050B											
Post Spike (B359903-PS5)		**Source: 23L0541-02**		Prepared: 12/06/23 Analyzed: 12/12/23							
Calcium	2600		mg/L	16.0	2390	**1330**	*	75-125			MS-19
Iron	730		mg/L	16.0	438	**1820**	*	75-125			MS-19
Magnesium	1540		mg/L	16.0	1280	**1630**	*	75-125			MS-19
Dilution Check (B359903-SRL1)		**Source: 23L0541-02**		Prepared: 12/06/23 Analyzed: 12/08/23							
Aluminum	9000	88	mg/Kg dry		8710				3.23	20	
Potassium	1790	880	mg/Kg dry		1810				1.03	20	
Sodium	ND	880	mg/Kg dry		ND					20	
Dilution Check (B359903-SRL2)		**Source: 23K3642-06**		Prepared: 12/06/23 Analyzed: 12/08/23							
Aluminum	8040	110	mg/Kg dry		7600				5.61	20	
Calcium	914	110	mg/Kg dry		840				8.53	20	
Magnesium	1710	110	mg/Kg dry		1570				8.79	20	
Potassium	335	1100	mg/Kg dry		315				6.20	20	J
Sodium	ND	1100	mg/Kg dry		ND					20	
Dilution Check (B359903-SRL5)		**Source: 23L0541-02**		Prepared: 12/06/23 Analyzed: 12/12/23							
Calcium	86600	1800	mg/Kg dry		83700				3.42	20	
Iron	15800	1800	mg/Kg dry		15400				2.87	20	
Magnesium	47100	1800	mg/Kg dry		44900				4.74	20	
Dilution Check (B359903-SRL6)		**Source: 23K3642-06**		Prepared: 12/06/23 Analyzed: 12/14/23							
Iron	13700	1100	mg/Kg dry		13700				0.00482	20	
Batch B360091 - SW-846 7471											
Blank (B360091-BLK1)				Prepared: 12/07/23 Analyzed: 12/08/23							
Mercury	ND	0.025	mg/Kg wet								
LCS (B360091-BS1)				Prepared: 12/07/23 Analyzed: 12/08/23							
Mercury	9.39	1.8	mg/Kg wet	10.3		91.1		55-143.7			
LCS Dup (B360091-BSD1)				Prepared: 12/07/23 Analyzed: 12/08/23							
Mercury	8.19	1.9	mg/Kg wet	10.3		79.5		55-143.7	13.6	20	
Matrix Spike (B360091-MS1)		**Source: 23L0541-02**		Prepared: 12/07/23 Analyzed: 12/08/23							
Mercury	0.452	0.028	mg/Kg dry	0.370	0.0869	98.6		80-120			
Matrix Spike Dup (B360091-MSD1)		**Source: 23L0541-02**		Prepared: 12/07/23 Analyzed: 12/08/23							
Mercury	0.429	0.028	mg/Kg dry	0.367	0.0869	93.3		80-120	5.10	20	

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B359896 - % Solids										
Duplicate (B359896-DUP2)	**Source: 23L0541-02**			Prepared & Analyzed: 12/06/23						
% Solids	90.6		% Wt		89.8			0.850	10	
Batch B364445 - SW-846 3060A										
Blank (B364445-BLK1)				Prepared: 01/29/24	Analyzed: 01/30/24					
Hexavalent Chromium	ND	0.16	mg/Kg wet							
LCS (B364445-BS1)				Prepared: 01/29/24	Analyzed: 01/30/24					
Hexavalent Chromium	150	3.8	mg/Kg wet	168		88.9	80-120			
LCS Dup (B364445-BSD1)				Prepared: 01/29/24	Analyzed: 01/30/24					
Hexavalent Chromium	150	3.7	mg/Kg wet	164		91.1	80-120	0.368	20	
Matrix Spike (B364445-MS1) Soluble MS	**Source: 23L0541-02**			Prepared: 01/29/24	Analyzed: 01/30/24					
Hexavalent Chromium	19	0.87	mg/Kg dry	43.5	ND	**44.6** *	85-115			MS-16
Matrix Spike Dup (B364445-MSD1) Soluble MS Dup	**Source: 23L0541-02**			Prepared: 01/29/24	Analyzed: 01/30/24					
Hexavalent Chromium	22	0.88	mg/Kg dry	44.2	ND	**49.6** *	85-115	12.1	35	MS-16

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

MW-4 (2)

Lab Sample ID: 23L0541-03 Date(s) Analyzed: 12/08/2023 12/08/2023

Instrument ID (1): ECD5 Instrument ID (2): ECD5

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1248	1	0.000	0.000	0.000	0.046	
	2	0.000	0.000	0.000	0.047	2.2

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS

Lab Sample ID: B359941-BS1 Date(s) Analyzed: 12/08/2023 12/08/2023

Instrument ID (1): ECD5 Instrument ID (2): ECD5

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.17	
	2	0.000	0.000	0.000	0.18	5.7
Aroclor-1260	1	0.000	0.000	0.000	0.17	
	2	0.000	0.000	0.000	0.17	0.0

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS Dup

Lab Sample ID: B359941-BSD1 Date(s) Analyzed: 12/08/2023 12/08/2023

Instrument ID (1): ECD5 Instrument ID (2): ECD5

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.18	
	2	0.000	0.000	0.000	0.19	5.4
Aroclor-1260	1	0.000	0.000	0.000	0.18	
	2	0.000	0.000	0.000	0.18	0.0

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Matrix Spike

Lab Sample ID: B359941-MS3

Date(s) Analyzed: 12/08/2023 12/08/2023

Instrument ID (1): ECD5

Instrument ID (2): ECD5

GC Column (1): ID: (mm)

GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.21	
	2	0.000	0.000	0.000	0.22	4.7
Aroclor-1260	1	0.000	0.000	0.000	0.20	
	2	0.000	0.000	0.000	0.20	0.0

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Matrix Spike Dup

Lab Sample ID: B359941-MSD3 Date(s) Analyzed: 12/08/2023 12/08/2023

Instrument ID (1): ECD5 Instrument ID (2): ECD5

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.22	
	2	0.000	0.000	0.000	0.22	0.0
Aroclor-1260	1	0.000	0.000	0.000	0.21	
	2	0.000	0.000	0.000	0.20	4.9

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
DL-05	Sample required a dilution due to high internal standard recovery of the lesser diluted digestion, reporting limit is elevated.
H-06	Sample was extracted past the recommended holding time.
H-10	Analysis was requested after the recommended holding time had passed.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
M-11	The serial dilution RPD is outside of control limits. Increased variability for reported result is expected.
MS-04	Poor spike recovery suspected to be a result of obvious visual non-homogeneity of sample and spike aliquots.
MS-07A	Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.
MS-12A	Matrix spike and spike duplicate recovery is outside of control limits on the high side.
MS-16	For solid method SW846-7196A, the matrix spike is outside of control limits. pH and ORP results were indicative of reducing conditions. Reanalysis is not required. Analysis is in control based on LCS recoveries.
MS-19	Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representative of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.
MS-22	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
S-19	Surrogate recovery is outside of control limits, matrix interference suspected. Reanalysis yielded similar surrogate non-conformance.
V-04	Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria. Reported result is estimated.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-06	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for this compound.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
V-34	Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.
V-36	Initial calibration verification (ICV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
Z-01	Post spike recovery is outside of control limits. Possibility of matrix interference cannot be eliminated. Analysis is in control based on laboratory fortified blank and duplicate.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 6010D in Soil	
Aluminum	CT,NH,NY,ME,VA,NC
Calcium	CT,NH,NY,ME,VA,NC
Iron	CT,NH,NY,ME,VA,NC
Magnesium	CT,NH,NY,ME,VA,NC
Potassium	CT,NH,NY,ME,VA,NC
Sodium	CT,NH,NY,ME,VA,NC
SW-846 6010D in Water	
Aluminum	CT,NH,NY,ME,VA,NC
Calcium	CT,NH,NY,ME,VA,NC
Iron	CT,NH,NY,ME,VA,NC
Magnesium	CT,NH,NY,ME,VA,NC
Potassium	CT,NH,NY,ME,VA,NC
Sodium	CT,NH,NY,ME,VA,NC
SW-846 6020B in Soil	
Antimony	NY,NC,ME
Arsenic	NY,VA,NH,NC,ME
Beryllium	VA,NY,NH,NC,ME
Chromium	NY,NC,ME
Cobalt	NY,NC,ME
Copper	NY,NC,ME
Lead	NY,NC,ME
Manganese	NY,NC,ME
Nickel	NY,NC,ME
Selenium	NY,VA,NH,NC,ME
Silver	NY,NC,ME
Thallium	VA,NY,NH,NC,ME
Vanadium	NY,NC,ME,CT,VA,NH
Zinc	NY,NC,ME
Barium	NY,NC,CT,NH,ME,VA
Cadmium	NY,NC,ME
SW-846 6020B in Water	
Antimony	CT,NH,NY,ME,VA,NC
Arsenic	CT,NH,NY,ME,VA,NC
Barium	NH,NY,ME,VA,NC
Beryllium	CT,NH,NY,ME,VA,NC
Cadmium	CT,NH,NY,RI,ME,VA,NC
Chromium	CT,NH,NY,ME,VA,NC
Cobalt	CT,NH,NY,ME,VA,NC
Copper	CT,NH,NY,ME,VA,NC
Lead	CT,NH,NY,ME,VA,NC
Manganese	CT,NH,NY,ME,VA,NC
Nickel	CT,NH,NY,ME,VA,NC
Selenium	CT,NH,NY,ME,VA,NC
Silver	CT,NH,NY,ME,VA,NC
Thallium	CT,NH,NY,ME,VA,NC
Vanadium	CT,NH,NY,ME,VA,NC

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 6020B in Water	
Zinc	CT,NH,NY,ME,VA,NC
SW-846 7196A in Soil	
Hexavalent Chromium	NY,CT,NH,NC,ME,VA
SW-846 7471B in Soil	
Mercury	CT,NH,NY,NC,ME,VA
SW-846 8082A in Soil	
Aroclor-1016	CT,NH,NY,NC,ME,VA,PA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1262	NH,NY,NC,ME,VA,PA
Aroclor-1262 [2C]	NH,NY,NC,ME,VA,PA
Aroclor-1268	NH,NY,NC,ME,VA,PA
Aroclor-1268 [2C]	NH,NY,NC,ME,VA,PA
SW-846 8082A in Water	
Aroclor-1016	CT,NH,NY,NC,ME,VA,PA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1262	NH,NY,NC,ME,VA,PA
Aroclor-1262 [2C]	NH,NY,NC,ME,VA,PA
Aroclor-1268	NH,NY,NC,ME,VA,PA
Aroclor-1268 [2C]	NH,NY,NC,ME,VA,PA
SW-846 8260D in Soil	
Acetone	CT,NH,NY,ME,VA

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260D in Soil	
Benzene	CT,NH,NY,ME,VA
Bromochloromethane	NH,NY,ME,VA
Bromodichloromethane	CT,NH,NY,ME,VA
Bromoform	CT,NH,NY,ME,VA
Bromomethane	CT,NH,NY,ME,VA
2-Butanone (MEK)	CT,NH,NY,ME,VA
Carbon Disulfide	CT,NH,NY,ME,VA
Carbon Tetrachloride	CT,NH,NY,ME,VA
Chlorobenzene	CT,NH,NY,ME,VA
Chlorodibromomethane	CT,NH,NY,ME,VA
Chloroethane	CT,NH,NY,ME,VA
Chloroform	CT,NH,NY,ME,VA
Chloromethane	CT,NH,NY,ME,VA
Cyclohexane	NY,ME
1,2-Dibromo-3-chloropropane (DBCP)	NY,ME
1,2-Dibromoethane (EDB)	NH,NY
1,2-Dichlorobenzene	CT,NH,NY,ME,VA
1,3-Dichlorobenzene	CT,NH,NY,ME,VA
1,4-Dichlorobenzene	CT,NH,NY,ME,VA
Dichlorodifluoromethane (Freon 12)	NH,NY,ME,VA
1,1-Dichloroethane	CT,NH,NY,ME,VA
1,2-Dichloroethane	CT,NH,NY,ME,VA
1,1-Dichloroethylene	CT,NH,NY,ME,VA
cis-1,2-Dichloroethylene	CT,NH,NY,ME,VA
trans-1,2-Dichloroethylene	CT,NH,NY,ME,VA
1,2-Dichloropropane	CT,NH,NY,ME,VA
cis-1,3-Dichloropropene	CT,NH,NY,ME,VA
trans-1,3-Dichloropropene	CT,NH,NY,ME,VA
1,4-Dioxane	NY,ME
Ethylbenzene	CT,NH,NY,ME,VA
Hexachlorobutadiene	NH,NY,ME,VA
2-Hexanone (MBK)	CT,NH,NY,ME,VA
Isopropylbenzene (Cumene)	CT,NH,NY,ME,VA
Methyl Acetate	NY,ME
Methyl tert-Butyl Ether (MTBE)	NY,ME,VA
Methyl Cyclohexane	NY
Methylene Chloride	CT,NH,NY,ME,VA
4-Methyl-2-pentanone (MIBK)	CT,NH,NY,ME,VA
Naphthalene	NH,NY,ME,VA
Styrene	CT,NH,NY,ME,VA
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME,VA
Tetrachloroethylene	CT,NH,NY,ME,VA
Toluene	CT,NH,NY,ME,VA
1,2,3-Trichlorobenzene	NY,ME
1,2,4-Trichlorobenzene	NH,NY,ME,VA
1,1,1-Trichloroethane	CT,NH,NY,ME,VA
1,1,2-Trichloroethane	CT,NH,NY,ME,VA

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260D in Soil	
Trichloroethylene	CT,NH,NY,ME,VA
Trichlorofluoromethane (Freon 11)	CT,NH,NY,ME,VA
Vinyl Chloride	CT,NH,NY,ME,VA
Xylenes (total)	NH,NY,ME
SW-846 8260D in Water	
Acetone	CT,ME,NH,VA,NY
Benzene	CT,ME,NH,VA,NY
Bromochloromethane	ME,NH,VA,NY
Bromodichloromethane	CT,ME,NH,VA,NY
Bromoform	CT,ME,NH,VA,NY
Bromomethane	CT,ME,NH,VA,NY
2-Butanone (MEK)	CT,ME,NH,VA,NY
Carbon Disulfide	CT,ME,NH,VA,NY
Carbon Tetrachloride	CT,ME,NH,VA,NY
Chlorobenzene	CT,ME,NH,VA,NY
Chlorodibromomethane	CT,ME,NH,VA,NY
Chloroethane	CT,ME,NH,VA,NY
Chloroform	CT,ME,NH,VA,NY
Chloromethane	CT,ME,NH,VA,NY
Cyclohexane	ME,NY
1,2-Dibromo-3-chloropropane (DBCP)	ME,NY
1,2-Dibromoethane (EDB)	ME,NY
1,2-Dichlorobenzene	CT,ME,NH,VA,NY
1,3-Dichlorobenzene	CT,ME,NH,VA,NY
1,4-Dichlorobenzene	CT,ME,NH,VA,NY
Dichlorodifluoromethane (Freon 12)	ME,NH,VA,NY
1,1-Dichloroethane	CT,ME,NH,VA,NY
1,2-Dichloroethane	CT,ME,NH,VA,NY
1,1-Dichloroethylene	CT,ME,NH,VA,NY
cis-1,2-Dichloroethylene	ME,NY
trans-1,2-Dichloroethylene	CT,ME,NH,VA,NY
1,2-Dichloropropane	CT,ME,NH,VA,NY
cis-1,3-Dichloropropene	CT,ME,NH,VA,NY
trans-1,3-Dichloropropene	CT,ME,NH,VA,NY
1,4-Dioxane	ME,NY
Ethylbenzene	CT,ME,NH,VA,NY
Hexachlorobutadiene	CT,ME,NH,VA,NY
2-Hexanone (MBK)	CT,ME,NH,VA,NY
Isopropylbenzene (Cumene)	ME,VA,NY
Methyl Acetate	ME,NY
Methyl tert-Butyl Ether (MTBE)	CT,ME,NH,VA,NY
Methyl Cyclohexane	NY
Methylene Chloride	CT,ME,NH,VA,NY
4-Methyl-2-pentanone (MIBK)	CT,ME,NH,VA,NY
Naphthalene	ME,NH,VA,NY
Styrene	CT,ME,NH,VA,NY

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260D in Water	
1,1,2,2-Tetrachloroethane	CT,ME,NH,VA,NY
Tetrachloroethylene	CT,ME,NH,VA,NY
Toluene	CT,ME,NH,VA,NY
1,2,3-Trichlorobenzene	ME,NH,VA,NY
1,2,4-Trichlorobenzene	CT,ME,NH,VA,NY
1,1,1-Trichloroethane	CT,ME,NH,VA,NY
1,1,2-Trichloroethane	CT,ME,NH,VA,NY
Trichloroethylene	CT,ME,NH,VA,NY
Trichlorofluoromethane (Freon 11)	CT,ME,NH,VA,NY
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	VA,NY
Vinyl Chloride	CT,ME,NH,VA,NY
Xylenes (total)	ME,NY
SW-846 8270E in Soil	
1,4-Dioxane	NY,NH
Atrazine	ME,NC
Acenaphthene	CT,NY,NH,ME,NC,VA
Acenaphthylene	CT,NY,NH,ME,NC,VA
Acetophenone	NY,NH,ME,NC,VA
Anthracene	CT,NY,NH,ME,NC,VA
Benzo(a)anthracene	CT,NY,NH,ME,NC,VA
Benzo(a)pyrene	CT,NY,NH,ME,NC,VA
Benzo(b)fluoranthene	CT,NY,NH,ME,NC,VA
Benzo(g,h,i)perylene	CT,NY,NH,ME,NC,VA
Benzo(k)fluoranthene	CT,NY,NH,ME,NC,VA
Bis(2-chloroethoxy)methane	CT,NY,NH,ME,NC,VA
Bis(2-chloroethyl)ether	CT,NY,NH,ME,NC,VA
Bis(2-chloroisopropyl)ether	CT,NY,NH,ME,NC,VA
Bis(2-Ethylhexyl)phthalate	CT,NY,NH,ME,NC,VA
4-Bromophenylphenylether	CT,NY,NH,ME,NC,VA
Butylbenzylphthalate	CT,NY,NH,ME,NC,VA
Carbazole	NC
4-Chloroaniline	CT,NY,NH,ME,NC,VA
4-Chloro-3-methylphenol	CT,NY,NH,ME,NC,VA
2-Chloronaphthalene	CT,NY,NH,NC,VA
2-Chlorophenol	CT,NY,NH,ME,NC,VA
4-Chlorophenylphenylether	CT,NY,NH,ME,NC,VA
Chrysene	CT,NY,NH,ME,NC,VA
Dibenz(a,h)anthracene	CT,NY,NH,ME,NC,VA
Dibenzofuran	CT,NY,NH,ME,NC,VA
Di-n-butylphthalate	CT,NY,NH,ME,NC,VA
1,2-Dichlorobenzene	NY,NH,ME,NC,VA
1,3-Dichlorobenzene	NY,NH,ME,NC,VA
1,4-Dichlorobenzene	NY,NH,ME,NC,VA
3,3-Dichlorobenzidine	CT,NY,NH,ME,NC,VA
2,4-Dichlorophenol	CT,NY,NH,ME,NC,VA
Diethylphthalate	CT,NY,NH,ME,NC,VA

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8270E in Soil	
2,4-Dimethylphenol	CT,NY,NH,ME,NC,VA
Dimethylphthalate	CT,NY,NH,ME,NC,VA
4,6-Dinitro-2-methylphenol	CT,NY,NH,ME,NC,VA
2,4-Dinitrophenol	CT,NY,NH,ME,NC,VA
2,4-Dinitrotoluene	CT,NY,NH,ME,NC,VA
2,6-Dinitrotoluene	CT,NY,NH,ME,NC,VA
Di-n-octylphthalate	CT,NY,NH,ME,NC,VA
Fluoranthene	CT,NY,NH,ME,NC,VA
Fluorene	NY,NH,ME,NC,VA
Hexachlorobenzene	CT,NY,NH,ME,NC,VA
Hexachlorobutadiene	CT,NY,NH,ME,NC,VA
Hexachlorocyclopentadiene	CT,NY,NH,ME,NC,VA
Hexachloroethane	CT,NY,NH,ME,NC,VA
Indeno(1,2,3-cd)pyrene	CT,NY,NH,ME,NC,VA
Isophorone	CT,NY,NH,ME,NC,VA
2-Methylnaphthalene	CT,NY,NH,ME,NC,VA
2-Methylphenol	CT,NY,NH,ME,NC,VA
3/4-Methylphenol	CT,NY,NH,ME,NC,VA
Naphthalene	CT,NY,NH,ME,NC,VA
2-Nitroaniline	CT,NY,NH,ME,NC,VA
3-Nitroaniline	CT,NY,NH,ME,NC,VA
4-Nitroaniline	CT,NY,NH,ME,NC,VA
Nitrobenzene	CT,NY,NH,ME,NC,VA
2-Nitrophenol	CT,NY,NH,ME,NC,VA
4-Nitrophenol	CT,NY,NH,ME,NC,VA
N-Nitrosodi-n-propylamine	CT,NY,NH,ME,NC,VA
Pentachlorophenol	CT,NY,NH,ME,NC,VA
Phenanthrene	CT,NY,NH,ME,NC,VA
Phenol	CT,NY,NH,ME,NC,VA
Pyrene	CT,NY,NH,ME,NC,VA
1,2,4,5-Tetrachlorobenzene	NY,NC
1,2,4-Trichlorobenzene	CT,NY,NH,ME,NC,VA
2,4,5-Trichlorophenol	CT,NY,NH,ME,NC,VA
2,4,6-Trichlorophenol	CT,NY,NH,ME,NC,VA
2-Fluorophenol	NC
SW-846 8270E in Water	
1,4-Dioxane	NY,NH
Acenaphthene	CT,NY,NC,ME,NH,VA
Acenaphthylene	CT,NY,NC,ME,NH,VA
Acetophenone	NY,NC
Anthracene	CT,NY,NC,ME,NH,VA
Benzo(a)anthracene	CT,NY,NC,ME,NH,VA
Benzo(a)pyrene	CT,NY,NC,ME,NH,VA
Benzo(b)fluoranthene	CT,NY,NC,ME,NH,VA
Benzo(g,h,i)perylene	CT,NY,NC,ME,NH,VA
Benzo(k)fluoranthene	CT,NY,NC,ME,NH,VA

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8270E in Water	
Bis(2-chloroethoxy)methane	CT,NY,NC,ME,NH,VA
Bis(2-chloroethyl)ether	CT,NY,NC,ME,NH,VA
Bis(2-chloroisopropyl)ether	CT,NY,NC,ME,NH,VA
Bis(2-Ethylhexyl)phthalate	CT,NY,NC,ME,NH,VA
4-Bromophenylphenylether	CT,NY,NC,ME,NH,VA
Butylbenzylphthalate	CT,NY,NC,ME,NH,VA
Carbazole	NC
4-Chloroaniline	CT,NY,NC,ME,NH,VA
4-Chloro-3-methylphenol	CT,NY,NC,ME,NH,VA
2-Chloronaphthalene	CT,NY,NC,ME,NH,VA
2-Chlorophenol	CT,NY,NC,ME,NH,VA
4-Chlorophenylphenylether	CT,NY,NC,ME,NH,VA
Chrysene	CT,NY,NC,ME,NH,VA
Dibenz(a,h)anthracene	CT,NY,NC,ME,NH,VA
Dibenzofuran	CT,NY,NC,ME,NH,VA
Di-n-butylphthalate	CT,NY,NC,ME,NH,VA
1,2-Dichlorobenzene	CT,NY,NC,ME,NH,VA
1,3-Dichlorobenzene	CT,NY,NC,ME,NH,VA
1,4-Dichlorobenzene	CT,NY,NC,ME,NH,VA
3,3-Dichlorobenzidine	CT,NY,NC,ME,NH,VA
2,4-Dichlorophenol	CT,NY,NC,ME,NH,VA
Diethylphthalate	CT,NY,NC,ME,NH,VA
2,4-Dimethylphenol	CT,NY,NC,ME,NH,VA
Dimethylphthalate	CT,NY,NC,ME,NH,VA
4,6-Dinitro-2-methylphenol	CT,NY,NC,ME,NH,VA
2,4-Dinitrophenol	CT,NY,NC,ME,NH,VA
2,4-Dinitrotoluene	CT,NY,NC,ME,NH,VA
2,6-Dinitrotoluene	CT,NY,NC,ME,NH,VA
Di-n-octylphthalate	CT,NY,NC,ME,NH,VA
Fluoranthene	CT,NY,NC,ME,NH,VA
Fluorene	NY,NC,ME,NH,VA
Hexachlorobenzene	CT,NY,NC,ME,NH,VA
Hexachlorobutadiene	CT,NY,NC,ME,NH,VA
Hexachlorocyclopentadiene	CT,NY,NC,ME,NH,VA
Hexachloroethane	CT,NY,NC,ME,NH,VA
Indeno(1,2,3-cd)pyrene	CT,NY,NC,ME,NH,VA
Isophorone	CT,NY,NC,ME,NH,VA
2-Methylnaphthalene	CT,NY,NC,ME,NH,VA
2-Methylphenol	CT,NY,NC,NH,VA
3/4-Methylphenol	CT,NY,NC,NH,VA
Naphthalene	CT,NY,NC,ME,NH,VA
2-Nitroaniline	CT,NY,NC,ME,NH,VA
3-Nitroaniline	CT,NY,NC,ME,NH,VA
4-Nitroaniline	CT,NY,NC,ME,NH,VA
Nitrobenzene	CT,NY,NC,ME,NH,VA
2-Nitrophenol	CT,NY,NC,ME,NH,VA
4-Nitrophenol	CT,NY,NC,ME,NH,VA

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8270E in Water	
N-Nitrosodi-n-propylamine	CT,NY,NC,ME,NH,VA
Pentachlorophenol	CT,NY,NC,ME,NH,VA
Phenanthrene	CT,NY,NC,ME,NH,VA
Phenol	CT,NY,NC,ME,NH,VA
Pyrene	CT,NY,NC,ME,NH,VA
1,2,4,5-Tetrachlorobenzene	NY,NC
1,2,4-Trichlorobenzene	CT,NY,NC,ME,NH,VA
2,4,5-Trichlorophenol	CT,NY,NC,ME,NH,VA
2,4,6-Trichlorophenol	CT,NY,NC,ME,NH,VA
2-Fluorophenol	NC

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
RI	Rhode Island Department of Health	LAO00373	12/30/2024
NC	North Carolina Div. of Water Quality	652	12/31/2024
ME	State of Maine	MA00100	06/9/2025
VA	Commonwealth of Virginia	460217	12/14/2024
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2024

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23L0544

https://www.pacelabs.com/

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

1800 Elm Street SE
Minneapolis, MN 55414

CLIENT: SYRACUSE SAND AND GRAVEL

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name:	(ALPHA - OMEGA)
Address:	P.O. BOX 6418, SYR, NY 13212
Phone:	
Project Name:	
Project Location:	ALPHA PORTLAND SITE DEC # 734006
Project Number:	TDK PROJECT NO. 20210G3
Project Manager:	JOHN HERRMANN, TDK ENGINEERING
Pace Analytical Quote Name/Number:	TDK ALPHA PORTLAND 00143967
Invoice Recipient:	
Sampled By:	JCH, TDK ENGINEERING

Requested Turnaround Time
7-Day ☐ 10-Day ☑
Due Date:

Rush-Approval Required
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #:

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	Conc Code	VOCs - TCL+TICs	SVOCs - TCL+TICs	METALS - TAL	PFAS	1,4-Dioxane	PCBs	VOCs - % Solids	# of Containers	[2] Preservation Code	[3] Container Code
1	MW-1 (2')	11/28/23 3:30PM			✓	S	A		✓	✓		✓	✓				
	" "	"			✓	S	A							✓			
	" "	"			✓	S	P				✓						
	" "	"			✓	S	V	✓									
2	SB-1 (2')	11/29/23	9:15AM		✓	S	A		✓	✓		✓	✓				
	"	"	"		✓	S	A							✓			
	"	"	"		✓	S	P				✓						
	"	"	"		✓	S	V	✓									
3	SB MW-4 (2')	11/29/23	1:30PM		✓	S	A		✓	✓		✓	✓				
	"	11/29/23	1:30PM		✓	S	A							✓			

ANALYSIS REQUESTED

Dissolved Metals Samples
☐ Field Filtered
☐ Lab to Filter

Orthophosphate Samples
☐ Field Filtered
☐ Lab to Filter

[1] Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] Container Codes:
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Comments: PLEASE FORWARD RESULTS TO JHERRMANN@TDKENGINEERING.COM
CAT B DELIVERABLES PACKAGE

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time:
	12/1/23 11:55 AM
Received by: (signature)	Date/Time:
	12/1 1400
Relinquished by: (signature)	Date/Time:
	12/ 1700
Received by: (signature)	Date/Time:
12/27/23	12/28/23 1240
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Program & Regulatory Information
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375
Other:

Deliverables
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD
Other:
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Pace Analytical

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https://www.pacelabs.com/

Doc # 380 Rev 1_03242017

1800 Elm Street SE
Minneapolis, MN 55414

Table of Contents

Page 4 of 4

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CHAIN OF CUSTODY RECORD (New York)

Client: Syracuse Sand and Gravel

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: (Alpha - Omega)

Address: P.O. Box 6418, Syr., NY 13212

Phone:

Project Name:

Project Location: Alpha Portland Site DEC# 734006

Project Number: TDK Proj. No. 202163

Project Manager: John Herrmann, TDK Engineering

Pace Analytical Quote Name/Number: TDK Alpha Portland 00143967

Invoice Recipient:

Sampled By: JCM, TDK Engineering

Turnaround Time
7-Day ☐ 10-Day ☑
Due Date:

Data Deliverables
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Report Delivery
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #:

ANALYSIS REQUESTED

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	Conc Code	VOCs - TCL + TICs	SVOCs - TCL + TICs	Metals - TAL	PFAS	1,4-Dioxane	PCBs	VOCs - % Solids	# of Containers	[2] Preservation Code	[3] Container Code
3	MW-4(2')	11/29/23 1:30 PM			✓	GW	P				✓						
	"	11/29/23 1:30 PM			✓	GW	V	✓									
4	SB-2(2')	11/30/23	10:05 AM		✓	S	A		✓	✓		✓	✓				
	"	"	"		✓	S	A							✓			
	"	"	"		✓	S	P				✓						
	"	"	"		✓	S	V	✓									
5	DUPLICATE				✓	S	A		✓	✓		✓	✓				
	DUPLICATE				✓	S	A							✓			
	"				✓	S	P				✓						
	"				✓	S	V	✓									

Filtered Dissolved Samples
☐ Field Filtered
☐ Lab to Filter

Unfiltered Samples
☐ Field Filtered
☐ Lab to Filter

[1] Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] Container Codes:
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Comments: Please forward results to JHerrmann@TDKEngineering.com
CAT B Deliverables Package

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time:	Received by: (signature)	Date/Time:
	12/1/23 11:55		
	12/1 1400		
	12/1 1700		
	12/2/23 1240		

Regulatory Requirements / Report Limits
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375

Deliverables
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Other
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

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Fax: 612-607-6344
https://www.pacelabs.com/
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Minneapolis, MN 55414

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York) 23L0541

Client: Syracuse Sand and Gravel

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: (Alpha-Omega)

Address: P.O. Box 6118, Syracuse, NY 13212

Phone:

Project Name:

Project Location: Alpha Pentland Site, DEC # 734006

Project Number: TDR Project No. 202003

Project Manager: John Heckman, TDR Engineering

Alpha Analytical Quote Name/Number: TDR Alpha Portland 00143967

Invoice Recipient:

Sampled By: JCH, TDR Engineering

Turnaround Time Requested
- 7-Day ☐ 10-Day ☑
- Due Date:
- 1-Day ☐ 3-Day ☐
- 2-Day ☐ 4-Day ☐

Data Delivery
- Format: PDF ☐ EXCEL ☐
- Other:
- CLP Like Data Pkg Required: ☐
- Email To:
- Fax To #:

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	Conc Code	VOCs - TCL+TICs	SVOCs - TCL+TICs	Metals - TAL	PFAS	1,4-Dioxane	PCBs	VOCs - % Solids	# of Containers	[2] Preservation Code	[3] Container Code
	MS				✓	S	A		✓	✓		✓	✓				
	"				✓	S	A							✓			
	"				✓	S	P				✓						
	"				✓	S	V	✓									
	MSD				✓	S	A		✓	✓		✓	✓				
	"				✓	S	A							✓			
	"				✓	S	P				✓						
	"				✓	S	V	✓									
6	Equip. Dcon	11/29/23	3:00PM		✓	O*	V	✓									

ANALYSIS REQUESTED

Filtered Metals Samples
- ☐ Field Filtered
- ☐ Lab to Filter

Dissolved Gases & Alkalinity Samples
- ☐ Field Filtered
- ☐ Lab to Filter

Comments: Please forward results to jheckman@tdrengineering.com
CAT B Deliverables Package

*Equipment Decon

[1] Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] Container Codes:
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
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Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

	Relinquished by: (signature)	Date/Time:	Received by: (signature)	Date/Time:
1		12/1/23 11:55		
2		12/1 1400		
3		12/1 1700		
4		12/2/23 1246		
5				

Regulatory Requirements / Report Limits
- ☐ AWQ STDS
- ☐ NY TOGS
- ☐ NYC Sewer Discharge
- ☐ NY CP-51
- ☐ Part 360 GW (Landfill)
- ☐ NY Restricted Use
- ☐ NY Unrestricted Use
- ☐ NY Part 375

Deliverables
- ☐ Enhanced Data Package
- ☐ NYSDEC EQuIS EDD
- ☐ EQuIS (Standard) EDD
- ☐ NY Regulatory EDD
- ☐ NY Regs Hits-Only EDD

Other: NELAC and AIHA-LAP, LLC Accredited

Project Entity
- ☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
- ☐ Federal ☐ 21 J ☐ School
- ☐ City ☐ Brownfield ☐ MBTA

Other
- ☐ Chromatogram
- ☐ AIHA-LAP,LLC

PCB ONLY
- ☐ Soxhlet
- ☐ Non Soxhlet

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-ELON-0001 v07_Sample Receiving Checklist
	Effective Date: 07/13/2023

Log In Back-Sheet

Client Syracuse Sand & Gravel

Project 734006

MCP/RCP Required ~~NY~~ ~~NA~~ NP

Deliverable Package Requirement Cat B

Location NY

PWSID# (When Applicable) NA

Arrival Method:

Courier ☑ Fed Ex ☐ Walk In ☐ Other ☐ _____

Received By / Date / Time EC 12/2/23 1240

Back-Sheet By / Date / Time EC 12/5/23 1509

Temperature Method Gun # 5

Temp < 6° C Actual Temperature 2.7, 2.1

Rush Samples: Yes / (No) Notify _____

Short Hold: Yes / (No) Notify _____

Notes regarding Samples/COC outside of SOP:

Login Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy) Any False statement will be brought to the attention of the Client – True or False

	True	False
Received on Ice	☑	☐
Received in Cooler	☑	☐
Custody Seal: DATE TIME	☐	☑
COC Relinquished	☑	☐
COC/Samples Labels Agree	☑	☐
All Samples in Good Condition	☑	☐
Samples Received within Holding Time	☑	☐
Is there enough Volume	☑	☐
Proper Media/Container Used	☑	☐
Splitting Samples Required	☐	☑
MS/MSD	☑	☐
Trip Blanks	☐	☑
Lab to Filters	☐	☑
COC Legible	☑	☐

COC Included: (Check all included)

Client ☐ Analysis ☑ Sampler Name ☑

Project ☑ IDs ☑ Collection Date/Time ☑

All Samples Proper pH: (N/A) ☐ ☐

Additional Container Notes

Note: West Virginia requires all samples to have their temperature taken. Note any outliers.

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-ELON-0001 v07_Sample Receiving Checklist
	Effective Date: 07/13/2023

Sample			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
16oz Amb/Clear	Soils Jars (Circle Amb/Clear)																					
8oz Amb/Clear				3	1	1	1															
4oz Amb/Clear																						
2oz Amb/Clear				3	1	1																
Unpreserved	Ambers	1 Liter																				
HCL																						
Sulfuric																						
Sulfuric		250mL																				
Phosphoric																						
HCl																						
Unpreserved		100mL																				
Unpreserved	Plastics	1 Liter																				
Sulfuric																						
Unpreserved		500mL																				
Sulfuric																						
Unpreserved		250mL																				
Trizma																						
Sulfuric																						
Nitric																						
NaOH																						
Ammonium Acetate																						
NaOH/Zinc																						
Unpreserved	VOA Vials																					
HCl									2													
MeOH			1		3	1	1	1														
D.I. Water																						
BiSulfate			2		6	2	2	2														
Col/Bact	Other / Fill in																					
125 mL plastic																						

Qualtrax ID: 120836

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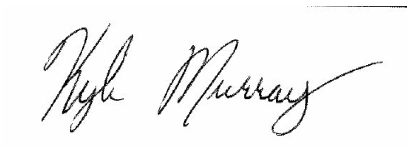
January 5, 2024

Richard Riccelli
Syracuse Sand & Gravel, LLC
6131 E Taft Road
North Syracuse, NY 13212

Project Location: NY
Client Job Number:
Project Number: 00143967 - TDK_Alpha Portland - CAT B
Laboratory Work Order Number: 23L0555

Enclosed are results of analyses for samples as received by the laboratory on December 2, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kyle A. Murray
Project Manager

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Syracuse Sand & Gravel, LLC
6131 E Taft Road
North Syracuse, NY 13212
ATTN: Richard Riccelli

REPORT DATE: 1/5/2024

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 00143967 - TDK_Alpha Portland - CAT B

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23L0555

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-1 (2ft)	23L0555-01	Soil		Draft Method 1633	
				SM 2540G	
SB-1 (2ft)	23L0555-02	Soil		Draft Method 1633	
				SM 2540G	
MW-4 (2ft)	23L0555-03	Soil		Draft Method 1633	
				SM 2540G	
SB-2 (2ft)	23L0555-04	Soil		Draft Method 1633	
				SM 2540G	
Duplicate	23L0555-05	Soil		Draft Method 1633	
				SM 2540G	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

Draft Method 1633

Qualifications:

PF-17C

Extracted internal standard is outside of control limits. Analyte is a known difficult compound.

Analyte & Samples(s) Qualified:

13C2-6:2FTS
23L0555-02[SB-1 (2ft)]

1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS
23L0555-02[SB-1 (2ft)]

S-29

Extracted Internal Standard is outside of control limits.

Analyte & Samples(s) Qualified:

13C2-PFTeDA
S098871-CCV2

D7-NMeFOSE
S098871-CCV2

SM 2540G

Qualifications:

H-06

Sample was extracted past the recommended holding time.

Analyte & Samples(s) Qualified:

% Solids
23L0555-01[MW-1 (2ft)], 23L0555-02[SB-1 (2ft)], 23L0555-03[MW-4 (2ft)], 23L0555-04[SB-2 (2ft)], 23L0555-05[Duplicate]

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: NY | Sample Description: | Work Order: 23L0555

Date Received: 12/2/2023

Field Sample #: MW-1 (2ft) | Sampled: 11/28/2023 15:30

Sample ID: 23L0555-01

Sample Matrix: Soil

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	0.79	0.14	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
Perfluoropentanoic acid (PFPeA)	0.033	0.40	0.026	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/4/24 15:18	AMS
Perfluorohexanoic acid (PFHxA)	0.021	0.20	0.014	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/4/24 15:18	AMS
Perfluoroheptanoic acid (PFHpA)	0.017	0.20	0.015	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/4/24 15:18	AMS
Perfluorooctanoic acid (PFOA)	ND	0.20	0.029	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
Perfluorononanoic acid (PFNA)	ND	0.20	0.026	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
Perfluorodecanoic acid (PFDA)	ND	0.20	0.018	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.20	0.020	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.20	0.022	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.20	0.027	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.20	0.018	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	0.20	0.020	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.20	0.030	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	0.20	0.025	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.20	0.022	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
Perfluorooctanesulfonic acid (PFOS)	0.11	0.20	0.036	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/4/24 15:18	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.20	0.030	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.20	0.045	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.20	0.021	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	0.79	0.074	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	0.79	0.081	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	0.79	0.074	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.20	0.10	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.20	0.021	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.20	0.028	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.20	0.028	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.20	0.042	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	2.0	0.15	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	2.0	0.17	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.79	0.065	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.79	0.080	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
9Cl-PF3ONS (F53B Minor)	ND	0.79	0.076	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
11Cl-PF3OUdS (F53B Major)	ND	0.79	0.10	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	2.0	0.17	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	9.9	1.2	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	9.9	0.97	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	0.40	0.020	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	0.40	0.042	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS

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Project Location: NY | Sample Description: | Work Order: 23L0555

Date Received: 12/2/2023

Field Sample #: MW-1 (2ft) | Sampled: 11/28/2023 15:30

Sample ID: 23L0555-01

Sample Matrix: Soil

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	0.40	0.031	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.40	0.040	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:18	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	81.9	10-130		1/4/24 15:18
13C5-PFPeA	79.4	35-150		1/4/24 15:18
13C5-PFHxA	79.9	55-150		1/4/24 15:18
13C4-PFHpA	78.2	55-150		1/4/24 15:18
13C8-PFOA	74.1	60-140		1/4/24 15:18
13C9-PFNA	77.9	55-140		1/4/24 15:18
13C6-PFDA	78.9	50-140		1/4/24 15:18
13C7-PFUnA	77.8	30-140		1/4/24 15:18
13C2-PFDoA	81.4	10-150		1/4/24 15:18
13C2-PFTeDA	90.6	10-130		1/4/24 15:18
13C3-PFBS	77.9	55-150		1/4/24 15:18
13C3-PFHxS	76.3	55-150		1/4/24 15:18
13C8-PFOS	74.6	45-140		1/4/24 15:18
13C2-4:2FTS	76.1	60-200		1/4/24 15:18
13C2-6:2FTS	71.1	60-200		1/4/24 15:18
13C2-8:2FTS	70.9	50-200		1/4/24 15:18
13C8-PFOSA	80.2	30-130		1/4/24 15:18
D3-NMeFOSA	48.0	15-130		1/4/24 15:18
D5-NEtFOSA	39.8	10-130		1/4/24 15:18
D3-NMeFOSAA	80.5	45-200		1/4/24 15:18
D5-NEtFOSAA	84.8	10-200		1/4/24 15:18
D7-NMeFOSE	74.5	10-150		1/4/24 15:18
D9-NEtFOSE	67.5	10-150		1/4/24 15:18
13C3-HFPO-DA	81.7	25-160		1/4/24 15:18

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Project Location: NY | Sample Description: | Work Order: 23L0555

Date Received: 12/2/2023

Field Sample #: MW-1 (2ft) | Sampled: 11/28/2023 15:30

Sample ID: 23L0555-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	90.3		% Wt	1	H-06	SM 2540G	12/8/23	12/8/23 12:37	DV

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Project Location: NY | Sample Description: | Work Order: 23L0555

Date Received: 12/2/2023

Field Sample #: SB-1 (2ft) | Sampled: 11/29/2023 09:15

Sample ID: 23L0555-02

Sample Matrix: Soil

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	0.80	0.14	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
Perfluoropentanoic acid (PFPeA)	0.030	0.40	0.026	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/4/24 15:34	AMS
Perfluorohexanoic acid (PFHxA)	ND	0.20	0.014	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
Perfluoroheptanoic acid (PFHpA)	ND	0.20	0.015	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
Perfluorooctanoic acid (PFOA)	ND	0.20	0.029	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
Perfluorononanoic acid (PFNA)	ND	0.20	0.026	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
Perfluorodecanoic acid (PFDA)	ND	0.20	0.018	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.20	0.020	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.20	0.022	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.20	0.027	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.20	0.018	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	0.20	0.020	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.20	0.030	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
Perfluorohexanesulfonic acid (PFHxS)	0.029	0.20	0.025	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/4/24 15:34	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.20	0.022	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
Perfluorooctanesulfonic acid (PFOS)	0.11	0.20	0.036	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/4/24 15:34	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.20	0.030	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.20	0.045	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.20	0.021	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	0.80	0.074	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	0.80	0.082	µg/kg dry	1	PF-17C	Draft Method 1633	1/2/24	1/4/24 15:34	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	0.80	0.074	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.20	0.10	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.20	0.021	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.20	0.028	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.20	0.028	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.20	0.042	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	2.0	0.15	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	2.0	0.17	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.80	0.065	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.80	0.081	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
9Cl-PF3ONS (F53B Minor)	ND	0.80	0.077	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
11Cl-PF3OUdS (F53B Major)	ND	0.80	0.10	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	2.0	0.17	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	9.9	1.2	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	9.9	0.97	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	0.40	0.020	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	0.40	0.042	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS

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Project Location: NY | Sample Description: | Work Order: 23L0555

Date Received: 12/2/2023

Field Sample #: SB-1 (2ft) | Sampled: 11/29/2023 09:15

Sample ID: 23L0555-02

Sample Matrix: Soil

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	0.40	0.031	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.40	0.040	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:34	AMS

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
13C4-PFBA	70.6		10-130		1/4/24 15:34
13C5-PFPeA	68.1		35-150		1/4/24 15:34
13C5-PFHxA	66.2		55-150		1/4/24 15:34
13C4-PFHpA	63.8		55-150		1/4/24 15:34
13C8-PFOA	68.0		60-140		1/4/24 15:34
13C9-PFNA	63.8		55-140		1/4/24 15:34
13C6-PFDA	68.3		50-140		1/4/24 15:34
13C7-PFUnA	66.5		30-140		1/4/24 15:34
13C2-PFDoA	70.8		10-150		1/4/24 15:34
13C2-PFTeDA	72.0		10-130		1/4/24 15:34
13C3-PFBS	65.0		55-150		1/4/24 15:34
13C3-PFHxS	64.0		55-150		1/4/24 15:34
13C8-PFOS	63.8		45-140		1/4/24 15:34
13C2-4:2FTS	64.3		60-200		1/4/24 15:34
13C2-6:2FTS	**59.8**	*	60-200	PF-17C	1/4/24 15:34
13C2-8:2FTS	62.3		50-200		1/4/24 15:34
13C8-PFOSA	67.0		30-130		1/4/24 15:34
D3-NMeFOSA	48.0		15-130		1/4/24 15:34
D5-NEtFOSA	44.8		10-130		1/4/24 15:34
D3-NMeFOSAA	58.5		45-200		1/4/24 15:34
D5-NEtFOSAA	62.4		10-200		1/4/24 15:34
D7-NMeFOSE	69.3		10-150		1/4/24 15:34
D9-NEtFOSE	66.8		10-150		1/4/24 15:34
13C3-HFPO-DA	71.1		25-160		1/4/24 15:34

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Project Location: NY | Sample Description: | Work Order: 23L0555

Date Received: 12/2/2023

Field Sample #: SB-1 (2ft) | Sampled: 11/29/2023 09:15

Sample ID: 23L0555-02

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	91.0		% Wt	1	H-06	SM 2540G	12/8/23	12/8/23 12:37	DV

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Project Location: NY | Sample Description: | Work Order: 23L0555

Date Received: 12/2/2023

Field Sample #: MW-4 (2ft) | Sampled: 11/29/2023 13:30

Sample ID: 23L0555-03

Sample Matrix: Soil

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	0.79	0.14	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
Perfluoropentanoic acid (PFPeA)	0.040	0.40	0.026	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/4/24 15:49	AMS
Perfluorohexanoic acid (PFHxA)	ND	0.20	0.013	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
Perfluoroheptanoic acid (PFHpA)	0.017	0.20	0.015	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/4/24 15:49	AMS
Perfluorooctanoic acid (PFOA)	0.034	0.20	0.029	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/4/24 15:49	AMS
Perfluorononanoic acid (PFNA)	0.041	0.20	0.026	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/4/24 15:49	AMS
Perfluorodecanoic acid (PFDA)	0.027	0.20	0.018	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/4/24 15:49	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.20	0.020	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.20	0.022	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.20	0.027	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.20	0.018	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	0.20	0.020	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.20	0.029	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	0.20	0.025	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.20	0.022	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
Perfluorooctanesulfonic acid (PFOS)	0.17	0.20	0.035	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/4/24 15:49	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.20	0.030	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.20	0.044	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.20	0.021	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	0.79	0.074	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	0.79	0.081	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	0.79	0.074	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.20	0.10	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.20	0.020	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.20	0.028	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.20	0.028	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.20	0.042	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	2.0	0.15	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	2.0	0.17	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.79	0.065	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.79	0.080	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
9Cl-PF3ONS (F53B Minor)	ND	0.79	0.076	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
11Cl-PF3OUdS (F53B Major)	ND	0.79	0.10	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	2.0	0.17	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	9.9	1.2	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	9.9	0.97	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	0.40	0.020	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	0.40	0.042	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS

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Project Location: NY | Sample Description: | Work Order: 23L0555

Date Received: 12/2/2023

Field Sample #: MW-4 (2ft) | Sampled: 11/29/2023 13:30

Sample ID: 23L0555-03

Sample Matrix: Soil

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	0.40	0.031	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.40	0.040	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 15:49	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	83.6	10-130		1/4/24 15:49
13C5-PFPeA	82.2	35-150		1/4/24 15:49
13C5-PFHxA	83.4	55-150		1/4/24 15:49
13C4-PFHpA	81.8	55-150		1/4/24 15:49
13C8-PFOA	80.0	60-140		1/4/24 15:49
13C9-PFNA	81.8	55-140		1/4/24 15:49
13C6-PFDA	82.9	50-140		1/4/24 15:49
13C7-PFUnA	84.3	30-140		1/4/24 15:49
13C2-PFDoA	87.5	10-150		1/4/24 15:49
13C2-PFTeDA	91.2	10-130		1/4/24 15:49
13C3-PFBS	81.0	55-150		1/4/24 15:49
13C3-PFHxS	83.6	55-150		1/4/24 15:49
13C8-PFOS	80.9	45-140		1/4/24 15:49
13C2-4:2FTS	75.8	60-200		1/4/24 15:49
13C2-6:2FTS	74.0	60-200		1/4/24 15:49
13C2-8:2FTS	79.1	50-200		1/4/24 15:49
13C8-PFOSA	80.9	30-130		1/4/24 15:49
D3-NMeFOSA	60.6	15-130		1/4/24 15:49
D5-NEtFOSA	54.1	10-130		1/4/24 15:49
D3-NMeFOSAA	90.5	45-200		1/4/24 15:49
D5-NEtFOSAA	95.0	10-200		1/4/24 15:49
D7-NMeFOSE	82.5	10-150		1/4/24 15:49
D9-NEtFOSE	79.3	10-150		1/4/24 15:49
13C3-HFPO-DA	83.2	25-160		1/4/24 15:49

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Project Location: NY | Sample Description: | Work Order: 23L0555

Date Received: 12/2/2023

Field Sample #: MW-4 (2ft) | Sampled: 11/29/2023 13:30

Sample ID: 23L0555-03

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	84.0		% Wt	1	H-06	SM 2540G	12/8/23	12/8/23 12:37	DV

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Project Location: NY | Sample Description: | Work Order: 23L0555

Date Received: 12/2/2023

Field Sample #: SB-2 (2ft) | Sampled: 11/29/2023 10:05

Sample ID: 23L0555-04

Sample Matrix: Soil

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	0.79	0.14	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
Perfluoropentanoic acid (PFPeA)	0.039	0.40	0.026	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/4/24 16:05	AMS
Perfluorohexanoic acid (PFHxA)	0.041	0.20	0.014	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/4/24 16:05	AMS
Perfluoroheptanoic acid (PFHpA)	0.017	0.20	0.015	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/4/24 16:05	AMS
Perfluorooctanoic acid (PFOA)	ND	0.20	0.029	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
Perfluorononanoic acid (PFNA)	ND	0.20	0.026	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
Perfluorodecanoic acid (PFDA)	ND	0.20	0.018	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.20	0.020	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.20	0.022	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.20	0.027	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.20	0.018	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	0.20	0.020	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.20	0.030	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
Perfluorohexanesulfonic acid (PFHxS)	0.043	0.20	0.025	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/4/24 16:05	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.20	0.022	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
Perfluorooctanesulfonic acid (PFOS)	0.18	0.20	0.036	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/4/24 16:05	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.20	0.030	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.20	0.045	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.20	0.021	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	0.79	0.074	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	0.79	0.081	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	0.79	0.074	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.20	0.10	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.20	0.021	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.20	0.028	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.20	0.028	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.20	0.042	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	2.0	0.15	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	2.0	0.17	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.79	0.065	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.79	0.080	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
9Cl-PF3ONS (F53B Minor)	ND	0.79	0.076	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
11Cl-PF3OUdS (F53B Major)	ND	0.79	0.10	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	2.0	0.17	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	9.9	1.2	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	9.9	0.97	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	0.40	0.020	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	0.40	0.042	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS

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Project Location: NY | Sample Description: | Work Order: 23L0555

Date Received: 12/2/2023

Field Sample #: SB-2 (2ft) | Sampled: 11/29/2023 10:05

Sample ID: 23L0555-04

Sample Matrix: Soil

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	0.40	0.031	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.40	0.040	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:05	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	82.6	10-130		1/4/24 16:05
13C5-PFPeA	82.2	35-150		1/4/24 16:05
13C5-PFHxA	80.9	55-150		1/4/24 16:05
13C4-PFHpA	80.1	55-150		1/4/24 16:05
13C8-PFOA	80.7	60-140		1/4/24 16:05
13C9-PFNA	83.5	55-140		1/4/24 16:05
13C6-PFDA	86.0	50-140		1/4/24 16:05
13C7-PFUnA	85.7	30-140		1/4/24 16:05
13C2-PFDoA	88.9	10-150		1/4/24 16:05
13C2-PFTeDA	85.4	10-130		1/4/24 16:05
13C3-PFBS	82.5	55-150		1/4/24 16:05
13C3-PFHxS	83.8	55-150		1/4/24 16:05
13C8-PFOS	81.6	45-140		1/4/24 16:05
13C2-4:2FTS	76.2	60-200		1/4/24 16:05
13C2-6:2FTS	73.0	60-200		1/4/24 16:05
13C2-8:2FTS	80.5	50-200		1/4/24 16:05
13C8-PFOSA	85.3	30-130		1/4/24 16:05
D3-NMeFOSA	58.8	15-130		1/4/24 16:05
D5-NEtFOSA	54.8	10-130		1/4/24 16:05
D3-NMeFOSAA	78.1	45-200		1/4/24 16:05
D5-NEtFOSAA	80.1	10-200		1/4/24 16:05
D7-NMeFOSE	80.2	10-150		1/4/24 16:05
D9-NEtFOSE	75.3	10-150		1/4/24 16:05
13C3-HFPO-DA	84.4	25-160		1/4/24 16:05

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Project Location: NY | Sample Description: | Work Order: 23L0555

Date Received: 12/2/2023

Field Sample #: SB-2 (2ft) | Sampled: 11/29/2023 10:05

Sample ID: 23L0555-04

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	90.1		% Wt	1	H-06	SM 2540G	12/8/23	12/8/23 12:37	DV

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Project Location: NY | Sample Description: | Work Order: 23L0555

Date Received: 12/2/2023

Field Sample #: Duplicate | Sampled: 11/29/2023 00:00

Sample ID: 23L0555-05

Sample Matrix: Soil

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	0.79	0.14	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
Perfluoropentanoic acid (PFPeA)	0.047	0.40	0.026	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/4/24 16:20	AMS
Perfluorohexanoic acid (PFHxA)	0.031	0.20	0.014	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/4/24 16:20	AMS
Perfluoroheptanoic acid (PFHpA)	0.035	0.20	0.015	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/4/24 16:20	AMS
Perfluorooctanoic acid (PFOA)	0.053	0.20	0.029	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/4/24 16:20	AMS
Perfluorononanoic acid (PFNA)	ND	0.20	0.026	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
Perfluorodecanoic acid (PFDA)	ND	0.20	0.018	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.20	0.020	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.20	0.022	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.20	0.027	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.20	0.018	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	0.20	0.020	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.20	0.030	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	0.20	0.025	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.20	0.022	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
Perfluorooctanesulfonic acid (PFOS)	0.063	0.20	0.035	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/4/24 16:20	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.20	0.030	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.20	0.045	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.20	0.021	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	0.79	0.074	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	0.79	0.081	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	0.79	0.074	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.20	0.10	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.20	0.021	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.20	0.028	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.20	0.028	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.20	0.042	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	2.0	0.15	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	2.0	0.17	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.79	0.065	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.79	0.080	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
9Cl-PF3ONS (F53B Minor)	ND	0.79	0.076	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
11Cl-PF3OUdS (F53B Major)	ND	0.79	0.10	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	2.0	0.17	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	9.9	1.2	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	9.9	0.97	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	0.40	0.020	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	0.40	0.042	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS

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Project Location: NY | Sample Description: | Work Order: 23L0555

Date Received: 12/2/2023

Field Sample #: Duplicate | Sampled: 11/29/2023 00:00

Sample ID: 23L0555-05

Sample Matrix: Soil

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	0.40	0.031	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.40	0.040	µg/kg dry	1		Draft Method 1633	1/2/24	1/4/24 16:20	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	95.7	10-130		1/4/24 16:20
13C5-PFPeA	95.2	35-150		1/4/24 16:20
13C5-PFHxA	94.1	55-150		1/4/24 16:20
13C4-PFHpA	97.4	55-150		1/4/24 16:20
13C8-PFOA	97.9	60-140		1/4/24 16:20
13C9-PFNA	93.6	55-140		1/4/24 16:20
13C6-PFDA	97.7	50-140		1/4/24 16:20
13C7-PFUnA	98.6	30-140		1/4/24 16:20
13C2-PFDoA	102	10-150		1/4/24 16:20
13C2-PFTeDA	113	10-130		1/4/24 16:20
13C3-PFBS	94.5	55-150		1/4/24 16:20
13C3-PFHxS	97.9	55-150		1/4/24 16:20
13C8-PFOS	92.5	45-140		1/4/24 16:20
13C2-4:2FTS	90.8	60-200		1/4/24 16:20
13C2-6:2FTS	87.0	60-200		1/4/24 16:20
13C2-8:2FTS	99.7	50-200		1/4/24 16:20
13C8-PFOSA	105	30-130		1/4/24 16:20
D3-NMeFOSA	76.3	15-130		1/4/24 16:20
D5-NEtFOSA	70.5	10-130		1/4/24 16:20
D3-NMeFOSAA	112	45-200		1/4/24 16:20
D5-NEtFOSAA	115	10-200		1/4/24 16:20
D7-NMeFOSE	90.8	10-150		1/4/24 16:20
D9-NEtFOSE	87.0	10-150		1/4/24 16:20
13C3-HFPO-DA	97.8	25-160		1/4/24 16:20

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Project Location: NY | Sample Description: | Work Order: 23L0555

Date Received: 12/2/2023

Field Sample #: Duplicate | Sampled: 11/29/2023 00:00

Sample ID: 23L0555-05

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	91.4		% Wt	1	H-06	SM 2540G	12/8/23	12/8/23 12:37	DV

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Sample Extraction Data

Prep Method:Draft Method 1633 **Analytical Method:Draft Method 1633**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L0555-01 [MW-1 (2ft)]	B361583	5.58	5.00	01/02/24
23L0555-02 [SB-1 (2ft)]	B361583	5.52	5.00	01/02/24
23L0555-03 [MW-4 (2ft)]	B361583	6.02	5.00	01/02/24
23L0555-04 [SB-2 (2ft)]	B361583	5.59	5.00	01/02/24
23L0555-05 [Duplicate]	B361583	5.52	5.00	01/02/24

Prep Method:% Solids **Analytical Method:SM 2540G**

Lab Number [Field ID]	Batch	Date
23L0555-01 [MW-1 (2ft)]	B360214	12/08/23
23L0555-02 [SB-1 (2ft)]	B360214	12/08/23
23L0555-03 [MW-4 (2ft)]	B360214	12/08/23
23L0555-04 [SB-2 (2ft)]	B360214	12/08/23
23L0555-05 [Duplicate]	B360214	12/08/23

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361583 - Draft Method 1633										
Blank (B361583-BLK1)				Prepared: 01/02/24 Analyzed: 01/04/24						
Perfluorobutanoic acid (PFBA)	ND	0.77	µg/kg wet							
Perfluoropentanoic acid (PFPeA)	ND	0.39	µg/kg wet							
Perfluorohexanoic acid (PFHxA)	ND	0.19	µg/kg wet							
Perfluoroheptanoic acid (PFHpA)	ND	0.19	µg/kg wet							
Perfluorooctanoic acid (PFOA)	ND	0.19	µg/kg wet							
Perfluorononanoic acid (PFNA)	ND	0.19	µg/kg wet							
Perfluorodecanoic acid (PFDA)	ND	0.19	µg/kg wet							
Perfluoroundecanoic acid (PFUnA)	ND	0.19	µg/kg wet							
Perfluorododecanoic acid (PFDoA)	ND	0.19	µg/kg wet							
Perfluorotridecanoic acid (PFTrDA)	ND	0.19	µg/kg wet							
Perfluorotetradecanoic acid (PFTeDA)	ND	0.19	µg/kg wet							
Perfluorobutanesulfonic acid (PFBS)	ND	0.19	µg/kg wet							
Perfluoropentanesulfonic acid (PFPeS)	ND	0.19	µg/kg wet							
Perfluorohexanesulfonic acid (PFHxS)	ND	0.19	µg/kg wet							
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.19	µg/kg wet							
Perfluorooctanesulfonic acid (PFOS)	ND	0.19	µg/kg wet							
Perfluorononanesulfonic acid (PFNS)	ND	0.19	µg/kg wet							
Perfluorodecanesulfonic acid (PFDS)	ND	0.19	µg/kg wet							
Perfluorododecanesulfonic acid (PFDoS)	ND	0.19	µg/kg wet							
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	0.77	µg/kg wet							
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	0.77	µg/kg wet							
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	0.77	µg/kg wet							
Perfluorooctanesulfonamide (PFOSA)	ND	0.19	µg/kg wet							
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.19	µg/kg wet							
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.19	µg/kg wet							
N-MeFOSAA (NMeFOSAA)	ND	0.19	µg/kg wet							
N-EtFOSAA (NEtFOSAA)	ND	0.19	µg/kg wet							
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	1.9	µg/kg wet							
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	1.9	µg/kg wet							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.77	µg/kg wet							
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.77	µg/kg wet							
9Cl-PF3ONS (F53B Minor)	ND	0.77	µg/kg wet							
11Cl-PF3OUdS (F53B Major)	ND	0.77	µg/kg wet							
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	1.9	µg/kg wet							
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	9.7	µg/kg wet							
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	9.7	µg/kg wet							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	0.39	µg/kg wet							
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	0.39	µg/kg wet							
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	0.39	µg/kg wet							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.39	µg/kg wet							
Surrogate: 13C4-PFBA	*7.88*		µg/kg wet	9.68		81.4	10-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361583 - Draft Method 1633										
Blank (B361583-BLK1)				Prepared: 01/02/24 Analyzed: 01/04/24						
Surrogate: 13C5-PFPeA	*3.92*		µg/kg wet	4.84		80.9	35-150			
Surrogate: 13C5-PFHxA	*1.89*		µg/kg wet	2.42		78.1	55-150			
Surrogate: 13C4-PFHpA	*1.88*		µg/kg wet	2.42		77.8	55-150			
Surrogate: 13C8-PFOA	*1.91*		µg/kg wet	2.42		78.7	60-140			
Surrogate: 13C9-PFNA	*0.915*		µg/kg wet	1.21		75.6	55-140			
Surrogate: 13C6-PFDA	*0.952*		µg/kg wet	1.21		78.6	50-140			
Surrogate: 13C7-PFUnA	*0.907*		µg/kg wet	1.21		74.9	30-140			
Surrogate: 13C2-PFDoA	*0.922*		µg/kg wet	1.21		76.2	10-150			
Surrogate: 13C2-PFTeDA	*0.804*		µg/kg wet	1.21		66.4	10-130			
Surrogate: 13C3-PFBS	*1.92*		µg/kg wet	2.42		79.3	55-150			
Surrogate: 13C3-PFHxS	*1.86*		µg/kg wet	2.42		77.0	55-150			
Surrogate: 13C8-PFOS	*1.87*		µg/kg wet	2.42		77.0	45-140			
Surrogate: 13C2-4:2FTS	*3.67*		µg/kg wet	4.84		75.8	60-200			
Surrogate: 13C2-6:2FTS	*3.35*		µg/kg wet	4.84		69.2	60-200			
Surrogate: 13C2-8:2FTS	*3.40*		µg/kg wet	4.84		70.1	50-200			
Surrogate: 13C8-PFOSA	*1.94*		µg/kg wet	2.42		80.3	30-130			
Surrogate: D3-NMeFOSA	*1.46*		µg/kg wet	2.42		60.2	15-130			
Surrogate: D5-NEtFOSA	*1.39*		µg/kg wet	2.42		57.5	10-130			
Surrogate: D3-NMeFOSAA	*3.55*		µg/kg wet	4.84		73.3	45-200			
Surrogate: D5-NEtFOSAA	*3.39*		µg/kg wet	4.84		69.9	10-200			
Surrogate: D7-NMeFOSE	*17.3*		µg/kg wet	24.2		71.4	10-150			
Surrogate: D9-NEtFOSE	*16.2*		µg/kg wet	24.2		67.1	10-150			
Surrogate: 13C3-HFPO-DA	*7.84*		µg/kg wet	9.68		81.0	25-160			
LCS (B361583-BS1)				Prepared: 01/02/24 Analyzed: 01/04/24						
Perfluorobutanoic acid (PFBA)	9.72	0.79	µg/kg wet	9.52		102	58-148			
Perfluoropentanoic acid (PFPeA)	4.95	0.40	µg/kg wet	4.76		104	54-152			
Perfluorohexanoic acid (PFHxA)	2.50	0.20	µg/kg wet	2.38		105	55-152			
Perfluoroheptanoic acid (PFHpA)	2.45	0.20	µg/kg wet	2.38		103	54-154			
Perfluorooctanoic acid (PFOA)	2.35	0.20	µg/kg wet	2.38		98.7	52-161			
Perfluorononanoic acid (PFNA)	2.52	0.20	µg/kg wet	2.38		106	59-149			
Perfluorodecanoic acid (PFDA)	2.51	0.20	µg/kg wet	2.38		106	52-147			
Perfluoroundecanoic acid (PFUnA)	2.53	0.20	µg/kg wet	2.38		106	48-159			
Perfluorododecanoic acid (PFDoA)	2.53	0.20	µg/kg wet	2.38		106	64-142			
Perfluorotridecanoic acid (PFTrDA)	2.33	0.20	µg/kg wet	2.38		98.0	49-148			
Perfluorotetradecanoic acid (PFTeDA)	2.56	0.20	µg/kg wet	2.38		107	47-161			
Perfluorobutanesulfonic acid (PFBS)	2.24	0.20	µg/kg wet	2.11		106	62-144			
Perfluoropentanesulfonic acid (PFPeS)	2.32	0.20	µg/kg wet	2.24		104	59-151			
Perfluorohexanesulfonic acid (PFHxS)	2.24	0.20	µg/kg wet	2.18		103	57-146			
Perfluoroheptanesulfonic acid (PFHpS)	2.36	0.20	µg/kg wet	2.27		104	55-152			
Perfluorooctanesulfonic acid (PFOS)	2.24	0.20	µg/kg wet	2.21		102	58-149			
Perfluorononanesulfonic acid (PFNS)	2.32	0.20	µg/kg wet	2.29		101	52-148			
Perfluorodecanesulfonic acid (PFDS)	2.28	0.20	µg/kg wet	2.30		99.2	51-147			
Perfluorododecanesulfonic acid (PFDoS)	2.13	0.20	µg/kg wet	2.31		92.1	36-145			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	10.0	0.79	µg/kg wet	8.92		112	67-146			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	9.64	0.79	µg/kg wet	9.04		107	61-151			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	9.55	0.79	µg/kg wet	9.16		104	63-152			
Perfluorooctanesulfonamide (PFOSA)	2.48	0.20	µg/kg wet	2.38		104	61-148			
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	2.28	0.20	µg/kg wet	2.38		95.7	63-145			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361583 - Draft Method 1633										
LCS (B361583-BS1)				Prepared: 01/02/24 Analyzed: 01/04/24						
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	2.37	0.20	µg/kg wet	2.38		99.5	65-139			
N-MeFOSAA (NMeFOSAA)	2.47	0.20	µg/kg wet	2.38		104	58-144			
N-EtFOSAA (NEtFOSAA)	2.43	0.20	µg/kg wet	2.38		102	59-146			
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	24.7	2.0	µg/kg wet	23.8		104	71-136			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	24.4	2.0	µg/kg wet	23.8		102	69-137			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	9.99	0.79	µg/kg wet	9.52		105	63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	8.58	0.79	µg/kg wet	8.98		95.6	68-146			
9Cl-PF3ONS (F53B Minor)	8.31	0.79	µg/kg wet	8.92		93.1	56-156			
11Cl-PF3OUdS (F53B Major)	8.06	0.79	µg/kg wet	8.98		89.7	46-156			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	20.8	2.0	µg/kg wet	23.8		87.5	62-129			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	107	9.9	µg/kg wet	119		90.0	63-134			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	101	9.9	µg/kg wet	119		85.0	50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	4.37	0.40	µg/kg wet	4.23		103	56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.74	0.40	µg/kg wet	4.76		99.6	51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.93	0.40	µg/kg wet	4.76		104	55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.63	0.40	µg/kg wet	4.76		97.2	48-161			
Surrogate: 13C4-PFBA	*8.41*		µg/kg wet	9.91		84.9	10-130			
Surrogate: 13C5-PFPeA	*4.12*		µg/kg wet	4.96		83.2	35-150			
Surrogate: 13C5-PFHxA	*2.01*		µg/kg wet	2.48		81.2	55-150			
Surrogate: 13C4-PFHpA	*1.99*		µg/kg wet	2.48		80.1	55-150			
Surrogate: 13C8-PFOA	*2.05*		µg/kg wet	2.48		82.8	60-140			
Surrogate: 13C9-PFNA	*0.980*		µg/kg wet	1.24		79.1	55-140			
Surrogate: 13C6-PFDA	*1.00*		µg/kg wet	1.24		80.7	50-140			
Surrogate: 13C7-PFUnA	*0.951*		µg/kg wet	1.24		76.7	30-140			
Surrogate: 13C2-PFDoA	*0.962*		µg/kg wet	1.24		77.7	10-150			
Surrogate: 13C2-PFTeDA	*0.836*		µg/kg wet	1.24		67.5	10-130			
Surrogate: 13C3-PFBS	*2.04*		µg/kg wet	2.48		82.5	55-150			
Surrogate: 13C3-PFHxS	*2.01*		µg/kg wet	2.48		80.9	55-150			
Surrogate: 13C8-PFOS	*1.93*		µg/kg wet	2.48		77.7	45-140			
Surrogate: 13C2-4:2FTS	*4.25*		µg/kg wet	4.96		85.7	60-200			
Surrogate: 13C2-6:2FTS	*3.90*		µg/kg wet	4.96		78.7	60-200			
Surrogate: 13C2-8:2FTS	*3.88*		µg/kg wet	4.96		78.2	50-200			
Surrogate: 13C8-PFOSA	*1.96*		µg/kg wet	2.48		79.2	30-130			
Surrogate: D3-NMeFOSA	*1.48*		µg/kg wet	2.48		59.8	15-130			
Surrogate: D5-NEtFOSA	*1.38*		µg/kg wet	2.48		55.6	10-130			
Surrogate: D3-NMeFOSAA	*3.88*		µg/kg wet	4.96		78.3	45-200			
Surrogate: D5-NEtFOSAA	*3.77*		µg/kg wet	4.96		76.1	10-200			
Surrogate: D7-NMeFOSE	*17.0*		µg/kg wet	24.8		68.4	10-150			
Surrogate: D9-NEtFOSE	*16.6*		µg/kg wet	24.8		67.0	10-150			
Surrogate: 13C3-HFPO-DA	*8.32*		µg/kg wet	9.91		83.9	25-160			
MRL Check (B361583-MRL1)				Prepared: 01/02/24 Analyzed: 01/04/24						
Perfluorobutanoic acid (PFBA)	0.825	0.78	µg/kg wet	0.780		106	44-157			
Perfluoropentanoic acid (PFPeA)	0.404	0.39	µg/kg wet	0.390		104	57-148			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361583 - Draft Method 1633										
MRL Check (B361583-MRL1)				Prepared: 01/02/24 Analyzed: 01/04/24						
Perfluorohexanoic acid (PFHxA)	0.201	0.20	µg/kg wet	0.195		103	62-149			
Perfluoroheptanoic acid (PFHpA)	0.202	0.20	µg/kg wet	0.195		104	56-150			
Perfluorooctanoic acid (PFOA)	0.186	0.20	µg/kg wet	0.195		95.6	57-161			J
Perfluorononanoic acid (PFNA)	0.189	0.20	µg/kg wet	0.195		96.8	53-157			J
Perfluorodecanoic acid (PFDA)	0.197	0.20	µg/kg wet	0.195		101	43-158			
Perfluoroundecanoic acid (PFUnA)	0.198	0.20	µg/kg wet	0.195		101	50-155			
Perfluorododecanoic acid (PFDoA)	0.204	0.20	µg/kg wet	0.195		105	60-141			
Perfluorotridecanoic acid (PFTrDA)	0.183	0.20	µg/kg wet	0.195		93.9	52-140			J
Perfluorotetradecanoic acid (PFTeDA)	0.196	0.20	µg/kg wet	0.195		100	52-156			
Perfluorobutanesulfonic acid (PFBS)	0.163	0.20	µg/kg wet	0.173		94.3	63-145			J
Perfluoropentanesulfonic acid (PFPeS)	0.183	0.20	µg/kg wet	0.183		99.6	58-144			J
Perfluorohexanesulfonic acid (PFHxS)	0.192	0.20	µg/kg wet	0.178		108	44-158			J
Perfluoroheptanesulfonic acid (PFHpS)	0.181	0.20	µg/kg wet	0.186		97.5	51-150			J
Perfluorooctanesulfonic acid (PFOS)	0.189	0.20	µg/kg wet	0.181		104	43-162			J
Perfluorononanesulfonic acid (PFNS)	0.190	0.20	µg/kg wet	0.188		101	46-151			J
Perfluorodecanesulfonic acid (PFDS)	0.186	0.20	µg/kg wet	0.188		98.6	50-144			J
Perfluorododecanesulfonic acid (PFDoS)	0.191	0.20	µg/kg wet	0.189		101	30-138			J
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	0.773	0.78	µg/kg wet	0.731		106	52-158			J
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	0.876	0.78	µg/kg wet	0.741		118	48-158			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	0.813	0.78	µg/kg wet	0.751		108	46-165			
Perfluorooctanesulfonamide (PFOSA)	0.196	0.20	µg/kg wet	0.195		101	47-163			
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	0.177	0.20	µg/kg wet	0.195		90.8	54-155			J
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	0.200	0.20	µg/kg wet	0.195		102	49-156			
N-MeFOSAA (NMeFOSAA)	0.222	0.20	µg/kg wet	0.195		114	32-160			
N-EtFOSAA (NEtFOSAA)	0.209	0.20	µg/kg wet	0.195		107	51-154			
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	1.96	2.0	µg/kg wet	1.95		101	56-151			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	1.97	2.0	µg/kg wet	1.95		101	60-147			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	0.780	0.78	µg/kg wet	0.780		100	58-154			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.707	0.78	µg/kg wet	0.736		96.0	61-148			J
9Cl-PF3ONS (F53B Minor)	0.688	0.78	µg/kg wet	0.731		94.0	44-167			J
11Cl-PF3OUdS (F53B Major)	0.661	0.78	µg/kg wet	0.736		89.8	36-158			J
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	1.65	2.0	µg/kg wet	1.95		84.6	32-161			J
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	9.19	9.8	µg/kg wet	9.75		94.3	39-156			J
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	8.97	9.8	µg/kg wet	9.75		91.9	36-149			J
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.395	0.39	µg/kg wet	0.347		114	56-144			
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.457	0.39	µg/kg wet	0.390		117	48-150			
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.455	0.39	µg/kg wet	0.390		117	49-154			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.446	0.39	µg/kg wet	0.390		114	47-160			
Surrogate: 13C4-PFBA	*7.90*		µg/kg wet	9.75		81.0	10-130			
Surrogate: 13C5-PFPeA	*3.75*		µg/kg wet	4.88		76.9	35-150			
Surrogate: 13C5-PFHxA	*1.86*		µg/kg wet	2.44		76.2	55-150			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361583 - Draft Method 1633										
MRL Check (B361583-MRL1)				Prepared: 01/02/24 Analyzed: 01/04/24						
Surrogate: 13C4-PFHpA	*1.82*		µg/kg wet	2.44		74.7	55-150			
Surrogate: 13C8-PFOA	*1.89*		µg/kg wet	2.44		77.7	60-140			
Surrogate: 13C9-PFNA	*0.904*		µg/kg wet	1.22		74.2	55-140			
Surrogate: 13C6-PFDA	*0.945*		µg/kg wet	1.22		77.5	50-140			
Surrogate: 13C7-PFUnA	*0.898*		µg/kg wet	1.22		73.7	30-140			
Surrogate: 13C2-PFDoA	*0.898*		µg/kg wet	1.22		73.7	10-150			
Surrogate: 13C2-PFTeDA	*0.809*		µg/kg wet	1.22		66.3	10-130			
Surrogate: 13C3-PFBS	*1.88*		µg/kg wet	2.44		77.3	55-150			
Surrogate: 13C3-PFHxS	*1.82*		µg/kg wet	2.44		74.6	55-150			
Surrogate: 13C8-PFOS	*1.83*		µg/kg wet	2.44		75.0	45-140			
Surrogate: 13C2-4:2FTS	*3.72*		µg/kg wet	4.88		76.3	60-200			
Surrogate: 13C2-6:2FTS	*3.49*		µg/kg wet	4.88		71.5	60-200			
Surrogate: 13C2-8:2FTS	*3.57*		µg/kg wet	4.88		73.3	50-200			
Surrogate: 13C8-PFOSA	*1.92*		µg/kg wet	2.44		78.6	30-130			
Surrogate: D3-NMeFOSA	*1.41*		µg/kg wet	2.44		57.8	15-130			
Surrogate: D5-NEtFOSA	*1.43*		µg/kg wet	2.44		58.5	10-130			
Surrogate: D3-NMeFOSAA	*3.88*		µg/kg wet	4.88		79.7	45-200			
Surrogate: D5-NEtFOSAA	*3.55*		µg/kg wet	4.88		72.8	10-200			
Surrogate: D7-NMeFOSE	*16.6*		µg/kg wet	24.4		68.2	10-150			
Surrogate: D9-NEtFOSE	*16.0*		µg/kg wet	24.4		65.6	10-150			
Surrogate: 13C3-HFPO-DA	*7.48*		µg/kg wet	9.75		76.7	25-160			
Matrix Spike (B361583-MS1)	**Source: 23L0555-02**			Prepared: 01/02/24 Analyzed: 01/04/24						
Perfluorobutanoic acid (PFBA)	10.7	0.78	µg/kg dry	9.40	ND	114	58-148			
Perfluoropentanoic acid (PFPeA)	5.37	0.39	µg/kg dry	4.70	0.0302	114	54-152			
Perfluorohexanoic acid (PFHxA)	2.67	0.20	µg/kg dry	2.35	ND	114	55-152			
Perfluoroheptanoic acid (PFHpA)	2.66	0.20	µg/kg dry	2.35	ND	113	54-154			
Perfluorooctanoic acid (PFOA)	2.59	0.20	µg/kg dry	2.35	ND	110	52-161			
Perfluorononanoic acid (PFNA)	2.68	0.20	µg/kg dry	2.35	ND	114	59-149			
Perfluorodecanoic acid (PFDA)	2.69	0.20	µg/kg dry	2.35	ND	114	52-147			
Perfluoroundecanoic acid (PFUnA)	2.78	0.20	µg/kg dry	2.35	ND	118	48-159			
Perfluorododecanoic acid (PFDoA)	2.75	0.20	µg/kg dry	2.35	ND	117	64-142			
Perfluorotridecanoic acid (PFTrDA)	2.81	0.20	µg/kg dry	2.35	ND	119	49-148			
Perfluorotetradecanoic acid (PFTeDA)	2.83	0.20	µg/kg dry	2.35	ND	121	47-161			
Perfluorobutanesulfonic acid (PFBS)	2.40	0.20	µg/kg dry	2.09	ND	115	62-144			
Perfluoropentanesulfonic acid (PFPeS)	2.52	0.20	µg/kg dry	2.21	ND	114	59-151			
Perfluorohexanesulfonic acid (PFHxS)	2.43	0.20	µg/kg dry	2.15	0.0293	112	57-146			
Perfluoroheptanesulfonic acid (PFHpS)	2.52	0.20	µg/kg dry	2.24	ND	113	55-152			
Perfluorooctanesulfonic acid (PFOS)	2.52	0.20	µg/kg dry	2.18	0.110	111	58-149			
Perfluorononanesulfonic acid (PFNS)	2.60	0.20	µg/kg dry	2.26	ND	115	52-148			
Perfluorodecanesulfonic acid (PFDS)	2.61	0.20	µg/kg dry	2.27	ND	115	51-147			
Perfluorododecanesulfonic acid (PFDoS)	2.59	0.20	µg/kg dry	2.28	ND	114	36-145			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	10.6	0.78	µg/kg dry	8.82	ND	120	67-146			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	10.4	0.78	µg/kg dry	8.93	ND	116	61-151			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	10.4	0.78	µg/kg dry	9.05	ND	115	63-152			
Perfluorooctanesulfonamide (PFOSA)	2.76	0.20	µg/kg dry	2.35	ND	117	61-148			
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	2.61	0.20	µg/kg dry	2.35	ND	111	63-145			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	2.61	0.20	µg/kg dry	2.35	ND	111	65-139			
N-MeFOSAA (NMeFOSAA)	2.78	0.20	µg/kg dry	2.35	ND	118	58-144			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361583 - Draft Method 1633										
Matrix Spike (B361583-MS1)	**Source: 23L0555-02**			Prepared: 01/02/24 Analyzed: 01/04/24						
N-EtFOSAA (NEtFOSAA)	2.48	0.20	µg/kg dry	2.35	ND	105	59-146			
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	25.9	2.0	µg/kg dry	23.5	ND	110	71-136			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	25.8	2.0	µg/kg dry	23.5	ND	110	69-137			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	10.3	0.78	µg/kg dry	9.40	ND	110	63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	9.28	0.78	µg/kg dry	8.87	ND	105	68-146			
9Cl-PF3ONS (F53B Minor)	9.80	0.78	µg/kg dry	8.82	ND	111	56-156			
11Cl-PF3OUdS (F53B Major)	10.2	0.78	µg/kg dry	8.87	ND	115	46-156			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	19.7	2.0	µg/kg dry	23.5	ND	83.7	62-129			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	104	9.8	µg/kg dry	118	ND	88.9	63-134			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	108	9.8	µg/kg dry	118	ND	91.6	50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	4.81	0.39	µg/kg dry	4.18	ND	115	56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	5.13	0.39	µg/kg dry	4.70	ND	109	51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	5.40	0.39	µg/kg dry	4.70	ND	115	55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.98	0.39	µg/kg dry	4.70	ND	106	48-161			
Surrogate: 13C4-PFBA	*7.61*		µg/kg dry	9.79		77.7	10-130			
Surrogate: 13C5-PFPeA	*3.70*		µg/kg dry	4.90		75.5	35-150			
Surrogate: 13C5-PFHxA	*1.86*		µg/kg dry	2.45		75.8	55-150			
Surrogate: 13C4-PFHpA	*1.85*		µg/kg dry	2.45		75.4	55-150			
Surrogate: 13C8-PFOA	*1.83*		µg/kg dry	2.45		74.6	60-140			
Surrogate: 13C9-PFNA	*0.933*		µg/kg dry	1.22		76.2	55-140			
Surrogate: 13C6-PFDA	*0.955*		µg/kg dry	1.22		78.0	50-140			
Surrogate: 13C7-PFUnA	*0.975*		µg/kg dry	1.22		79.6	30-140			
Surrogate: 13C2-PFDoA	*1.05*		µg/kg dry	1.22		85.7	10-150			
Surrogate: 13C2-PFTeDA	*1.13*		µg/kg dry	1.22		92.1	10-130			
Surrogate: 13C3-PFBS	*1.85*		µg/kg dry	2.45		75.7	55-150			
Surrogate: 13C3-PFHxS	*1.84*		µg/kg dry	2.45		75.1	55-150			
Surrogate: 13C8-PFOS	*1.80*		µg/kg dry	2.45		73.6	45-140			
Surrogate: 13C2-4:2FTS	*3.84*		µg/kg dry	4.90		78.3	60-200			
Surrogate: 13C2-6:2FTS	*3.77*		µg/kg dry	4.90		76.9	60-200			
Surrogate: 13C2-8:2FTS	*3.99*		µg/kg dry	4.90		81.4	50-200			
Surrogate: 13C8-PFOSA	*1.85*		µg/kg dry	2.45		75.6	30-130			
Surrogate: D3-NMeFOSA	*1.25*		µg/kg dry	2.45		51.1	15-130			
Surrogate: D5-NEtFOSA	*0.995*		µg/kg dry	2.45		40.6	10-130			
Surrogate: D3-NMeFOSAA	*3.60*		µg/kg dry	4.90		73.6	45-200			
Surrogate: D5-NEtFOSAA	*4.21*		µg/kg dry	4.90		86.0	10-200			
Surrogate: D7-NMeFOSE	*19.3*		µg/kg dry	24.5		78.8	10-150			
Surrogate: D9-NEtFOSE	*18.8*		µg/kg dry	24.5		76.9	10-150			
Surrogate: 13C3-HFPO-DA	*7.71*		µg/kg dry	9.79		78.7	25-160			
Matrix Spike Dup (B361583-MSD1)	**Source: 23L0555-02**			Prepared: 01/02/24 Analyzed: 01/04/24						
Perfluorobutanoic acid (PFBA)	10.8	0.78	µg/kg dry	9.36	ND	115	58-148	0.792	20	
Perfluoropentanoic acid (PFPeA)	5.48	0.39	µg/kg dry	4.68	0.0302	116	54-152	2.02	20	
Perfluorohexanoic acid (PFHxA)	2.75	0.20	µg/kg dry	2.34	ND	117	55-152	2.77	25	
Perfluoroheptanoic acid (PFHpA)	2.64	0.20	µg/kg dry	2.34	ND	113	54-154	0.901	25	
Perfluorooctanoic acid (PFOA)	2.64	0.20	µg/kg dry	2.34	ND	113	52-161	2.08	25	

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361583 - Draft Method 1633										
Matrix Spike Dup (B361583-MSD1)	**Source: 23L0555-02**		Prepared: 01/02/24 Analyzed: 01/04/24							
Perfluorononanoic acid (PFNA)	2.79	0.20	µg/kg dry	2.34	ND	119	59-149	4.15	25	
Perfluorodecanoic acid (PFDA)	2.75	0.20	µg/kg dry	2.34	ND	118	52-147	2.32	25	
Perfluoroundecanoic acid (PFUnA)	2.75	0.20	µg/kg dry	2.34	ND	117	48-159	1.32	30	
Perfluorododecanoic acid (PFDoA)	2.72	0.20	µg/kg dry	2.34	ND	116	64-142	1.12	25	
Perfluorotridecanoic acid (PFTrDA)	2.91	0.20	µg/kg dry	2.34	ND	124	49-148	3.70	25	
Perfluorotetradecanoic acid (PFTeDA)	2.85	0.20	µg/kg dry	2.34	ND	122	47-161	0.416	25	
Perfluorobutanesulfonic acid (PFBS)	2.42	0.20	µg/kg dry	2.08	ND	117	62-144	0.991	20	
Perfluoropentanesulfonic acid (PFPeS)	2.49	0.20	µg/kg dry	2.20	ND	113	59-151	1.16	25	
Perfluorohexanesulfonic acid (PFHxS)	2.50	0.20	µg/kg dry	2.14	0.0293	115	57-146	2.88	25	
Perfluoroheptanesulfonic acid (PFHpS)	2.55	0.20	µg/kg dry	2.23	ND	114	55-152	1.10	25	
Perfluorooctanesulfonic acid (PFOS)	2.41	0.20	µg/kg dry	2.17	0.110	106	58-149	4.31	20	
Perfluorononanesulfonic acid (PFNS)	2.65	0.20	µg/kg dry	2.25	ND	118	52-148	1.90	25	
Perfluorodecanesulfonic acid (PFDS)	2.65	0.20	µg/kg dry	2.26	ND	117	51-147	1.28	25	
Perfluorododecanesulfonic acid (PFDoS)	2.64	0.20	µg/kg dry	2.27	ND	116	36-145	1.72	30	
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	10.7	0.78	µg/kg dry	8.78	ND	122	67-146	1.82	25	
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	9.98	0.78	µg/kg dry	8.89	ND	112	61-151	3.94	30	
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	10.4	0.78	µg/kg dry	9.01	ND	116	63-152	0.514	30	
Perfluorooctanesulfonamide (PFOSA)	2.75	0.20	µg/kg dry	2.34	ND	118	61-148	0.0842	20	
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	2.58	0.20	µg/kg dry	2.34	ND	110	63-145	1.13	25	
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	2.61	0.20	µg/kg dry	2.34	ND	111	65-139	0.0229	25	
N-MeFOSAA (NMeFOSAA)	2.92	0.20	µg/kg dry	2.34	ND	125	58-144	5.05	25	
N-EtFOSAA (NEtFOSAA)	2.66	0.20	µg/kg dry	2.34	ND	114	59-146	7.27	25	
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	26.0	2.0	µg/kg dry	23.4	ND	111	71-136	0.632	20	
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	26.2	2.0	µg/kg dry	23.4	ND	112	69-137	1.45	25	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	10.7	0.78	µg/kg dry	9.36	ND	114	63-144	3.65	25	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	9.38	0.78	µg/kg dry	8.84	ND	106	68-146	1.05	20	
9Cl-PF3ONS (F53B Minor)	9.96	0.78	µg/kg dry	8.78	ND	113	56-156	1.66	30	
11Cl-PF3OUdS (F53B Major)	10.3	0.78	µg/kg dry	8.84	ND	116	46-156	0.772	35	
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	19.4	2.0	µg/kg dry	23.4	ND	82.9	62-129	1.37	20	
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	103	9.8	µg/kg dry	117	ND	88.0	63-134	1.41	20	
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	105	9.8	µg/kg dry	117	ND	89.6	50-138	2.64	25	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	5.03	0.39	µg/kg dry	4.17	ND	121	56-151	4.41	20	
Perfluoro-3-methoxypropanoic acid (PFMPA)	5.21	0.39	µg/kg dry	4.68	ND	111	51-145	1.53	25	
Perfluoro-4-methoxybutanoic acid (PFMBA)	5.59	0.39	µg/kg dry	4.68	ND	119	55-148	3.40	20	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	5.25	0.39	µg/kg dry	4.68	ND	112	48-161	5.31	35	
Surrogate: 13C4-PFBA	*7.95*		µg/kg dry	9.75		81.5	10-130			
Surrogate: 13C5-PFPeA	*3.84*		µg/kg dry	4.88		78.8	35-150			
Surrogate: 13C5-PFHxA	*1.91*		µg/kg dry	2.44		78.4	55-150			
Surrogate: 13C4-PFHpA	*1.94*		µg/kg dry	2.44		79.7	55-150			
Surrogate: 13C8-PFOA	*1.92*		µg/kg dry	2.44		78.6	60-140			
Surrogate: 13C9-PFNA	*0.966*		µg/kg dry	1.22		79.2	55-140			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361583 - Draft Method 1633										
Matrix Spike Dup (B361583-MSD1)		**Source: 23L0555-02**		Prepared: 01/02/24 Analyzed: 01/04/24						
Surrogate: 13C6-PFDA	*0.999*		µg/kg dry	1.22		81.9	50-140			
Surrogate: 13C7-PFUnA	*1.02*		µg/kg dry	1.22		84.0	30-140			
Surrogate: 13C2-PFDoA	*1.12*		µg/kg dry	1.22		91.5	10-150			
Surrogate: 13C2-PFTeDA	*1.20*		µg/kg dry	1.22		98.4	10-130			
Surrogate: 13C3-PFBS	*1.93*		µg/kg dry	2.44		79.2	55-150			
Surrogate: 13C3-PFHxS	*1.93*		µg/kg dry	2.44		79.3	55-150			
Surrogate: 13C8-PFOS	*1.90*		µg/kg dry	2.44		77.9	45-140			
Surrogate: 13C2-4:2FTS	*3.91*		µg/kg dry	4.88		80.1	60-200			
Surrogate: 13C2-6:2FTS	*3.72*		µg/kg dry	4.88		76.4	60-200			
Surrogate: 13C2-8:2FTS	*4.23*		µg/kg dry	4.88		86.8	50-200			
Surrogate: 13C8-PFOSA	*2.00*		µg/kg dry	2.44		81.8	30-130			
Surrogate: D3-NMeFOSA	*1.33*		µg/kg dry	2.44		54.5	15-130			
Surrogate: D5-NEtFOSA	*1.12*		µg/kg dry	2.44		45.9	10-130			
Surrogate: D3-NMeFOSAA	*3.77*		µg/kg dry	4.88		77.4	45-200			
Surrogate: D5-NEtFOSAA	*4.09*		µg/kg dry	4.88		83.9	10-200			
Surrogate: D7-NMeFOSE	*21.4*		µg/kg dry	24.4		87.9	10-150			
Surrogate: D9-NEtFOSE	*22.3*		µg/kg dry	24.4		91.6	10-150			
Surrogate: 13C3-HFPO-DA	*8.00*		µg/kg dry	9.75		82.0	25-160			

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B360214 - % Solids										
Duplicate (B360214-DUP2)	**Source: 23L0555-02**			Prepared & Analyzed: 12/08/23						
% Solids	90.6		% Wt		91.0			0.394	10	

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
H-06	Sample was extracted past the recommended holding time.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
PF-17C	Extracted internal standard is outside of control limits. Analyte is a known difficult compound.
S-29	Extracted Internal Standard is outside of control limits.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
Draft Method 1633 in Soil	
Perfluorobutanoic acid (PFBA)	NH-P,NY,PA,WV
Perfluoropentanoic acid (PFPeA)	NH-P,NY,PA,WV
Perfluorohexanoic acid (PFHxA)	NH-P,NY,PA,WV
Perfluoroheptanoic acid (PFHpA)	NH-P,NY,PA,WV
Perfluorooctanoic acid (PFOA)	NH-P,NY,PA,WV
Perfluorononanoic acid (PFNA)	NH-P,NY,PA,WV
Perfluorodecanoic acid (PFDA)	NH-P,NY,PA,WV
Perfluoroundecanoic acid (PFUnA)	NH-P,NY,PA,WV
Perfluorododecanoic acid (PFDoA)	NH-P,NY,PA,WV
Perfluorotridecanoic acid (PFTrDA)	NH-P,NY,PA,WV
Perfluorotetradecanoic acid (PFTeDA)	NH-P,PA,WV
Perfluorobutanesulfonic acid (PFBS)	NH-P,PA,WV
Perfluoropentanesulfonic acid (PFPeS)	NH-P,PA,WV
Perfluorohexanesulfonic acid (PFHxS)	NH-P,PA,WV
Perfluoroheptanesulfonic acid (PFHpS)	NH-P,PA,WV
Perfluorooctanesulfonic acid (PFOS)	NH-P,NY,PA,WV
Perfluorononanesulfonic acid (PFNS)	NH-P,PA,WV
Perfluorodecanesulfonic acid (PFDS)	NH-P,PA,WV
Perfluorododecanesulfonic acid (PFDoS)	NH-P,PA,WV
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	NH-P,PA,WV
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	NH-P,PA,WV
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	NH-P,NY,PA,WV
Perfluorooctanesulfonamide (PFOSA)	NH-P,PA,WV
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	NH-P,PA,WV
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	NH-P,PA,WV
N-MeFOSAA (NMeFOSAA)	NH-P,NY,PA,WV
N-EtFOSAA (NEtFOSAA)	NH-P,PA,WV
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	NH-P,PA,WV
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	NH-P,PA,WV
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P,PA,WV
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,PA,WV
9Cl-PF3ONS (F53B Minor)	NH-P,PA,WV
11Cl-PF3OUdS (F53B Major)	NH-P,PA,WV
3-Perfluoropropyl propanoic acid (FPrPA)(3:3FTCA)	NH-P,PA,WV
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	NH-P,PA,WV
3-Perfluoroheptyl propanoic acid (FHpPA)(7:3FTCA)	NH-P,PA,WV
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NH-P,PA,WV
Perfluoro-3-methoxypropanoic acid (PFMPA)	NH-P,PA,WV
Perfluoro-4-methoxybutanoic acid (PFMBA)	NH-P,PA,WV
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH-P,PA,WV
Draft Method 1633 in Water	
Perfluorobutanoic acid (PFBA)	NH-P,NY,PA,WV,CT
Perfluoropentanoic acid (PFPeA)	NH-P,NY,PA,WV,CT
Perfluorohexanoic acid (PFHxA)	NH-P,NY,PA,WV,CT
Perfluoroheptanoic acid (PFHpA)	NH-P,NY,PA,WV,CT
Perfluorooctanoic acid (PFOA)	NH-P,NY,PA,WV,CT

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
Draft Method 1633 in Water	
Perfluorononanoic acid (PFNA)	NH-P,NY,PA,WV,CT
Perfluorodecanoic acid (PFDA)	NH-P,NY,PA,WV,CT
Perfluoroundecanoic acid (PFUnA)	NH-P,NY,PA,WV,CT
Perfluorododecanoic acid (PFDoA)	NH-P,NY,PA,WV,CT
Perfluorotridecanoic acid (PFTrDA)	NH-P,NY,PA,WV,CT
Perfluorotetradecanoic acid (PFTeDA)	NH-P,NY,PA,WV,CT
Perfluorobutanesulfonic acid (PFBS)	NH-P,NY,PA,WV,CT
Perfluoropentanesulfonic acid (PFPeS)	NH-P,NY,PA,WV,CT
Perfluorohexanesulfonic acid (PFHxS)	NH-P,NY,PA,WV,CT
Perfluoroheptanesulfonic acid (PFHpS)	NH-P,NY,PA,WV,CT
Perfluorooctanesulfonic acid (PFOS)	NH-P,NY,PA,WV,CT
Perfluorononanesulfonic acid (PFNS)	NH-P,PA,WV,CT
Perfluorodecanesulfonic acid (PFDS)	NH-P,PA,WV,CT
Perfluorododecanesulfonic acid (PFDoS)	NH-P,PA,WV,CT
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	NH-P,PA,WV,CT
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	NH-P,NY,PA,WV,CT
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	NH-P,NY,PA,WV,CT
Perfluorooctanesulfonamide (PFOSA)	NH-P,PA,WV,CT
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	NH-P,PA,WV,CT
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	NH-P,PA,WV,CT
N-MeFOSAA (NMeFOSAA)	NH-P,NY,PA,WV,CT
N-EtFOSAA (NEtFOSAA)	NH-P,NY,PA,WV,CT
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	NH-P,PA,WV,CT
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	NH-P,PA,WV,CT
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P,NY,PA,WV,CT
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,NY,PA,WV,CT
9Cl-PF3ONS (F53B Minor)	NH-P,NY,PA,WV,CT
11Cl-PF3OUdS (F53B Major)	NH-P,NY,PA,WV,CT
3-Perfluoropropyl propanoic acid (FPrPA)(3:3FTCA)	NH-P,PA,WV,CT
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	NH-P,PA,WV,CT
3-Perfluoroheptyl propanoic acid (FHpPA)(7:3FTCA)	NH-P,PA,WV,CT
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NH-P,NY,PA,WV,CT
Perfluoro-3-methoxypropanoic acid (PFMPA)	NH-P,NY,PA,WV,CT
Perfluoro-4-methoxybutanoic acid (PFMBA)	NH-P,PA,WV,CT
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH-P,PA,WV,CT

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2024
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2024
WV	West Virginia DEP Division of Water and Waste Management	419	08/31/2024

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Phone: 612-607-6400
Fax: 612-607-6344

235555

https://www.pacelabs.com/

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

1800 Elm Street SE
Minneapolis, MN 55414

CLIENT: SYRACUSE SAND AND GRAVEL

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: (ALPHA - OMEGA)

Address: P.O. BOX 6418, SYR, NY 13212

Phone:

Project Name:

Project Location: ALPHA PORTLAND SITE DEC # 734006

Project Number: TDK PROJECT NO. 20210G3

Project Manager: JOHN HERRMANN, TDK ENGINEERING

Pace Analytical Quote Name/Number: TDK ALPHA PORTLAND 00143967

Invoice Recipient:

Sampled By: JCH, TDK ENGINEERING

Requested Turnaround Time
7-Day ☐ 10-Day ☑
Due Date:

Rush Approval Required
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #:

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	Matrix Code	Conc Code	VOCs - TCL+TICs	SVOCs - TCL+TICs	METALS - TAL	PFAS	1,4-Dioxane	PCBs	VOCs - % Solids	# of Containers	Preservation Code	Container Code
1	MW-1 (2')	11/28/23 3:30PM			✓	S	A		✓	✓		✓	✓				
	" "	"			✓	S	A							✓			
	" "	"			✓	S	P				✓						
	" "	"			✓	S	V	✓									
2	SB-1 (2')	11/29/23	9:15AM		✓	S	A		✓	✓		✓	✓				
	"	"	"		✓	S	A							✓			
	"	"	"		✓	S	P				✓						
	"	"	"		✓	S	V	✓									
3	SB MW-4 (2')	11/29/23	1:30PM		✓	S	A		✓	✓		✓	✓				
	"	11/29/23	1:30PM		✓	S	A							✓			

ANALYSIS REQUESTED

Dissolved Metals Samples
☐ Field Filtered
☐ Lab to Filter

Orthophosphate Samples
☐ Field Filtered
☐ Lab to Filter

[1] Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] Container Codes:
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Comments: PLEASE FORWARD RESULTS TO JHERRMANN@TDKENGINEERING.COM
CAT B DELIVERABLES PACKAGE

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time: 12/1/23 11:55 AM	
Received by: (signature)	Date/Time: 12/1 1400	
Relinquished by: (signature)	Date/Time: 12/ 1700	
Received by: (signature) 12.7.21	Date/Time: 12/1/23 1240	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Program & Regulatory Information
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375
Other:

Deliverables
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD
Other:
NELAC and AIHA-LAP,LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Fax: 612-607-6344

CHAIN OF CUSTODY RECORD (New York)

2360555

1800 Elm Street SE
Minneapolis, MN 55414

Client: Syracuse Sand and Gravel

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: (Alpha - Omega)

Address: P.O. Box 6418, Syr., NY 13212

Phone:

Project Name:

Project Location: Alpha Portland Site DEC # 734006

Project Number: TDK Proj. No. 2021063

Project Manager: John Herrmann, TDK Engineering

Pace Analytical Quote Name/Number: TDK, Alpha Portland 00143967

Invoice Recipient:

Sampled By: JCM, TDK Engineering

Regulatory Requirement/Turnaround Time
7-Day ☐ 10-Day ☑
Due Date:

Rush Approval Required
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #:

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	Conc Code	VOCs - TCL+TICs	SVOCs - TCL+TICs	Metals - TAL	PFAS	1,4-Dioxane	PCBs	VOCs - % Solids	# of Containers	[2] Preservation Code	[3] Container Code
3	MW-4(2')	11/29/23 1:30 PM			✓	SS	P				✓						
	"	11/29/23 1:30 PM			✓	SS	V	✓									
4	SB-2(2')	11/30/23	10:05 AM		✓	S	A		✓	✓		✓	✓				
	"	"	"		✓	S	A							✓			
	"	"	"		✓	S	P				✓						
	"	"	"		✓	S	V	✓									
5	DUPLICATE				✓	S	A		✓	✓		✓	✓				
	DUPLICATE				✓	S	A							✓			
	"				✓	S	P				✓						
	"				✓	S	V	✓									

ANALYSIS REQUESTED

Dissolved Metals Samples
☐ Field Filtered
☐ Lab to Filter

Orthophosphate Samples
☐ Field Filtered
☐ Lab to Filter

Comments: Please forward results to JHerrmann@TDKengineering.com
CAT B Deliverables Package

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] **Container Codes:**
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

	Date/Time
Relinquished by: (signature)	12/1/23 11:55 AM
Received by: (signature)	12/1 1400
Relinquished by: (signature)	12/1 1700
Received by: (signature)	12/2/23 1240
Relinquished by: (signature)	
Received by: (signature)	

Regulatory Program / Regulatory Information
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375

Deliverables
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Other
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Pace Analytical®
Phone: 612-607-6400
Fax: 612-607-6344
https://www.pacelabs.com/
1800 Elm Street SE
Minneapolis, MN 55414

CHAIN OF CUSTODY RECORD (New York)

23L0555

CLIENT: SYRACUSE SAND AND GRAVEL

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: (ALPHA-OMEGA)

Address: P.O. BOX 618, SYRACUSE, NY 13212

Phone:

Project Name:

Project Location: ALPHA PORTLAND SITE, DEC # 734006

Project Number: TDK PROJECT NO. 2024003

Project Manager: JOHN HERRMANN, TDK ENGINEERING

Pace Analytical Quote Name/Number TDK ALPHA PORTLAND 00143967

Invoice Recipient:

Sampled By: JCH, TDK ENGINEERING

Turnaround Time Required:
7-Day ☐ 10-Day ☑
Due Date:

Rush Approval Required:
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery:
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #:

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	Conc Code	VOCs - TCL+TICs	SVOCs - TCL+TICs	Metals - TAL	PFAS	1,4-Dioxane	PCBs	VOCs - % Solids
	MS				✓	S	A		✓	✓		✓	✓	
	"				✓	S	A							✓
	"				✓	S	P				✓			
	"				✓	S	V	✓						
	MSD				✓	S	A		✓	✓		✓	✓	
	"				✓	S	A							✓
	"				✓	S	P				✓			
	"				✓	S	V	✓						
6	EQUIP. DECONN	11/29/23	3:00PM		✓	O*	✓	✓						

ANALYSIS REQUESTED

# of Containers
[2] Preservation Code
[3] Container Code

Analysis of Metals Samples:
☐ Field Filtered
☐ Lab to Filter

Analysis of Metals Samples:
☐ Field Filtered
☐ Lab to Filter

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
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S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] **Container Codes:**
A = Amber Glass
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V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Comments: PLEASE FORWARD RESULTS TO JHERRMANN@TDKENGINEERING.COM
CAT B DELIVERABLES PACKAGE

*EQUIPMENT DECONN

	Date/Time
Relinquished by: (signature)	12/1/23 11:55 AM
Received by: (signature)	12/1 1400
Relinquished by: (signature)	12/1 1700
Received by: (signature)	12/2/23 1246
Relinquished by: (signature)	
Received by: (signature)	

Program / Regulatory Information:
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375

Deliverables:
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Other:
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-ELON-0001 v07_Sample Receiving Checklist
	Effective Date: 07/13/2023

Log In Back-Sheet

Client Syracuse Sand & Gravel

Project 134006

MCP/RCP Required ~~AFY~~ ~~AFA~~ NA

Deliverable Package Requirement Cat B

Location NY

PWSID# (When Applicable) NA

Arrival Method:

Courier ☑ Fed Ex ☐ Walk In ☐ Other ☐ _____

Received By / Date / Time SC 12/2/23 1240

Back-Sheet By / Date / Time AT 12/5/23 1509

Temperature Method gun # 5

Temp < 6° C Actual Temperature 2.7, 2.1

Rush Samples: Yes / (No) Notify _____

Short Hold: Yes / (No) Notify _____

Notes regarding Samples/COC outside of SOP:

Login Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy) Any False statement will be brought to the attention of the Client – True or False

	True	False
Received on Ice	☑	☐
Received in Cooler	☑	☐
Custody Seal: DATE TIME	☐	☑
COC Relinquished	☑	☐
COC/Samples Labels Agree	☑	☐
All Samples in Good Condition	☑	☐
Samples Received within Holding Time	☑	☐
Is there enough Volume	☑	☐
Proper Media/Container Used	☑	☐
Splitting Samples Required	☐	☑
MS/MSD	☑	☐
Trip Blanks	☐	☑
Lab to Filters	☐	☑
COC Legible	☑	☐

COC Included: (Check all included)

Client ☐ Analysis ☑ Sampler Name ☑

Project ☑ IDs ☑ Collection Date/Time ☑

All Samples Proper pH: (N/A) ☐ ☐

Additional Container Notes

Note: West Virginia requires all samples to have their temperature taken. Note any outliers.

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-ELON-0001 v07_Sample Receiving Checklist
	Effective Date: 07/13/2023

Sample			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
16oz Amb/Clear	(Circle Amb/Clear)	Soils Jars																				
8oz Amb/Clear																						
4oz Amb/Clear																						
2oz Amb/Clear																						
Unpreserved	1 Liter	Ambers																				
HCL																						
Sulfuric																						
Sulfuric	250mL																					
Phosphoric																						
HCl																						
Unpreserved	100mL																					
Unpreserved	1 Liter	Plastics																				
Sulfuric																						
Unpreserved	500mL																					
Sulfuric																						
Unpreserved	250mL																					
Trizma																						
Sulfuric																						
Nitric																						
NaOH																						
Ammonium Acetate																						
NaOH/Zinc																						
Unpreserved		VOA Vials																				
HCl																						
MeOH																						
D.I. Water																						
BiSulfate																						
Col/Bact		Other / Fill in																				
125ml plastic																						

Qualtrax ID: 120836

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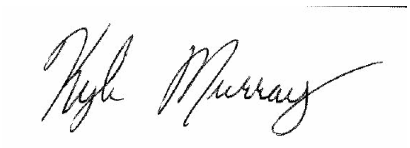
January 30, 2024

Richard Riccelli
Syracuse Sand & Gravel, LLC
6131 E Taft Road
North Syracuse, NY 13212

Project Location: NY
Client Job Number:
Project Number: 00143967 - TDK_Alpha Portland - CAT B
Laboratory Work Order Number: 23L0875

Enclosed are results of analyses for samples as received by the laboratory on December 6, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kyle A. Murray
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Syracuse Sand & Gravel, LLC
6131 E Taft Road
North Syracuse, NY 13212
ATTN: Richard Riccelli

REPORT DATE: 1/30/2024

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 00143967 - TDK_Alpha Portland - CAT B

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23L0875

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-2 (2)	23L0875-01	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 6020B	
				SW-846 7196A	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8260D	
				SW-846 8270E	
SB-4 (4)	23L0875-02	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 6020B	
				SW-846 7196A	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8260D	
				SW-846 8270E	
Equip. Deconn	23L0875-03	Equipment Blank Water		SW-846 8260D	
Duplicate	23L0875-04	Soil		SM 2540G	
				SW-846 6010D	
				SW-846 6020B	
				SW-846 7196A	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8260D	
				SW-846 8270E	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

REVISED 01-30-24: Hex Cr added per client.

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SW-846 6010D

Qualifications:

MS-19

Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representative of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.

Analyte & Samples(s) Qualified:

Aluminum
23L0875-02[SB-4 (4)], B360037-MS4, B360037-MSD4, B360037-PS4

Calcium
23L0875-02[SB-4 (4)], B360037-MS6, B360037-MSD6, B360037-PS6

Iron
23L0875-02[SB-4 (4)], B360037-MS6, B360037-MSD6, B360037-PS6

Magnesium
23L0875-02[SB-4 (4)], B360037-MS6, B360037-MSD6, B360037-PS6

MS-22

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.

Analyte & Samples(s) Qualified:

Potassium
23L0875-02[SB-4 (4)], B360037-MSD2

SW-846 6020B

Qualifications:

DL-05

Sample required a dilution due to high internal standard recovery of the lesser diluted digestion, reporting limit is elevated.

Analyte & Samples(s) Qualified:

Beryllium
23L0875-01[MW-2 (2)], 23L0875-02[SB-4 (4)], 23L0875-04[Duplicate]

MS-07A

Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.

Analyte & Samples(s) Qualified:

Antimony
23L0875-02[SB-4 (4)], B360041-MS2, B360041-MSD2

MS-19

Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representative of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.

Analyte & Samples(s) Qualified:

Barium
B360041-PS1

Chromium
B360041-PS1

Cobalt
B360041-PS1

Copper
B360041-PS1

Lead
B360041-PS1

Manganese
23L0875-02[SB-4 (4)], B360041-MS3, B360041-MSD3

Nickel
B360041-PS1

Vanadium
B360041-PS1

Zinc
B360041-PS1

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MS-22

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.

Analyte & Samples(s) Qualified:

Barium

B360041-MSD1

MS-23

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is outside of the method specified criteria. Reduced precision anticipated for any reported result for this compound.

Analyte & Samples(s) Qualified:

Chromium

B360041-MS1, B360041-MSD1

Z-01

Post spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery.Possibility of sample matrix effects that lead to low bias for reported result cannot be eliminated.

Analyte & Samples(s) Qualified:

Selenium

23L0875-02[SB-4 (4)], B360041-PS1

SW-846 7196A

Qualifications:

H-10

Analysis was requested after the recommended holding time had passed.

Analyte & Samples(s) Qualified:

Hexavalent Chromium

23L0875-01[MW-2 (2)], 23L0875-02[SB-4 (4)], 23L0875-04[Duplicate]

MS-16

For solid method SW846-7196A, the matrix spike is outside of control limits. pH and ORP results were indicative of reducing conditions. Reanalysis is not required. Analysis is in control based on LCS recoveries.

Analyte & Samples(s) Qualified:

Hexavalent Chromium

23L0875-02[SB-4 (4)], B364445-MS2, B364445-MSD2

W-06

Elevated method reporting limit due to intense color of sample

Analyte & Samples(s) Qualified:

Hexavalent Chromium

23L0875-02[SB-4 (4)]

SW-846 8260D

Qualifications:

L-02

Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.

Analyte & Samples(s) Qualified:

Bromomethane

B360032-BS1, B360032-BSD1

MS-07A

Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.

Analyte & Samples(s) Qualified:

Chloromethane

23L0875-02[SB-4 (4)], B360032-MS1, B360032-MSD1

MS-22

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.

Analyte & Samples(s) Qualified:

Bromomethane

B360032-MS1

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

MS-24

Either matrix spike or matrix spike duplicate is outside of control limits, but the other is within limits. Analysis is in control based on laboratory fortified blank recovery.

Analyte & Samples(s) Qualified:

Carbon Disulfide
B360032-MS1

V-20

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:

Bromomethane
B360032-BS1, B360032-BSD1, B360032-MS1, B360032-MSD1, S097427-CCV1

Chloromethane
B360032-BS1, B360032-BSD1, B360032-MS1, B360032-MSD1, S097427-CCV1

V-36

Initial calibration verification (ICV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:

Acetone
B360032-BS1, B360032-BSD1, B360032-MS1, B360032-MSD1, S097427-CCV1

SW-846 8270E

Qualifications:

B

Analyte is found in the associated laboratory blank as well as in the sample.

Analyte & Samples(s) Qualified:

Furan, 2,5-dimethyl-
B360166-BLK1

Heptane, 2,3-dimethyl-
23L0875-01[MW-2 (2)], 23L0875-02[SB-4 (4)], B360166-BLK1

Heptane, 3,5-dimethyl-
23L0875-01[MW-2 (2)], 23L0875-02[SB-4 (4)], B360166-BLK1

MS-09

Matrix spike recovery and/or matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

Analyte & Samples(s) Qualified:

3,3-Dichlorobenzidine
23L0875-02[SB-4 (4)], B360166-MS1, B360166-MSD1

4-Chloroaniline
23L0875-02[SB-4 (4)], B360166-MS1, B360166-MSD1

Hexachlorocyclopentadiene
23L0875-02[SB-4 (4)], B360166-MS1, B360166-MSD1

MS-22

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.

Analyte & Samples(s) Qualified:

4-Nitroaniline
B360166-MS1

Pentachlorophenol
B360166-MS1

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:

4-Chloroaniline
23L0875-01[MW-2 (2)], 23L0875-02[SB-4 (4)], B360166-MS1, B360166-MSD1, S097716-CCV1

Hexachlorocyclopentadiene
23L0875-01[MW-2 (2)], 23L0875-02[SB-4 (4)], B360166-BLK1, B360166-BS1, B360166-BSD1, B360166-MS1, B360166-MSD1, S097712-CCV1, S097716-CCV1, S097716-CCV2

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V-06

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for this compound.

Analyte & Samples(s) Qualified:

Atrazine

23L0875-04[Duplicate], B360416-BLK1, B360416-BS1, B360416-BSD1, S097699-CCV2

Benzaldehyde

23L0875-01[MW-2 (2)], 23L0875-02[SB-4 (4)], B360166-BLK1, B360166-BS1, B360166-BSD1, B360166-MSD1, S097712-CCV2, S097716-CCV1, S097716-CCV2

Caprolactam

23L0875-01[MW-2 (2)], 23L0875-02[SB-4 (4)], 23L0875-04[Duplicate], B360166-BLK1, B360166-BS1, B360166-BSD1, B360166-MSD1, B360416-BLK1, B360416-BS1, B360416-BSD1, S097699-CCV2, S097712-CCV2, S097716-CCV1, S097716-CCV2

V-34

Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

Analyte & Samples(s) Qualified:

Benzaldehyde

23L0875-01[MW-2 (2)], 23L0875-02[SB-4 (4)], 23L0875-04[Duplicate], B360166-MSD1, B360416-BLK1, B360416-BS1, B360416-BSD1, S097351-ICV1, S097699-CCV2, S097716-CCV1, S097716-CCV2

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

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A Pace Analytical® Laboratory

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: MW-2 (2) | Sampled: 12/1/2023 08:30

Sample ID: 23L0875-01

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	0.0093	0.093	0.0084	mg/Kg dry	1	J	SW-846 8260D	12/7/23	12/7/23 7:07	MFF
Benzene	ND	0.0019	0.00054	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
Bromochloromethane	ND	0.0019	0.00073	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
Bromodichloromethane	ND	0.0019	0.00048	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
Bromoform	ND	0.0019	0.00057	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
Bromomethane	ND	0.0093	0.0016	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
2-Butanone (MEK)	ND	0.037	0.0058	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
Carbon Disulfide	ND	0.0093	0.0074	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
Carbon Tetrachloride	ND	0.0019	0.00073	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
Chlorobenzene	ND	0.0019	0.00052	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
Chlorodibromomethane	ND	0.00093	0.00059	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
Chloroethane	ND	0.019	0.0010	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
Chloroform	ND	0.0037	0.00058	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
Chloromethane	ND	0.0093	0.00092	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
Cyclohexane	ND	0.0093	0.0038	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0019	0.00073	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
1,2-Dibromoethane (EDB)	ND	0.00093	0.00071	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
1,2-Dichlorobenzene	ND	0.0019	0.00049	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
1,3-Dichlorobenzene	ND	0.0019	0.00051	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
1,4-Dichlorobenzene	ND	0.0019	0.00056	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.019	0.00096	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
1,1-Dichloroethane	ND	0.0019	0.00064	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
1,2-Dichloroethane	ND	0.0019	0.00062	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
1,1-Dichloroethylene	ND	0.0037	0.00076	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
cis-1,2-Dichloroethylene	ND	0.0019	0.00059	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
trans-1,2-Dichloroethylene	ND	0.0019	0.00068	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
1,2-Dichloropropane	ND	0.0019	0.00058	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
cis-1,3-Dichloropropene	ND	0.00093	0.00052	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
trans-1,3-Dichloropropene	ND	0.00093	0.00057	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
1,4-Dioxane	ND	0.093	0.042	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
Ethylbenzene	ND	0.0019	0.00055	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
2-Hexanone (MBK)	ND	0.019	0.0047	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
Isopropylbenzene (Cumene)	ND	0.0019	0.00058	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
Methyl Acetate	ND	0.0019	0.0013	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0037	0.00062	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
Methyl Cyclohexane	ND	0.0037	0.00072	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
Methylene Chloride	ND	0.019	0.00089	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.019	0.0041	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
Styrene	ND	0.0019	0.00046	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
1,1,2,2-Tetrachloroethane	ND	0.00093	0.00051	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
Tetrachloroethylene	ND	0.0019	0.00078	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
Toluene	ND	0.0019	0.00063	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
1,2,3-Trichlorobenzene	ND	0.0019	0.00053	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
1,2,4-Trichlorobenzene	ND	0.0019	0.00056	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: MW-2 (2) | Sampled: 12/1/2023 08:30

Sample ID: 23L0875-01

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	0.0019	0.00071	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
1,1,2-Trichloroethane	ND	0.0019	0.00050	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
Trichloroethylene	ND	0.0019	0.00075	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0093	0.00069	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0093	0.00080	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
Vinyl Chloride	ND	0.0093	0.00069	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF
Xylenes (total)	ND	0.0019	0.0019	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 7:07	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	89.7	70-130		12/7/23 7:07
Toluene-d8	100	70-130		12/7/23 7:07
4-Bromofluorobenzene	98.0	70-130		12/7/23 7:07

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Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: MW-2 (2) | Sampled: 12/1/2023 08:30

Sample ID: 23L0875-01

Sample Matrix: Soil

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	mg/Kg dry			1			SW-846 8260D	12/7/23	12/7/23 7:07	MFF

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Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: MW-2 (2) | Sampled: 12/1/2023 08:30

Sample ID: 23L0875-01

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Atrazine	ND	0.77	0.053	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Benzaldehyde	ND	0.39	0.037	mg/Kg dry	1	V-06, V-34	SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Biphenyl	ND	0.77	0.061	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Caprolactam	ND	0.39	0.055	mg/Kg dry	1	V-06	SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Acenaphthene	0.091	0.19	0.074	mg/Kg dry	1	J	SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Acenaphthylene	ND	0.19	0.076	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Acetophenone	ND	0.39	0.076	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Anthracene	0.18	0.19	0.075	mg/Kg dry	1	J	SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Benzo(a)anthracene	0.52	0.19	0.070	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Benzo(a)pyrene	0.55	0.19	0.064	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Benzo(b)fluoranthene	0.65	0.19	0.066	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Benzo(g,h,i)perylene	0.28	0.19	0.081	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Benzo(k)fluoranthene	0.25	0.19	0.070	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Bis(2-chloroethoxy)methane	ND	0.39	0.076	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Bis(2-chloroethyl)ether	ND	0.39	0.082	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Bis(2-chloroisopropyl)ether	ND	0.39	0.16	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Bis(2-Ethylhexyl)phthalate	ND	0.39	0.079	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
4-Bromophenylphenylether	ND	0.39	0.080	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Butylbenzylphthalate	ND	0.39	0.073	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Carbazole	ND	0.19	0.076	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
4-Chloroaniline	ND	0.76	0.069	mg/Kg dry	1	V-05	SW-846 8270E	12/8/23	12/12/23 19:20	BGL
4-Chloro-3-methylphenol	ND	0.76	0.077	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
2-Chloronaphthalene	ND	0.39	0.069	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
2-Chlorophenol	ND	0.39	0.079	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
4-Chlorophenylphenylether	ND	0.39	0.075	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Chrysene	0.54	0.19	0.070	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Dibenz(a,h)anthracene	ND	0.19	0.075	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Dibenzofuran	ND	0.39	0.076	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Di-n-butylphthalate	ND	0.39	0.071	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
3,3-Dichlorobenzidine	ND	0.19	0.051	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
2,4-Dichlorophenol	ND	0.39	0.075	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Diethylphthalate	ND	0.39	0.075	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
2,4-Dimethylphenol	ND	0.39	0.10	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Dimethylphthalate	ND	0.39	0.080	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
4,6-Dinitro-2-methylphenol	ND	0.39	0.32	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
2,4-Dinitrophenol	ND	0.76	0.34	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
2,4-Dinitrotoluene	ND	0.39	0.078	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
2,6-Dinitrotoluene	ND	0.39	0.088	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Di-n-octylphthalate	ND	0.39	0.077	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Fluoranthene	1.0	0.19	0.069	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Fluorene	0.097	0.19	0.076	mg/Kg dry	1	J	SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Hexachlorobenzene	ND	0.39	0.081	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Hexachlorobutadiene	ND	0.39	0.079	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Hexachlorocyclopentadiene	ND	0.39	0.25	mg/Kg dry	1	V-05	SW-846 8270E	12/8/23	12/12/23 19:20	BGL

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Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: MW-2 (2) | Sampled: 12/1/2023 08:30

Sample ID: 23L0875-01

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachloroethane	ND	0.39	0.076	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Indeno(1,2,3-cd)pyrene	0.25	0.19	0.085	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Isophorone	ND	0.39	0.079	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
2-Methylnaphthalene	ND	0.19	0.076	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
2-Methylphenol	ND	0.39	0.077	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
3/4-Methylphenol	ND	0.39	0.085	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Naphthalene	ND	0.19	0.078	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
2-Nitroaniline	ND	0.39	0.077	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
3-Nitroaniline	ND	0.39	0.092	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
4-Nitroaniline	ND	0.39	0.066	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Nitrobenzene	ND	0.39	0.084	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
2-Nitrophenol	ND	0.39	0.080	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
4-Nitrophenol	ND	0.76	0.16	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	0.39	0.078	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
N-Nitrosodi-n-propylamine	ND	0.39	0.084	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Pentachlorophenol	ND	0.39	0.17	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Phenanthrene	0.70	0.19	0.076	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Phenol	ND	0.39	0.090	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Pyrene	1.2	0.19	0.078	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
1,2,4,5-Tetrachlorobenzene	ND	0.39	0.080	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
2,4,5-Trichlorophenol	ND	0.39	0.075	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL
2,4,6-Trichlorophenol	ND	0.39	0.074	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:20	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	63.2	30-130		12/12/23 19:20
Phenol-d6	66.0	30-130		12/12/23 19:20
Nitrobenzene-d5	72.3	30-130		12/12/23 19:20
2-Fluorobiphenyl	68.6	30-130		12/12/23 19:20
2,4,6-Tribromophenol	48.7	30-130		12/12/23 19:20
p-Terphenyl-d14	90.7	30-130		12/12/23 19:20

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Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: MW-2 (2) | Sampled: 12/1/2023 08:30

Sample ID: 23L0875-01

Sample Matrix: Soil

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.057	0.024	mg/Kg dry	1		SW-846 8270E	12/7/23	12/14/23 14:06	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,4-Dioxane-d8	38.0	15-110		12/14/23 14:06

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Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: MW-2 (2) | Sampled: 12/1/2023 08:30

Sample ID: 23L0875-01

Sample Matrix: Soil

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
3-Penten-2-one, 4-methyl-	0.20	mg/Kg dry	47212	2.256	1	000141-79-7	95	SW-846 8270E	12/8/23	12/12/23 19:20	BGL
9-Octadecenamide, (Z)-	1.1	mg/Kg dry	537389	7.719	1	000301-02-0	98	SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Anthracene, 1-methyl-	0.20	mg/Kg dry	81532	6.355	1	000610-48-0	95	SW-846 8270E	12/8/23	12/12/23 19:20	BGL
cis-9-Hexadecenoic acid	0.37	mg/Kg dry	152901	6.301	1	1000333-19-5	99	SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Heptane, 2,3-dimethyl-	0.22	mg/Kg dry	52567	2.513	1	003074-71-3	91	SW-846 8270E	12/8/23	12/12/23 19:20	BGL
Heptane, 3,5-dimethyl-	0.35	mg/Kg dry	81963	2.413	1	000926-82-9	91	SW-846 8270E	12/8/23	12/12/23 19:20	BGL
n-Hexadecanoic acid	0.61	mg/Kg dry	252701	6.324	1	000057-10-3	99	SW-846 8270E	12/8/23	12/12/23 19:20	BGL

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Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: MW-2 (2) | Sampled: 12/1/2023 08:30

Sample ID: 23L0875-01

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.087	0.023	mg/Kg dry	4		SW-846 8082A	12/12/23	12/15/23 2:32	SFM
Aroclor-1221 [1]	ND	0.087	0.047	mg/Kg dry	4		SW-846 8082A	12/12/23	12/15/23 2:32	SFM
Aroclor-1232 [1]	ND	0.087	0.028	mg/Kg dry	4		SW-846 8082A	12/12/23	12/15/23 2:32	SFM
Aroclor-1242 [1]	ND	0.087	0.026	mg/Kg dry	4		SW-846 8082A	12/12/23	12/15/23 2:32	SFM
Aroclor-1248 [1]	ND	0.087	0.022	mg/Kg dry	4		SW-846 8082A	12/12/23	12/15/23 2:32	SFM
Aroclor-1254 [1]	ND	0.087	0.026	mg/Kg dry	4		SW-846 8082A	12/12/23	12/15/23 2:32	SFM
Aroclor-1260 [1]	ND	0.087	0.023	mg/Kg dry	4		SW-846 8082A	12/12/23	12/15/23 2:32	SFM
Aroclor-1262 [1]	ND	0.087	0.026	mg/Kg dry	4		SW-846 8082A	12/12/23	12/15/23 2:32	SFM
Aroclor-1268 [1]	ND	0.087	0.029	mg/Kg dry	4		SW-846 8082A	12/12/23	12/15/23 2:32	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	76.4	30-150		12/15/23 2:32
Decachlorobiphenyl [2]	73.7	30-150		12/15/23 2:32
Tetrachloro-m-xylene [1]	79.4	30-150		12/15/23 2:32
Tetrachloro-m-xylene [2]	77.4	30-150		12/15/23 2:32

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Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: MW-2 (2) | Sampled: 12/1/2023 08:30

Sample ID: 23L0875-01

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	8100	18	4.1	mg/Kg dry	1		SW-846 6010D	12/7/23	12/11/23 16:29	HNN
Antimony	ND	2.0		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:32	AAJ
Arsenic	3.3	0.18		mg/Kg dry	5		SW-846 6020B	12/7/23	12/16/23 14:12	NC
Beryllium	ND	1.1		mg/Kg dry	20	DL-05	SW-846 6020B	12/7/23	12/18/23 16:43	NC
Calcium	100000	180	66	mg/Kg dry	10		SW-846 6010D	12/7/23	12/11/23 18:35	HNN
Chromium	24	4.5		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:32	AAJ
Cobalt	8.2	1.8		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:32	AAJ
Copper	26	4.5		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:32	AAJ
Iron	14000	180	36	mg/Kg dry	10		SW-846 6010D	12/7/23	12/11/23 18:35	HNN
Lead	20	1.8		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:32	AAJ
Magnesium	49000	180	25	mg/Kg dry	10		SW-846 6010D	12/7/23	12/11/23 18:35	HNN
Manganese	420	47		mg/Kg dry	50		SW-846 6020B	12/7/23	12/17/23 14:16	NC
Mercury	0.060	0.029	0.012	mg/Kg dry	1		SW-846 7471B	12/7/23	12/8/23 10:38	AV
Nickel	26	4.5		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:32	AAJ
Potassium	2200	180	48	mg/Kg dry	1		SW-846 6010D	12/7/23	12/8/23 18:38	HNN
Selenium	ND	1.5		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:32	AAJ
Silver	0.093	0.091		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:32	AAJ
Sodium	170	180	40	mg/Kg dry	1	J	SW-846 6010D	12/7/23	12/8/23 18:38	HNN
Thallium	0.17	0.091		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:32	AAJ
Vanadium	19	9.1		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:32	AAJ
Zinc	40	9.1		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:32	AAJ
Barium	620	9.1		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:32	AAJ
Cadmium	ND	0.36		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:32	AAJ

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Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: MW-2 (2) | Sampled: 12/1/2023 08:30

Sample ID: 23L0875-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	86.4			% Wt	1		SM 2540G	12/6/23	12/6/23 16:27	DV
Hexavalent Chromium	ND	0.18	0.13	mg/Kg dry	1	H-10	SW-846 7196A	1/29/24	1/30/24 8:20	LL

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Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: SB-4 (4) | Sampled: 12/4/2023 09:20

Sample ID: 23L0875-02

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.12	0.011	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
Benzene	ND	0.0023	0.00068	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
Bromochloromethane	ND	0.0023	0.00091	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
Bromodichloromethane	ND	0.0023	0.00061	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
Bromoform	ND	0.0023	0.00071	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
Bromomethane	ND	0.012	0.0020	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
2-Butanone (MEK)	ND	0.047	0.0073	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
Carbon Disulfide	ND	0.012	0.0093	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
Carbon Tetrachloride	ND	0.0023	0.00092	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
Chlorobenzene	ND	0.0023	0.00065	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
Chlorodibromomethane	ND	0.0012	0.00074	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
Chloroethane	ND	0.023	0.0013	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
Chloroform	ND	0.0047	0.00073	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
Chloromethane	ND	0.012	0.0012	mg/Kg dry	1	MS-07A	SW-846 8260D	12/7/23	12/7/23 6:42	MFF
Cyclohexane	ND	0.012	0.0047	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0023	0.00092	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
1,2-Dibromoethane (EDB)	ND	0.0012	0.00089	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
1,2-Dichlorobenzene	ND	0.0023	0.00062	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
1,3-Dichlorobenzene	ND	0.0023	0.00064	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
1,4-Dichlorobenzene	ND	0.0023	0.00070	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.023	0.0012	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
1,1-Dichloroethane	ND	0.0023	0.00080	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
1,2-Dichloroethane	ND	0.0023	0.00078	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
1,1-Dichloroethylene	ND	0.0047	0.00096	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
cis-1,2-Dichloroethylene	ND	0.0023	0.00074	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
trans-1,2-Dichloroethylene	ND	0.0023	0.00085	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
1,2-Dichloropropane	ND	0.0023	0.00072	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
cis-1,3-Dichloropropene	ND	0.0012	0.00065	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
trans-1,3-Dichloropropene	ND	0.0012	0.00071	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
1,4-Dioxane	ND	0.12	0.053	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
Ethylbenzene	ND	0.0023	0.00070	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
2-Hexanone (MBK)	ND	0.023	0.0059	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
Isopropylbenzene (Cumene)	ND	0.0023	0.00072	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
Methyl Acetate	ND	0.0023	0.0017	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0047	0.00078	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
Methyl Cyclohexane	ND	0.0047	0.00091	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
Methylene Chloride	ND	0.023	0.0011	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.023	0.0052	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
Styrene	ND	0.0023	0.00058	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
1,1,2,2-Tetrachloroethane	ND	0.0012	0.00064	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
Tetrachloroethylene	ND	0.0023	0.00098	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
Toluene	ND	0.0023	0.00079	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
1,2,3-Trichlorobenzene	ND	0.0023	0.00066	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
1,2,4-Trichlorobenzene	ND	0.0023	0.00071	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF

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Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: SB-4 (4) | Sampled: 12/4/2023 09:20

Sample ID: 23L0875-02

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	0.0023	0.00089	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
1,1,2-Trichloroethane	ND	0.0023	0.00062	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
Trichloroethylene	ND	0.0023	0.00094	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
Trichlorofluoromethane (Freon 11)	ND	0.012	0.00087	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.012	0.0010	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
Vinyl Chloride	ND	0.012	0.00086	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF
Xylenes (total)	ND	0.0023	0.0023	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 6:42	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	86.7	70-130		12/7/23 6:42
Toluene-d8	96.5	70-130		12/7/23 6:42
4-Bromofluorobenzene	98.3	70-130		12/7/23 6:42

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Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: SB-4 (4) | Sampled: 12/4/2023 09:20

Sample ID: 23L0875-02

Sample Matrix: Soil

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	mg/Kg dry			1			SW-846 8260D	12/7/23	12/7/23 6:42	MFF

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Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: SB-4 (4) | Sampled: 12/4/2023 09:20

Sample ID: 23L0875-02

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Atrazine	ND	0.94	0.065	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Benzaldehyde	ND	0.47	0.045	mg/Kg dry	1	V-06, V-34	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Biphenyl	ND	0.94	0.074	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Caprolactam	ND	0.47	0.067	mg/Kg dry	1	V-06	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Acenaphthene	ND	0.24	0.091	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Acenaphthylene	ND	0.24	0.093	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Acetophenone	ND	0.47	0.093	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Anthracene	ND	0.24	0.091	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Benzo(a)anthracene	ND	0.24	0.085	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Benzo(a)pyrene	ND	0.24	0.078	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Benzo(b)fluoranthene	ND	0.24	0.080	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Benzo(g,h,i)perylene	ND	0.24	0.099	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Benzo(k)fluoranthene	ND	0.24	0.085	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Bis(2-chloroethoxy)methane	ND	0.47	0.093	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Bis(2-chloroethyl)ether	ND	0.47	0.099	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Bis(2-chloroisopropyl)ether	ND	0.47	0.20	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Bis(2-Ethylhexyl)phthalate	0.16	0.47	0.097	mg/Kg dry	1	J	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
4-Bromophenylphenylether	ND	0.47	0.098	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Butylbenzylphthalate	ND	0.47	0.089	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Carbazole	ND	0.24	0.092	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
4-Chloroaniline	ND	0.92	0.084	mg/Kg dry	1	MS-09, V-05	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
4-Chloro-3-methylphenol	ND	0.92	0.094	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
2-Chloronaphthalene	ND	0.47	0.084	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
2-Chlorophenol	ND	0.47	0.096	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
4-Chlorophenylphenylether	ND	0.47	0.092	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Chrysene	0.094	0.24	0.086	mg/Kg dry	1	J	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Dibenz(a,h)anthracene	ND	0.24	0.091	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Dibenzofuran	0.17	0.47	0.093	mg/Kg dry	1	J	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Di-n-butylphthalate	ND	0.47	0.086	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
3,3-Dichlorobenzidine	ND	0.24	0.062	mg/Kg dry	1	MS-09	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
2,4-Dichlorophenol	ND	0.47	0.091	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Diethylphthalate	ND	0.47	0.092	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
2,4-Dimethylphenol	ND	0.47	0.12	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Dimethylphthalate	ND	0.47	0.097	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
4,6-Dinitro-2-methylphenol	ND	0.47	0.39	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
2,4-Dinitrophenol	ND	0.92	0.41	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
2,4-Dinitrotoluene	ND	0.47	0.095	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
2,6-Dinitrotoluene	ND	0.47	0.11	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Di-n-octylphthalate	ND	0.47	0.094	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Fluoranthene	0.093	0.24	0.084	mg/Kg dry	1	J	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Fluorene	ND	0.24	0.092	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Hexachlorobenzene	ND	0.47	0.098	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Hexachlorobutadiene	ND	0.47	0.096	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Hexachlorocyclopentadiene	ND	0.47	0.31	mg/Kg dry	1	MS-09, V-05	SW-846 8270E	12/8/23	12/12/23 19:44	BGL

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Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: SB-4 (4) | Sampled: 12/4/2023 09:20

Sample ID: 23L0875-02

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachloroethane	ND	0.47	0.092	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Indeno(1,2,3-cd)pyrene	ND	0.24	0.10	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Isophorone	ND	0.47	0.097	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
2-Methylnaphthalene	0.80	0.24	0.093	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
2-Methylphenol	ND	0.47	0.094	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
3/4-Methylphenol	ND	0.47	0.10	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Naphthalene	0.53	0.24	0.095	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
2-Nitroaniline	ND	0.47	0.094	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
3-Nitroaniline	ND	0.47	0.11	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
4-Nitroaniline	ND	0.47	0.080	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Nitrobenzene	ND	0.47	0.10	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
2-Nitrophenol	ND	0.47	0.098	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
4-Nitrophenol	ND	0.92	0.20	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	0.47	0.095	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
N-Nitrosodi-n-propylamine	ND	0.47	0.10	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Pentachlorophenol	ND	0.47	0.21	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Phenanthrene	0.34	0.24	0.093	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Phenol	ND	0.47	0.11	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Pyrene	0.14	0.24	0.095	mg/Kg dry	1	J	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
1,2,4,5-Tetrachlorobenzene	ND	0.47	0.097	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
2,4,5-Trichlorophenol	ND	0.47	0.092	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL
2,4,6-Trichlorophenol	ND	0.47	0.090	mg/Kg dry	1		SW-846 8270E	12/8/23	12/12/23 19:44	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	60.2	30-130		12/12/23 19:44
Phenol-d6	65.5	30-130		12/12/23 19:44
Nitrobenzene-d5	71.0	30-130		12/12/23 19:44
2-Fluorobiphenyl	65.3	30-130		12/12/23 19:44
2,4,6-Tribromophenol	57.9	30-130		12/12/23 19:44
p-Terphenyl-d14	82.3	30-130		12/12/23 19:44

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Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: SB-4 (4) | Sampled: 12/4/2023 09:20

Sample ID: 23L0875-02

Sample Matrix: Soil

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.071	0.029	mg/Kg dry	1		SW-846 8270E	12/7/23	12/14/23 12:48	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,4-Dioxane-d8	37.3	15-110		12/14/23 12:48

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Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: SB-4 (4) | Sampled: 12/4/2023 09:20

Sample ID: 23L0875-02

Sample Matrix: Soil

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
1-Octadecene	0.42	mg/Kg dry	116158	8.27	1	000112-88-9	90	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
3-Hexene-2,5-dione	0.33	mg/Kg dry	61425	2.984	1	004436-75-3	86	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
3-Penten-2-one, 4-methyl-	0.47	mg/Kg dry	87354	2.253	1	000141-79-7	95	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
5H-Dibenzo[a,d]cycloheptene	0.39	mg/Kg dry	129613	6.432	1	000256-81-5	90	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
9-Octadecenamide, (Z)-	0.63	mg/Kg dry	175380	7.716	1	000301-02-0	98	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Benzaldehyde, 4-hydroxy-	0.40	mg/Kg dry	115287	4.598	1	000123-08-0	95	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Benzene, 1,2,3-trimethyl-	0.34	mg/Kg dry	62553	3.18	1	000526-73-8	97	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Benzene, 1,3-dimethyl-	0.41	mg/Kg dry	76492	2.721	1	000108-38-3	97	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Decane	0.19	mg/Kg dry	35576	3.154	1	000124-18-5	91	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Dibenzofuran, 4-methyl-	0.31	mg/Kg dry	89319	5.52	1	007320-53-8	87	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Heneicosane	0.31	mg/Kg dry	101736	6.725	1	000629-94-7	98	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Heptane, 2,3-dimethyl-	0.36	mg/Kg dry	67362	2.515	1	003074-71-3	90	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Heptane, 3,5-dimethyl-	0.42	mg/Kg dry	77461	2.412	1	000926-82-9	81	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Hexadecane	0.27	mg/Kg dry	76627	5.01	1	000544-76-3	90	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Hexane, 2,3,5-trimethyl-	0.19	mg/Kg dry	35771	2.348	1	001069-53-0	87	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Naphthalene, 1,4,6-trimethyl-	0.19	mg/Kg dry	55579	5.294	1	002131-42-2	94	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Naphthalene, 1,6,7-trimethyl-	0.51	mg/Kg dry	144563	5.417	1	002245-38-7	98	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Naphthalene, 1,6-dimethyl-	0.53	mg/Kg dry	150629	4.887	1	000575-43-9	97	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Naphthalene, 1,7-dimethyl-	0.89	mg/Kg dry	255542	4.871	1	000575-37-1	98	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Naphthalene, 1-ethyl-	0.21	mg/Kg dry	60390	4.784	1	001127-76-0	95	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Naphthalene, 2,3,6-trimethyl-	0.24	mg/Kg dry	69383	5.276	1	000829-26-5	96	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Naphthalene, 2,3-dimethyl-	0.51	mg/Kg dry	146048	4.943	1	000581-40-8	96	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Naphthalene, 2,6-dimethyl-	0.43	mg/Kg dry	122281	4.825	1	000581-42-0	98	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
n-Hexadecanoic acid	0.61	mg/Kg dry	201961	6.324	1	000057-10-3	99	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Nonadecane	0.32	mg/Kg dry	105527	5.891	1	000629-92-5	98	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Octacosane	0.24	mg/Kg dry	67233	7.812	1	000630-02-4	87	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Octane, 2,6-dimethyl-	0.27	mg/Kg dry	75301	4.233	1	002051-30-1	90	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Pentadecane	0.47	mg/Kg dry	155274	6.156	1	000629-62-9	83	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Phenanthrene, 2-methyl-	0.25	mg/Kg dry	84887	6.357	1	002531-84-2	90	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Tridecane (01)	0.23	mg/Kg dry	64384	4.336	1	000629-50-5	97	SW-846 8270E	12/8/23	12/12/23 19:44	BGL
Tridecane, 7-propyl-	0.38	mg/Kg dry	106385	7.405	1	055045-09-5	93	SW-846 8270E	12/8/23	12/12/23 19:44	BGL

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Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: SB-4 (4) | Sampled: 12/4/2023 09:20

Sample ID: 23L0875-02

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	0.028	mg/Kg dry	4		SW-846 8082A	12/12/23	12/15/23 2:49	SFM
Aroclor-1221 [1]	ND	0.11	0.058	mg/Kg dry	4		SW-846 8082A	12/12/23	12/15/23 2:49	SFM
Aroclor-1232 [1]	ND	0.11	0.036	mg/Kg dry	4		SW-846 8082A	12/12/23	12/15/23 2:49	SFM
Aroclor-1242 [1]	ND	0.11	0.033	mg/Kg dry	4		SW-846 8082A	12/12/23	12/15/23 2:49	SFM
Aroclor-1248 [2]	ND	0.11	0.027	mg/Kg dry	4		SW-846 8082A	12/12/23	12/15/23 2:49	SFM
Aroclor-1254 [1]	ND	0.11	0.033	mg/Kg dry	4		SW-846 8082A	12/12/23	12/15/23 2:49	SFM
Aroclor-1260 [2]	0.034	0.11	0.029	mg/Kg dry	4	J	SW-846 8082A	12/12/23	12/15/23 2:49	SFM
Aroclor-1262 [1]	ND	0.11	0.033	mg/Kg dry	4		SW-846 8082A	12/12/23	12/15/23 2:49	SFM
Aroclor-1268 [1]	ND	0.11	0.036	mg/Kg dry	4		SW-846 8082A	12/12/23	12/15/23 2:49	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	87.3	30-150		12/15/23 2:49
Decachlorobiphenyl [2]	82.3	30-150		12/15/23 2:49
Tetrachloro-m-xylene [1]	84.9	30-150		12/15/23 2:49
Tetrachloro-m-xylene [2]	82.3	30-150		12/15/23 2:49

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Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: SB-4 (4) | Sampled: 12/4/2023 09:20

Sample ID: 23L0875-02

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	4200	22	5.0	mg/Kg dry	1	MS-19	SW-846 6010D	12/7/23	12/11/23 15:39	HNN
Antimony	ND	2.4		mg/Kg dry	5	MS-07A	SW-846 6020B	12/7/23	12/16/23 14:03	NC
Arsenic	2.9	0.22		mg/Kg dry	5		SW-846 6020B	12/7/23	12/16/23 14:03	NC
Beryllium	ND	1.3		mg/Kg dry	20	DL-05	SW-846 6020B	12/7/23	12/18/23 16:38	NC
Calcium	140000	220	81	mg/Kg dry	10	MS-19	SW-846 6010D	12/7/23	12/11/23 17:45	HNN
Chromium	19	5.6		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:29	AAJ
Cobalt	3.7	2.2		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:29	AAJ
Copper	12	5.6		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:29	AAJ
Iron	6000	220	44	mg/Kg dry	10	MS-19	SW-846 6010D	12/7/23	12/11/23 17:45	HNN
Lead	18	2.2		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:29	AAJ
Magnesium	9000	220	30	mg/Kg dry	10	MS-19	SW-846 6010D	12/7/23	12/11/23 17:45	HNN
Manganese	160	58		mg/Kg dry	50	MS-19	SW-846 6020B	12/7/23	12/17/23 13:32	NC
Mercury	0.030	0.035	0.015	mg/Kg dry	1	J	SW-846 7471B	12/7/23	12/8/23 10:40	AV
Nickel	13	5.6		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:29	AAJ
Potassium	650	220	58	mg/Kg dry	1	MS-22	SW-846 6010D	12/7/23	12/8/23 16:47	HNN
Selenium	ND	1.8		mg/Kg dry	5	Z-01	SW-846 6020B	12/7/23	12/8/23 13:29	AAJ
Silver	ND	0.11		mg/Kg dry	5		SW-846 6020B	12/7/23	12/18/23 16:41	NC
Sodium	110	220	49	mg/Kg dry	1	J	SW-846 6010D	12/7/23	12/8/23 16:47	HNN
Thallium	0.17	0.11		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:29	AAJ
Vanadium	12	11		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:29	AAJ
Zinc	27	11		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:29	AAJ
Barium	47	11		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:29	AAJ
Cadmium	ND	0.45		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:29	AAJ

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Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: SB-4 (4) | Sampled: 12/4/2023 09:20

Sample ID: 23L0875-02

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	70.5			% Wt	1		SM 2540G	12/6/23	12/6/23 16:27	DV
Hexavalent Chromium	ND	1.1	0.79	mg/Kg dry	5	H-10, MS-16, W-06	SW-846 7196A	1/29/24	1/30/24 8:20	LL

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Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: Equip. Deconn | Sampled: 12/4/2023 00:00

Sample ID: 23L0875-03

Sample Matrix: Equipment Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	4.9	50	2.0	µg/L	1	J	SW-846 8260D	12/8/23	12/9/23 0:59	MFF
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
1,4-Dioxane	ND	50	18	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
Methyl Acetate	ND	1.0	0.61	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: Equip. Deconn | Sampled: 12/4/2023 00:00

Sample ID: 23L0875-03

Sample Matrix: Equipment Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	12/8/23	12/9/23 0:59	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	88.0	70-130		12/9/23 0:59
Toluene-d8	101	70-130		12/9/23 0:59
4-Bromofluorobenzene	97.7	70-130		12/9/23 0:59

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Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: Equip. Deconn | Sampled: 12/4/2023 00:00

Sample ID: 23L0875-03

Sample Matrix: Equipment Blank Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	12/8/23	12/9/23 0:59	MFF

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Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: Duplicate | Sampled: 12/4/2023 00:00

Sample ID: 23L0875-04

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	0.012	0.087	0.0079	mg/Kg dry	1	J	SW-846 8260D	12/7/23	12/7/23 9:05	MFF
Benzene	ND	0.0017	0.00051	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
Bromochloromethane	ND	0.0017	0.00068	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
Bromodichloromethane	ND	0.0017	0.00046	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
Bromoform	ND	0.0017	0.00053	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
Bromomethane	ND	0.0087	0.0015	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
2-Butanone (MEK)	ND	0.035	0.0055	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
Carbon Disulfide	ND	0.0087	0.0070	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
Carbon Tetrachloride	ND	0.0017	0.00069	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
Chlorobenzene	ND	0.0017	0.00049	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
Chlorodibromomethane	ND	0.00087	0.00055	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
Chloroethane	ND	0.017	0.00097	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
Chloroform	ND	0.0035	0.00055	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
Chloromethane	ND	0.0087	0.00087	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
Cyclohexane	ND	0.0087	0.0036	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0017	0.00069	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
1,2-Dibromoethane (EDB)	ND	0.00087	0.00067	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
1,2-Dichlorobenzene	ND	0.0017	0.00046	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
1,3-Dichlorobenzene	ND	0.0017	0.00048	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
1,4-Dichlorobenzene	ND	0.0017	0.00053	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.017	0.00090	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
1,1-Dichloroethane	ND	0.0017	0.00060	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
1,2-Dichloroethane	ND	0.0017	0.00058	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
1,1-Dichloroethylene	ND	0.0035	0.00072	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
cis-1,2-Dichloroethylene	ND	0.0017	0.00056	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
trans-1,2-Dichloroethylene	ND	0.0017	0.00064	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
1,2-Dichloropropane	ND	0.0017	0.00054	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
cis-1,3-Dichloropropene	ND	0.00087	0.00049	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
trans-1,3-Dichloropropene	ND	0.00087	0.00053	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
1,4-Dioxane	ND	0.087	0.040	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
Ethylbenzene	ND	0.0017	0.00052	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
2-Hexanone (MBK)	ND	0.017	0.0044	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
Isopropylbenzene (Cumene)	ND	0.0017	0.00054	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
Methyl Acetate	ND	0.0017	0.0013	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0035	0.00059	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
Methyl Cyclohexane	ND	0.0035	0.00068	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
Methylene Chloride	ND	0.017	0.00084	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.017	0.0039	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
Styrene	ND	0.0017	0.00043	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
1,1,2,2-Tetrachloroethane	ND	0.00087	0.00048	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
Tetrachloroethylene	ND	0.0017	0.00074	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
Toluene	ND	0.0017	0.00059	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
1,2,3-Trichlorobenzene	ND	0.0017	0.00050	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
1,2,4-Trichlorobenzene	ND	0.0017	0.00053	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: Duplicate | Sampled: 12/4/2023 00:00

Sample ID: 23L0875-04

Sample Matrix: Soil

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	0.0017	0.00067	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
1,1,2-Trichloroethane	ND	0.0017	0.00047	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
Trichloroethylene	ND	0.0017	0.00070	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0087	0.00065	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0087	0.00075	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
Vinyl Chloride	ND	0.0087	0.00065	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF
Xylenes (total)	ND	0.0017	0.0017	mg/Kg dry	1		SW-846 8260D	12/7/23	12/7/23 9:05	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	95.2	70-130		12/7/23 9:05
Toluene-d8	97.2	70-130		12/7/23 9:05
4-Bromofluorobenzene	101	70-130		12/7/23 9:05

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: Duplicate | Sampled: 12/4/2023 00:00

Sample ID: 23L0875-04

Sample Matrix: Soil

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	mg/Kg dry			1			SW-846 8260D	12/7/23	12/7/23 9:05	MFF

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Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: Duplicate | Sampled: 12/4/2023 00:00

Sample ID: 23L0875-04

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Atrazine	ND	0.77	0.054	mg/Kg dry	1	V-06	SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Benzaldehyde	ND	0.39	0.038	mg/Kg dry	1	V-34	SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Biphenyl	ND	0.77	0.061	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Caprolactam	ND	0.39	0.056	mg/Kg dry	1	V-06	SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Acenaphthene	0.096	0.20	0.075	mg/Kg dry	1	J	SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Acenaphthylene	ND	0.20	0.077	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Acetophenone	ND	0.39	0.077	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Anthracene	0.21	0.20	0.076	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Benzo(a)anthracene	0.54	0.20	0.071	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Benzo(a)pyrene	0.55	0.20	0.065	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Benzo(b)fluoranthene	0.65	0.20	0.066	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Benzo(g,h,i)perylene	0.29	0.20	0.082	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Benzo(k)fluoranthene	0.27	0.20	0.071	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Bis(2-chloroethoxy)methane	ND	0.39	0.077	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Bis(2-chloroethyl)ether	ND	0.39	0.082	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Bis(2-chloroisopropyl)ether	ND	0.39	0.16	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Bis(2-Ethylhexyl)phthalate	ND	0.39	0.080	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
4-Bromophenylphenylether	ND	0.39	0.081	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Butylbenzylphthalate	ND	0.39	0.074	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Carbazole	0.096	0.20	0.076	mg/Kg dry	1	J	SW-846 8270E	12/11/23	12/13/23 17:22	AR2
4-Chloroaniline	ND	0.76	0.070	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
4-Chloro-3-methylphenol	ND	0.76	0.077	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
2-Chloronaphthalene	ND	0.39	0.069	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
2-Chlorophenol	ND	0.39	0.079	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
4-Chlorophenylphenylether	ND	0.39	0.076	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Chrysene	0.57	0.20	0.071	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Dibenz(a,h)anthracene	ND	0.20	0.076	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Dibenzofuran	0.081	0.39	0.077	mg/Kg dry	1	J	SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Di-n-butylphthalate	ND	0.39	0.071	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
3,3-Dichlorobenzidine	ND	0.20	0.052	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
2,4-Dichlorophenol	ND	0.39	0.076	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Diethylphthalate	ND	0.39	0.076	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
2,4-Dimethylphenol	ND	0.39	0.10	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Dimethylphthalate	ND	0.39	0.081	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
4,6-Dinitro-2-methylphenol	ND	0.39	0.32	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
2,4-Dinitrophenol	ND	0.76	0.34	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
2,4-Dinitrotoluene	ND	0.39	0.078	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
2,6-Dinitrotoluene	ND	0.39	0.089	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Di-n-octylphthalate	ND	0.39	0.078	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Fluoranthene	1.1	0.20	0.070	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Fluorene	0.11	0.20	0.076	mg/Kg dry	1	J	SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Hexachlorobenzene	ND	0.39	0.081	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Hexachlorobutadiene	ND	0.39	0.079	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Hexachlorocyclopentadiene	ND	0.39	0.25	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2

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Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: Duplicate | Sampled: 12/4/2023 00:00

Sample ID: 23L0875-04

Sample Matrix: Soil

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachloroethane	ND	0.39	0.077	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Indeno(1,2,3-cd)pyrene	0.27	0.20	0.086	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Isophorone	ND	0.39	0.080	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
2-Methylnaphthalene	ND	0.20	0.077	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
2-Methylphenol	ND	0.39	0.078	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
3/4-Methylphenol	ND	0.39	0.085	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Naphthalene	0.091	0.20	0.078	mg/Kg dry	1	J	SW-846 8270E	12/11/23	12/13/23 17:22	AR2
2-Nitroaniline	ND	0.39	0.078	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
3-Nitroaniline	ND	0.39	0.092	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
4-Nitroaniline	ND	0.39	0.066	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Nitrobenzene	ND	0.39	0.085	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
2-Nitrophenol	ND	0.39	0.081	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
4-Nitrophenol	ND	0.76	0.16	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
N-Nitrosodiphenylamine/Diphenylamine	ND	0.39	0.079	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
N-Nitrosodi-n-propylamine	ND	0.39	0.085	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Pentachlorophenol	ND	0.39	0.18	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Phenanthrene	0.90	0.20	0.077	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Phenol	ND	0.39	0.091	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Pyrene	1.2	0.20	0.078	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
1,2,4,5-Tetrachlorobenzene	ND	0.39	0.080	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
2,4,5-Trichlorophenol	ND	0.39	0.076	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2
2,4,6-Trichlorophenol	ND	0.39	0.075	mg/Kg dry	1		SW-846 8270E	12/11/23	12/13/23 17:22	AR2

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	49.7	30-130		12/13/23 17:22
Phenol-d6	49.2	30-130		12/13/23 17:22
Nitrobenzene-d5	60.1	30-130		12/13/23 17:22
2-Fluorobiphenyl	60.5	30-130		12/13/23 17:22
2,4,6-Tribromophenol	44.3	30-130		12/13/23 17:22
p-Terphenyl-d14	74.6	30-130		12/13/23 17:22

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Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: Duplicate | Sampled: 12/4/2023 00:00

Sample ID: 23L0875-04

Sample Matrix: Soil

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.058	0.024	mg/Kg dry	1		SW-846 8270E	12/7/23	12/14/23 13:47	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
1,4-Dioxane-d8	38.3	15-110		12/14/23 13:47	

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Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: Duplicate | Sampled: 12/4/2023 00:00

Sample ID: 23L0875-04

Sample Matrix: Soil

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
.gamma.-Sitosterol	2.0	mg/Kg dry	627137	13.835	1	000083-47-6	97	SW-846 8270E	12/11/23	12/13/23 17:22	AR2
9-Octadecenamide, (Z)-	0.72	mg/Kg dry	434492	7.843	1	000301-02-0	97	SW-846 8270E	12/11/23	12/13/23 17:22	AR2
eicosane	0.41	mg/Kg dry	250186	9.54	1	000112-95-8	92	SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Hexadecane, 1-bromo-	0.93	mg/Kg dry	297493	12.39	1	000112-82-3	86	SW-846 8270E	12/11/23	12/13/23 17:22	AR2
n-Hexadecanoic acid	1.3	mg/Kg dry	770481	6.407	1	000057-10-3	97	SW-846 8270E	12/11/23	12/13/23 17:22	AR2
Octadecanal	0.84	mg/Kg dry	269305	12.03	1	000638-66-4	94	SW-846 8270E	12/11/23	12/13/23 17:22	AR2

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Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: Duplicate | Sampled: 12/4/2023 00:00

Sample ID: 23L0875-04

Sample Matrix: Soil

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.088	0.023	mg/Kg dry	4		SW-846 8082A	12/12/23	12/15/23 3:06	SFM
Aroclor-1221 [1]	ND	0.088	0.047	mg/Kg dry	4		SW-846 8082A	12/12/23	12/15/23 3:06	SFM
Aroclor-1232 [1]	ND	0.088	0.029	mg/Kg dry	4		SW-846 8082A	12/12/23	12/15/23 3:06	SFM
Aroclor-1242 [1]	ND	0.088	0.026	mg/Kg dry	4		SW-846 8082A	12/12/23	12/15/23 3:06	SFM
Aroclor-1248 [1]	ND	0.088	0.022	mg/Kg dry	4		SW-846 8082A	12/12/23	12/15/23 3:06	SFM
Aroclor-1254 [1]	ND	0.088	0.027	mg/Kg dry	4		SW-846 8082A	12/12/23	12/15/23 3:06	SFM
Aroclor-1260 [1]	ND	0.088	0.024	mg/Kg dry	4		SW-846 8082A	12/12/23	12/15/23 3:06	SFM
Aroclor-1262 [1]	ND	0.088	0.026	mg/Kg dry	4		SW-846 8082A	12/12/23	12/15/23 3:06	SFM
Aroclor-1268 [1]	ND	0.088	0.029	mg/Kg dry	4		SW-846 8082A	12/12/23	12/15/23 3:06	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	79.6	30-150		12/15/23 3:06
Decachlorobiphenyl [2]	76.0	30-150		12/15/23 3:06
Tetrachloro-m-xylene [1]	82.3	30-150		12/15/23 3:06
Tetrachloro-m-xylene [2]	79.9	30-150		12/15/23 3:06

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Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: Duplicate | Sampled: 12/4/2023 00:00

Sample ID: 23L0875-04

Sample Matrix: Soil

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	7800	19	4.1	mg/Kg dry	1		SW-846 6010D	12/7/23	12/11/23 16:35	HNN
Antimony	ND	2.0		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:36	AAJ
Arsenic	4.2	0.19		mg/Kg dry	5		SW-846 6020B	12/7/23	12/16/23 14:17	NC
Beryllium	ND	1.1		mg/Kg dry	20	DL-05	SW-846 6020B	12/7/23	12/18/23 16:46	NC
Calcium	110000	190	67	mg/Kg dry	10		SW-846 6010D	12/7/23	12/11/23 18:41	HNN
Chromium	35	4.6		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:36	AAJ
Cobalt	7.8	1.9		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:36	AAJ
Copper	22	4.6		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:36	AAJ
Iron	14000	190	37	mg/Kg dry	10		SW-846 6010D	12/7/23	12/11/23 18:41	HNN
Lead	90	1.9		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:36	AAJ
Magnesium	42000	190	25	mg/Kg dry	10		SW-846 6010D	12/7/23	12/11/23 18:41	HNN
Manganese	380	48		mg/Kg dry	50		SW-846 6020B	12/7/23	12/17/23 14:22	NC
Mercury	0.048	0.029	0.013	mg/Kg dry	1		SW-846 7471B	12/7/23	12/8/23 10:42	AV
Nickel	24	4.6		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:36	AAJ
Potassium	2000	190	49	mg/Kg dry	1		SW-846 6010D	12/7/23	12/8/23 18:45	HNN
Selenium	ND	1.5		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:36	AAJ
Silver	0.12	0.093		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:36	AAJ
Sodium	180	190	41	mg/Kg dry	1	J	SW-846 6010D	12/7/23	12/8/23 18:45	HNN
Thallium	0.18	0.093		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:36	AAJ
Vanadium	20	9.3		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:36	AAJ
Zinc	61	9.3		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:36	AAJ
Barium	470	9.3		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:36	AAJ
Cadmium	ND	0.37		mg/Kg dry	5		SW-846 6020B	12/7/23	12/8/23 13:36	AAJ

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Project Location: NY | Sample Description: | Work Order: 23L0875

Date Received: 12/6/2023

Field Sample #: Duplicate | Sampled: 12/4/2023 00:00

Sample ID: 23L0875-04

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	85.7			% Wt	1		SM 2540G	12/6/23	12/6/23 16:27	DV
Hexavalent Chromium	ND	0.18	0.13	mg/Kg dry	1	H-10	SW-846 7196A	1/29/24	1/30/24 8:20	LL

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Sample Extraction Data

Prep Method:% Solids **Analytical Method:SM 2540G**

Lab Number [Field ID]	Batch	Date
23L0875-01 [MW-2 (2)]	B359975	12/06/23
23L0875-02 [SB-4 (4)]	B359975	12/06/23
23L0875-04 [Duplicate]	B359975	12/06/23

Prep Method:SW-846 3050B **Analytical Method:SW-846 6010D**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L0875-01 [MW-2 (2)]	B360037	1.59	50.0	12/07/23
23L0875-02 [SB-4 (4)]	B360037	1.59	50.0	12/07/23
23L0875-02 [SB-4 (4)]	B360037	1.59	50.0	12/07/23
23L0875-04 [Duplicate]	B360037	1.57	50.0	12/07/23
23L0875-04 [Duplicate]	B360037	1.57	50.0	12/07/23

Prep Method:SW-846 3050B **Analytical Method:SW-846 6020B**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L0875-01 [MW-2 (2)]	B360041	1.59	50.0	12/07/23
23L0875-02 [SB-4 (4)]	B360041	1.59	50.0	12/07/23
23L0875-04 [Duplicate]	B360041	1.57	50.0	12/07/23

Prep Method:SW-846 3060A **Analytical Method:SW-846 7196A**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L0875-01 [MW-2 (2)]	B364445	2.55	100	01/29/24
23L0875-02 [SB-4 (4)]	B364445	2.58	100	01/29/24
23L0875-04 [Duplicate]	B364445	2.56	100	01/29/24

Prep Method:SW-846 7471 **Analytical Method:SW-846 7471B**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L0875-01 [MW-2 (2)]	B360093	0.607	50.0	12/07/23
23L0875-02 [SB-4 (4)]	B360093	0.602	50.0	12/07/23
23L0875-04 [Duplicate]	B360093	0.601	50.0	12/07/23

Prep Method:SW-846 3546 **Analytical Method:SW-846 8082A**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L0875-01 [MW-2 (2)]	B360436	10.6	10.0	12/12/23
23L0875-02 [SB-4 (4)]	B360436	10.4	10.0	12/12/23
23L0875-04 [Duplicate]	B360436	10.6	10.0	12/12/23

Prep Method:SW-846 5035 **Analytical Method:SW-846 8260D**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L0875-01 [MW-2 (2)]	B360032	6.24	10.0	12/07/23
23L0875-02 [SB-4 (4)]	B360032	6.09	10.0	12/07/23
23L0875-04 [Duplicate]	B360032	6.67	10.0	12/07/23

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Sample Extraction Data

Prep Method:SW-846 5030B **Analytical Method:SW-846 8260D**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23L0875-03 [Equip. Deconn]	B360150	5	5.00	12/08/23

Prep Method:SW-846 3546 **Analytical Method:SW-846 8270E**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L0875-01 [MW-2 (2)]	B360104	20.3	1.00	12/07/23
23L0875-02 [SB-4 (4)]	B360104	20.0	1.00	12/07/23
23L0875-04 [Duplicate]	B360104	20.0	1.00	12/07/23

Prep Method:SW-846 3546 **Analytical Method:SW-846 8270E**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L0875-01 [MW-2 (2)]	B360166	30.3	1.00	12/08/23
23L0875-02 [SB-4 (4)]	B360166	30.5	1.00	12/08/23

Prep Method:SW-846 3546 **Analytical Method:SW-846 8270E**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L0875-04 [Duplicate]	B360416	30.3	1.00	12/11/23

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B360032 - SW-846 5035										
Blank (B360032-BLK1)				Prepared & Analyzed: 12/07/23						
Acetone	ND	0.10	mg/Kg wet							
Benzene	ND	0.0020	mg/Kg wet							
Bromochloromethane	ND	0.0020	mg/Kg wet							
Bromodichloromethane	ND	0.0020	mg/Kg wet							
Bromoform	ND	0.0020	mg/Kg wet							
Bromomethane	ND	0.010	mg/Kg wet							
2-Butanone (MEK)	ND	0.040	mg/Kg wet							
Carbon Disulfide	ND	0.010	mg/Kg wet							
Carbon Tetrachloride	ND	0.0020	mg/Kg wet							
Chlorobenzene	ND	0.0020	mg/Kg wet							
Chlorodibromomethane	ND	0.0010	mg/Kg wet							
Chloroethane	ND	0.020	mg/Kg wet							
Chloroform	ND	0.0040	mg/Kg wet							
Chloromethane	ND	0.010	mg/Kg wet							
Cyclohexane	ND	0.010	mg/Kg wet							
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg wet							
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet							
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg wet							
1,1-Dichloroethane	ND	0.0020	mg/Kg wet							
1,2-Dichloroethane	ND	0.0020	mg/Kg wet							
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet							
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
1,2-Dichloropropane	ND	0.0020	mg/Kg wet							
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
1,4-Dioxane	ND	0.10	mg/Kg wet							
Ethylbenzene	ND	0.0020	mg/Kg wet							
2-Hexanone (MBK)	ND	0.020	mg/Kg wet							
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet							
Methyl Acetate	ND	0.0020	mg/Kg wet							
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet							
Methyl Cyclohexane	ND	0.0040	mg/Kg wet							
Methylene Chloride	ND	0.020	mg/Kg wet							
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet							
Styrene	ND	0.0020	mg/Kg wet							
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet							
Tetrachloroethylene	ND	0.0020	mg/Kg wet							
Toluene	ND	0.0020	mg/Kg wet							
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet							
Trichloroethylene	ND	0.0020	mg/Kg wet							
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	mg/Kg wet							
Vinyl Chloride	ND	0.010	mg/Kg wet							
m+p Xylene	ND	0.0040	mg/Kg wet							

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B360032 - SW-846 5035												
Blank (B360032-BLK1)				Prepared & Analyzed: 12/07/23								
o-Xylene	ND	0.0020	mg/Kg wet									
Xylenes (total)	ND	0.0020	mg/Kg wet									
Surrogate: 1,2-Dichloroethane-d4	*0.0435*		mg/Kg wet	0.0500		87.0		70-130				
Surrogate: Toluene-d8	*0.0476*		mg/Kg wet	0.0500		95.1		70-130				
Surrogate: 4-Bromofluorobenzene	*0.0498*		mg/Kg wet	0.0500		99.6		70-130				
LCS (B360032-BS1)				Prepared & Analyzed: 12/07/23								
Acetone	0.192	0.10	mg/Kg wet	0.200		96.0		70-160			V-36	†
Benzene	0.0198	0.0020	mg/Kg wet	0.0200		99.2		70-130				
Bromochloromethane	0.0204	0.0020	mg/Kg wet	0.0200		102		70-130				
Bromodichloromethane	0.0190	0.0020	mg/Kg wet	0.0200		95.1		70-130				
Bromoform	0.0196	0.0020	mg/Kg wet	0.0200		97.9		70-130				
Bromomethane	0.0337	0.010	mg/Kg wet	0.0200		**168**	*	40-130			L-02, V-20	†
2-Butanone (MEK)	0.191	0.040	mg/Kg wet	0.200		95.7		70-160				†
Carbon Disulfide	0.189	0.010	mg/Kg wet	0.200		94.6		70-130				
Carbon Tetrachloride	0.0168	0.0020	mg/Kg wet	0.0200		83.9		70-130				
Chlorobenzene	0.0215	0.0020	mg/Kg wet	0.0200		108		70-130				
Chlorodibromomethane	0.0203	0.0010	mg/Kg wet	0.0200		102		70-130				
Chloroethane	0.0233	0.020	mg/Kg wet	0.0200		117		70-130				
Chloroform	0.0193	0.0040	mg/Kg wet	0.0200		96.7		70-130				
Chloromethane	0.0235	0.010	mg/Kg wet	0.0200		118		70-130			V-20	
Cyclohexane	0.0176	0.010	mg/Kg wet	0.0200		87.8		70-130				
1,2-Dibromo-3-chloropropane (DBCP)	0.0170	0.0020	mg/Kg wet	0.0200		85.1		70-130				
1,2-Dibromoethane (EDB)	0.0217	0.0010	mg/Kg wet	0.0200		109		70-130				
1,2-Dichlorobenzene	0.0210	0.0020	mg/Kg wet	0.0200		105		70-130				
1,3-Dichlorobenzene	0.0204	0.0020	mg/Kg wet	0.0200		102		70-130				
1,4-Dichlorobenzene	0.0203	0.0020	mg/Kg wet	0.0200		102		70-130				
Dichlorodifluoromethane (Freon 12)	0.0239	0.020	mg/Kg wet	0.0200		120		40-160				†
1,1-Dichloroethane	0.0197	0.0020	mg/Kg wet	0.0200		98.5		70-130				
1,2-Dichloroethane	0.0200	0.0020	mg/Kg wet	0.0200		99.9		70-130				
1,1-Dichloroethylene	0.0212	0.0040	mg/Kg wet	0.0200		106		70-130				
cis-1,2-Dichloroethylene	0.0198	0.0020	mg/Kg wet	0.0200		98.9		70-130				
trans-1,2-Dichloroethylene	0.0198	0.0020	mg/Kg wet	0.0200		99.1		70-130				
1,2-Dichloropropane	0.0210	0.0020	mg/Kg wet	0.0200		105		70-130				
cis-1,3-Dichloropropene	0.0194	0.0010	mg/Kg wet	0.0200		97.0		70-130				
trans-1,3-Dichloropropene	0.0188	0.0010	mg/Kg wet	0.0200		93.9		70-130				
1,4-Dioxane	0.245	0.10	mg/Kg wet	0.200		123		40-160				†
Ethylbenzene	0.0222	0.0020	mg/Kg wet	0.0200		111		70-130				
2-Hexanone (MBK)	0.210	0.020	mg/Kg wet	0.200		105		70-160				†
Isopropylbenzene (Cumene)	0.0234	0.0020	mg/Kg wet	0.0200		117		70-130				
Methyl Acetate	0.0199	0.0020	mg/Kg wet	0.0200		99.7		70-130				
Methyl tert-Butyl Ether (MTBE)	0.0182	0.0040	mg/Kg wet	0.0200		90.8		70-130				
Methyl Cyclohexane	0.0204	0.0040	mg/Kg wet	0.0200		102		70-130				
Methylene Chloride	0.0197	0.020	mg/Kg wet	0.0200		98.6		40-160			J	†
4-Methyl-2-pentanone (MIBK)	0.216	0.020	mg/Kg wet	0.200		108		70-160				†
Styrene	0.0228	0.0020	mg/Kg wet	0.0200		114		70-130				
1,1,2,2-Tetrachloroethane	0.0225	0.0010	mg/Kg wet	0.0200		112		70-130				
Tetrachloroethylene	0.0236	0.0020	mg/Kg wet	0.0200		118		70-130				
Toluene	0.0221	0.0020	mg/Kg wet	0.0200		110		70-130				
1,2,3-Trichlorobenzene	0.0203	0.0020	mg/Kg wet	0.0200		101		70-130				
1,2,4-Trichlorobenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.7		70-130				
1,1,1-Trichloroethane	0.0192	0.0020	mg/Kg wet	0.0200		95.8		70-130				

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B360032 - SW-846 5035												
LCS (B360032-BS1)				Prepared & Analyzed: 12/07/23								
1,1,2-Trichloroethane	0.0219	0.0020	mg/Kg wet	0.0200		110		70-130				
Trichloroethylene	0.0210	0.0020	mg/Kg wet	0.0200		105		70-130				
Trichlorofluoromethane (Freon 11)	0.0221	0.010	mg/Kg wet	0.0200		111		70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0220	0.010	mg/Kg wet	0.0200		110		70-130				
Vinyl Chloride	0.0222	0.010	mg/Kg wet	0.0200		111		40-130				†
m+p Xylene	0.0463	0.0040	mg/Kg wet	0.0400		116		70-130				
o-Xylene	0.0224	0.0020	mg/Kg wet	0.0200		112		70-130				
Surrogate: 1,2-Dichloroethane-d4	*0.0419*		mg/Kg wet	0.0500		83.7		70-130				
Surrogate: Toluene-d8	*0.0509*		mg/Kg wet	0.0500		102		70-130				
Surrogate: 4-Bromofluorobenzene	*0.0489*		mg/Kg wet	0.0500		97.8		70-130				
LCS Dup (B360032-BSD1)				Prepared & Analyzed: 12/07/23								
Acetone	0.187	0.10	mg/Kg wet	0.200		93.4		70-160	2.83	25	V-36	†
Benzene	0.0188	0.0020	mg/Kg wet	0.0200		94.2		70-130	5.17	25		
Bromochloromethane	0.0200	0.0020	mg/Kg wet	0.0200		100		70-130	1.68	25		
Bromodichloromethane	0.0183	0.0020	mg/Kg wet	0.0200		91.4		70-130	3.97	25		
Bromoform	0.0192	0.0020	mg/Kg wet	0.0200		96.1		70-130	1.86	25		
Bromomethane	0.0301	0.010	mg/Kg wet	0.0200		**151**	*	40-130	11.1	25	L-02, V-20	†
2-Butanone (MEK)	0.184	0.040	mg/Kg wet	0.200		92.0		70-160	3.91	25		†
Carbon Disulfide	0.177	0.010	mg/Kg wet	0.200		88.5		70-130	6.71	25		
Carbon Tetrachloride	0.0156	0.0020	mg/Kg wet	0.0200		78.2		70-130	7.03	25		
Chlorobenzene	0.0202	0.0020	mg/Kg wet	0.0200		101		70-130	6.42	25		
Chlorodibromomethane	0.0192	0.0010	mg/Kg wet	0.0200		95.8		70-130	5.88	25		
Chloroethane	0.0223	0.020	mg/Kg wet	0.0200		112		70-130	4.47	25		
Chloroform	0.0184	0.0040	mg/Kg wet	0.0200		92.2		70-130	4.76	25		
Chloromethane	0.0220	0.010	mg/Kg wet	0.0200		110		70-130	6.58	25	V-20	
Cyclohexane	0.0163	0.010	mg/Kg wet	0.0200		81.4		70-130	7.57	25		
1,2-Dibromo-3-chloropropane (DBCP)	0.0161	0.0020	mg/Kg wet	0.0200		80.5		70-130	5.56	25		
1,2-Dibromoethane (EDB)	0.0214	0.0010	mg/Kg wet	0.0200		107		70-130	1.67	25		
1,2-Dichlorobenzene	0.0197	0.0020	mg/Kg wet	0.0200		98.5		70-130	6.58	25		
1,3-Dichlorobenzene	0.0192	0.0020	mg/Kg wet	0.0200		96.0		70-130	6.16	25		
1,4-Dichlorobenzene	0.0192	0.0020	mg/Kg wet	0.0200		95.9		70-130	5.77	25		
Dichlorodifluoromethane (Freon 12)	0.0216	0.020	mg/Kg wet	0.0200		108		40-160	10.1	25		†
1,1-Dichloroethane	0.0185	0.0020	mg/Kg wet	0.0200		92.3		70-130	6.50	25		
1,2-Dichloroethane	0.0191	0.0020	mg/Kg wet	0.0200		95.4		70-130	4.61	25		
1,1-Dichloroethylene	0.0198	0.0040	mg/Kg wet	0.0200		99.0		70-130	6.73	25		
cis-1,2-Dichloroethylene	0.0188	0.0020	mg/Kg wet	0.0200		93.8		70-130	5.29	25		
trans-1,2-Dichloroethylene	0.0183	0.0020	mg/Kg wet	0.0200		91.7		70-130	7.76	25		
1,2-Dichloropropane	0.0200	0.0020	mg/Kg wet	0.0200		99.8		70-130	4.98	25		
cis-1,3-Dichloropropene	0.0185	0.0010	mg/Kg wet	0.0200		92.6		70-130	4.64	25		
trans-1,3-Dichloropropene	0.0177	0.0010	mg/Kg wet	0.0200		88.6		70-130	5.81	25		
1,4-Dioxane	0.232	0.10	mg/Kg wet	0.200		116		40-160	5.58	50		† ‡
Ethylbenzene	0.0208	0.0020	mg/Kg wet	0.0200		104		70-130	6.88	25		
2-Hexanone (MBK)	0.202	0.020	mg/Kg wet	0.200		101		70-160	3.93	25		†
Isopropylbenzene (Cumene)	0.0217	0.0020	mg/Kg wet	0.0200		109		70-130	7.53	25		
Methyl Acetate	0.0195	0.0020	mg/Kg wet	0.0200		97.4		70-130	2.33	25		
Methyl tert-Butyl Ether (MTBE)	0.0175	0.0040	mg/Kg wet	0.0200		87.6		70-130	3.59	25		
Methyl Cyclohexane	0.0185	0.0040	mg/Kg wet	0.0200		92.7		70-130	9.36	25		
Methylene Chloride	0.0185	0.020	mg/Kg wet	0.0200		92.4		40-160	6.49	25	J	†
4-Methyl-2-pentanone (MIBK)	0.205	0.020	mg/Kg wet	0.200		102		70-160	5.47	25		†
Styrene	0.0216	0.0020	mg/Kg wet	0.0200		108		70-130	5.40	25		
1,1,2,2-Tetrachloroethane	0.0216	0.0010	mg/Kg wet	0.0200		108		70-130	4.17	25		

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B360032 - SW-846 5035											
LCS Dup (B360032-BSD1)				Prepared & Analyzed: 12/07/23							
Tetrachloroethylene	0.0214	0.0020	mg/Kg wet	0.0200		107		70-130	9.95	25	
Toluene	0.0203	0.0020	mg/Kg wet	0.0200		101		70-130	8.51	25	
1,2,3-Trichlorobenzene	0.0191	0.0020	mg/Kg wet	0.0200		95.7		70-130	5.69	25	
1,2,4-Trichlorobenzene	0.0183	0.0020	mg/Kg wet	0.0200		91.7		70-130	7.35	25	
1,1,1-Trichloroethane	0.0181	0.0020	mg/Kg wet	0.0200		90.5		70-130	5.69	25	
1,1,2-Trichloroethane	0.0211	0.0020	mg/Kg wet	0.0200		106		70-130	3.63	25	
Trichloroethylene	0.0195	0.0020	mg/Kg wet	0.0200		97.3		70-130	7.71	25	
Trichlorofluoromethane (Freon 11)	0.0206	0.010	mg/Kg wet	0.0200		103		70-130	7.12	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0205	0.010	mg/Kg wet	0.0200		102		70-130	7.34	25	
Vinyl Chloride	0.0207	0.010	mg/Kg wet	0.0200		103		40-130	7.01	25	†
m+p Xylene	0.0434	0.0040	mg/Kg wet	0.0400		108		70-130	6.43	25	
o-Xylene	0.0212	0.0020	mg/Kg wet	0.0200		106		70-130	5.69	25	
Surrogate: 1,2-Dichloroethane-d4	*0.0421*		mg/Kg wet	0.0500		84.2		70-130			
Surrogate: Toluene-d8	*0.0484*		mg/Kg wet	0.0500		96.8		70-130			
Surrogate: 4-Bromofluorobenzene	*0.0491*		mg/Kg wet	0.0500		98.3		70-130			
Matrix Spike (B360032-MS1)	**Source: 23L0875-02**			Prepared & Analyzed: 12/07/23							
Acetone	0.305	0.12	mg/Kg dry	0.248	ND	123		70-130			V-36
Benzene	0.0226	0.0025	mg/Kg dry	0.0248	ND	91.1		70-130			
Bromochloromethane	0.0233	0.0025	mg/Kg dry	0.0248	ND	94.0		70-130			
Bromodichloromethane	0.0228	0.0025	mg/Kg dry	0.0248	ND	92.0		70-130			
Bromoform	0.0245	0.0025	mg/Kg dry	0.0248	ND	98.9		70-130			
Bromomethane	0.0157	0.012	mg/Kg dry	0.0248	ND	**63.2**	*	70-130			MS-22, V-20
2-Butanone (MEK)	0.216	0.050	mg/Kg dry	0.248	ND	86.9		70-130			
Carbon Disulfide	0.0170	0.012	mg/Kg dry	0.0248	ND	**68.6**	*	70-130			MS-24
Carbon Tetrachloride	0.0205	0.0025	mg/Kg dry	0.0248	ND	82.7		70-130			
Chlorobenzene	0.0246	0.0025	mg/Kg dry	0.0248	ND	99.2		70-130			
Chlorodibromomethane	0.0243	0.0012	mg/Kg dry	0.0248	ND	97.8		70-130			
Chloroethane	0.0223	0.025	mg/Kg dry	0.0248	ND	89.7		70-130			J
Chloroform	0.0235	0.0050	mg/Kg dry	0.0248	ND	94.9		70-130			
Chloromethane	0.0158	0.012	mg/Kg dry	0.0248	ND	**63.8**	*	70-130			MS-07A, V-20
Cyclohexane	0.0187	0.012	mg/Kg dry	0.0248	ND	75.3		70-130			
1,2-Dibromo-3-chloropropane (DBCP)	0.0194	0.0025	mg/Kg dry	0.0248	ND	78.2		70-130			
1,2-Dibromoethane (EDB)	0.0246	0.0012	mg/Kg dry	0.0248	ND	99.3		70-130			
1,2-Dichlorobenzene	0.0255	0.0025	mg/Kg dry	0.0248	ND	103		70-130			
1,3-Dichlorobenzene	0.0250	0.0025	mg/Kg dry	0.0248	ND	101		70-130			
1,4-Dichlorobenzene	0.0245	0.0025	mg/Kg dry	0.0248	ND	98.9		70-130			
Dichlorodifluoromethane (Freon 12)	0.0183	0.025	mg/Kg dry	0.0248	ND	73.6		70-130			J
1,1-Dichloroethane	0.0235	0.0025	mg/Kg dry	0.0248	ND	94.8		70-130			
1,2-Dichloroethane	0.0231	0.0025	mg/Kg dry	0.0248	ND	93.1		70-130			
1,1-Dichloroethylene	0.0235	0.0050	mg/Kg dry	0.0248	ND	94.9		70-130			
cis-1,2-Dichloroethylene	0.0236	0.0025	mg/Kg dry	0.0248	ND	95.1		70-130			
trans-1,2-Dichloroethylene	0.0213	0.0025	mg/Kg dry	0.0248	ND	85.8		70-130			
1,2-Dichloropropane	0.0248	0.0025	mg/Kg dry	0.0248	ND	99.9		70-130			
cis-1,3-Dichloropropene	0.0210	0.0012	mg/Kg dry	0.0248	ND	84.5		70-130			
trans-1,3-Dichloropropene	0.0216	0.0012	mg/Kg dry	0.0248	ND	87.0		70-130			
1,4-Dioxane	0.216	0.12	mg/Kg dry	0.248	ND	87.0		70-130			
Ethylbenzene	0.0262	0.0025	mg/Kg dry	0.0248	ND	105		70-130			
2-Hexanone (MBK)	0.228	0.025	mg/Kg dry	0.248	ND	91.7		70-130			
Isopropylbenzene (Cumene)	0.0278	0.0025	mg/Kg dry	0.0248	ND	112		70-130			
Methyl Acetate	0.0264	0.0025	mg/Kg dry	0.0248	ND	107		70-130			
Methyl tert-Butyl Ether (MTBE)	0.0192	0.0050	mg/Kg dry	0.0248	ND	77.3		70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B360032 - SW-846 5035											
Matrix Spike (B360032-MS1)		**Source: 23L0875-02**		Prepared & Analyzed: 12/07/23							
Methyl Cyclohexane	0.0230	0.0050	mg/Kg dry	0.0248	ND	92.5		70-130			
Methylene Chloride	0.0206	0.025	mg/Kg dry	0.0248	ND	83.2		70-130			J
4-Methyl-2-pentanone (MIBK)	0.233	0.025	mg/Kg dry	0.248	ND	94.1		70-130			
Styrene	0.0263	0.0025	mg/Kg dry	0.0248	ND	106		70-130			
1,1,2,2-Tetrachloroethane	0.0271	0.0012	mg/Kg dry	0.0248	ND	109		70-130			
Tetrachloroethylene	0.0275	0.0025	mg/Kg dry	0.0248	ND	111		70-130			
Toluene	0.0255	0.0025	mg/Kg dry	0.0248	ND	103		70-130			
1,2,3-Trichlorobenzene	0.0226	0.0025	mg/Kg dry	0.0248	ND	91.1		70-130			
1,2,4-Trichlorobenzene	0.0225	0.0025	mg/Kg dry	0.0248	ND	90.6		70-130			
1,1,1-Trichloroethane	0.0235	0.0025	mg/Kg dry	0.0248	ND	94.8		70-130			
1,1,2-Trichloroethane	0.0268	0.0025	mg/Kg dry	0.0248	ND	108		70-130			
Trichloroethylene	0.0251	0.0025	mg/Kg dry	0.0248	ND	101		70-130			
Trichlorofluoromethane (Freon 11)	0.0254	0.012	mg/Kg dry	0.0248	ND	102		70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0274	0.012	mg/Kg dry	0.0248	ND	110		70-130			
Vinyl Chloride	0.0178	0.012	mg/Kg dry	0.0248	ND	71.8		70-130			
m+p Xylene	0.0530	0.0050	mg/Kg dry	0.0496	ND	107		70-130			
o-Xylene	0.0267	0.0025	mg/Kg dry	0.0248	ND	108		70-130			
Surrogate: 1,2-Dichloroethane-d4	*0.0528*		mg/Kg dry	0.0620		85.1		70-130			
Surrogate: Toluene-d8	*0.0609*		mg/Kg dry	0.0620		98.2		70-130			
Surrogate: 4-Bromofluorobenzene	*0.0591*		mg/Kg dry	0.0620		95.3		70-130			
Matrix Spike Dup (B360032-MSD1)		**Source: 23L0875-02**		Prepared & Analyzed: 12/07/23							
Acetone	0.323	0.13	mg/Kg dry	0.266	ND	121		70-130	5.69	30	V-36
Benzene	0.0249	0.0027	mg/Kg dry	0.0266	ND	93.7		70-130	9.68	30	
Bromochloromethane	0.0256	0.0027	mg/Kg dry	0.0266	ND	96.5		70-130	9.49	30	
Bromodichloromethane	0.0251	0.0027	mg/Kg dry	0.0266	ND	94.5		70-130	9.55	30	
Bromoform	0.0261	0.0027	mg/Kg dry	0.0266	ND	98.3		70-130	6.26	30	
Bromomethane	0.0203	0.013	mg/Kg dry	0.0266	ND	76.3		70-130	25.6	30	V-20
2-Butanone (MEK)	0.227	0.053	mg/Kg dry	0.266	ND	85.5		70-130	5.20	30	
Carbon Disulfide	0.0187	0.013	mg/Kg dry	0.0266	ND	70.2		70-130	9.17	30	
Carbon Tetrachloride	0.0226	0.0027	mg/Kg dry	0.0266	ND	84.9		70-130	9.49	30	
Chlorobenzene	0.0278	0.0027	mg/Kg dry	0.0266	ND	105		70-130	12.2	30	
Chlorodibromomethane	0.0261	0.0013	mg/Kg dry	0.0266	ND	98.2		70-130	7.28	30	
Chloroethane	0.0252	0.027	mg/Kg dry	0.0266	ND	94.8		70-130	12.4	30	J
Chloroform	0.0254	0.0053	mg/Kg dry	0.0266	ND	95.4		70-130	7.40	30	
Chloromethane	0.0175	0.013	mg/Kg dry	0.0266	ND	**66.0**	*	70-130	10.3	30	MS-07A, V-20
Cyclohexane	0.0207	0.013	mg/Kg dry	0.0266	ND	77.9		70-130	10.3	30	
1,2-Dibromo-3-chloropropane (DBCP)	0.0197	0.0027	mg/Kg dry	0.0266	ND	74.3		70-130	1.76	30	
1,2-Dibromoethane (EDB)	0.0259	0.0013	mg/Kg dry	0.0266	ND	97.6		70-130	5.15	30	
1,2-Dichlorobenzene	0.0276	0.0027	mg/Kg dry	0.0266	ND	104		70-130	7.84	30	
1,3-Dichlorobenzene	0.0268	0.0027	mg/Kg dry	0.0266	ND	101		70-130	6.87	30	
1,4-Dichlorobenzene	0.0262	0.0027	mg/Kg dry	0.0266	ND	98.6		70-130	6.57	30	
Dichlorodifluoromethane (Freon 12)	0.0198	0.027	mg/Kg dry	0.0266	ND	74.6		70-130	8.22	30	J
1,1-Dichloroethane	0.0263	0.0027	mg/Kg dry	0.0266	ND	99.1		70-130	11.3	30	
1,2-Dichloroethane	0.0246	0.0027	mg/Kg dry	0.0266	ND	92.5		70-130	6.23	30	
1,1-Dichloroethylene	0.0261	0.0053	mg/Kg dry	0.0266	ND	98.2		70-130	10.3	30	
cis-1,2-Dichloroethylene	0.0261	0.0027	mg/Kg dry	0.0266	ND	98.2		70-130	10.1	30	
trans-1,2-Dichloroethylene	0.0233	0.0027	mg/Kg dry	0.0266	ND	87.6		70-130	8.94	30	
1,2-Dichloropropane	0.0269	0.0027	mg/Kg dry	0.0266	ND	101		70-130	8.16	30	
cis-1,3-Dichloropropene	0.0230	0.0013	mg/Kg dry	0.0266	ND	86.5		70-130	9.21	30	
trans-1,3-Dichloropropene	0.0238	0.0013	mg/Kg dry	0.0266	ND	89.4		70-130	9.59	30	
1,4-Dioxane	0.241	0.13	mg/Kg dry	0.266	ND	90.6		70-130	10.9	30	

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B360032 - SW-846 5035										
Matrix Spike Dup (B360032-MSD1)	**Source: 23L0875-02**			Prepared & Analyzed: 12/07/23						
Ethylbenzene	0.0292	0.0027	mg/Kg dry	0.0266	ND	110	70-130	11.1	30	
2-Hexanone (MBK)	0.233	0.027	mg/Kg dry	0.266	ND	87.8	70-130	2.47	30	
Isopropylbenzene (Cumene)	0.0309	0.0027	mg/Kg dry	0.0266	ND	116	70-130	10.4	30	
Methyl Acetate	0.0275	0.0027	mg/Kg dry	0.0266	ND	103	70-130	3.73	30	
Methyl tert-Butyl Ether (MTBE)	0.0206	0.0053	mg/Kg dry	0.0266	ND	77.4	70-130	7.00	30	
Methyl Cyclohexane	0.0248	0.0053	mg/Kg dry	0.0266	ND	93.4	70-130	7.84	30	
Methylene Chloride	0.0234	0.027	mg/Kg dry	0.0266	ND	87.9	70-130	12.4	30	J
4-Methyl-2-pentanone (MIBK)	0.244	0.027	mg/Kg dry	0.266	ND	91.7	70-130	4.30	30	
Styrene	0.0291	0.0027	mg/Kg dry	0.0266	ND	110	70-130	10.2	30	
1,1,2,2-Tetrachloroethane	0.0287	0.0013	mg/Kg dry	0.0266	ND	108	70-130	5.86	30	
Tetrachloroethylene	0.0298	0.0027	mg/Kg dry	0.0266	ND	112	70-130	7.95	30	
Toluene	0.0294	0.0027	mg/Kg dry	0.0266	ND	111	70-130	14.4	30	
1,2,3-Trichlorobenzene	0.0237	0.0027	mg/Kg dry	0.0266	ND	89.2	70-130	4.77	30	
1,2,4-Trichlorobenzene	0.0243	0.0027	mg/Kg dry	0.0266	ND	91.3	70-130	7.64	30	
1,1,1-Trichloroethane	0.0256	0.0027	mg/Kg dry	0.0266	ND	96.4	70-130	8.54	30	
1,1,2-Trichloroethane	0.0283	0.0027	mg/Kg dry	0.0266	ND	106	70-130	5.47	30	
Trichloroethylene	0.0271	0.0027	mg/Kg dry	0.0266	ND	102	70-130	7.85	30	
Trichlorofluoromethane (Freon 11)	0.0279	0.013	mg/Kg dry	0.0266	ND	105	70-130	9.37	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0298	0.013	mg/Kg dry	0.0266	ND	112	70-130	8.22	30	
Vinyl Chloride	0.0195	0.013	mg/Kg dry	0.0266	ND	73.2	70-130	8.80	30	
m+p Xylene	0.0591	0.0053	mg/Kg dry	0.0532	ND	111	70-130	10.7	30	
o-Xylene	0.0294	0.0027	mg/Kg dry	0.0266	ND	111	70-130	9.52	30	
Surrogate: 1,2-Dichloroethane-d4	*0.0567*		mg/Kg dry	0.0664		85.4	70-130			
Surrogate: Toluene-d8	*0.0650*		mg/Kg dry	0.0664		97.9	70-130			
Surrogate: 4-Bromofluorobenzene	*0.0641*		mg/Kg dry	0.0664		96.5	70-130			
Batch B360150 - SW-846 5030B										
Blank (B360150-BLK1)				Prepared: 12/08/23 Analyzed: 12/09/23						
Acetone	ND	50	µg/L							
Benzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
Carbon Disulfide	ND	5.0	µg/L							
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
Cyclohexane	ND	5.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B360150 - SW-846 5030B										
Blank (B360150-BLK1)				Prepared: 12/08/23 Analyzed: 12/09/23						
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							
Ethylbenzene	ND	1.0	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
Methyl Acetate	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methyl Cyclohexane	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Styrene	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Xylenes (total)	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	*22.5*		µg/L	25.0		90.0	70-130			
Surrogate: Toluene-d8	*25.4*		µg/L	25.0		102	70-130			
Surrogate: 4-Bromofluorobenzene	*24.9*		µg/L	25.0		99.6	70-130			
LCS (B360150-BS1)				Prepared & Analyzed: 12/08/23						
Acetone	95.1	50	µg/L	100		95.1	70-160			†
Benzene	10.6	1.0	µg/L	10.0		106	70-130			
Bromochloromethane	10.3	1.0	µg/L	10.0		103	70-130			
Bromodichloromethane	10.7	0.50	µg/L	10.0		107	70-130			
Bromoform	9.62	1.0	µg/L	10.0		96.2	70-130			
Bromomethane	10.2	2.0	µg/L	10.0		102	40-160			†
2-Butanone (MEK)	98.8	20	µg/L	100		98.8	40-160			†
Carbon Disulfide	108	5.0	µg/L	100		108	70-130			
Carbon Tetrachloride	9.28	5.0	µg/L	10.0		92.8	70-130			
Chlorobenzene	10.5	1.0	µg/L	10.0		105	70-130			
Chlorodibromomethane	10.3	0.50	µg/L	10.0		103	70-130			
Chloroethane	11.4	2.0	µg/L	10.0		114	70-130			
Chloroform	10.4	2.0	µg/L	10.0		104	70-130			
Chloromethane	9.73	2.0	µg/L	10.0		97.3	40-160			†
Cyclohexane	9.38	5.0	µg/L	10.0		93.8	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	9.03	5.0	µg/L	10.0		90.3	70-130			
1,2-Dibromoethane (EDB)	11.4	0.50	µg/L	10.0		114	70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B360150 - SW-846 5030B										
LCS (B360150-BS1)				Prepared & Analyzed: 12/08/23						
1,2-Dichlorobenzene	9.71	1.0	µg/L	10.0		97.1	70-130			
1,3-Dichlorobenzene	9.75	1.0	µg/L	10.0		97.5	70-130			
1,4-Dichlorobenzene	9.60	1.0	µg/L	10.0		96.0	70-130			
Dichlorodifluoromethane (Freon 12)	10.2	2.0	µg/L	10.0		102	40-160			†
1,1-Dichloroethane	9.88	1.0	µg/L	10.0		98.8	70-130			
1,2-Dichloroethane	9.98	1.0	µg/L	10.0		99.8	70-130			
1,1-Dichloroethylene	9.90	1.0	µg/L	10.0		99.0	70-130			
cis-1,2-Dichloroethylene	9.61	1.0	µg/L	10.0		96.1	70-130			
trans-1,2-Dichloroethylene	9.80	1.0	µg/L	10.0		98.0	70-130			
1,2-Dichloropropane	10.7	1.0	µg/L	10.0		107	70-130			
cis-1,3-Dichloropropene	10.1	0.50	µg/L	10.0		101	70-130			
trans-1,3-Dichloropropene	9.71	0.50	µg/L	10.0		97.1	70-130			
1,4-Dioxane	95.4	50	µg/L	100		95.4	40-130			†
Ethylbenzene	10.4	1.0	µg/L	10.0		104	70-130			
2-Hexanone (MBK)	107	10	µg/L	100		107	70-160			†
Isopropylbenzene (Cumene)	10.2	1.0	µg/L	10.0		102	70-130			
Methyl Acetate	12.8	1.0	µg/L	10.0		128	70-130			
Methyl tert-Butyl Ether (MTBE)	9.10	1.0	µg/L	10.0		91.0	70-130			
Methyl Cyclohexane	10.8	1.0	µg/L	10.0		108	70-130			
Methylene Chloride	9.28	5.0	µg/L	10.0		92.8	70-130			
4-Methyl-2-pentanone (MIBK)	106	10	µg/L	100		106	70-160			†
Styrene	10.6	1.0	µg/L	10.0		106	70-130			
1,1,2,2-Tetrachloroethane	10.8	0.50	µg/L	10.0		108	70-130			
Tetrachloroethylene	11.2	1.0	µg/L	10.0		112	70-130			
Toluene	10.8	1.0	µg/L	10.0		108	70-130			
1,2,3-Trichlorobenzene	9.93	5.0	µg/L	10.0		99.3	70-130			
1,2,4-Trichlorobenzene	9.65	1.0	µg/L	10.0		96.5	70-130			
1,1,1-Trichloroethane	10.2	1.0	µg/L	10.0		102	70-130			
1,1,2-Trichloroethane	11.3	1.0	µg/L	10.0		113	70-130			
Trichloroethylene	11.4	1.0	µg/L	10.0		114	70-130			
Trichlorofluoromethane (Freon 11)	10.3	2.0	µg/L	10.0		103	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.8	1.0	µg/L	10.0		108	70-130			
Vinyl Chloride	10.7	2.0	µg/L	10.0		107	40-160			†
m+p Xylene	20.4	2.0	µg/L	20.0		102	70-130			
o-Xylene	10.4	1.0	µg/L	10.0		104	70-130			
Xylenes (total)	30.7	1.0	µg/L	30.0		102	0-200			
Surrogate: 1,2-Dichloroethane-d4	*21.8*		µg/L	25.0		87.3	70-130			
Surrogate: Toluene-d8	*25.9*		µg/L	25.0		103	70-130			
Surrogate: 4-Bromofluorobenzene	*25.1*		µg/L	25.0		100	70-130			
LCS Dup (B360150-BSD1)				Prepared & Analyzed: 12/08/23						
Acetone	89.6	50	µg/L	100		89.6	70-160	5.87	25	†
Benzene	10.6	1.0	µg/L	10.0		106	70-130	0.00	25	
Bromochloromethane	10.4	1.0	µg/L	10.0		104	70-130	0.774	25	
Bromodichloromethane	10.8	0.50	µg/L	10.0		108	70-130	1.21	25	
Bromoform	9.78	1.0	µg/L	10.0		97.8	70-130	1.65	25	
Bromomethane	10.4	2.0	µg/L	10.0		104	40-160	1.74	25	†
2-Butanone (MEK)	94.4	20	µg/L	100		94.4	40-160	4.64	25	†
Carbon Disulfide	109	5.0	µg/L	100		109	70-130	0.932	25	
Carbon Tetrachloride	8.85	5.0	µg/L	10.0		88.5	70-130	4.74	25	
Chlorobenzene	10.8	1.0	µg/L	10.0		108	70-130	2.81	25	
Chlorodibromomethane	10.5	0.50	µg/L	10.0		105	70-130	2.31	25	

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B360150 - SW-846 5030B										
LCS Dup (B360150-BSD1)				Prepared & Analyzed: 12/08/23						
Chloroethane	10.9	2.0	µg/L	10.0		109	70-130	4.47	25	
Chloroform	10.4	2.0	µg/L	10.0		104	70-130	0.578	25	
Chloromethane	9.92	2.0	µg/L	10.0		99.2	40-160	1.93	25	†
Cyclohexane	9.30	5.0	µg/L	10.0		93.0	70-130	0.857	25	
1,2-Dibromo-3-chloropropane (DBCP)	8.84	5.0	µg/L	10.0		88.4	70-130	2.13	25	
1,2-Dibromoethane (EDB)	11.0	0.50	µg/L	10.0		110	70-130	3.83	25	
1,2-Dichlorobenzene	9.97	1.0	µg/L	10.0		99.7	70-130	2.64	25	
1,3-Dichlorobenzene	9.96	1.0	µg/L	10.0		99.6	70-130	2.13	25	
1,4-Dichlorobenzene	9.87	1.0	µg/L	10.0		98.7	70-130	2.77	25	
Dichlorodifluoromethane (Freon 12)	10.4	2.0	µg/L	10.0		104	40-160	1.36	25	†
1,1-Dichloroethane	9.92	1.0	µg/L	10.0		99.2	70-130	0.404	25	
1,2-Dichloroethane	9.19	1.0	µg/L	10.0		91.9	70-130	8.24	25	
1,1-Dichloroethylene	9.93	1.0	µg/L	10.0		99.3	70-130	0.303	25	
cis-1,2-Dichloroethylene	9.75	1.0	µg/L	10.0		97.5	70-130	1.45	25	
trans-1,2-Dichloroethylene	10.1	1.0	µg/L	10.0		101	70-130	2.92	25	
1,2-Dichloropropane	11.1	1.0	µg/L	10.0		111	70-130	3.77	25	
cis-1,3-Dichloropropene	10.1	0.50	µg/L	10.0		101	70-130	0.198	25	
trans-1,3-Dichloropropene	9.86	0.50	µg/L	10.0		98.6	70-130	1.53	25	
1,4-Dioxane	90.0	50	µg/L	100		90.0	40-130	5.86	50	† ‡
Ethylbenzene	10.5	1.0	µg/L	10.0		105	70-130	0.860	25	
2-Hexanone (MBK)	100	10	µg/L	100		100	70-160	6.52	25	†
Isopropylbenzene (Cumene)	10.4	1.0	µg/L	10.0		104	70-130	1.75	25	
Methyl Acetate	12.3	1.0	µg/L	10.0		123	70-130	4.62	25	
Methyl tert-Butyl Ether (MTBE)	9.44	1.0	µg/L	10.0		94.4	70-130	3.67	25	
Methyl Cyclohexane	10.4	1.0	µg/L	10.0		104	70-130	3.58	25	
Methylene Chloride	9.39	5.0	µg/L	10.0		93.9	70-130	1.18	25	
4-Methyl-2-pentanone (MIBK)	101	10	µg/L	100		101	70-160	4.08	25	†
Styrene	10.8	1.0	µg/L	10.0		108	70-130	1.68	25	
1,1,2,2-Tetrachloroethane	11.0	0.50	µg/L	10.0		110	70-130	2.75	25	
Tetrachloroethylene	11.4	1.0	µg/L	10.0		114	70-130	1.50	25	
Toluene	10.7	1.0	µg/L	10.0		107	70-130	0.559	25	
1,2,3-Trichlorobenzene	9.93	5.0	µg/L	10.0		99.3	70-130	0.00	25	
1,2,4-Trichlorobenzene	9.91	1.0	µg/L	10.0		99.1	70-130	2.66	25	
1,1,1-Trichloroethane	9.78	1.0	µg/L	10.0		97.8	70-130	4.01	25	
1,1,2-Trichloroethane	11.4	1.0	µg/L	10.0		114	70-130	0.440	25	
Trichloroethylene	10.8	1.0	µg/L	10.0		108	70-130	6.04	25	
Trichlorofluoromethane (Freon 11)	9.68	2.0	µg/L	10.0		96.8	70-130	6.40	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.9	1.0	µg/L	10.0		109	70-130	1.01	25	
Vinyl Chloride	11.0	2.0	µg/L	10.0		110	40-160	2.67	25	†
m+p Xylene	20.8	2.0	µg/L	20.0		104	70-130	2.38	25	
o-Xylene	10.4	1.0	µg/L	10.0		104	70-130	0.289	25	
Xylenes (total)	31.2	1.0	µg/L	30.0		104	0-200	1.68		
Surrogate: 1,2-Dichloroethane-d4	*22.8*		µg/L	25.0		91.1	70-130			
Surrogate: Toluene-d8	*25.3*		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	*25.0*		µg/L	25.0		100	70-130			

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QUALITY CONTROL

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B360032 - SW-846 5035										
Blank (B360032-BLK1)				Prepared & Analyzed: 12/07/23						
No TICs Found	0.0		mg/Kg wet							
Batch B360150 - SW-846 5030B										
Blank (B360150-BLK1)				Prepared: 12/08/23 Analyzed: 12/09/23						
No TICs Found	0.0		µg/L							

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B360166 - SW-846 3546										
Blank (B360166-BLK1)				Prepared: 12/08/23 Analyzed: 12/11/23						
Atrazine	ND	0.67	mg/Kg wet							
Benzaldehyde	ND	0.34	mg/Kg wet							V-06
Biphenyl	ND	0.67	mg/Kg wet							
Caprolactam	ND	0.34	mg/Kg wet							V-06
Acenaphthene	ND	0.17	mg/Kg wet							
Acenaphthylene	ND	0.17	mg/Kg wet							
Acetophenone	ND	0.34	mg/Kg wet							
Anthracene	ND	0.17	mg/Kg wet							
Benzo(a)anthracene	ND	0.17	mg/Kg wet							
Benzo(a)pyrene	ND	0.17	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.17	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.17	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.17	mg/Kg wet							
Bis(2-chloroethoxy)methane	ND	0.34	mg/Kg wet							
Bis(2-chloroethyl)ether	ND	0.34	mg/Kg wet							
Bis(2-chloroisopropyl)ether	ND	0.34	mg/Kg wet							
Bis(2-Ethylhexyl)phthalate	ND	0.34	mg/Kg wet							
4-Bromophenylphenylether	ND	0.34	mg/Kg wet							
Butylbenzylphthalate	ND	0.34	mg/Kg wet							
Carbazole	ND	0.17	mg/Kg wet							
4-Chloroaniline	ND	0.66	mg/Kg wet							
4-Chloro-3-methylphenol	ND	0.66	mg/Kg wet							
2-Chloronaphthalene	ND	0.34	mg/Kg wet							
2-Chlorophenol	ND	0.34	mg/Kg wet							
4-Chlorophenylphenylether	ND	0.34	mg/Kg wet							
Chrysene	ND	0.17	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.17	mg/Kg wet							
Dibenzofuran	ND	0.34	mg/Kg wet							
Di-n-butylphthalate	ND	0.34	mg/Kg wet							
3,3-Dichlorobenzidine	ND	0.17	mg/Kg wet							
2,4-Dichlorophenol	ND	0.34	mg/Kg wet							
Diethylphthalate	ND	0.34	mg/Kg wet							
2,4-Dimethylphenol	ND	0.34	mg/Kg wet							
Dimethylphthalate	ND	0.34	mg/Kg wet							
4,6-Dinitro-2-methylphenol	ND	0.34	mg/Kg wet							
2,4-Dinitrophenol	ND	0.66	mg/Kg wet							
2,4-Dinitrotoluene	ND	0.34	mg/Kg wet							
2,6-Dinitrotoluene	ND	0.34	mg/Kg wet							
Di-n-octylphthalate	ND	0.34	mg/Kg wet							
Fluoranthene	ND	0.17	mg/Kg wet							
Fluorene	ND	0.17	mg/Kg wet							
Hexachlorobenzene	ND	0.34	mg/Kg wet							
Hexachlorobutadiene	ND	0.34	mg/Kg wet							
Hexachlorocyclopentadiene	ND	0.34	mg/Kg wet							V-05
Hexachloroethane	ND	0.34	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.17	mg/Kg wet							
Isophorone	ND	0.34	mg/Kg wet							
2-Methylnaphthalene	ND	0.17	mg/Kg wet							
2-Methylphenol	ND	0.34	mg/Kg wet							
3/4-Methylphenol	ND	0.34	mg/Kg wet							
Naphthalene	ND	0.17	mg/Kg wet							
2-Nitroaniline	ND	0.34	mg/Kg wet							

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B360166 - SW-846 3546										
Blank (B360166-BLK1)				Prepared: 12/08/23 Analyzed: 12/11/23						
3-Nitroaniline	ND	0.34	mg/Kg wet							
4-Nitroaniline	ND	0.34	mg/Kg wet							
Nitrobenzene	ND	0.34	mg/Kg wet							
2-Nitrophenol	ND	0.34	mg/Kg wet							
4-Nitrophenol	ND	0.66	mg/Kg wet							
N-Nitrosodiphenylamine/Diphenylamine	ND	0.34	mg/Kg wet							
N-Nitrosodi-n-propylamine	ND	0.34	mg/Kg wet							
Pentachlorophenol	ND	0.34	mg/Kg wet							
Phenanthrene	ND	0.17	mg/Kg wet							
Phenol	ND	0.34	mg/Kg wet							
Pyrene	ND	0.17	mg/Kg wet							
1,2,4,5-Tetrachlorobenzene	ND	0.34	mg/Kg wet							
2,4,5-Trichlorophenol	ND	0.34	mg/Kg wet							
2,4,6-Trichlorophenol	ND	0.34	mg/Kg wet							
Surrogate: 2-Fluorophenol	*3.89*		mg/Kg wet	6.67		58.3	30-130			
Surrogate: Phenol-d6	*4.05*		mg/Kg wet	6.67		60.7	30-130			
Surrogate: Nitrobenzene-d5	*2.24*		mg/Kg wet	3.33		67.0	30-130			
Surrogate: 2-Fluorobiphenyl	*2.15*		mg/Kg wet	3.33		64.6	30-130			
Surrogate: 2,4,6-Tribromophenol	*4.01*		mg/Kg wet	6.67		60.2	30-130			
Surrogate: p-Terphenyl-d14	*2.91*		mg/Kg wet	3.33		87.2	30-130			
LCS (B360166-BS1)				Prepared: 12/08/23 Analyzed: 12/11/23						
Atrazine	1.08	0.67	mg/Kg wet	1.67		64.6	40-140			
Benzaldehyde	0.919	0.34	mg/Kg wet	1.67		55.1	40-140			V-06
Biphenyl	1.11	0.67	mg/Kg wet	1.67		66.8	40-140			
Caprolactam	1.24	0.34	mg/Kg wet	1.67		74.6	40-140			V-06
Acenaphthene	1.11	0.17	mg/Kg wet	1.67		66.3	40-140			
Acenaphthylene	1.12	0.17	mg/Kg wet	1.67		67.5	40-140			
Acetophenone	1.15	0.34	mg/Kg wet	1.67		69.1	40-140			
Anthracene	1.14	0.17	mg/Kg wet	1.67		68.6	40-140			
Benzo(a)anthracene	1.14	0.17	mg/Kg wet	1.67		68.3	40-140			
Benzo(a)pyrene	1.16	0.17	mg/Kg wet	1.67		69.8	40-140			
Benzo(b)fluoranthene	1.21	0.17	mg/Kg wet	1.67		72.9	40-140			
Benzo(g,h,i)perylene	1.17	0.17	mg/Kg wet	1.67		70.1	40-140			
Benzo(k)fluoranthene	1.28	0.17	mg/Kg wet	1.67		76.8	40-140			
Bis(2-chloroethoxy)methane	1.21	0.34	mg/Kg wet	1.67		72.5	40-140			
Bis(2-chloroethyl)ether	1.28	0.34	mg/Kg wet	1.67		76.6	40-140			
Bis(2-chloroisopropyl)ether	1.41	0.34	mg/Kg wet	1.67		84.6	40-140			
Bis(2-Ethylhexyl)phthalate	1.14	0.34	mg/Kg wet	1.67		68.1	40-140			
4-Bromophenylphenylether	1.10	0.34	mg/Kg wet	1.67		65.9	40-140			
Butylbenzylphthalate	1.17	0.34	mg/Kg wet	1.67		70.0	40-140			
Carbazole	1.11	0.17	mg/Kg wet	1.67		66.7	40-140			
4-Chloroaniline	0.747	0.66	mg/Kg wet	1.67		44.8	10-140			†
4-Chloro-3-methylphenol	1.16	0.66	mg/Kg wet	1.67		69.4	30-130			
2-Chloronaphthalene	0.928	0.34	mg/Kg wet	1.67		55.7	40-140			
2-Chlorophenol	1.10	0.34	mg/Kg wet	1.67		66.2	30-130			
4-Chlorophenylphenylether	1.07	0.34	mg/Kg wet	1.67		64.3	40-140			
Chrysene	1.11	0.17	mg/Kg wet	1.67		66.4	40-140			
Dibenz(a,h)anthracene	1.07	0.17	mg/Kg wet	1.67		64.5	40-140			
Dibenzofuran	1.10	0.34	mg/Kg wet	1.67		66.3	40-140			
Di-n-butylphthalate	1.09	0.34	mg/Kg wet	1.67		65.5	40-140			
3,3-Dichlorobenzidine	1.01	0.17	mg/Kg wet	1.67		60.8	20-140			†

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B360166 - SW-846 3546										
LCS (B360166-BS1)				Prepared: 12/08/23 Analyzed: 12/11/23						
2,4-Dichlorophenol	1.06	0.34	mg/Kg wet	1.67		63.5	30-130			
Diethylphthalate	1.12	0.34	mg/Kg wet	1.67		67.1	40-140			
2,4-Dimethylphenol	0.944	0.34	mg/Kg wet	1.67		56.7	30-130			
Dimethylphthalate	1.11	0.34	mg/Kg wet	1.67		66.4	40-140			
4,6-Dinitro-2-methylphenol	1.20	0.34	mg/Kg wet	1.67		71.9	30-130			
2,4-Dinitrophenol	1.02	0.66	mg/Kg wet	1.67		61.0	30-130			
2,4-Dinitrotoluene	1.12	0.34	mg/Kg wet	1.67		67.1	40-140			
2,6-Dinitrotoluene	1.13	0.34	mg/Kg wet	1.67		68.1	40-140			
Di-n-octylphthalate	1.16	0.34	mg/Kg wet	1.67		69.7	40-140			
Fluoranthene	1.05	0.17	mg/Kg wet	1.67		62.9	40-140			
Fluorene	1.10	0.17	mg/Kg wet	1.67		65.9	40-140			
Hexachlorobenzene	1.09	0.34	mg/Kg wet	1.67		65.4	40-140			
Hexachlorobutadiene	0.953	0.34	mg/Kg wet	1.67		57.2	40-140			
Hexachlorocyclopentadiene	0.760	0.34	mg/Kg wet	1.67		45.6	40-140			V-05
Hexachloroethane	0.991	0.34	mg/Kg wet	1.67		59.5	40-140			
Indeno(1,2,3-cd)pyrene	1.11	0.17	mg/Kg wet	1.67		66.3	40-140			
Isophorone	1.22	0.34	mg/Kg wet	1.67		73.2	40-140			
2-Methylnaphthalene	1.03	0.17	mg/Kg wet	1.67		62.0	40-140			
2-Methylphenol	1.13	0.34	mg/Kg wet	1.67		67.9	30-130			
3/4-Methylphenol	1.20	0.34	mg/Kg wet	1.67		72.1	30-130			
Naphthalene	1.06	0.17	mg/Kg wet	1.67		63.4	40-140			
2-Nitroaniline	1.27	0.34	mg/Kg wet	1.67		76.1	40-140			
3-Nitroaniline	1.02	0.34	mg/Kg wet	1.67		61.3	30-140			†
4-Nitroaniline	1.04	0.34	mg/Kg wet	1.67		62.1	40-140			
Nitrobenzene	1.16	0.34	mg/Kg wet	1.67		69.9	40-140			
2-Nitrophenol	1.04	0.34	mg/Kg wet	1.67		62.6	30-130			
4-Nitrophenol	1.33	0.66	mg/Kg wet	1.67		80.0	30-130			
N-Nitrosodiphenylamine/Diphenylamine	1.32	0.34	mg/Kg wet	1.67		79.3	40-140			
N-Nitrosodi-n-propylamine	1.24	0.34	mg/Kg wet	1.67		74.5	40-140			
Pentachlorophenol	1.04	0.34	mg/Kg wet	1.67		62.2	30-130			
Phenanthrene	1.14	0.17	mg/Kg wet	1.67		68.3	40-140			
Phenol	1.17	0.34	mg/Kg wet	1.67		70.1	30-130			
Pyrene	1.20	0.17	mg/Kg wet	1.67		72.0	40-140			
1,2,4,5-Tetrachlorobenzene	0.998	0.34	mg/Kg wet	1.67		59.9	40-140			
2,4,5-Trichlorophenol	1.06	0.34	mg/Kg wet	1.67		63.5	30-130			
2,4,6-Trichlorophenol	1.07	0.34	mg/Kg wet	1.67		64.4	30-130			
Surrogate: 2-Fluorophenol	*8.10*		mg/Kg wet	13.3		60.7	30-130			
Surrogate: Phenol-d6	*8.29*		mg/Kg wet	13.3		62.2	30-130			
Surrogate: Nitrobenzene-d5	*4.57*		mg/Kg wet	6.67		68.5	30-130			
Surrogate: 2-Fluorobiphenyl	*4.44*		mg/Kg wet	6.67		66.7	30-130			
Surrogate: 2,4,6-Tribromophenol	*9.73*		mg/Kg wet	13.3		73.0	30-130			
Surrogate: p-Terphenyl-d14	*5.39*		mg/Kg wet	6.67		80.8	30-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B360166 - SW-846 3546											
LCS Dup (B360166-BSD1)				Prepared: 12/08/23 Analyzed: 12/11/23							
Atrazine	1.09	0.66	mg/Kg wet	1.65		66.1	40-140	1.18	30		
Benzaldehyde	0.862	0.34	mg/Kg wet	1.65		52.3	40-140	6.36	20	V-06	
Biphenyl	1.12	0.66	mg/Kg wet	1.65		68.0	40-140	0.785	20		
Caprolactam	1.24	0.34	mg/Kg wet	1.65		75.4	40-140	0.0186	20	V-06	
Acenaphthene	1.13	0.17	mg/Kg wet	1.65		68.6	40-140	2.41	30		
Acenaphthylene	1.13	0.17	mg/Kg wet	1.65		68.3	40-140	0.301	30		
Acetophenone	1.10	0.34	mg/Kg wet	1.65		66.4	40-140	4.92	30		
Anthracene	1.17	0.17	mg/Kg wet	1.65		70.6	40-140	1.94	30		
Benzo(a)anthracene	1.16	0.17	mg/Kg wet	1.65		70.3	40-140	1.92	30		
Benzo(a)pyrene	1.17	0.17	mg/Kg wet	1.65		70.7	40-140	0.229	30		
Benzo(b)fluoranthene	1.21	0.17	mg/Kg wet	1.65		73.6	40-140	0.0427	30		
Benzo(g,h,i)perylene	1.20	0.17	mg/Kg wet	1.65		72.5	40-140	2.40	30		
Benzo(k)fluoranthene	1.29	0.17	mg/Kg wet	1.65		78.1	40-140	0.683	30		
Bis(2-chloroethoxy)methane	1.22	0.34	mg/Kg wet	1.65		73.9	40-140	0.918	30		
Bis(2-chloroethyl)ether	1.21	0.34	mg/Kg wet	1.65		73.1	40-140	5.67	30		
Bis(2-chloroisopropyl)ether	1.37	0.34	mg/Kg wet	1.65		83.0	40-140	2.90	30		
Bis(2-Ethylhexyl)phthalate	1.17	0.34	mg/Kg wet	1.65		71.0	40-140	3.12	30		
4-Bromophenylphenylether	1.12	0.34	mg/Kg wet	1.65		67.6	40-140	1.55	30		
Butylbenzylphthalate	1.21	0.34	mg/Kg wet	1.65		73.2	40-140	3.47	30		
Carbazole	1.12	0.17	mg/Kg wet	1.65		68.1	40-140	1.08	30		
4-Chloroaniline	0.700	0.65	mg/Kg wet	1.65		42.4	10-140	6.50	30		†
4-Chloro-3-methylphenol	1.16	0.65	mg/Kg wet	1.65		70.2	30-130	0.0650	30		
2-Chloronaphthalene	0.964	0.34	mg/Kg wet	1.65		58.4	40-140	3.77	30		
2-Chlorophenol	1.08	0.34	mg/Kg wet	1.65		65.5	30-130	1.97	30		
4-Chlorophenylphenylether	1.08	0.34	mg/Kg wet	1.65		65.4	40-140	0.701	30		
Chrysene	1.13	0.17	mg/Kg wet	1.65		68.4	40-140	2.00	30		
Dibenz(a,h)anthracene	1.10	0.17	mg/Kg wet	1.65		66.6	40-140	2.21	30		
Dibenzofuran	1.12	0.34	mg/Kg wet	1.65		67.9	40-140	1.39	30		
Di-n-butylphthalate	1.14	0.34	mg/Kg wet	1.65		69.2	40-140	4.50	30		
3,3-Dichlorobenzidine	0.950	0.17	mg/Kg wet	1.65		57.6	20-140	6.47	50		† ‡
2,4-Dichlorophenol	1.07	0.34	mg/Kg wet	1.65		64.5	30-130	0.567	30		
Diethylphthalate	1.13	0.34	mg/Kg wet	1.65		68.3	40-140	0.777	30		
2,4-Dimethylphenol	0.964	0.34	mg/Kg wet	1.65		58.4	30-130	2.03	30		
Dimethylphthalate	1.12	0.34	mg/Kg wet	1.65		67.8	40-140	1.15	30		
4,6-Dinitro-2-methylphenol	1.22	0.34	mg/Kg wet	1.65		74.1	30-130	2.02	30		
2,4-Dinitrophenol	1.02	0.65	mg/Kg wet	1.65		61.5	30-130	0.114	30		
2,4-Dinitrotoluene	1.10	0.34	mg/Kg wet	1.65		66.6	40-140	1.71	30		
2,6-Dinitrotoluene	1.15	0.34	mg/Kg wet	1.65		69.8	40-140	1.53	30		
Di-n-octylphthalate	1.19	0.34	mg/Kg wet	1.65		72.1	40-140	2.36	30		
Fluoranthene	1.08	0.17	mg/Kg wet	1.65		65.3	40-140	2.72	30		
Fluorene	1.10	0.17	mg/Kg wet	1.65		66.9	40-140	0.481	30		
Hexachlorobenzene	1.12	0.34	mg/Kg wet	1.65		67.6	40-140	2.34	30		
Hexachlorobutadiene	0.918	0.34	mg/Kg wet	1.65		55.6	40-140	3.76	30		
Hexachlorocyclopentadiene	0.786	0.34	mg/Kg wet	1.65		47.6	40-140	3.34	30	V-05	
Hexachloroethane	0.964	0.34	mg/Kg wet	1.65		58.4	40-140	2.76	30		
Indeno(1,2,3-cd)pyrene	1.11	0.17	mg/Kg wet	1.65		67.3	40-140	0.382	30		
Isophorone	1.21	0.34	mg/Kg wet	1.65		73.4	40-140	0.695	30		
2-Methylnaphthalene	1.04	0.17	mg/Kg wet	1.65		62.9	40-140	0.383	30		
2-Methylphenol	1.11	0.34	mg/Kg wet	1.65		67.6	30-130	1.47	30		
3/4-Methylphenol	1.18	0.34	mg/Kg wet	1.65		71.7	30-130	1.61	30		
Naphthalene	1.04	0.17	mg/Kg wet	1.65		63.2	40-140	1.31	30		
2-Nitroaniline	1.28	0.34	mg/Kg wet	1.65		77.5	40-140	0.880	30		

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B360166 - SW-846 3546												
LCS Dup (B360166-BSD1)				Prepared: 12/08/23 Analyzed: 12/11/23								
3-Nitroaniline	0.992	0.34	mg/Kg wet	1.65		60.1		30-140	2.87	30		†
4-Nitroaniline	1.02	0.34	mg/Kg wet	1.65		61.7		40-140	1.74	30		
Nitrobenzene	1.12	0.34	mg/Kg wet	1.65		67.7		40-140	4.16	30		
2-Nitrophenol	1.04	0.34	mg/Kg wet	1.65		62.8		30-130	0.740	30		
4-Nitrophenol	1.33	0.65	mg/Kg wet	1.65		80.6		30-130	0.223	50		‡
N-Nitrosodiphenylamine/Diphenylamine	1.36	0.34	mg/Kg wet	1.65		82.1		40-140	2.47	30		
N-Nitrosodi-n-propylamine	1.22	0.34	mg/Kg wet	1.65		73.6		40-140	2.18	30		
Pentachlorophenol	1.06	0.34	mg/Kg wet	1.65		64.1		30-130	1.95	30		
Phenanthrene	1.16	0.17	mg/Kg wet	1.65		70.2		40-140	1.81	30		
Phenol	1.16	0.34	mg/Kg wet	1.65		70.2		30-130	0.853	30		
Pyrene	1.23	0.17	mg/Kg wet	1.65		74.7		40-140	2.74	30		
1,2,4,5-Tetrachlorobenzene	1.01	0.34	mg/Kg wet	1.65		61.0		40-140	0.890	30		
2,4,5-Trichlorophenol	1.06	0.34	mg/Kg wet	1.65		64.5		30-130	0.567	30		
2,4,6-Trichlorophenol	1.09	0.34	mg/Kg wet	1.65		66.2		30-130	1.79	30		
Surrogate: 2-Fluorophenol	*3.95*		mg/Kg wet	6.60		59.9		30-130				
Surrogate: Phenol-d6	*4.26*		mg/Kg wet	6.60		64.5		30-130				
Surrogate: Nitrobenzene-d5	*2.32*		mg/Kg wet	3.30		70.2		30-130				
Surrogate: 2-Fluorobiphenyl	*2.28*		mg/Kg wet	3.30		69.2		30-130				
Surrogate: 2,4,6-Tribromophenol	*4.26*		mg/Kg wet	6.60		64.6		30-130				
Surrogate: p-Terphenyl-d14	*2.60*		mg/Kg wet	3.30		78.7		30-130				
Matrix Spike (B360166-MS1)	**Source: 23L0875-02**			Prepared: 12/08/23 Analyzed: 12/12/23								
Atrazine	1.38	0.93	mg/Kg dry	2.31	ND	59.5		40-140				
Benzaldehyde	1.29	0.47	mg/Kg dry	2.31	ND	55.6		40-140				
Biphenyl	1.51	0.93	mg/Kg dry	2.31	ND	65.5		40-140				
Caprolactam	1.49	0.47	mg/Kg dry	2.31	ND	64.4		40-140				
Acenaphthene	1.48	0.24	mg/Kg dry	2.31	ND	63.9		40-140				
Acenaphthylene	1.46	0.24	mg/Kg dry	2.31	ND	63.2		40-140				
Acetophenone	1.45	0.47	mg/Kg dry	2.31	ND	62.9		40-140				
Anthracene	1.42	0.24	mg/Kg dry	2.31	ND	61.6		40-140				
Benzo(a)anthracene	1.49	0.24	mg/Kg dry	2.31	ND	64.3		40-140				
Benzo(a)pyrene	1.45	0.24	mg/Kg dry	2.31	ND	62.5		40-140				
Benzo(b)fluoranthene	1.45	0.24	mg/Kg dry	2.31	ND	62.9		40-140				
Benzo(g,h,i)perylene	0.956	0.24	mg/Kg dry	2.31	ND	41.4		40-140				
Benzo(k)fluoranthene	1.57	0.24	mg/Kg dry	2.31	ND	67.8		40-140				
Bis(2-chloroethoxy)methane	1.56	0.47	mg/Kg dry	2.31	ND	67.4		40-140				
Bis(2-chloroethyl)ether	1.54	0.47	mg/Kg dry	2.31	ND	66.6		40-140				
Bis(2-chloroisopropyl)ether	1.79	0.47	mg/Kg dry	2.31	ND	77.5		40-140				
Bis(2-Ethylhexyl)phthalate	1.70	0.47	mg/Kg dry	2.31	0.161	66.5		40-140				
4-Bromophenylphenylether	1.39	0.47	mg/Kg dry	2.31	ND	60.2		40-140				
Butylbenzylphthalate	1.54	0.47	mg/Kg dry	2.31	ND	66.7		40-140				
Carbazole	1.44	0.24	mg/Kg dry	2.31	ND	62.1		40-140				
4-Chloroaniline	0.693	0.92	mg/Kg dry	2.31	ND	**30.0**	*	40-140			J, MS-09, V-05	
4-Chloro-3-methylphenol	1.47	0.92	mg/Kg dry	2.31	ND	63.6		30-130				
2-Chloronaphthalene	1.26	0.47	mg/Kg dry	2.31	ND	54.3		40-140				
2-Chlorophenol	1.39	0.47	mg/Kg dry	2.31	ND	60.3		30-130				
4-Chlorophenylphenylether	1.39	0.47	mg/Kg dry	2.31	ND	60.1		40-140				
Chrysene	1.48	0.24	mg/Kg dry	2.31	0.0935	59.9		40-140				
Dibenz(a,h)anthracene	0.987	0.24	mg/Kg dry	2.31	ND	42.7		40-140				
Dibenzofuran	1.59	0.47	mg/Kg dry	2.31	0.166	61.7		40-140				
Di-n-butylphthalate	1.46	0.47	mg/Kg dry	2.31	ND	63.1		40-140				
3,3-Dichlorobenzidine	0.705	0.24	mg/Kg dry	2.31	ND	**30.5**	*	40-140			MS-09	

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B360166 - SW-846 3546											
Matrix Spike (B360166-MS1)		**Source: 23L0875-02**		Prepared: 12/08/23 Analyzed: 12/12/23							
2,4-Dichlorophenol	1.36	0.47	mg/Kg dry	2.31	ND	58.7		30-130			
Diethylphthalate	1.44	0.47	mg/Kg dry	2.31	ND	62.2		40-140			
2,4-Dimethylphenol	1.26	0.47	mg/Kg dry	2.31	ND	54.4		30-130			
Dimethylphthalate	1.43	0.47	mg/Kg dry	2.31	ND	62.0		40-140			
4,6-Dinitro-2-methylphenol	1.22	0.47	mg/Kg dry	2.31	ND	52.9		30-130			
2,4-Dinitrophenol	0.952	0.92	mg/Kg dry	2.31	ND	41.2		30-130			
2,4-Dinitrotoluene	1.38	0.47	mg/Kg dry	2.31	ND	59.8		40-140			
2,6-Dinitrotoluene	1.48	0.47	mg/Kg dry	2.31	ND	64.2		40-140			
Di-n-octylphthalate	1.62	0.47	mg/Kg dry	2.31	ND	70.2		40-140			
Fluoranthene	1.45	0.24	mg/Kg dry	2.31	0.0926	58.9		40-140			
Fluorene	1.44	0.24	mg/Kg dry	2.31	ND	62.2		40-140			
Hexachlorobenzene	1.36	0.47	mg/Kg dry	2.31	ND	58.8		40-140			
Hexachlorobutadiene	1.21	0.47	mg/Kg dry	2.31	ND	52.5		40-140			
Hexachlorocyclopentadiene	ND	0.47	mg/Kg dry	2.31	ND		*	30-130			MS-09, V-05
Hexachloroethane	1.23	0.47	mg/Kg dry	2.31	ND	53.1		40-140			
Indeno(1,2,3-cd)pyrene	0.967	0.24	mg/Kg dry	2.31	ND	41.8		40-140			
Isophorone	1.60	0.47	mg/Kg dry	2.31	ND	69.1		40-140			
2-Methylnaphthalene	2.14	0.24	mg/Kg dry	2.31	0.798	58.1		40-140			
2-Methylphenol	1.47	0.47	mg/Kg dry	2.31	ND	63.7		30-130			
3/4-Methylphenol	1.54	0.47	mg/Kg dry	2.31	ND	66.7		30-130			
Naphthalene	1.86	0.24	mg/Kg dry	2.31	0.531	57.7		40-140			
2-Nitroaniline	1.57	0.47	mg/Kg dry	2.31	ND	68.0		40-140			
3-Nitroaniline	1.03	0.47	mg/Kg dry	2.31	ND	44.4		40-140			
4-Nitroaniline	0.879	0.47	mg/Kg dry	2.31	ND	**38.0**	*	40-140			MS-22
Nitrobenzene	1.46	0.47	mg/Kg dry	2.31	ND	63.1		40-140			
2-Nitrophenol	1.33	0.47	mg/Kg dry	2.31	ND	57.6		30-130			
4-Nitrophenol	1.63	0.92	mg/Kg dry	2.31	ND	70.4		30-130			
N-Nitrosodiphenylamine/Diphenylamine	1.67	0.47	mg/Kg dry	2.31	ND	72.2		40-140			
N-Nitrosodi-n-propylamine	1.57	0.47	mg/Kg dry	2.31	ND	68.1		40-140			
Pentachlorophenol	0.579	0.47	mg/Kg dry	2.31	ND	**25.0**	*	30-130			MS-22
Phenanthrene	1.78	0.24	mg/Kg dry	2.31	0.338	62.3		40-140			
Phenol	1.52	0.47	mg/Kg dry	2.31	ND	65.9		30-130			
Pyrene	1.58	0.24	mg/Kg dry	2.31	0.138	62.5		40-140			
1,2,4,5-Tetrachlorobenzene	1.31	0.47	mg/Kg dry	2.31	ND	56.8		40-140			
2,4,5-Trichlorophenol	1.30	0.47	mg/Kg dry	2.31	ND	56.3		30-130			
2,4,6-Trichlorophenol	1.29	0.47	mg/Kg dry	2.31	ND	55.9		30-130			
Surrogate: 2-Fluorophenol	*5.03*		mg/Kg dry	9.25		54.4		30-130			
Surrogate: Phenol-d6	*5.38*		mg/Kg dry	9.25		58.2		30-130			
Surrogate: Nitrobenzene-d5	*2.94*		mg/Kg dry	4.62		63.7		30-130			
Surrogate: 2-Fluorobiphenyl	*2.93*		mg/Kg dry	4.62		63.3		30-130			
Surrogate: 2,4,6-Tribromophenol	*4.65*		mg/Kg dry	9.25		50.3		30-130			
Surrogate: p-Terphenyl-d14	*3.09*		mg/Kg dry	4.62		66.9		30-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B360166 - SW-846 3546											
Matrix Spike Dup (B360166-MSD1)	**Source: 23L0875-02**			Prepared: 12/08/23 Analyzed: 12/12/23							
Atrazine	1.44	0.94	mg/Kg dry	2.33	ND	61.6		40-140	4.45	30	
Benzaldehyde	1.30	0.48	mg/Kg dry	2.33	ND	55.9		40-140	1.45	30	V-06, V-34
Biphenyl	1.60	0.94	mg/Kg dry	2.33	ND	68.3		40-140	5.29	30	
Caprolactam	1.59	0.48	mg/Kg dry	2.33	ND	68.0		40-140	6.36	30	V-06
Acenaphthene	1.55	0.24	mg/Kg dry	2.33	ND	66.3		40-140	4.73	30	
Acenaphthylene	1.54	0.24	mg/Kg dry	2.33	ND	66.1		40-140	5.50	30	
Acetophenone	1.47	0.48	mg/Kg dry	2.33	ND	63.1		40-140	1.24	30	
Anthracene	1.57	0.24	mg/Kg dry	2.33	ND	67.2		40-140	9.71	30	
Benzo(a)anthracene	1.59	0.24	mg/Kg dry	2.33	ND	68.3		40-140	6.89	30	
Benzo(a)pyrene	1.54	0.24	mg/Kg dry	2.33	ND	65.9		40-140	6.25	30	
Benzo(b)fluoranthene	1.63	0.24	mg/Kg dry	2.33	ND	70.0		40-140	11.5	30	
Benzo(g,h,i)perylene	1.17	0.24	mg/Kg dry	2.33	ND	50.1		40-140	20.1	30	
Benzo(k)fluoranthene	1.70	0.24	mg/Kg dry	2.33	ND	72.7		40-140	8.07	30	
Bis(2-chloroethoxy)methane	1.63	0.48	mg/Kg dry	2.33	ND	69.6		40-140	4.22	30	
Bis(2-chloroethyl)ether	1.59	0.48	mg/Kg dry	2.33	ND	68.2		40-140	3.38	30	
Bis(2-chloroisopropyl)ether	1.86	0.48	mg/Kg dry	2.33	ND	79.9		40-140	4.06	30	
Bis(2-Ethylhexyl)phthalate	1.70	0.48	mg/Kg dry	2.33	0.161	65.8		40-140	0.0846	30	
4-Bromophenylphenylether	1.47	0.48	mg/Kg dry	2.33	ND	63.0		40-140	5.53	30	
Butylbenzylphthalate	1.61	0.48	mg/Kg dry	2.33	ND	69.0		40-140	4.40	30	
Carbazole	1.58	0.24	mg/Kg dry	2.33	ND	67.8		40-140	9.72	30	
4-Chloroaniline	0.730	0.92	mg/Kg dry	2.33	ND	**31.3**	*	40-140	5.16	30	J, MS-09, V-05
4-Chloro-3-methylphenol	1.51	0.92	mg/Kg dry	2.33	ND	64.8		30-130	2.94	30	
2-Chloronaphthalene	1.31	0.48	mg/Kg dry	2.33	ND	56.1		40-140	4.31	30	
2-Chlorophenol	1.40	0.48	mg/Kg dry	2.33	ND	60.1		30-130	0.683	30	
4-Chlorophenylphenylether	1.46	0.48	mg/Kg dry	2.33	ND	62.3		40-140	4.64	30	
Chrysene	1.57	0.24	mg/Kg dry	2.33	0.0935	63.3		40-140	5.98	30	
Dibenz(a,h)anthracene	1.20	0.24	mg/Kg dry	2.33	ND	51.6		40-140	19.7	30	
Dibenzofuran	1.69	0.48	mg/Kg dry	2.33	0.166	65.2		40-140	5.88	30	
Di-n-butylphthalate	1.52	0.48	mg/Kg dry	2.33	ND	65.3		40-140	4.35	30	
3,3-Dichlorobenzidine	0.865	0.24	mg/Kg dry	2.33	ND	**37.1**	*	40-140	20.5	30	MS-09
2,4-Dichlorophenol	1.42	0.48	mg/Kg dry	2.33	ND	60.8		30-130	4.40	30	
Diethylphthalate	1.51	0.48	mg/Kg dry	2.33	ND	64.8		40-140	5.11	30	
2,4-Dimethylphenol	1.28	0.48	mg/Kg dry	2.33	ND	54.8		30-130	1.75	30	
Dimethylphthalate	1.48	0.48	mg/Kg dry	2.33	ND	63.5		40-140	3.37	30	
4,6-Dinitro-2-methylphenol	1.32	0.48	mg/Kg dry	2.33	ND	56.5		30-130	7.64	30	
2,4-Dinitrophenol	1.04	0.92	mg/Kg dry	2.33	ND	44.4		30-130	8.60	30	
2,4-Dinitrotoluene	1.46	0.48	mg/Kg dry	2.33	ND	62.4		40-140	5.20	30	
2,6-Dinitrotoluene	1.54	0.48	mg/Kg dry	2.33	ND	66.0		40-140	3.69	30	
Di-n-octylphthalate	1.84	0.48	mg/Kg dry	2.33	ND	78.9		40-140	12.6	30	
Fluoranthene	1.63	0.24	mg/Kg dry	2.33	0.0926	65.7		40-140	11.1	30	
Fluorene	1.54	0.24	mg/Kg dry	2.33	ND	65.9		40-140	6.67	30	
Hexachlorobenzene	1.45	0.48	mg/Kg dry	2.33	ND	61.9		40-140	6.15	30	
Hexachlorobutadiene	1.27	0.48	mg/Kg dry	2.33	ND	54.4		40-140	4.54	30	
Hexachlorocyclopentadiene	0.115	0.48	mg/Kg dry	2.33	ND	**4.94**	*	30-130		30	J, MS-09, V-05
Hexachloroethane	1.26	0.48	mg/Kg dry	2.33	ND	54.2		40-140	3.07	30	
Indeno(1,2,3-cd)pyrene	1.15	0.24	mg/Kg dry	2.33	ND	49.2		40-140	17.2	30	
Isophorone	1.64	0.48	mg/Kg dry	2.33	ND	70.5		40-140	2.96	30	
2-Methylnaphthalene	2.22	0.24	mg/Kg dry	2.33	0.798	60.8		40-140	3.46	30	
2-Methylphenol	1.49	0.48	mg/Kg dry	2.33	ND	63.6		30-130	0.794	30	
3/4-Methylphenol	1.55	0.48	mg/Kg dry	2.33	ND	66.6		30-130	0.802	30	
Naphthalene	1.93	0.24	mg/Kg dry	2.33	0.531	60.0		40-140	3.55	30	
2-Nitroaniline	1.66	0.48	mg/Kg dry	2.33	ND	71.2		40-140	5.58	30	

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B360166 - SW-846 3546										
Matrix Spike Dup (B360166-MSD1)	**Source: 23L0875-02**			Prepared: 12/08/23 Analyzed: 12/12/23						
3-Nitroaniline	1.13	0.48	mg/Kg dry	2.33	ND	48.5	40-140	9.86	30	
4-Nitroaniline	0.980	0.48	mg/Kg dry	2.33	ND	42.0	40-140	10.9	30	
Nitrobenzene	1.49	0.48	mg/Kg dry	2.33	ND	63.8	40-140	2.21	30	
2-Nitrophenol	1.38	0.48	mg/Kg dry	2.33	ND	58.9	30-130	3.28	30	
4-Nitrophenol	1.75	0.92	mg/Kg dry	2.33	ND	74.9	30-130	7.26	30	
N-Nitrosodiphenylamine/Diphenylamine	1.81	0.48	mg/Kg dry	2.33	ND	77.4	40-140	7.83	30	
N-Nitrosodi-n-propylamine	1.61	0.48	mg/Kg dry	2.33	ND	69.1	40-140	2.41	30	
Pentachlorophenol	0.771	0.48	mg/Kg dry	2.33	ND	33.0	30-130	28.5	30	
Phenanthrene	1.92	0.24	mg/Kg dry	2.33	0.338	67.9	40-140	7.79	30	
Phenol	1.55	0.48	mg/Kg dry	2.33	ND	66.2	30-130	1.47	30	
Pyrene	1.69	0.24	mg/Kg dry	2.33	0.138	66.3	40-140	6.33	30	
1,2,4,5-Tetrachlorobenzene	1.39	0.48	mg/Kg dry	2.33	ND	59.3	40-140	5.29	30	
2,4,5-Trichlorophenol	1.42	0.48	mg/Kg dry	2.33	ND	60.7	30-130	8.40	30	
2,4,6-Trichlorophenol	1.41	0.48	mg/Kg dry	2.33	ND	60.2	30-130	8.46	30	
Surrogate: 2-Fluorophenol	*5.29*		mg/Kg dry	9.34		56.7	30-130			
Surrogate: Phenol-d6	*5.56*		mg/Kg dry	9.34		59.5	30-130			
Surrogate: Nitrobenzene-d5	*3.08*		mg/Kg dry	4.67		65.9	30-130			
Surrogate: 2-Fluorobiphenyl	*3.11*		mg/Kg dry	4.67		66.7	30-130			
Surrogate: 2,4,6-Tribromophenol	*5.11*		mg/Kg dry	9.34		54.7	30-130			
Surrogate: p-Terphenyl-d14	*3.25*		mg/Kg dry	4.67		69.7	30-130			
Batch B360416 - SW-846 3546										
Blank (B360416-BLK1)				Prepared: 12/11/23 Analyzed: 12/13/23						
Atrazine	ND	0.65	mg/Kg wet							V-06
Benzaldehyde	ND	0.33	mg/Kg wet							V-34
Biphenyl	ND	0.65	mg/Kg wet							
Caprolactam	ND	0.33	mg/Kg wet							V-06
Acenaphthene	ND	0.17	mg/Kg wet							
Acenaphthylene	ND	0.17	mg/Kg wet							
Acetophenone	ND	0.33	mg/Kg wet							
Anthracene	ND	0.17	mg/Kg wet							
Benzo(a)anthracene	ND	0.17	mg/Kg wet							
Benzo(a)pyrene	ND	0.17	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.17	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.17	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.17	mg/Kg wet							
Bis(2-chloroethoxy)methane	ND	0.33	mg/Kg wet							
Bis(2-chloroethyl)ether	ND	0.33	mg/Kg wet							
Bis(2-chloroisopropyl)ether	ND	0.33	mg/Kg wet							
Bis(2-Ethylhexyl)phthalate	ND	0.33	mg/Kg wet							
4-Bromophenylphenylether	ND	0.33	mg/Kg wet							
Butylbenzylphthalate	ND	0.33	mg/Kg wet							
Carbazole	ND	0.17	mg/Kg wet							
4-Chloroaniline	ND	0.64	mg/Kg wet							
4-Chloro-3-methylphenol	ND	0.64	mg/Kg wet							
2-Chloronaphthalene	ND	0.33	mg/Kg wet							
2-Chlorophenol	ND	0.33	mg/Kg wet							
4-Chlorophenylphenylether	ND	0.33	mg/Kg wet							
Chrysene	ND	0.17	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.17	mg/Kg wet							
Dibenzofuran	ND	0.33	mg/Kg wet							
Di-n-butylphthalate	ND	0.33	mg/Kg wet							

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B360416 - SW-846 3546										
Blank (B360416-BLK1)				Prepared: 12/11/23 Analyzed: 12/13/23						
3,3-Dichlorobenzidine	ND	0.17	mg/Kg wet							
2,4-Dichlorophenol	ND	0.33	mg/Kg wet							
Diethylphthalate	ND	0.33	mg/Kg wet							
2,4-Dimethylphenol	ND	0.33	mg/Kg wet							
Dimethylphthalate	ND	0.33	mg/Kg wet							
4,6-Dinitro-2-methylphenol	ND	0.33	mg/Kg wet							
2,4-Dinitrophenol	ND	0.64	mg/Kg wet							
2,4-Dinitrotoluene	ND	0.33	mg/Kg wet							
2,6-Dinitrotoluene	ND	0.33	mg/Kg wet							
Di-n-octylphthalate	ND	0.33	mg/Kg wet							
Fluoranthene	ND	0.17	mg/Kg wet							
Fluorene	ND	0.17	mg/Kg wet							
Hexachlorobenzene	ND	0.33	mg/Kg wet							
Hexachlorobutadiene	ND	0.33	mg/Kg wet							
Hexachlorocyclopentadiene	ND	0.33	mg/Kg wet							
Hexachloroethane	ND	0.33	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.17	mg/Kg wet							
Isophorone	ND	0.33	mg/Kg wet							
2-Methylnaphthalene	ND	0.17	mg/Kg wet							
2-Methylphenol	ND	0.33	mg/Kg wet							
3/4-Methylphenol	ND	0.33	mg/Kg wet							
Naphthalene	ND	0.17	mg/Kg wet							
2-Nitroaniline	ND	0.33	mg/Kg wet							
3-Nitroaniline	ND	0.33	mg/Kg wet							
4-Nitroaniline	ND	0.33	mg/Kg wet							
Nitrobenzene	ND	0.33	mg/Kg wet							
2-Nitrophenol	ND	0.33	mg/Kg wet							
4-Nitrophenol	ND	0.64	mg/Kg wet							
N-Nitrosodiphenylamine/Diphenylamine	ND	0.33	mg/Kg wet							
N-Nitrosodi-n-propylamine	ND	0.33	mg/Kg wet							
Pentachlorophenol	ND	0.33	mg/Kg wet							
Phenanthrene	ND	0.17	mg/Kg wet							
Phenol	ND	0.33	mg/Kg wet							
Pyrene	ND	0.17	mg/Kg wet							
1,2,4,5-Tetrachlorobenzene	ND	0.33	mg/Kg wet							
2,4,5-Trichlorophenol	ND	0.33	mg/Kg wet							
2,4,6-Trichlorophenol	ND	0.33	mg/Kg wet							
Surrogate: 2-Fluorophenol	*3.61*		mg/Kg wet	6.51		55.4	30-130			
Surrogate: Phenol-d6	*3.85*		mg/Kg wet	6.51		59.0	30-130			
Surrogate: Nitrobenzene-d5	*2.10*		mg/Kg wet	3.26		64.4	30-130			
Surrogate: 2-Fluorobiphenyl	*2.17*		mg/Kg wet	3.26		66.8	30-130			
Surrogate: 2,4,6-Tribromophenol	*3.99*		mg/Kg wet	6.51		61.2	30-130			
Surrogate: p-Terphenyl-d14	*2.37*		mg/Kg wet	3.26		72.7	30-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B360416 - SW-846 3546											
LCS (B360416-BS1)				Prepared: 12/11/23 Analyzed: 12/13/23							
Atrazine	1.27	0.66	mg/Kg wet	1.64		77.2	40-140			V-06	
Benzaldehyde	0.756	0.34	mg/Kg wet	1.64		45.9	40-140			V-34	
Biphenyl	1.10	0.66	mg/Kg wet	1.64		66.6	40-140				
Caprolactam	1.34	0.34	mg/Kg wet	1.64		81.5	40-140			V-06	
Acenaphthene	1.07	0.17	mg/Kg wet	1.64		65.1	40-140				
Acenaphthylene	1.13	0.17	mg/Kg wet	1.64		68.9	40-140				
Acetophenone	1.16	0.34	mg/Kg wet	1.64		70.6	40-140				
Anthracene	1.18	0.17	mg/Kg wet	1.64		71.7	40-140				
Benzo(a)anthracene	1.19	0.17	mg/Kg wet	1.64		72.3	40-140				
Benzo(a)pyrene	1.24	0.17	mg/Kg wet	1.64		75.3	40-140				
Benzo(b)fluoranthene	1.22	0.17	mg/Kg wet	1.64		74.0	40-140				
Benzo(g,h,i)perylene	1.23	0.17	mg/Kg wet	1.64		74.8	40-140				
Benzo(k)fluoranthene	1.30	0.17	mg/Kg wet	1.64		79.3	40-140				
Bis(2-chloroethoxy)methane	1.16	0.34	mg/Kg wet	1.64		70.3	40-140				
Bis(2-chloroethyl)ether	1.11	0.34	mg/Kg wet	1.64		67.7	40-140				
Bis(2-chloroisopropyl)ether	1.34	0.34	mg/Kg wet	1.64		81.3	40-140				
Bis(2-Ethylhexyl)phthalate	1.17	0.34	mg/Kg wet	1.64		70.9	40-140				
4-Bromophenylphenylether	1.20	0.34	mg/Kg wet	1.64		72.7	40-140				
Butylbenzylphthalate	1.09	0.34	mg/Kg wet	1.64		66.0	40-140				
Carbazole	1.15	0.17	mg/Kg wet	1.64		70.2	40-140				
4-Chloroaniline	0.748	0.65	mg/Kg wet	1.64		45.5	10-140				†
4-Chloro-3-methylphenol	1.15	0.65	mg/Kg wet	1.64		69.8	30-130				
2-Chloronaphthalene	0.972	0.34	mg/Kg wet	1.64		59.1	40-140				
2-Chlorophenol	1.09	0.34	mg/Kg wet	1.64		66.5	30-130				
4-Chlorophenylphenylether	1.13	0.34	mg/Kg wet	1.64		68.8	40-140				
Chrysene	1.19	0.17	mg/Kg wet	1.64		72.4	40-140				
Dibenz(a,h)anthracene	1.21	0.17	mg/Kg wet	1.64		73.6	40-140				
Dibenzofuran	1.13	0.34	mg/Kg wet	1.64		69.0	40-140				
Di-n-butylphthalate	1.13	0.34	mg/Kg wet	1.64		68.7	40-140				
3,3-Dichlorobenzidine	0.904	0.17	mg/Kg wet	1.64		55.0	20-140				†
2,4-Dichlorophenol	1.19	0.34	mg/Kg wet	1.64		72.1	30-130				
Diethylphthalate	1.08	0.34	mg/Kg wet	1.64		65.6	40-140				
2,4-Dimethylphenol	0.960	0.34	mg/Kg wet	1.64		58.4	30-130				
Dimethylphthalate	1.10	0.34	mg/Kg wet	1.64		66.7	40-140				
4,6-Dinitro-2-methylphenol	1.33	0.34	mg/Kg wet	1.64		80.6	30-130				
2,4-Dinitrophenol	0.843	0.65	mg/Kg wet	1.64		51.3	30-130				
2,4-Dinitrotoluene	1.11	0.34	mg/Kg wet	1.64		67.2	40-140				
2,6-Dinitrotoluene	1.13	0.34	mg/Kg wet	1.64		68.5	40-140				
Di-n-octylphthalate	1.05	0.34	mg/Kg wet	1.64		63.6	40-140				
Fluoranthene	1.14	0.17	mg/Kg wet	1.64		69.0	40-140				
Fluorene	1.08	0.17	mg/Kg wet	1.64		65.9	40-140				
Hexachlorobenzene	1.25	0.34	mg/Kg wet	1.64		75.9	40-140				
Hexachlorobutadiene	1.04	0.34	mg/Kg wet	1.64		63.1	40-140				
Hexachlorocyclopentadiene	0.852	0.34	mg/Kg wet	1.64		51.8	40-140				
Hexachloroethane	0.985	0.34	mg/Kg wet	1.64		59.9	40-140				
Indeno(1,2,3-cd)pyrene	1.23	0.17	mg/Kg wet	1.64		75.0	40-140				
Isophorone	1.18	0.34	mg/Kg wet	1.64		71.9	40-140				
2-Methylnaphthalene	1.06	0.17	mg/Kg wet	1.64		64.4	40-140				
2-Methylphenol	1.14	0.34	mg/Kg wet	1.64		69.2	30-130				
3/4-Methylphenol	1.19	0.34	mg/Kg wet	1.64		72.2	30-130				
Naphthalene	1.08	0.17	mg/Kg wet	1.64		65.6	40-140				
2-Nitroaniline	1.13	0.34	mg/Kg wet	1.64		68.7	40-140				

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B360416 - SW-846 3546											
LCS (B360416-BS1)				Prepared: 12/11/23 Analyzed: 12/13/23							
3-Nitroaniline	0.932	0.34	mg/Kg wet	1.64		56.7	30-140				†
4-Nitroaniline	1.03	0.34	mg/Kg wet	1.64		62.8	40-140				
Nitrobenzene	1.07	0.34	mg/Kg wet	1.64		65.3	40-140				
2-Nitrophenol	1.10	0.34	mg/Kg wet	1.64		67.0	30-130				
4-Nitrophenol	1.27	0.65	mg/Kg wet	1.64		77.4	30-130				
N-Nitrosodiphenylamine/Diphenylamine	1.37	0.34	mg/Kg wet	1.64		83.6	40-140				
N-Nitrosodi-n-propylamine	1.18	0.34	mg/Kg wet	1.64		71.8	40-140				
Pentachlorophenol	1.01	0.34	mg/Kg wet	1.64		61.6	30-130				
Phenanthrene	1.17	0.17	mg/Kg wet	1.64		70.8	40-140				
Phenol	1.12	0.34	mg/Kg wet	1.64		67.9	30-130				
Pyrene	1.09	0.17	mg/Kg wet	1.64		66.4	40-140				
1,2,4,5-Tetrachlorobenzene	1.09	0.34	mg/Kg wet	1.64		66.2	40-140				
2,4,5-Trichlorophenol	1.19	0.34	mg/Kg wet	1.64		72.1	30-130				
2,4,6-Trichlorophenol	1.16	0.34	mg/Kg wet	1.64		70.5	30-130				
Surrogate: 2-Fluorophenol	*3.90*		mg/Kg wet	6.58		59.3	30-130				
Surrogate: Phenol-d6	*4.17*		mg/Kg wet	6.58		63.4	30-130				
Surrogate: Nitrobenzene-d5	*2.21*		mg/Kg wet	3.29		67.3	30-130				
Surrogate: 2-Fluorobiphenyl	*2.39*		mg/Kg wet	3.29		72.5	30-130				
Surrogate: 2,4,6-Tribromophenol	*4.26*		mg/Kg wet	6.58		64.7	30-130				
Surrogate: p-Terphenyl-d14	*2.29*		mg/Kg wet	3.29		69.7	30-130				
LCS Dup (B360416-BSD1)				Prepared: 12/11/23 Analyzed: 12/13/23							
Atrazine	1.25	0.66	mg/Kg wet	1.65		75.9	40-140	1.37	30	V-06	
Benzaldehyde	0.749	0.34	mg/Kg wet	1.65		45.4	40-140	0.897	20	V-34	
Biphenyl	1.10	0.66	mg/Kg wet	1.65		66.8	40-140	0.599	20		
Caprolactam	1.33	0.34	mg/Kg wet	1.65		80.5	40-140	0.954	20	V-06	
Acenaphthene	1.08	0.17	mg/Kg wet	1.65		65.3	40-140	0.667	30		
Acenaphthylene	1.13	0.17	mg/Kg wet	1.65		68.6	40-140	0.0486	30		
Acetophenone	1.15	0.34	mg/Kg wet	1.65		69.6	40-140	1.10	30		
Anthracene	1.14	0.17	mg/Kg wet	1.65		69.0	40-140	3.42	30		
Benzo(a)anthracene	1.18	0.17	mg/Kg wet	1.65		71.4	40-140	0.978	30		
Benzo(a)pyrene	1.22	0.17	mg/Kg wet	1.65		73.9	40-140	1.47	30		
Benzo(b)fluoranthene	1.20	0.17	mg/Kg wet	1.65		72.5	40-140	1.66	30		
Benzo(g,h,i)perylene	1.21	0.17	mg/Kg wet	1.65		73.6	40-140	1.32	30		
Benzo(k)fluoranthene	1.28	0.17	mg/Kg wet	1.65		77.8	40-140	1.50	30		
Bis(2-chloroethoxy)methane	1.13	0.34	mg/Kg wet	1.65		68.5	40-140	2.18	30		
Bis(2-chloroethyl)ether	1.08	0.34	mg/Kg wet	1.65		65.6	40-140	2.85	30		
Bis(2-chloroisopropyl)ether	1.34	0.34	mg/Kg wet	1.65		81.3	40-140	0.305	30		
Bis(2-Ethylhexyl)phthalate	1.14	0.34	mg/Kg wet	1.65		68.9	40-140	2.56	30		
4-Bromophenylphenylether	1.16	0.34	mg/Kg wet	1.65		70.4	40-140	2.94	30		
Butylbenzylphthalate	1.05	0.34	mg/Kg wet	1.65		63.9	40-140	2.87	30		
Carbazole	1.14	0.17	mg/Kg wet	1.65		69.1	40-140	1.25	30		
4-Chloroaniline	0.628	0.65	mg/Kg wet	1.65		38.1	10-140	17.4	30	J	†
4-Chloro-3-methylphenol	1.11	0.65	mg/Kg wet	1.65		67.4	30-130	3.11	30		
2-Chloronaphthalene	0.989	0.34	mg/Kg wet	1.65		59.9	40-140	1.77	30		
2-Chlorophenol	1.09	0.34	mg/Kg wet	1.65		66.3	30-130	0.0283	30		
4-Chlorophenylphenylether	1.11	0.34	mg/Kg wet	1.65		67.5	40-140	1.55	30		
Chrysene	1.18	0.17	mg/Kg wet	1.65		71.4	40-140	1.12	30		
Dibenz(a,h)anthracene	1.17	0.17	mg/Kg wet	1.65		70.8	40-140	3.49	30		
Dibenzofuran	1.13	0.34	mg/Kg wet	1.65		68.2	40-140	0.778	30		
Di-n-butylphthalate	1.11	0.34	mg/Kg wet	1.65		67.5	40-140	1.40	30		
3,3-Dichlorobenzidine	0.794	0.17	mg/Kg wet	1.65		48.1	20-140	13.0	50		† ‡

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B360416 - SW-846 3546										
LCS Dup (B360416-BSD1)				Prepared: 12/11/23 Analyzed: 12/13/23						
2,4-Dichlorophenol	1.17	0.34	mg/Kg wet	1.65		71.1	30-130	1.01	30	
Diethylphthalate	1.06	0.34	mg/Kg wet	1.65		64.0	40-140	2.05	30	
2,4-Dimethylphenol	0.945	0.34	mg/Kg wet	1.65		57.3	30-130	1.61	30	
Dimethylphthalate	1.07	0.34	mg/Kg wet	1.65		64.9	40-140	2.50	30	
4,6-Dinitro-2-methylphenol	1.25	0.34	mg/Kg wet	1.65		75.6	30-130	6.05	30	
2,4-Dinitrophenol	0.815	0.65	mg/Kg wet	1.65		49.4	30-130	3.45	30	
2,4-Dinitrotoluene	1.07	0.34	mg/Kg wet	1.65		65.1	40-140	2.78	30	
2,6-Dinitrotoluene	1.11	0.34	mg/Kg wet	1.65		67.2	40-140	1.56	30	
Di-n-octylphthalate	1.01	0.34	mg/Kg wet	1.65		61.1	40-140	3.68	30	
Fluoranthene	1.13	0.17	mg/Kg wet	1.65		68.5	40-140	0.456	30	
Fluorene	1.08	0.17	mg/Kg wet	1.65		65.7	40-140	0.0254	30	
Hexachlorobenzene	1.20	0.34	mg/Kg wet	1.65		72.9	40-140	3.70	30	
Hexachlorobutadiene	1.05	0.34	mg/Kg wet	1.65		63.8	40-140	1.46	30	
Hexachlorocyclopentadiene	0.863	0.34	mg/Kg wet	1.65		52.3	40-140	1.25	30	
Hexachloroethane	0.973	0.34	mg/Kg wet	1.65		59.0	40-140	1.22	30	
Indeno(1,2,3-cd)pyrene	1.21	0.17	mg/Kg wet	1.65		73.3	40-140	1.99	30	
Isophorone	1.17	0.34	mg/Kg wet	1.65		71.1	40-140	0.873	30	
2-Methylnaphthalene	1.05	0.17	mg/Kg wet	1.65		63.5	40-140	1.11	30	
2-Methylphenol	1.15	0.34	mg/Kg wet	1.65		70.0	30-130	1.45	30	
3/4-Methylphenol	1.19	0.34	mg/Kg wet	1.65		71.9	30-130	0.170	30	
Naphthalene	1.07	0.17	mg/Kg wet	1.65		64.7	40-140	0.929	30	
2-Nitroaniline	1.12	0.34	mg/Kg wet	1.65		67.8	40-140	0.960	30	
3-Nitroaniline	0.894	0.34	mg/Kg wet	1.65		54.2	30-140	4.15	30	†
4-Nitroaniline	1.01	0.34	mg/Kg wet	1.65		61.3	40-140	2.06	30	
Nitrobenzene	1.08	0.34	mg/Kg wet	1.65		65.7	40-140	0.940	30	
2-Nitrophenol	1.11	0.34	mg/Kg wet	1.65		67.3	30-130	0.806	30	
4-Nitrophenol	1.24	0.65	mg/Kg wet	1.65		75.3	30-130	2.34	50	‡
N-Nitrosodiphenylamine/Diphenylamine	1.33	0.34	mg/Kg wet	1.65		80.3	40-140	3.60	30	
N-Nitrosodi-n-propylamine	1.19	0.34	mg/Kg wet	1.65		71.8	40-140	0.385	30	
Pentachlorophenol	1.00	0.34	mg/Kg wet	1.65		60.8	30-130	0.880	30	
Phenanthrene	1.13	0.17	mg/Kg wet	1.65		68.4	40-140	3.15	30	
Phenol	1.10	0.34	mg/Kg wet	1.65		66.5	30-130	1.69	30	
Pyrene	1.06	0.17	mg/Kg wet	1.65		64.3	40-140	2.94	30	
1,2,4,5-Tetrachlorobenzene	1.09	0.34	mg/Kg wet	1.65		66.2	40-140	0.299	30	
2,4,5-Trichlorophenol	1.14	0.34	mg/Kg wet	1.65		69.3	30-130	3.58	30	
2,4,6-Trichlorophenol	1.15	0.34	mg/Kg wet	1.65		69.9	30-130	0.554	30	
Surrogate: 2-Fluorophenol	*3.85*		mg/Kg wet	6.60		58.3	30-130			
Surrogate: Phenol-d6	*4.07*		mg/Kg wet	6.60		61.6	30-130			
Surrogate: Nitrobenzene-d5	*2.19*		mg/Kg wet	3.30		66.4	30-130			
Surrogate: 2-Fluorobiphenyl	*2.34*		mg/Kg wet	3.30		71.0	30-130			
Surrogate: 2,4,6-Tribromophenol	*4.19*		mg/Kg wet	6.60		63.5	30-130			
Surrogate: p-Terphenyl-d14	*2.23*		mg/Kg wet	3.30		67.6	30-130			

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QUALITY CONTROL

1,4-Dioxane by isotope dilution GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B360104 - SW-846 3546										
Blank (B360104-BLK1)				Prepared: 12/07/23 Analyzed: 12/13/23						
1,4-Dioxane	ND	0.049	mg/Kg wet							
Surrogate: 1,4-Dioxane-d8	*0.198*		mg/Kg wet	0.490		40.4	15-110			
LCS (B360104-BS1)				Prepared: 12/07/23 Analyzed: 12/13/23						
1,4-Dioxane	0.582	0.050	mg/Kg wet	0.500		116	40-140			
Surrogate: 1,4-Dioxane-d8	*0.223*		mg/Kg wet	0.500		44.7	15-110			
LCS Dup (B360104-BSD1)				Prepared: 12/07/23 Analyzed: 12/13/23						
1,4-Dioxane	0.552	0.050	mg/Kg wet	0.498		111	40-140	5.42	30	
Surrogate: 1,4-Dioxane-d8	*0.205*		mg/Kg wet	0.498		41.2	15-110			
Matrix Spike (B360104-MS2)		**Source: 23L0875-02**		Prepared: 12/07/23 Analyzed: 12/14/23						
1,4-Dioxane	0.757	0.068	mg/Kg dry	0.679	ND	112	30-140			
Surrogate: 1,4-Dioxane-d8	*0.245*		mg/Kg dry	0.679		36.1	15-110			
Matrix Spike Dup (B360104-MSD2)		**Source: 23L0875-02**		Prepared: 12/07/23 Analyzed: 12/14/23						
1,4-Dioxane	0.822	0.071	mg/Kg dry	0.710	ND	116	30-140	8.25	30	
Surrogate: 1,4-Dioxane-d8	*0.292*		mg/Kg dry	0.710		41.1	15-110			

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QUALITY CONTROL

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B360166 - SW-846 3546										
Blank (B360166-BLK1)				Prepared: 12/08/23 Analyzed: 12/11/23						
Furan, 2,5-dimethyl-	0.55		mg/Kg wet							B
Heptane, 2,3-dimethyl-	0.20		mg/Kg wet							B
Heptane, 3,5-dimethyl-	0.28		mg/Kg wet							B
Batch B360416 - SW-846 3546										
Blank (B360416-BLK1)				Prepared: 12/11/23 Analyzed: 12/13/23						
No TICs Found	0.0		mg/Kg wet							

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B360436 - SW-846 3546										
Blank (B360436-BLK1)				Prepared: 12/12/23 Analyzed: 12/14/23						
Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	*0.206*		mg/Kg wet	0.200		103	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.201*		mg/Kg wet	0.200		101	30-150			
Surrogate: Tetrachloro-m-xylene	*0.192*		mg/Kg wet	0.200		95.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.188*		mg/Kg wet	0.200		93.9	30-150			
LCS (B360436-BS1)				Prepared: 12/12/23 Analyzed: 12/14/23						
Aroclor-1016	0.17	0.020	mg/Kg wet	0.198		84.9	40-140			
Aroclor-1016 [2C]	0.16	0.020	mg/Kg wet	0.198		80.3	40-140			
Aroclor-1260	0.17	0.020	mg/Kg wet	0.198		85.7	40-140			
Aroclor-1260 [2C]	0.16	0.020	mg/Kg wet	0.198		78.5	40-140			
Surrogate: Decachlorobiphenyl	*0.203*		mg/Kg wet	0.198		103	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.197*		mg/Kg wet	0.198		99.7	30-150			
Surrogate: Tetrachloro-m-xylene	*0.187*		mg/Kg wet	0.198		94.2	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.182*		mg/Kg wet	0.198		91.7	30-150			
LCS Dup (B360436-BSD1)				Prepared: 12/12/23 Analyzed: 12/14/23						
Aroclor-1016	0.16	0.019	mg/Kg wet	0.192		85.3	40-140	0.481	30	
Aroclor-1016 [2C]	0.15	0.019	mg/Kg wet	0.192		79.9	40-140	0.424	30	
Aroclor-1260	0.16	0.019	mg/Kg wet	0.192		84.9	40-140	0.904	30	
Aroclor-1260 [2C]	0.14	0.019	mg/Kg wet	0.192		74.8	40-140	4.88	30	
Surrogate: Decachlorobiphenyl	*0.196*		mg/Kg wet	0.192		102	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.190*		mg/Kg wet	0.192		98.8	30-150			
Surrogate: Tetrachloro-m-xylene	*0.181*		mg/Kg wet	0.192		94.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.177*		mg/Kg wet	0.192		92.3	30-150			

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B360436 - SW-846 3546										
Matrix Spike (B360436-MS1)	**Source: 23L0875-02**			Prepared: 12/12/23 Analyzed: 12/15/23						
Aroclor-1016	0.31	0.11	mg/Kg dry	0.263	ND	119	40-140			
Aroclor-1016 [2C]	0.21	0.11	mg/Kg dry	0.263	ND	81.5	40-140			
Aroclor-1260	0.23	0.11	mg/Kg dry	0.263	ND	87.3	40-140			
Aroclor-1260 [2C]	0.21	0.11	mg/Kg dry	0.263	0.034	65.5	40-140			
Surrogate: Decachlorobiphenyl	*0.227*		mg/Kg dry	0.263		86.4	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.213*		mg/Kg dry	0.263		81.0	30-150			
Surrogate: Tetrachloro-m-xylene	*0.227*		mg/Kg dry	0.263		86.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.218*		mg/Kg dry	0.263		82.8	30-150			
Matrix Spike Dup (B360436-MSD1)	**Source: 23L0875-02**			Prepared: 12/12/23 Analyzed: 12/15/23						
Aroclor-1016	0.29	0.11	mg/Kg dry	0.278	ND	103	40-140	14.2	30	
Aroclor-1016 [2C]	0.25	0.11	mg/Kg dry	0.278	ND	88.5	40-140	8.19	30	
Aroclor-1260	0.24	0.11	mg/Kg dry	0.278	ND	85.6	40-140	2.00	30	
Aroclor-1260 [2C]	0.22	0.11	mg/Kg dry	0.278	0.034	68.5	40-140	4.54	30	
Surrogate: Decachlorobiphenyl	*0.236*		mg/Kg dry	0.278		84.9	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.221*		mg/Kg dry	0.278		79.5	30-150			
Surrogate: Tetrachloro-m-xylene	*0.238*		mg/Kg dry	0.278		85.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.230*		mg/Kg dry	0.278		82.7	30-150			

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD		RPD Limit	Notes
Batch B360037 - SW-846 3050B												
Blank (B360037-BLK1)				Prepared: 12/07/23 Analyzed: 12/08/23								
Calcium	ND	17	mg/Kg wet									
Magnesium	ND	17	mg/Kg wet									
Potassium	ND	170	mg/Kg wet									
Sodium	ND	170	mg/Kg wet									
Blank (B360037-BLK2)				Prepared: 12/07/23 Analyzed: 12/11/23								
Aluminum	ND	17	mg/Kg wet									
LCS (B360037-BS1)				Prepared: 12/07/23 Analyzed: 12/08/23								
Calcium	5260	50	mg/Kg wet	5340		98.4		81.6-118.5				
Magnesium	1970	50	mg/Kg wet	2150		91.6		75.8-123.7				
Potassium	1590	500	mg/Kg wet	1730		92.1		71.7-128.9				
Sodium	466	500	mg/Kg wet	462		101		73.4-126.6				J
LCS (B360037-BS2)				Prepared: 12/07/23 Analyzed: 12/11/23								
Aluminum	7250	50	mg/Kg wet	8630		84.0		51.8-148.3				
LCS Dup (B360037-BSD1)				Prepared: 12/07/23 Analyzed: 12/08/23								
Calcium	5010	50	mg/Kg wet	5340		93.8		81.6-118.5	4.79		30	
Magnesium	1920	50	mg/Kg wet	2150		89.3		75.8-123.7	2.61		30	
Potassium	1540	500	mg/Kg wet	1730		88.9		71.7-128.9	3.57		30	
Sodium	440	500	mg/Kg wet	462		95.3		73.4-126.6	5.57		30	J
LCS Dup (B360037-BSD2)				Prepared: 12/07/23 Analyzed: 12/11/23								
Aluminum	7310	50	mg/Kg wet	8630		84.7		51.8-148.3	0.798		30	
Matrix Spike (B360037-MS2)	**Source: 23L0875-02**			Prepared: 12/07/23 Analyzed: 12/08/23								
Potassium	868	230	mg/Kg dry	183	648	120		75-125				
Sodium	329	230	mg/Kg dry	183	113	118		75-125				
Matrix Spike (B360037-MS4)	**Source: 23L0875-02**			Prepared: 12/07/23 Analyzed: 12/11/23								
Aluminum	3720	23	mg/Kg dry	22.9	4160	**-1920**	*	75-125				MS-19
Matrix Spike (B360037-MS6)	**Source: 23L0875-02**			Prepared: 12/07/23 Analyzed: 12/11/23								
Calcium	184000	230	mg/Kg dry	183	144000	**22100**	*	75-125				MS-19
Iron	6870	230	mg/Kg dry	183	6030	**458**	*	75-125				MS-19
Magnesium	18200	230	mg/Kg dry	183	8970	**5060**	*	75-125				MS-19
Matrix Spike Dup (B360037-MSD2)	**Source: 23L0875-02**			Prepared: 12/07/23 Analyzed: 12/08/23								
Potassium	954	230	mg/Kg dry	187	648	**163**	*	75-125	9.38		35	MS-22
Sodium	334	230	mg/Kg dry	187	113	118		75-125	1.28		35	
Matrix Spike Dup (B360037-MSD4)	**Source: 23L0875-02**			Prepared: 12/07/23 Analyzed: 12/11/23								
Aluminum	5380	23	mg/Kg dry	23.4	4160	**5230**	*	75-125	**36.5**	*	35	MS-19

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD		RPD Limit	Notes
Batch B360037 - SW-846 3050B												
Matrix Spike Dup (B360037-MSD6)	**Source: 23L0875-02**			Prepared: 12/07/23 Analyzed: 12/11/23								
Calcium	171000	230	mg/Kg dry	187	144000	**14300**	*	75-125	7.74		35	MS-19
Iron	8610	230	mg/Kg dry	187	6030	**1380**	*	75-125	22.5		35	MS-19
Magnesium	11700	230	mg/Kg dry	187	8970	**1480**	*	75-125	**43.3**	*	35	MS-19
Post Spike (B360037-PS2)	**Source: 23L0875-02**			Prepared: 12/07/23 Analyzed: 12/08/23								
Potassium	32.1		mg/L	16.0	14.5	110		75-125				
Sodium	21.5		mg/L	16.0	2.52	119		75-125				
Post Spike (B360037-PS4)	**Source: 23L0875-02**			Prepared: 12/07/23 Analyzed: 12/11/23								
Aluminum	93.0		mg/L	2.00	93.2	**-11.4**	*	75-125				MS-19
Post Spike (B360037-PS6)	**Source: 23L0875-02**			Prepared: 12/07/23 Analyzed: 12/11/23								
Calcium	3300		mg/L	16.0	3230	**449**	*	75-125				MS-19
Iron	283		mg/L	16.0	135	**922**	*	75-125				MS-19
Magnesium	360		mg/L	16.0	201	**991**	*	75-125				MS-19
Dilution Check (B360037-SRL1)	**Source: 23K3642-04**			Prepared: 12/07/23 Analyzed: 12/08/23								
Calcium	1440	110	mg/Kg dry		1420				1.42		20	
Magnesium	1350	110	mg/Kg dry		1320				2.39		20	
Potassium	494	1100	mg/Kg dry		506				2.28		20	J
Sodium	ND	1100	mg/Kg dry		ND						20	
Dilution Check (B360037-SRL2)	**Source: 23L0875-02**			Prepared: 12/07/23 Analyzed: 12/08/23								
Potassium	570	1100	mg/Kg dry		648				12.8		20	J
Sodium	ND	1100	mg/Kg dry		ND						20	
Dilution Check (B360037-SRL3)	**Source: 23K3642-04**			Prepared: 12/07/23 Analyzed: 12/11/23								
Aluminum	6620	110	mg/Kg dry		6710				1.24		20	
Dilution Check (B360037-SRL4)	**Source: 23L0875-02**			Prepared: 12/07/23 Analyzed: 12/11/23								
Aluminum	4050	110	mg/Kg dry		4160				2.59		20	
Dilution Check (B360037-SRL5)	**Source: 23K3642-04**			Prepared: 12/07/23 Analyzed: 12/11/23								
Iron	10600	1100	mg/Kg dry		10300				2.68		20	
Dilution Check (B360037-SRL6)	**Source: 23L0875-02**			Prepared: 12/07/23 Analyzed: 12/11/23								
Calcium	151000	1100	mg/Kg dry		144000				4.98		20	
Iron	6350	1100	mg/Kg dry		6030				5.21		20	
Magnesium	9390	1100	mg/Kg dry		8970				4.62		20	
Batch B360041 - SW-846 3050B												
Blank (B360041-BLK1)				Prepared: 12/07/23 Analyzed: 12/08/23								
Chromium	ND	4.2	mg/Kg wet									
Cobalt	ND	1.7	mg/Kg wet									
Copper	ND	4.2	mg/Kg wet									
Lead	ND	1.7	mg/Kg wet									
Nickel	ND	4.2	mg/Kg wet									
Selenium	ND	1.3	mg/Kg wet									
Silver	ND	0.083	mg/Kg wet									
Thallium	ND	0.083	mg/Kg wet									
Vanadium	ND	8.3	mg/Kg wet									
Zinc	ND	8.3	mg/Kg wet									
Barium	ND	8.3	mg/Kg wet									
Cadmium	ND	0.33	mg/Kg wet									

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B360041 - SW-846 3050B										
Blank (B360041-BLK2)				Prepared: 12/07/23 Analyzed: 12/16/23						
Antimony	ND	1.8	mg/Kg wet							
Arsenic	ND	0.17	mg/Kg wet							
Manganese	ND	4.3	mg/Kg wet							
Blank (B360041-BLK4)				Prepared: 12/07/23 Analyzed: 12/18/23						
Beryllium	ND	0.25	mg/Kg wet							
LCS (B360041-BS1)				Prepared: 12/07/23 Analyzed: 12/08/23						
Chromium	247	50	mg/Kg wet	232		106	81.5-118.5			
Cobalt	185	20	mg/Kg wet	166		111	83.1-116.9			
Copper	137	50	mg/Kg wet	124		110	83.1-116.9			
Lead	162	20	mg/Kg wet	145		112	82.1-117.9			
Nickel	126	50	mg/Kg wet	108		117	85.2-117.6			
Selenium	94.9	16	mg/Kg wet	96.3		98.5	78.8-121.5			
Silver	50.0	0.99	mg/Kg wet	47.3		106	79.5-120.5			
Thallium	190	0.99	mg/Kg wet	172		110	80.8-118.6			
Vanadium	122	99	mg/Kg wet	118		103	77.9-122			
Zinc	382	99	mg/Kg wet	369		103	80.2-120.1			
Barium	380	99	mg/Kg wet	354		107	81.6-118.1			
Cadmium	111	4.0	mg/Kg wet	105		106	82.8-118.1			
LCS (B360041-BS2)				Prepared: 12/07/23 Analyzed: 12/16/23						
Antimony	86.7	21	mg/Kg wet	144		60.2	6.3-193.8			
Arsenic	190	2.0	mg/Kg wet	180		106	83.1-116.9			
Manganese	427	52	mg/Kg wet	412		104	81.3-118.7			
LCS (B360041-BS4)				Prepared: 12/07/23 Analyzed: 12/18/23						
Beryllium	155	3.0	mg/Kg wet	152		102	82.9-117.8			
LCS Dup (B360041-BSD1)				Prepared: 12/07/23 Analyzed: 12/08/23						
Chromium	236	50	mg/Kg wet	232		102	81.5-118.5	4.33	30	
Cobalt	178	20	mg/Kg wet	166		107	83.1-116.9	3.61	20	
Copper	132	50	mg/Kg wet	124		107	83.1-116.9	3.40	30	
Lead	156	20	mg/Kg wet	145		107	82.1-117.9	3.98	30	
Nickel	121	50	mg/Kg wet	108		112	85.2-117.6	3.93	30	
Selenium	91.4	16	mg/Kg wet	96.3		94.9	78.8-121.5	3.76	30	
Silver	49.0	1.0	mg/Kg wet	47.3		103	79.5-120.5	2.19	30	
Thallium	182	1.0	mg/Kg wet	172		106	80.8-118.6	4.25	30	
Vanadium	117	100	mg/Kg wet	118		98.7	77.9-122	4.50	30	
Zinc	369	100	mg/Kg wet	369		100	80.2-120.1	3.32	30	
Barium	381	100	mg/Kg wet	354		108	81.6-118.1	0.427	20	
Cadmium	107	4.0	mg/Kg wet	105		101	82.8-118.1	3.92	20	

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD		RPD Limit	Notes
Batch B360041 - SW-846 3050B												
LCS Dup (B360041-BSD2)				Prepared: 12/07/23 Analyzed: 12/16/23								
Antimony	82.2	22	mg/Kg wet	144		57.1		6.3-193.8	5.35		30	
Arsenic	183	2.0	mg/Kg wet	180		102		83.1-116.9	3.66		30	
Manganese	413	52	mg/Kg wet	412		100		81.3-118.7	3.39		30	
LCS Dup (B360041-BSD4)				Prepared: 12/07/23 Analyzed: 12/18/23								
Beryllium	145	3.0	mg/Kg wet	152		95.2		82.9-117.8	6.51		30	
Matrix Spike (B360041-MS1)	**Source: 23L0875-02**			Prepared: 12/07/23 Analyzed: 12/08/23								
Chromium	45.2	23	mg/Kg dry	22.9	19.0	115		75-125				MS-23
Cobalt	24.7	9.2	mg/Kg dry	22.9	3.70	92.0		75-125				
Copper	50.2	23	mg/Kg dry	45.8	12.0	83.4		75-125				
Lead	38.4	9.2	mg/Kg dry	22.9	18.3	87.7		75-125				
Nickel	35.6	23	mg/Kg dry	22.9	13.4	97.2		75-125				
Selenium	18.4	7.3	mg/Kg dry	22.9	ND	80.3		75-125				
Thallium	22.2	0.46	mg/Kg dry	22.9	0.169	96.1		75-125				
Vanadium	33.3	46	mg/Kg dry	22.9	11.8	94.1		75-125				
Zinc	66.2	46	mg/Kg dry	45.8	27.1	85.5		75-125				
Barium	64.0	46	mg/Kg dry	22.9	46.7	75.7		75-125				
Cadmium	18.6	1.8	mg/Kg dry	22.9	ND	81.4		75-125				
Matrix Spike (B360041-MS2)	**Source: 23L0875-02**			Prepared: 12/07/23 Analyzed: 12/16/23								
Antimony	6.15	9.9	mg/Kg dry	22.9	ND	**26.9**	*	75-125				MS-07A
Arsenic	26.6	0.92	mg/Kg dry	22.9	2.86	104		75-125				
Matrix Spike (B360041-MS3)	**Source: 23L0875-02**			Prepared: 12/07/23 Analyzed: 12/17/23								
Manganese	680	59	mg/Kg dry	22.9	161	**2270**	*	75-125				MS-19
Matrix Spike (B360041-MS4)	**Source: 23L0875-02**			Prepared: 12/07/23 Analyzed: 12/18/23								
Beryllium	19.0	1.4	mg/Kg dry	22.9	0.353	81.4		75-125				
Matrix Spike Dup (B360041-MSD1)	**Source: 23L0875-02**			Prepared: 12/07/23 Analyzed: 12/08/23								
Chromium	81.1	23	mg/Kg dry	23.4	19.0	**266**	*	75-125	**56.9**	*	35	MS-23
Cobalt	25.1	9.3	mg/Kg dry	23.4	3.70	91.6		75-125	1.49		35	
Copper	51.7	23	mg/Kg dry	46.7	12.0	84.9		75-125	3.03		35	
Lead	39.5	9.3	mg/Kg dry	23.4	18.3	90.6		75-125	2.85		35	
Nickel	37.9	23	mg/Kg dry	23.4	13.4	105		75-125	6.00		35	
Selenium	18.2	7.5	mg/Kg dry	23.4	ND	77.8		75-125	1.03		35	
Thallium	21.8	0.47	mg/Kg dry	23.4	0.169	92.3		75-125	1.85		35	
Vanadium	35.6	47	mg/Kg dry	23.4	11.8	102		75-125	6.65		35	
Zinc	70.3	47	mg/Kg dry	46.7	27.1	92.4		75-125	5.99		35	
Barium	88.9	47	mg/Kg dry	23.4	46.7	**180**	*	75-125	32.5		35	MS-22
Cadmium	18.4	1.9	mg/Kg dry	23.4	ND	78.9		75-125	1.03		35	

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B360041 - SW-846 3050B											
Matrix Spike Dup (B360041-MSD2)	**Source: 23L0875-02**			Prepared: 12/07/23 Analyzed: 12/16/23							
Antimony	6.42	10	mg/Kg dry	23.4	ND	**27.4**	*	75-125	4.25	35	MS-07A
Arsenic	27.2	0.93	mg/Kg dry	23.4	2.86	104		75-125	2.43	35	
Matrix Spike Dup (B360041-MSD3)	**Source: 23L0875-02**			Prepared: 12/07/23 Analyzed: 12/17/23							
Manganese	769	61	mg/Kg dry	23.4	161	**2600**	*	75-125	12.2	35	MS-19
Matrix Spike Dup (B360041-MSD4)	**Source: 23L0875-02**			Prepared: 12/07/23 Analyzed: 12/18/23							
Beryllium	18.8	1.4	mg/Kg dry	23.4	0.353	78.9		75-125	1.02	35	
Post Spike (B360041-PS1)	**Source: 23L0875-02**			Prepared: 12/07/23 Analyzed: 12/08/23							
Chromium	359		µg/L	20.0	425	**-333**	*	75-125			MS-19
Cobalt	87.7		µg/L	20.0	83.0	**23.6**	*	75-125			MS-19
Copper	254		µg/L	40.0	269	**-36.7**	*	75-125			MS-19
Lead	347		µg/L	20.0	411	**-319**	*	75-125			MS-19
Nickel	262		µg/L	20.0	301	**-193**	*	75-125			MS-19
Selenium	14.2		µg/L	8.00	8.67	**68.5**	*	75-125			Z-01
Thallium	26.7		µg/L	20.0	3.80	115		75-125			
Vanadium	231		µg/L	20.0	264	**-163**	*	75-125			MS-19
Zinc	526		µg/L	40.0	607	**-204**	*	75-125			MS-19
Barium	915		µg/L	80.0	1050	**-166**	*	75-125			MS-19
Cadmium	18.5		µg/L	20.0	0.772	88.7		75-125			
Dilution Check (B360041-SRL1)	**Source: 23L0875-02**			Prepared: 12/07/23 Analyzed: 12/08/23							
Chromium	18.9	28	mg/Kg dry		19.0				0.208	20	
Cobalt	3.69	11	mg/Kg dry		3.70				0.334	20	
Copper	12.8	28	mg/Kg dry		12.0				6.31	20	
Lead	17.8	11	mg/Kg dry		18.3				2.81	20	
Nickel	13.6	28	mg/Kg dry		13.4				1.36	20	
Selenium	ND	8.9	mg/Kg dry		ND					20	
Thallium	0.160	0.56	mg/Kg dry		0.169				5.95	20	
Vanadium	ND	56	mg/Kg dry		ND					20	
Zinc	31.0	56	mg/Kg dry		27.1				13.4	20	
Barium	45.4	56	mg/Kg dry		46.7				2.86	20	
Cadmium	ND	2.2	mg/Kg dry		ND					20	
Batch B360093 - SW-846 7471											
Blank (B360093-BLK1)				Prepared: 12/07/23 Analyzed: 12/08/23							
Mercury	ND	0.025	mg/Kg wet								
LCS (B360093-BS1)				Prepared: 12/07/23 Analyzed: 12/08/23							
Mercury	9.84	1.8	mg/Kg wet	10.3		95.5		55-143.7			

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B360093 - SW-846 7471										
LCS Dup (B360093-BSD1)				Prepared: 12/07/23 Analyzed: 12/08/23						
Mercury	8.64	1.8	mg/Kg wet	10.3		83.9	55-143.7	13.0	20	
Matrix Spike (B360093-MS1)		**Source: 23L0875-02**		Prepared: 12/07/23 Analyzed: 12/08/23						
Mercury	0.417	0.035	mg/Kg dry	0.471	0.0303	81.9	80-120			
Matrix Spike Dup (B360093-MSD1)		**Source: 23L0875-02**		Prepared: 12/07/23 Analyzed: 12/08/23						
Mercury	0.415	0.035	mg/Kg dry	0.468	0.0303	82.2	80-120	0.361	20	

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B359975 - % Solids											
Duplicate (B359975-DUP2)	**Source: 23L0875-02**			Prepared & Analyzed: 12/06/23							
% Solids	72.7		% Wt		70.5				3.16	10	
Batch B364445 - SW-846 3060A											
Blank (B364445-BLK1)				Prepared: 01/29/24 Analyzed: 01/30/24							
Hexavalent Chromium	ND	0.16	mg/Kg wet								
LCS (B364445-BS1)				Prepared: 01/29/24 Analyzed: 01/30/24							
Hexavalent Chromium	150	3.8	mg/Kg wet	168		88.9		80-120			
LCS Dup (B364445-BSD1)				Prepared: 01/29/24 Analyzed: 01/30/24							
Hexavalent Chromium	150	3.7	mg/Kg wet	164		91.1		80-120	0.368	20	
Matrix Spike (B364445-MS2) Soluble MS	**Source: 23L0875-02**			Prepared: 01/29/24 Analyzed: 01/30/24							
Hexavalent Chromium	7.2	1.1	mg/Kg dry	56.4	ND	**12.7**	*	85-115			MS-16
Matrix Spike Dup (B364445-MSD2) Soluble MS Dup	**Source: 23L0875-02**			Prepared: 01/29/24 Analyzed: 01/30/24							
Hexavalent Chromium	7.4	1.1	mg/Kg dry	55.6	ND	**13.3**	*	85-115	3.29	35	MS-16

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS

Lab Sample ID: B360436-BS1

Date(s) Analyzed: 12/14/2023 12/14/2023

Instrument ID (1): ECD10

Instrument ID (2): ECD10

GC Column (1): ID: (mm)

GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.17	
	2	0.000	0.000	0.000	0.16	6.1
Aroclor-1260	1	0.000	0.000	0.000	0.17	
	2	0.000	0.000	0.000	0.16	6.1

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS Dup

Lab Sample ID: B360436-BSD1 Date(s) Analyzed: 12/14/2023 12/14/2023

Instrument ID (1): ECD10 Instrument ID (2): ECD10

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.16	
	2	0.000	0.000	0.000	0.15	6.5
Aroclor-1260	1	0.000	0.000	0.000	0.16	
	2	0.000	0.000	0.000	0.14	13.3

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Matrix Spike

Lab Sample ID: B360436-MS1 Date(s) Analyzed: 12/15/2023 12/15/2023

Instrument ID (1): ECD10 Instrument ID (2): ECD10

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.31	
	2	0.000	0.000	0.000	0.21	38.5
Aroclor-1260	1	0.000	0.000	0.000	0.23	
	2	0.000	0.000	0.000	0.21	9.1

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Matrix Spike Dup

Lab Sample ID: B360436-MSD1 Date(s) Analyzed: 12/15/2023 12/15/2023

Instrument ID (1): ECD10 Instrument ID (2): ECD10

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.29	
	2	0.000	0.000	0.000	0.25	14.8
Aroclor-1260	1	0.000	0.000	0.000	0.24	
	2	0.000	0.000	0.000	0.22	8.7

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
B	Analyte is found in the associated laboratory blank as well as in the sample.
DL-05	Sample required a dilution due to high internal standard recovery of the lesser diluted digestion, reporting limit is elevated.
H-10	Analysis was requested after the recommended holding time had passed.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
L-02	Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
MS-07A	Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.
MS-09	Matrix spike recovery and/or matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.
MS-16	For solid method SW846-7196A, the matrix spike is outside of control limits. pH and ORP results were indicative of reducing conditions. Reanalysis is not required. Analysis is in control based on LCS recoveries.
MS-19	Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representative of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.
MS-22	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.
MS-23	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is outside of the method specified criteria. Reduced precision anticipated for any reported result for this compound.
MS-24	Either matrix spike or matrix spike duplicate is outside of control limits, but the other is within limits. Analysis is in control based on laboratory fortified blank recovery.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-06	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for this compound.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
V-34	Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.
V-36	Initial calibration verification (ICV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
W-06	Elevated method reporting limit due to intense color of sample
Z-01	Post spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery.Possibility of sample matrix effects that lead to low bias for reported result cannot be eliminated.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 6010D in Soil	
Aluminum	CT,NH,NY,ME,VA,NC
Calcium	CT,NH,NY,ME,VA,NC
Iron	CT,NH,NY,ME,VA,NC
Magnesium	CT,NH,NY,ME,VA,NC
Potassium	CT,NH,NY,ME,VA,NC
Sodium	CT,NH,NY,ME,VA,NC
SW-846 6010D in Water	
Aluminum	CT,NH,NY,ME,VA,NC
Calcium	CT,NH,NY,ME,VA,NC
Iron	CT,NH,NY,ME,VA,NC
Magnesium	CT,NH,NY,ME,VA,NC
Potassium	CT,NH,NY,ME,VA,NC
Sodium	CT,NH,NY,ME,VA,NC
SW-846 6020B in Soil	
Antimony	NY,NC,ME
Arsenic	NY,VA,NH,NC,ME
Beryllium	VA,NY,NH,NC,ME
Chromium	NY,NC,ME
Cobalt	NY,NC,ME
Copper	NY,NC,ME
Lead	NY,NC,ME
Manganese	NY,NC,ME
Nickel	NY,NC,ME
Selenium	NY,VA,NH,NC,ME
Silver	NY,NC,ME
Thallium	VA,NY,NH,NC,ME
Vanadium	NY,NC,ME,CT,VA,NH
Zinc	NY,NC,ME
Barium	NY,NC,CT,NH,ME,VA
Cadmium	NY,NC,ME
SW-846 6020B in Water	
Antimony	CT,NH,NY,ME,VA,NC
Arsenic	CT,NH,NY,ME,VA,NC
Barium	NH,NY,ME,VA,NC
Beryllium	CT,NH,NY,ME,VA,NC
Cadmium	CT,NH,NY,RI,ME,VA,NC
Chromium	CT,NH,NY,ME,VA,NC
Cobalt	CT,NH,NY,ME,VA,NC
Copper	CT,NH,NY,ME,VA,NC
Lead	CT,NH,NY,ME,VA,NC
Manganese	CT,NH,NY,ME,VA,NC
Nickel	CT,NH,NY,ME,VA,NC
Selenium	CT,NH,NY,ME,VA,NC
Silver	CT,NH,NY,ME,VA,NC
Thallium	CT,NH,NY,ME,VA,NC
Vanadium	CT,NH,NY,ME,VA,NC

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 6020B in Water	
Zinc	CT,NH,NY,ME,VA,NC
SW-846 7196A in Soil	
Hexavalent Chromium	NY,CT,NH,NC,ME,VA
SW-846 7471B in Soil	
Mercury	CT,NH,NY,NC,ME,VA
SW-846 8082A in Soil	
Aroclor-1016	CT,NH,NY,NC,ME,VA,PA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1262	NH,NY,NC,ME,VA,PA
Aroclor-1262 [2C]	NH,NY,NC,ME,VA,PA
Aroclor-1268	NH,NY,NC,ME,VA,PA
Aroclor-1268 [2C]	NH,NY,NC,ME,VA,PA
SW-846 8082A in Water	
Aroclor-1016	CT,NH,NY,NC,ME,VA,PA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1262	NH,NY,NC,ME,VA,PA
Aroclor-1262 [2C]	NH,NY,NC,ME,VA,PA
Aroclor-1268	NH,NY,NC,ME,VA,PA
Aroclor-1268 [2C]	NH,NY,NC,ME,VA,PA
SW-846 8260D in Soil	
Acetone	CT,NH,NY,ME,VA

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260D in Soil	
Benzene	CT,NH,NY,ME,VA
Bromochloromethane	NH,NY,ME,VA
Bromodichloromethane	CT,NH,NY,ME,VA
Bromoform	CT,NH,NY,ME,VA
Bromomethane	CT,NH,NY,ME,VA
2-Butanone (MEK)	CT,NH,NY,ME,VA
Carbon Disulfide	CT,NH,NY,ME,VA
Carbon Tetrachloride	CT,NH,NY,ME,VA
Chlorobenzene	CT,NH,NY,ME,VA
Chlorodibromomethane	CT,NH,NY,ME,VA
Chloroethane	CT,NH,NY,ME,VA
Chloroform	CT,NH,NY,ME,VA
Chloromethane	CT,NH,NY,ME,VA
Cyclohexane	NY,ME
1,2-Dibromo-3-chloropropane (DBCP)	NY,ME
1,2-Dibromoethane (EDB)	NH,NY
1,2-Dichlorobenzene	CT,NH,NY,ME,VA
1,3-Dichlorobenzene	CT,NH,NY,ME,VA
1,4-Dichlorobenzene	CT,NH,NY,ME,VA
Dichlorodifluoromethane (Freon 12)	NH,NY,ME,VA
1,1-Dichloroethane	CT,NH,NY,ME,VA
1,2-Dichloroethane	CT,NH,NY,ME,VA
1,1-Dichloroethylene	CT,NH,NY,ME,VA
cis-1,2-Dichloroethylene	CT,NH,NY,ME,VA
trans-1,2-Dichloroethylene	CT,NH,NY,ME,VA
1,2-Dichloropropane	CT,NH,NY,ME,VA
cis-1,3-Dichloropropene	CT,NH,NY,ME,VA
trans-1,3-Dichloropropene	CT,NH,NY,ME,VA
1,4-Dioxane	NY,ME
Ethylbenzene	CT,NH,NY,ME,VA
Hexachlorobutadiene	NH,NY,ME,VA
2-Hexanone (MBK)	CT,NH,NY,ME,VA
Isopropylbenzene (Cumene)	CT,NH,NY,ME,VA
Methyl Acetate	NY,ME
Methyl tert-Butyl Ether (MTBE)	NY,ME,VA
Methyl Cyclohexane	NY
Methylene Chloride	CT,NH,NY,ME,VA
4-Methyl-2-pentanone (MIBK)	CT,NH,NY,ME,VA
Naphthalene	NH,NY,ME,VA
Styrene	CT,NH,NY,ME,VA
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME,VA
Tetrachloroethylene	CT,NH,NY,ME,VA
Toluene	CT,NH,NY,ME,VA
1,2,3-Trichlorobenzene	NY,ME
1,2,4-Trichlorobenzene	NH,NY,ME,VA
1,1,1-Trichloroethane	CT,NH,NY,ME,VA
1,1,2-Trichloroethane	CT,NH,NY,ME,VA

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260D in Soil	
Trichloroethylene	CT,NH,NY,ME,VA
Trichlorofluoromethane (Freon 11)	CT,NH,NY,ME,VA
Vinyl Chloride	CT,NH,NY,ME,VA
Xylenes (total)	NH,NY,ME
SW-846 8260D in Water	
Acetone	CT,ME,NH,VA,NY
Benzene	CT,ME,NH,VA,NY
Bromochloromethane	ME,NH,VA,NY
Bromodichloromethane	CT,ME,NH,VA,NY
Bromoform	CT,ME,NH,VA,NY
Bromomethane	CT,ME,NH,VA,NY
2-Butanone (MEK)	CT,ME,NH,VA,NY
Carbon Disulfide	CT,ME,NH,VA,NY
Carbon Tetrachloride	CT,ME,NH,VA,NY
Chlorobenzene	CT,ME,NH,VA,NY
Chlorodibromomethane	CT,ME,NH,VA,NY
Chloroethane	CT,ME,NH,VA,NY
Chloroform	CT,ME,NH,VA,NY
Chloromethane	CT,ME,NH,VA,NY
Cyclohexane	ME,NY
1,2-Dibromo-3-chloropropane (DBCP)	ME,NY
1,2-Dibromoethane (EDB)	ME,NY
1,2-Dichlorobenzene	CT,ME,NH,VA,NY
1,3-Dichlorobenzene	CT,ME,NH,VA,NY
1,4-Dichlorobenzene	CT,ME,NH,VA,NY
Dichlorodifluoromethane (Freon 12)	ME,NH,VA,NY
1,1-Dichloroethane	CT,ME,NH,VA,NY
1,2-Dichloroethane	CT,ME,NH,VA,NY
1,1-Dichloroethylene	CT,ME,NH,VA,NY
cis-1,2-Dichloroethylene	ME,NY
trans-1,2-Dichloroethylene	CT,ME,NH,VA,NY
1,2-Dichloropropane	CT,ME,NH,VA,NY
cis-1,3-Dichloropropene	CT,ME,NH,VA,NY
trans-1,3-Dichloropropene	CT,ME,NH,VA,NY
1,4-Dioxane	ME,NY
Ethylbenzene	CT,ME,NH,VA,NY
Hexachlorobutadiene	CT,ME,NH,VA,NY
2-Hexanone (MBK)	CT,ME,NH,VA,NY
Isopropylbenzene (Cumene)	ME,VA,NY
Methyl Acetate	ME,NY
Methyl tert-Butyl Ether (MTBE)	CT,ME,NH,VA,NY
Methyl Cyclohexane	NY
Methylene Chloride	CT,ME,NH,VA,NY
4-Methyl-2-pentanone (MIBK)	CT,ME,NH,VA,NY
Naphthalene	ME,NH,VA,NY
Styrene	CT,ME,NH,VA,NY

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260D in Water	
1,1,2,2-Tetrachloroethane	CT,ME,NH,VA,NY
Tetrachloroethylene	CT,ME,NH,VA,NY
Toluene	CT,ME,NH,VA,NY
1,2,3-Trichlorobenzene	ME,NH,VA,NY
1,2,4-Trichlorobenzene	CT,ME,NH,VA,NY
1,1,1-Trichloroethane	CT,ME,NH,VA,NY
1,1,2-Trichloroethane	CT,ME,NH,VA,NY
Trichloroethylene	CT,ME,NH,VA,NY
Trichlorofluoromethane (Freon 11)	CT,ME,NH,VA,NY
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	VA,NY
Vinyl Chloride	CT,ME,NH,VA,NY
Xylenes (total)	ME,NY
SW-846 8270E in Soil	
1,4-Dioxane	NY,NH
Atrazine	ME,NC
Acenaphthene	CT,NY,NH,ME,NC,VA
Acenaphthylene	CT,NY,NH,ME,NC,VA
Acetophenone	NY,NH,ME,NC,VA
Anthracene	CT,NY,NH,ME,NC,VA
Benzo(a)anthracene	CT,NY,NH,ME,NC,VA
Benzo(a)pyrene	CT,NY,NH,ME,NC,VA
Benzo(b)fluoranthene	CT,NY,NH,ME,NC,VA
Benzo(g,h,i)perylene	CT,NY,NH,ME,NC,VA
Benzo(k)fluoranthene	CT,NY,NH,ME,NC,VA
Bis(2-chloroethoxy)methane	CT,NY,NH,ME,NC,VA
Bis(2-chloroethyl)ether	CT,NY,NH,ME,NC,VA
Bis(2-chloroisopropyl)ether	CT,NY,NH,ME,NC,VA
Bis(2-Ethylhexyl)phthalate	CT,NY,NH,ME,NC,VA
4-Bromophenylphenylether	CT,NY,NH,ME,NC,VA
Butylbenzylphthalate	CT,NY,NH,ME,NC,VA
Carbazole	NC
4-Chloroaniline	CT,NY,NH,ME,NC,VA
4-Chloro-3-methylphenol	CT,NY,NH,ME,NC,VA
2-Chloronaphthalene	CT,NY,NH,NC,VA
2-Chlorophenol	CT,NY,NH,ME,NC,VA
4-Chlorophenylphenylether	CT,NY,NH,ME,NC,VA
Chrysene	CT,NY,NH,ME,NC,VA
Dibenz(a,h)anthracene	CT,NY,NH,ME,NC,VA
Dibenzofuran	CT,NY,NH,ME,NC,VA
Di-n-butylphthalate	CT,NY,NH,ME,NC,VA
1,2-Dichlorobenzene	NY,NH,ME,NC,VA
1,3-Dichlorobenzene	NY,NH,ME,NC,VA
1,4-Dichlorobenzene	NY,NH,ME,NC,VA
3,3-Dichlorobenzidine	CT,NY,NH,ME,NC,VA
2,4-Dichlorophenol	CT,NY,NH,ME,NC,VA
Diethylphthalate	CT,NY,NH,ME,NC,VA

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8270E in Soil	
2,4-Dimethylphenol	CT,NY,NH,ME,NC,VA
Dimethylphthalate	CT,NY,NH,ME,NC,VA
4,6-Dinitro-2-methylphenol	CT,NY,NH,ME,NC,VA
2,4-Dinitrophenol	CT,NY,NH,ME,NC,VA
2,4-Dinitrotoluene	CT,NY,NH,ME,NC,VA
2,6-Dinitrotoluene	CT,NY,NH,ME,NC,VA
Di-n-octylphthalate	CT,NY,NH,ME,NC,VA
Fluoranthene	CT,NY,NH,ME,NC,VA
Fluorene	NY,NH,ME,NC,VA
Hexachlorobenzene	CT,NY,NH,ME,NC,VA
Hexachlorobutadiene	CT,NY,NH,ME,NC,VA
Hexachlorocyclopentadiene	CT,NY,NH,ME,NC,VA
Hexachloroethane	CT,NY,NH,ME,NC,VA
Indeno(1,2,3-cd)pyrene	CT,NY,NH,ME,NC,VA
Isophorone	CT,NY,NH,ME,NC,VA
2-Methylnaphthalene	CT,NY,NH,ME,NC,VA
2-Methylphenol	CT,NY,NH,ME,NC,VA
3/4-Methylphenol	CT,NY,NH,ME,NC,VA
Naphthalene	CT,NY,NH,ME,NC,VA
2-Nitroaniline	CT,NY,NH,ME,NC,VA
3-Nitroaniline	CT,NY,NH,ME,NC,VA
4-Nitroaniline	CT,NY,NH,ME,NC,VA
Nitrobenzene	CT,NY,NH,ME,NC,VA
2-Nitrophenol	CT,NY,NH,ME,NC,VA
4-Nitrophenol	CT,NY,NH,ME,NC,VA
N-Nitrosodi-n-propylamine	CT,NY,NH,ME,NC,VA
Pentachlorophenol	CT,NY,NH,ME,NC,VA
Phenanthrene	CT,NY,NH,ME,NC,VA
Phenol	CT,NY,NH,ME,NC,VA
Pyrene	CT,NY,NH,ME,NC,VA
1,2,4,5-Tetrachlorobenzene	NY,NC
1,2,4-Trichlorobenzene	CT,NY,NH,ME,NC,VA
2,4,5-Trichlorophenol	CT,NY,NH,ME,NC,VA
2,4,6-Trichlorophenol	CT,NY,NH,ME,NC,VA
2-Fluorophenol	NC
SW-846 8270E in Water	
1,4-Dioxane	NY,NH
Acenaphthene	CT,NY,NC,ME,NH,VA
Acenaphthylene	CT,NY,NC,ME,NH,VA
Acetophenone	NY,NC
Anthracene	CT,NY,NC,ME,NH,VA
Benzo(a)anthracene	CT,NY,NC,ME,NH,VA
Benzo(a)pyrene	CT,NY,NC,ME,NH,VA
Benzo(b)fluoranthene	CT,NY,NC,ME,NH,VA
Benzo(g,h,i)perylene	CT,NY,NC,ME,NH,VA
Benzo(k)fluoranthene	CT,NY,NC,ME,NH,VA

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8270E in Water	
Bis(2-chloroethoxy)methane	CT,NY,NC,ME,NH,VA
Bis(2-chloroethyl)ether	CT,NY,NC,ME,NH,VA
Bis(2-chloroisopropyl)ether	CT,NY,NC,ME,NH,VA
Bis(2-Ethylhexyl)phthalate	CT,NY,NC,ME,NH,VA
4-Bromophenylphenylether	CT,NY,NC,ME,NH,VA
Butylbenzylphthalate	CT,NY,NC,ME,NH,VA
Carbazole	NC
4-Chloroaniline	CT,NY,NC,ME,NH,VA
4-Chloro-3-methylphenol	CT,NY,NC,ME,NH,VA
2-Chloronaphthalene	CT,NY,NC,ME,NH,VA
2-Chlorophenol	CT,NY,NC,ME,NH,VA
4-Chlorophenylphenylether	CT,NY,NC,ME,NH,VA
Chrysene	CT,NY,NC,ME,NH,VA
Dibenz(a,h)anthracene	CT,NY,NC,ME,NH,VA
Dibenzofuran	CT,NY,NC,ME,NH,VA
Di-n-butylphthalate	CT,NY,NC,ME,NH,VA
1,2-Dichlorobenzene	CT,NY,NC,ME,NH,VA
1,3-Dichlorobenzene	CT,NY,NC,ME,NH,VA
1,4-Dichlorobenzene	CT,NY,NC,ME,NH,VA
3,3-Dichlorobenzidine	CT,NY,NC,ME,NH,VA
2,4-Dichlorophenol	CT,NY,NC,ME,NH,VA
Diethylphthalate	CT,NY,NC,ME,NH,VA
2,4-Dimethylphenol	CT,NY,NC,ME,NH,VA
Dimethylphthalate	CT,NY,NC,ME,NH,VA
4,6-Dinitro-2-methylphenol	CT,NY,NC,ME,NH,VA
2,4-Dinitrophenol	CT,NY,NC,ME,NH,VA
2,4-Dinitrotoluene	CT,NY,NC,ME,NH,VA
2,6-Dinitrotoluene	CT,NY,NC,ME,NH,VA
Di-n-octylphthalate	CT,NY,NC,ME,NH,VA
Fluoranthene	CT,NY,NC,ME,NH,VA
Fluorene	NY,NC,ME,NH,VA
Hexachlorobenzene	CT,NY,NC,ME,NH,VA
Hexachlorobutadiene	CT,NY,NC,ME,NH,VA
Hexachlorocyclopentadiene	CT,NY,NC,ME,NH,VA
Hexachloroethane	CT,NY,NC,ME,NH,VA
Indeno(1,2,3-cd)pyrene	CT,NY,NC,ME,NH,VA
Isophorone	CT,NY,NC,ME,NH,VA
2-Methylnaphthalene	CT,NY,NC,ME,NH,VA
2-Methylphenol	CT,NY,NC,NH,VA
3/4-Methylphenol	CT,NY,NC,NH,VA
Naphthalene	CT,NY,NC,ME,NH,VA
2-Nitroaniline	CT,NY,NC,ME,NH,VA
3-Nitroaniline	CT,NY,NC,ME,NH,VA
4-Nitroaniline	CT,NY,NC,ME,NH,VA
Nitrobenzene	CT,NY,NC,ME,NH,VA
2-Nitrophenol	CT,NY,NC,ME,NH,VA
4-Nitrophenol	CT,NY,NC,ME,NH,VA

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8270E in Water	
N-Nitrosodi-n-propylamine	CT,NY,NC,ME,NH,VA
Pentachlorophenol	CT,NY,NC,ME,NH,VA
Phenanthrene	CT,NY,NC,ME,NH,VA
Phenol	CT,NY,NC,ME,NH,VA
Pyrene	CT,NY,NC,ME,NH,VA
1,2,4,5-Tetrachlorobenzene	NY,NC
1,2,4-Trichlorobenzene	CT,NY,NC,ME,NH,VA
2,4,5-Trichlorophenol	CT,NY,NC,ME,NH,VA
2,4,6-Trichlorophenol	CT,NY,NC,ME,NH,VA
2-Fluorophenol	NC

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
RI	Rhode Island Department of Health	LAO00373	12/30/2024
NC	North Carolina Div. of Water Quality	652	12/31/2024
ME	State of Maine	MA00100	06/9/2025
VA	Commonwealth of Virginia	460217	12/14/2024
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2024

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23L0875

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Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

1800 Elm Street SE
Minneapolis, MN 55414

Table of Contents

CLIENT: SYRACUSE SAND AND GRAVEL

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: (ALPHA - OMEGA)

Address: P.O. Box 6418, Syr, NY 13212

Phone:

Project Info:

Project Location: ALPHA PORTLAND SITE DEC # 734006

Project Number: TDK PROJECT NO. 2021063

Project Manager: JOHN HERRMANN, TDK ENGINEERING

Pace Analytical Quote Name/Number: TDK ALPHA PORTLAND 00143967

Invoice Recipient:

Sampled By: JCH, TDK ENGINEERING

Turnaround Time Request:
7-Day ☐ 10-Day ☑
Due Date:

Rush Turnaround Request:
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery:
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #:

ANALYSIS REQUESTED

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	Conc Code	VOCs - TCL + TICs	SVOCs - TCL + TICs	Metals - TAL	PFAS	1,4-Dioxane	PCBs	VOCs - % Solids	# of Containers	[2] Preservation Code	[3] Container Code
1	MW-2 (2')	12/1/23	8:30 Am		✓	S	A		✓	✓		✓	✓				
	" "	"	"		✓	S	A							✓			
	" "	"	"		✓	S	P				✓						
	" "	"	"		✓	S	V	✓									
2	SB-4 (4')	12/4/23	9:20 Am		✓	S	A		✓	✓		✓	✓				
	" "	"	"		✓	S	A							✓			
	" "	"	"		✓	S	P				✓						
	" "	"	"		✓	S	V	✓									
3	EQUIP DECONN	12/4/23			✓	O*	V	✓									

Comments: PLEASE FORWARD RESULTS TO: JHERRMANN@TDKENGINEERING.COM

CAT B DELIVERABLES PACKAGE

* EQUIPMENT DECON WATER

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time:
	12/5/23; 1:40PM
Received by: (signature)	Date/Time:
Jessica Hamilton	12/5/23; 1:40 PM
Relinquished by: (signature)	Date/Time:
Jessica Hamilton	12/5/23; 2:24PM
Received by: (signature)	Date/Time:
FAKE	12/5 1430
Relinquished by: (signature)	Date/Time:
FAKE	12/5 1700
Received by: (signature)	Date/Time:
12/6/23	1000

Regulatory Requirements/Report Limits:
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375

Data Deliverables:
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Other:
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Aqueous/Wastewater Samples:
☐ Field Filtered
☐ Lab to Filter

Drinking Water Samples:
☐ Field Filtered
☐ Lab to Filter

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] **Container Codes:**
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

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https://www.pacelabs.com/

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

1800 Elm Street SE
Minneapolis, MN 55414

Table of Contents

Page 2 of 3

CLIENT: SYRACUSE SAND AND GRAVEL

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: (ALPHA-OMEGA)

Address: P.O. Box 6418, Syracuse, NY 13212

Phone:

Project Name:

Project Location: ALPHA PORTLAND SITE: DEC # 734006

Project Number: TDK PROJECT NO. 2021063

Project Manager: JOHN HERRMANN, TDK ENGINEERING

Pace Analytical Quote Name/Number TDK ALPHA PORTLAND 00014397

Invoice Recipient:

Sampled By: JCH, TDK ENGINEERING

Regulatory Requirement/Report Due Date:
7-Day ☐ 10-Day ☑
Due Date:

Rush Turnaround Required:
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery:
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #:

25L0875

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	Conc Code	VOCs - TCL+TICs	SVOCs - TCL+TICs	METALS - TAL	PFAS	1,4-Dioxane	PCBs	VOCs - % Solids	# of Containers	[2] Preservation Code	[3] Container Code
	MS - SB-4(4')	12/4/23	9:00AM		✓	S	A		✓	✓		✓	✓				
	"	"	"		✓	S	A							✓			
	"	"	"		✓	S	P				✓						
2	"	"	"		✓	S	V	✓									
	MSD - SB-4(4')	"	"		✓	S	A		✓	✓		✓	✓				
	"	"	"		✓	S	A							✓			
	"	"	"		✓	S	P				✓						
2	"	"	"		✓	S	V	✓									

ANALYSIS REQUESTED

Preservation of Filtered Samples:
☐ Field Filtered
☐ Lab to Filter

Preservation of Non-Filtered Samples:
☐ Field Filtered
☐ Lab to Filter

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] **Container Codes:**
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Comments: PLEASE FORWARD RESULTS TO: JHERRMANN@TDKENGINEERING.COM

CAT B DELIVERABLES PACKAGE

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time:
	12/5/23; 1:40 pm
Received by: (signature) Jessica Hawke	Date/Time: 12/5/23; 1:40 Pm
Relinquished by: (signature) Jessica Hawke	Date/Time: 12/5/23; 2:24 Pm
Received by: (signature) PACE	Date/Time: 12/5 1430
Relinquished by: (signature) PACE	Date/Time: 12/5 1700
Received by: (signature) 2.9	Date/Time: 12/6/23 1000

Regulatory Requirements/Report Limit Requirements
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375

Deliverables
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Other
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

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Minneapolis, MN 55414

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

2310975

CLIENT: SYRACUSE SAND AND GRAVEL

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: (ALPHA-OMEGA)

Address: P.O. Box 6418, SYRACUSE, NY 13212

Phone:

Project Name:

Project Location: ALPHA PORTLAND SITE: DEC #734006

Project Number: TDK PROJECT NO. 2021063

Project Manager: JOHN HERRMANN, TDK ENGINEERING

Pace Analytical Quote Name/Number TDK ALPHA PORTLAND

Invoice Recipient: 0014396 7

Sampled By:

Requested Turnaround Time:
7-Day ☐ 10-Day ☑
Due Date:

Rush Approval Required:
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery:
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #:

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	Conc Code	VOCs - TCL + TICs	SVOCs - TCL + TICs	Metals - TAL	PFAS	1,4-Dioxane	PCBs	VOCs - % Solids	# of Containers	[2] Preservation Code	[3] Container Code
	DUPLICATE				✓	S	A		✓	✓		✓	✓				
	"				✓	S	A							✓			
	"				✓	S	P				✓						
	"				✓	S	V	✓									

ANALYSIS REQUESTED

Dissolved Metals Samples
☐ Field Filtered
☐ Lab to Filter

Orthophosphate Samples
☐ Field Filtered
☐ Lab to Filter

[1] Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] Container Codes:
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Comments: PLEASE FORWARD RESULTS TO: JHERRMANN@TDKENGINEERING.COM
CAT B DELIVERABLES PACKAGE

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time:	Received by: (signature)	Date/Time:
	12/5/23; 1:40 PM	Jessica Hamlet	12/5/23; 1:48 PM
Relinquished by: (signature)	Date/Time:	Received by: (signature)	Date/Time:
	12/5/23; 2:24 PM	PMC	12/5 1430
Relinquished by: (signature)	Date/Time:	Received by: (signature)	Date/Time:
PMC	12/5 1700		
Relinquished by: (signature)	Date/Time:	Received by: (signature)	Date/Time:
		2.9 12/6/23	1000

Program & Regulatory Information
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375

Deliverables
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Other
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-ELON-0001 v07_Sample Receiving Checklist
	Effective Date: 07/13/2023

Log In Back-Sheet

Client Syracuse Sand & Gravel

Project 734006

MCP/RCP Required NC

Deliverable Package Requirement CAT B

Location NY

PWSID# (When Applicable) NA

Arrival Method:

Courier ☑ Fed Ex ☐ Walk In ☐ Other ☐

Received By / Date / Time ER 12/6/23 1000

Back-Sheet By / Date / Time ER 12/6/23 1856

Temperature Method Gun # 52.4

Temp < 6° C Actual Temperature 2.9

Rush Samples: Yes / (No) Notify

Short Hold: Yes / (No) Notify

Notes regarding Samples/COC outside of SOP:

Login Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy) Any False statement will be brought to the attention of the Client – True or False

	True	False
Received on Ice	☑	☐
Received in Cooler	☑	☐
Custody Seal: DATE TIME	☐	☑
COC Relinquished	☑	☐
COC/Samples Labels Agree	☑	☐
All Samples in Good Condition	☑	☐
Samples Received within Holding Time	☑	☐
Is there enough Volume	☑	☐
Proper Media/Container Used	☑	☐
Splitting Samples Required	☐	☑
MS/MSD	☑	☐
Trip Blanks	☑	☐
Lab to Filters	☐	☑
COC Legible	☑	☐

COC Included: (Check all included)

Client ☑ Analysis ☑ Sampler Name ☐

Project ☑ IDs ☑ Collection Date/Time ☑

All Samples Proper pH: N/A ☑ ☐

Additional Container Notes

Note: West Virginia requires all samples to have their temperature taken. Note any outliers.

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-ELON-0001 v07_Sample Receiving Checklist
	Effective Date: 07/13/2023

Sample			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
16oz Amb/Clear	Soils Jars (Circle Amb/Clear)																					
8oz Amb/Clear			1	2		1																
4oz Amb/Clear																						
2oz Amb/Clear			1	2		1																
Unpreserved	Ambers	1 Liter																				
HCL																						
Sulfuric																						
Sulfuric		250mL																				
Phosphoric																						
HCl																						
Unpreserved		100mL																				
Unpreserved	Plastics	1 Liter																				
Sulfuric																						
Unpreserved		500mL																				
Sulfuric																						
Unpreserved		250mL																				
Trizma																						
Sulfuric																						
Nitric																						
NaOH																						
Ammonium Acetate																						
NaOH/Zinc																						
Unpreserved	VOA Vials																					
HCl					3																	
MeOH			1	2		1																
D.I. Water																						
BiSulfate			2	1		3																
Col/Bact	Other / Fill in																					

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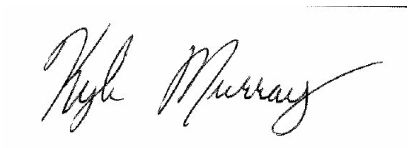
January 16, 2024

Richard Riccelli
Syracuse Sand & Gravel, LLC
6131 E Taft Road
North Syracuse, NY 13212

Project Location: NY
Client Job Number:
Project Number: 00143967
Laboratory Work Order Number: 23L0876

Enclosed are results of analyses for samples as received by the laboratory on December 6, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kyle A. Murray
Project Manager

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Syracuse Sand & Gravel, LLC
6131 E Taft Road
North Syracuse, NY 13212
ATTN: Richard Riccelli

REPORT DATE: 1/16/2024

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 00143967

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23L0876

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-2 (2)	23L0876-01	Soil		Draft Method 1633	
				SM 2540G	
SB-4 (4)	23L0876-02	Soil		Draft Method 1633	
				SM 2540G	
Duplicate	23L0876-03	Soil		Draft Method 1633	
				SM 2540G	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

Draft Method 1633

Qualifications:

PF-22

Qualifier ion ratio >150% of associated calibration. Detection is suspect.

Analyte & Samples(s) Qualified:

Perfluoropentanoic acid (PFPeA)
23L0876-02RE1[SB-4 (4)]

PF-23

Qualifier ion ratio <50% of associated calibration. Detection is suspect.

Analyte & Samples(s) Qualified:

Perfluorobutanesulfonic acid (PFBS)
23L0876-01RE1[MW-2 (2)]

Perfluorohexanoic acid (PFHxA)
23L0876-01RE1[MW-2 (2)]

S-29

Extracted Internal Standard is outside of control limits.

Analyte & Samples(s) Qualified:

13C2-PFTeDA
S099085-CCB3, S099216-CCV3

D7-NMeFOSE
S099216-CCV3

D9-NEtFOSE
S099216-CCV3

N-ethylperfluorooctanesulfonamidoethanol (NEtFO
S099216-CCV3

N-methylperfluorooctanesulfonamidoethanol(NMeF
S099216-CCV3

Perfluorotetradecanoic acid (PFTeDA)
S099085-CCB3, S099216-CCV3

Z-01

Analyte detected in method blank >1/3 MRL

Analyte & Samples(s) Qualified:

Perfluorobutanesulfonic acid (PFBS)
B361792-BLK1

SM 2540G

Qualifications:

H-06

Sample was extracted past the recommended holding time.

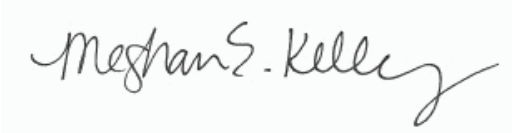
Analyte & Samples(s) Qualified:

% Solids
23L0876-01[MW-2 (2)], 23L0876-02[SB-4 (4)], 23L0876-03[Duplicate]

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The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Meghan E. Kelley
Reporting Specialist

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Project Location: NY | Sample Description: | Work Order: 23L0876

Date Received: 12/6/2023

Field Sample #: MW-2 (2) | Sampled: 12/1/2023 08:30

Sample ID: 23L0876-01

Sample Matrix: Soil

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	0.79	0.14	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
Perfluoropentanoic acid (PFPeA)	ND	0.39	0.026	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
Perfluorohexanoic acid (PFHxA)	0.025	0.20	0.013	µg/kg dry	1	PF-23, J	Draft Method 1633	1/12/24	1/15/24 18:29	AMS
Perfluoroheptanoic acid (PFHpA)	ND	0.20	0.015	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
Perfluorooctanoic acid (PFOA)	0.032	0.20	0.028	µg/kg dry	1	J	Draft Method 1633	1/12/24	1/15/24 18:29	AMS
Perfluorononanoic acid (PFNA)	ND	0.20	0.026	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
Perfluorodecanoic acid (PFDA)	ND	0.20	0.018	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.20	0.020	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.20	0.021	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.20	0.027	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.20	0.018	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
Perfluorobutanesulfonic acid (PFBS)	0.10	0.20	0.019	µg/kg dry	1	PF-23, J	Draft Method 1633	1/12/24	1/15/24 18:29	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.20	0.029	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
Perfluorohexanesulfonic acid (PFHxS)	0.046	0.20	0.025	µg/kg dry	1	J	Draft Method 1633	1/12/24	1/15/24 18:29	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.20	0.022	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
Perfluorooctanesulfonic acid (PFOS)	0.48	0.20	0.035	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.20	0.029	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.20	0.044	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.20	0.021	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	0.79	0.073	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	0.79	0.080	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	0.79	0.073	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.20	0.10	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.20	0.020	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.20	0.027	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.20	0.027	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.20	0.041	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	2.0	0.15	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	2.0	0.17	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.79	0.064	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.79	0.080	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
9Cl-PF3ONS (F53B Minor)	ND	0.79	0.076	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
11Cl-PF3OUdS (F53B Major)	ND	0.79	0.10	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	2.0	0.17	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	9.8	1.2	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	9.8	0.96	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	0.39	0.020	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	0.39	0.041	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS

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Project Location: NY | Sample Description: | Work Order: 23L0876

Date Received: 12/6/2023

Field Sample #: MW-2 (2) | Sampled: 12/1/2023 08:30

Sample ID: 23L0876-01

Sample Matrix: Soil

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	0.39	0.030	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.39	0.040	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:29	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	99.5	10-130		1/15/24 18:29
13C5-PFPeA	92.1	35-150		1/15/24 18:29
13C5-PFHxA	100	55-150		1/15/24 18:29
13C4-PFHpA	101	55-150		1/15/24 18:29
13C8-PFOA	96.4	60-140		1/15/24 18:29
13C9-PFNA	93.7	55-140		1/15/24 18:29
13C6-PFDA	99.3	50-140		1/15/24 18:29
13C7-PFUnA	104	30-140		1/15/24 18:29
13C2-PFDoA	118	10-150		1/15/24 18:29
13C2-PFTeDA	121	10-130		1/15/24 18:29
13C3-PFBS	95.0	55-150		1/15/24 18:29
13C3-PFHxS	98.9	55-150		1/15/24 18:29
13C8-PFOS	98.0	45-140		1/15/24 18:29
13C2-4:2FTS	97.1	60-200		1/15/24 18:29
13C2-6:2FTS	94.4	60-200		1/15/24 18:29
13C2-8:2FTS	95.5	50-200		1/15/24 18:29
13C8-PFOSA	100	30-130		1/15/24 18:29
D3-NMeFOSA	68.5	15-130		1/15/24 18:29
D5-NEtFOSA	58.3	10-130		1/15/24 18:29
D3-NMeFOSAA	140	45-200		1/15/24 18:29
D5-NEtFOSAA	149	10-200		1/15/24 18:29
D7-NMeFOSE	92.9	10-150		1/15/24 18:29
D9-NEtFOSE	85.5	10-150		1/15/24 18:29
13C3-HFPO-DA	94.8	25-160		1/15/24 18:29

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Project Location: NY | Sample Description: | Work Order: 23L0876

Date Received: 12/6/2023

Field Sample #: MW-2 (2) | Sampled: 12/1/2023 08:30

Sample ID: 23L0876-01

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	83.0		% Wt	1	H-06	SM 2540G	12/19/23	12/19/23 8:05	DV

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Project Location: NY | Sample Description: | Work Order: 23L0876

Date Received: 12/6/2023

Field Sample #: SB-4 (4) | Sampled: 12/4/2023 09:20

Sample ID: 23L0876-02

Sample Matrix: Soil

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	0.24	0.79	0.14	µg/kg dry	1	J	Draft Method 1633	1/12/24	1/15/24 18:44	AMS
Perfluoropentanoic acid (PFPeA)	0.045	0.39	0.026	µg/kg dry	1	PF-22, J	Draft Method 1633	1/12/24	1/15/24 18:44	AMS
Perfluorohexanoic acid (PFHxA)	0.047	0.20	0.013	µg/kg dry	1	J	Draft Method 1633	1/12/24	1/15/24 18:44	AMS
Perfluoroheptanoic acid (PFHpA)	0.090	0.20	0.015	µg/kg dry	1	J	Draft Method 1633	1/12/24	1/15/24 18:44	AMS
Perfluorooctanoic acid (PFOA)	0.15	0.20	0.029	µg/kg dry	1	J	Draft Method 1633	1/12/24	1/15/24 18:44	AMS
Perfluorononanoic acid (PFNA)	0.19	0.20	0.026	µg/kg dry	1	J	Draft Method 1633	1/12/24	1/15/24 18:44	AMS
Perfluorodecanoic acid (PFDA)	0.10	0.20	0.018	µg/kg dry	1	J	Draft Method 1633	1/12/24	1/15/24 18:44	AMS
Perfluoroundecanoic acid (PFUnA)	0.14	0.20	0.020	µg/kg dry	1	J	Draft Method 1633	1/12/24	1/15/24 18:44	AMS
Perfluorododecanoic acid (PFDoA)	0.043	0.20	0.021	µg/kg dry	1	J	Draft Method 1633	1/12/24	1/15/24 18:44	AMS
Perfluorotridecanoic acid (PFTrDA)	0.037	0.20	0.027	µg/kg dry	1	J	Draft Method 1633	1/12/24	1/15/24 18:44	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.20	0.018	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	0.20	0.020	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.20	0.029	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	0.20	0.025	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.20	0.022	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS
Perfluorooctanesulfonic acid (PFOS)	0.66	0.20	0.035	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.20	0.029	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.20	0.044	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.20	0.021	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	0.79	0.074	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	0.79	0.081	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	0.79	0.073	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.20	0.10	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.20	0.020	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.20	0.027	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.20	0.028	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.20	0.041	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	2.0	0.15	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	2.0	0.17	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.79	0.064	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.79	0.080	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS
9Cl-PF3ONS (F53B Minor)	ND	0.79	0.076	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS
11Cl-PF3OUdS (F53B Major)	ND	0.79	0.10	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	2.0	0.17	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	9.8	1.2	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	9.8	0.96	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	0.39	0.020	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	0.39	0.041	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS

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Project Location: NY | Sample Description: | Work Order: 23L0876

Date Received: 12/6/2023

Field Sample #: SB-4 (4) | Sampled: 12/4/2023 09:20

Sample ID: 23L0876-02

Sample Matrix: Soil

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	0.39	0.030	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.39	0.040	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 18:44	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	97.0	10-130		1/15/24 18:44
13C5-PFPeA	91.1	35-150		1/15/24 18:44
13C5-PFHxA	97.8	55-150		1/15/24 18:44
13C4-PFHpA	98.4	55-150		1/15/24 18:44
13C8-PFOA	98.6	60-140		1/15/24 18:44
13C9-PFNA	93.8	55-140		1/15/24 18:44
13C6-PFDA	102	50-140		1/15/24 18:44
13C7-PFUnA	102	30-140		1/15/24 18:44
13C2-PFDoA	113	10-150		1/15/24 18:44
13C2-PFTeDA	109	10-130		1/15/24 18:44
13C3-PFBS	95.8	55-150		1/15/24 18:44
13C3-PFHxS	96.1	55-150		1/15/24 18:44
13C8-PFOS	92.9	45-140		1/15/24 18:44
13C2-4:2FTS	127	60-200		1/15/24 18:44
13C2-6:2FTS	101	60-200		1/15/24 18:44
13C2-8:2FTS	123	50-200		1/15/24 18:44
13C8-PFOSA	97.1	30-130		1/15/24 18:44
D3-NMeFOSA	59.0	15-130		1/15/24 18:44
D5-NEtFOSA	48.0	10-130		1/15/24 18:44
D3-NMeFOSAA	147	45-200		1/15/24 18:44
D5-NEtFOSAA	162	10-200		1/15/24 18:44
D7-NMeFOSE	90.9	10-150		1/15/24 18:44
D9-NEtFOSE	73.2	10-150		1/15/24 18:44
13C3-HFPO-DA	93.3	25-160		1/15/24 18:44

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Project Location: NY | Sample Description: | Work Order: 23L0876

Date Received: 12/6/2023

Field Sample #: SB-4 (4) | Sampled: 12/4/2023 09:20

Sample ID: 23L0876-02

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	57.9		% Wt	1	H-06	SM 2540G	12/19/23	12/19/23 8:05	DV

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Project Location: NY | Sample Description: | Work Order: 23L0876

Date Received: 12/6/2023

Field Sample #: Duplicate | Sampled: 12/4/2023 00:00

Sample ID: 23L0876-03

Sample Matrix: Soil

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	0.79	0.14	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
Perfluoropentanoic acid (PFPeA)	ND	0.40	0.026	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
Perfluorohexanoic acid (PFHxA)	ND	0.20	0.013	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
Perfluoroheptanoic acid (PFHpA)	ND	0.20	0.015	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
Perfluorooctanoic acid (PFOA)	ND	0.20	0.029	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
Perfluorononanoic acid (PFNA)	ND	0.20	0.026	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
Perfluorodecanoic acid (PFDA)	ND	0.20	0.018	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.20	0.020	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.20	0.022	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.20	0.027	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.20	0.018	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	0.20	0.020	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.20	0.029	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
Perfluorohexanesulfonic acid (PFHxS)	0.037	0.20	0.025	µg/kg dry	1	J	Draft Method 1633	1/12/24	1/15/24 19:00	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.20	0.022	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
Perfluorooctanesulfonic acid (PFOS)	0.55	0.20	0.035	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.20	0.030	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.20	0.044	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.20	0.021	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	0.79	0.074	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	0.79	0.081	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	0.79	0.073	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.20	0.10	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.20	0.020	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.20	0.028	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.20	0.028	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.20	0.041	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	2.0	0.15	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	2.0	0.17	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.79	0.065	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.79	0.080	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
9Cl-PF3ONS (F53B Minor)	ND	0.79	0.076	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
11Cl-PF3OUdS (F53B Major)	ND	0.79	0.10	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	2.0	0.17	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	9.9	1.2	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	9.9	0.97	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	0.40	0.020	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	0.40	0.041	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS

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Project Location: NY | Sample Description: | Work Order: 23L0876

Date Received: 12/6/2023

Field Sample #: Duplicate | Sampled: 12/4/2023 00:00

Sample ID: 23L0876-03

Sample Matrix: Soil

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	0.40	0.031	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.40	0.040	µg/kg dry	1		Draft Method 1633	1/12/24	1/15/24 19:00	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	89.4	10-130		1/15/24 19:00
13C5-PFPeA	80.4	35-150		1/15/24 19:00
13C5-PFHxA	86.5	55-150		1/15/24 19:00
13C4-PFHpA	86.7	55-150		1/15/24 19:00
13C8-PFOA	86.3	60-140		1/15/24 19:00
13C9-PFNA	86.9	55-140		1/15/24 19:00
13C6-PFDA	90.3	50-140		1/15/24 19:00
13C7-PFUnA	93.7	30-140		1/15/24 19:00
13C2-PFDoA	106	10-150		1/15/24 19:00
13C2-PFTeDA	107	10-130		1/15/24 19:00
13C3-PFBS	87.2	55-150		1/15/24 19:00
13C3-PFHxS	89.5	55-150		1/15/24 19:00
13C8-PFOS	89.9	45-140		1/15/24 19:00
13C2-4:2FTS	90.7	60-200		1/15/24 19:00
13C2-6:2FTS	89.0	60-200		1/15/24 19:00
13C2-8:2FTS	94.3	50-200		1/15/24 19:00
13C8-PFOSA	91.5	30-130		1/15/24 19:00
D3-NMeFOSA	25.8	15-130		1/15/24 19:00
D5-NEtFOSA	16.3	10-130		1/15/24 19:00
D3-NMeFOSAA	129	45-200		1/15/24 19:00
D5-NEtFOSAA	143	10-200		1/15/24 19:00
D7-NMeFOSE	79.6	10-150		1/15/24 19:00
D9-NEtFOSE	68.2	10-150		1/15/24 19:00
13C3-HFPO-DA	84.7	25-160		1/15/24 19:00

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Project Location: NY | Sample Description: | Work Order: 23L0876

Date Received: 12/6/2023

Field Sample #: Duplicate | Sampled: 12/4/2023 00:00

Sample ID: 23L0876-03

Sample Matrix: Soil

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	84.0		% Wt	1	H-06	SM 2540G	12/19/23	12/19/23 8:05	DV

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Sample Extraction Data

Prep Method:Draft Method 1633 **Analytical Method:Draft Method 1633**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L0876-01RE1 [MW-2 (2)]	B363113	6.14	5.00	01/12/24
23L0876-02RE1 [SB-4 (4)]	B363113	8.78	5.00	01/12/24
23L0876-03RE1 [Duplicate]	B363113	6.03	5.00	01/12/24

Prep Method:% Solids **Analytical Method:SM 2540G**

Lab Number [Field ID]	Batch	Date
23L0876-01 [MW-2 (2)]	B361144	12/19/23
23L0876-02 [SB-4 (4)]	B361144	12/19/23
23L0876-03 [Duplicate]	B361144	12/19/23

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361792 - Draft Method 1633										
Blank (B361792-BLK1)				Prepared: 01/04/24 Analyzed: 01/09/24						
Perfluorobutanoic acid (PFBA)	ND	0.79	µg/kg wet							
Perfluoropentanoic acid (PFPeA)	ND	0.39	µg/kg wet							
Perfluorohexanoic acid (PFHxA)	ND	0.20	µg/kg wet							
Perfluoroheptanoic acid (PFHpA)	ND	0.20	µg/kg wet							
Perfluorooctanoic acid (PFOA)	ND	0.20	µg/kg wet							
Perfluorononanoic acid (PFNA)	ND	0.20	µg/kg wet							
Perfluorodecanoic acid (PFDA)	ND	0.20	µg/kg wet							
Perfluoroundecanoic acid (PFUnA)	ND	0.20	µg/kg wet							
Perfluorododecanoic acid (PFDoA)	ND	0.20	µg/kg wet							
Perfluorotridecanoic acid (PFTrDA)	ND	0.20	µg/kg wet							
Perfluorotetradecanoic acid (PFTeDA)	ND	0.20	µg/kg wet							
Perfluorobutanesulfonic acid (PFBS)	0.11	0.20	µg/kg wet							Z-01, J
Perfluoropentanesulfonic acid (PFPeS)	ND	0.20	µg/kg wet							
Perfluorohexanesulfonic acid (PFHxS)	ND	0.20	µg/kg wet							
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.20	µg/kg wet							
Perfluorooctanesulfonic acid (PFOS)	ND	0.20	µg/kg wet							
Perfluorononanesulfonic acid (PFNS)	ND	0.20	µg/kg wet							
Perfluorodecanesulfonic acid (PFDS)	ND	0.20	µg/kg wet							
Perfluorododecanesulfonic acid (PFDoS)	ND	0.20	µg/kg wet							
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	0.79	µg/kg wet							
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	0.79	µg/kg wet							
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	0.79	µg/kg wet							
Perfluorooctanesulfonamide (PFOSA)	ND	0.20	µg/kg wet							
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.20	µg/kg wet							
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.20	µg/kg wet							
N-MeFOSAA (NMeFOSAA)	ND	0.20	µg/kg wet							
N-EtFOSAA (NEtFOSAA)	ND	0.20	µg/kg wet							
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	2.0	µg/kg wet							
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	2.0	µg/kg wet							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.79	µg/kg wet							
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.79	µg/kg wet							
9Cl-PF3ONS (F53B Minor)	ND	0.79	µg/kg wet							
11Cl-PF3OUdS (F53B Major)	ND	0.79	µg/kg wet							
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	2.0	µg/kg wet							
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	9.8	µg/kg wet							
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	9.8	µg/kg wet							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	0.39	µg/kg wet							
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	0.39	µg/kg wet							
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	0.39	µg/kg wet							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.39	µg/kg wet							
Surrogate: 13C4-PFBA	*9.02*		µg/kg wet	9.83		91.7	10-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361792 - Draft Method 1633										
Blank (B361792-BLK1)				Prepared: 01/04/24 Analyzed: 01/09/24						
Surrogate: 13C5-PFPeA	*4.35*		µg/kg wet	4.92		88.6	35-150			
Surrogate: 13C5-PFHxA	*2.23*		µg/kg wet	2.46		90.6	55-150			
Surrogate: 13C4-PFHpA	*2.22*		µg/kg wet	2.46		90.3	55-150			
Surrogate: 13C8-PFOA	*2.31*		µg/kg wet	2.46		93.8	60-140			
Surrogate: 13C9-PFNA	*1.10*		µg/kg wet	1.23		89.5	55-140			
Surrogate: 13C6-PFDA	*1.13*		µg/kg wet	1.23		91.8	50-140			
Surrogate: 13C7-PFUnA	*1.12*		µg/kg wet	1.23		91.4	30-140			
Surrogate: 13C2-PFDoA	*1.15*		µg/kg wet	1.23		93.3	10-150			
Surrogate: 13C2-PFTeDA	*1.15*		µg/kg wet	1.23		93.6	10-130			
Surrogate: 13C3-PFBS	*2.20*		µg/kg wet	2.46		89.3	55-150			
Surrogate: 13C3-PFHxS	*2.22*		µg/kg wet	2.46		90.3	55-150			
Surrogate: 13C8-PFOS	*2.18*		µg/kg wet	2.46		88.5	45-140			
Surrogate: 13C2-4:2FTS	*4.48*		µg/kg wet	4.92		91.1	60-200			
Surrogate: 13C2-6:2FTS	*4.18*		µg/kg wet	4.92		85.1	60-200			
Surrogate: 13C2-8:2FTS	*4.02*		µg/kg wet	4.92		81.8	50-200			
Surrogate: 13C8-PFOSA	*2.11*		µg/kg wet	2.46		85.9	30-130			
Surrogate: D3-NMeFOSA	*1.79*		µg/kg wet	2.46		73.0	15-130			
Surrogate: D5-NEtFOSA	*1.70*		µg/kg wet	2.46		69.3	10-130			
Surrogate: D3-NMeFOSAA	*4.74*		µg/kg wet	4.92		96.5	45-200			
Surrogate: D5-NEtFOSAA	*4.74*		µg/kg wet	4.92		96.4	10-200			
Surrogate: D7-NMeFOSE	*23.0*		µg/kg wet	24.6		93.6	10-150			
Surrogate: D9-NEtFOSE	*23.1*		µg/kg wet	24.6		93.8	10-150			
Surrogate: 13C3-HFPO-DA	*8.95*		µg/kg wet	9.83		91.1	25-160			
Batch B363113 - Draft Method 1633										
Blank (B363113-BLK1)				Prepared: 01/12/24 Analyzed: 01/15/24						
Perfluorobutanoic acid (PFBA)	ND	0.80	µg/kg wet							
Perfluoropentanoic acid (PFPeA)	ND	0.40	µg/kg wet							
Perfluorohexanoic acid (PFHxA)	ND	0.20	µg/kg wet							
Perfluoroheptanoic acid (PFHpA)	ND	0.20	µg/kg wet							
Perfluorooctanoic acid (PFOA)	ND	0.20	µg/kg wet							
Perfluorononanoic acid (PFNA)	ND	0.20	µg/kg wet							
Perfluorodecanoic acid (PFDA)	ND	0.20	µg/kg wet							
Perfluoroundecanoic acid (PFUnA)	ND	0.20	µg/kg wet							
Perfluorododecanoic acid (PFDoA)	ND	0.20	µg/kg wet							
Perfluorotridecanoic acid (PFTrDA)	ND	0.20	µg/kg wet							
Perfluorotetradecanoic acid (PFTeDA)	ND	0.20	µg/kg wet							
Perfluorobutanesulfonic acid (PFBS)	0.038	0.20	µg/kg wet							J
Perfluoropentanesulfonic acid (PFPeS)	ND	0.20	µg/kg wet							
Perfluorohexanesulfonic acid (PFHxS)	ND	0.20	µg/kg wet							
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.20	µg/kg wet							
Perfluorooctanesulfonic acid (PFOS)	ND	0.20	µg/kg wet							
Perfluorononanesulfonic acid (PFNS)	ND	0.20	µg/kg wet							
Perfluorodecanesulfonic acid (PFDS)	ND	0.20	µg/kg wet							
Perfluorododecanesulfonic acid (PFDoS)	ND	0.20	µg/kg wet							
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	0.80	µg/kg wet							
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	0.80	µg/kg wet							
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	0.80	µg/kg wet							
Perfluorooctanesulfonamide (PFOSA)	ND	0.20	µg/kg wet							

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B363113 - Draft Method 1633										
Blank (B363113-BLK1)				Prepared: 01/12/24 Analyzed: 01/15/24						
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.20	µg/kg wet							
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.20	µg/kg wet							
N-MeFOSAA (NMeFOSAA)	ND	0.20	µg/kg wet							
N-EtFOSAA (NEtFOSAA)	ND	0.20	µg/kg wet							
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	2.0	µg/kg wet							
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	2.0	µg/kg wet							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.80	µg/kg wet							
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.80	µg/kg wet							
9Cl-PF3ONS (F53B Minor)	ND	0.80	µg/kg wet							
11Cl-PF3OUdS (F53B Major)	ND	0.80	µg/kg wet							
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	2.0	µg/kg wet							
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	10	µg/kg wet							
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	10	µg/kg wet							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	0.40	µg/kg wet							
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	0.40	µg/kg wet							
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	0.40	µg/kg wet							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.40	µg/kg wet							
Surrogate: 13C4-PFBA	*6.92*		µg/kg wet	9.96		69.4	10-130			
Surrogate: 13C5-PFPeA	*3.26*		µg/kg wet	4.98		65.5	35-150			
Surrogate: 13C5-PFHxA	*1.69*		µg/kg wet	2.49		67.9	55-150			
Surrogate: 13C4-PFHpA	*1.69*		µg/kg wet	2.49		67.8	55-150			
Surrogate: 13C8-PFOA	*1.71*		µg/kg wet	2.49		68.9	60-140			
Surrogate: 13C9-PFNA	*0.835*		µg/kg wet	1.25		67.1	55-140			
Surrogate: 13C6-PFDA	*0.854*		µg/kg wet	1.25		68.6	50-140			
Surrogate: 13C7-PFUnA	*0.833*		µg/kg wet	1.25		66.9	30-140			
Surrogate: 13C2-PFDoA	*0.856*		µg/kg wet	1.25		68.8	10-150			
Surrogate: 13C2-PFTeDA	*0.730*		µg/kg wet	1.25		58.6	10-130			
Surrogate: 13C3-PFBS	*1.80*		µg/kg wet	2.49		72.1	55-150			
Surrogate: 13C3-PFHxS	*1.77*		µg/kg wet	2.49		71.0	55-150			
Surrogate: 13C8-PFOS	*1.67*		µg/kg wet	2.49		67.1	45-140			
Surrogate: 13C2-4:2FTS	*3.51*		µg/kg wet	4.98		70.4	60-200			
Surrogate: 13C2-6:2FTS	*3.26*		µg/kg wet	4.98		65.4	60-200			
Surrogate: 13C2-8:2FTS	*3.08*		µg/kg wet	4.98		61.8	50-200			
Surrogate: 13C8-PFOSA	*1.71*		µg/kg wet	2.49		68.6	30-130			
Surrogate: D3-NMeFOSA	*1.27*		µg/kg wet	2.49		51.2	15-130			
Surrogate: D5-NEtFOSA	*1.22*		µg/kg wet	2.49		49.1	10-130			
Surrogate: D3-NMeFOSAA	*3.94*		µg/kg wet	4.98		79.1	45-200			
Surrogate: D5-NEtFOSAA	*3.65*		µg/kg wet	4.98		73.4	10-200			
Surrogate: D7-NMeFOSE	*14.8*		µg/kg wet	24.9		59.6	10-150			
Surrogate: D9-NEtFOSE	*14.5*		µg/kg wet	24.9		58.0	10-150			
Surrogate: 13C3-HFPO-DA	*6.68*		µg/kg wet	9.96		67.1	25-160			
LCS (B363113-BS1)				Prepared: 01/12/24 Analyzed: 01/15/24						
Perfluorobutanoic acid (PFBA)	6.79	0.80	µg/kg wet	9.59		70.8	58-148			

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QUALITY CONTROL

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B363113 - Draft Method 1633										
LCS (B363113-BS1)				Prepared: 01/12/24 Analyzed: 01/15/24						
Perfluoropentanoic acid (PFPeA)	3.40	0.40	µg/kg wet	4.80		70.9	54-152			
Perfluorohexanoic acid (PFHxA)	1.72	0.20	µg/kg wet	2.40		71.6	55-152			
Perfluoroheptanoic acid (PFHpA)	1.70	0.20	µg/kg wet	2.40		70.9	54-154			
Perfluorooctanoic acid (PFOA)	1.65	0.20	µg/kg wet	2.40		68.7	52-161			
Perfluorononanoic acid (PFNA)	1.74	0.20	µg/kg wet	2.40		72.6	59-149			
Perfluorodecanoic acid (PFDA)	1.71	0.20	µg/kg wet	2.40		71.3	52-147			
Perfluoroundecanoic acid (PFUnA)	1.72	0.20	µg/kg wet	2.40		71.7	48-159			
Perfluorododecanoic acid (PFDoA)	1.76	0.20	µg/kg wet	2.40		73.2	64-142			
Perfluorotridecanoic acid (PFTrDA)	1.51	0.20	µg/kg wet	2.40		63.1	49-148			
Perfluorotetradecanoic acid (PFTeDA)	1.77	0.20	µg/kg wet	2.40		73.7	47-161			
Perfluorobutanesulfonic acid (PFBS)	1.58	0.20	µg/kg wet	2.13		74.1	62-144			
Perfluoropentanesulfonic acid (PFPeS)	1.62	0.20	µg/kg wet	2.25		71.8	59-151			
Perfluorohexanesulfonic acid (PFHxS)	1.57	0.20	µg/kg wet	2.19		71.6	57-146			
Perfluoroheptanesulfonic acid (PFHpS)	1.67	0.20	µg/kg wet	2.28		73.1	55-152			
Perfluorooctanesulfonic acid (PFOS)	1.52	0.20	µg/kg wet	2.22		68.2	58-149			
Perfluorononanesulfonic acid (PFNS)	1.58	0.20	µg/kg wet	2.31		68.6	52-148			
Perfluorodecanesulfonic acid (PFDS)	1.59	0.20	µg/kg wet	2.31		68.7	51-147			
Perfluorododecanesulfonic acid (PFDoS)	1.47	0.20	µg/kg wet	2.33		63.3	36-145			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	6.62	0.80	µg/kg wet	8.99		73.6	67-146			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	6.75	0.80	µg/kg wet	9.11		74.1	61-151			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	6.79	0.80	µg/kg wet	9.23		73.5	63-152			
Perfluorooctanesulfonamide (PFOSA)	1.70	0.20	µg/kg wet	2.40		71.0	61-148			
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	1.69	0.20	µg/kg wet	2.40		70.6	63-145			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	1.73	0.20	µg/kg wet	2.40		71.9	65-139			
N-MeFOSAA (NMeFOSAA)	1.74	0.20	µg/kg wet	2.40		72.4	58-144			
N-EtFOSAA (NEtFOSAA)	1.68	0.20	µg/kg wet	2.40		70.2	59-146			
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	17.7	2.0	µg/kg wet	24.0		73.7	71-136			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	17.7	2.0	µg/kg wet	24.0		73.7	69-137			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	7.66	0.80	µg/kg wet	9.59		79.8	63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	7.18	0.80	µg/kg wet	9.05		79.3	68-146			
9Cl-PF3ONS (F53B Minor)	6.83	0.80	µg/kg wet	8.99		76.0	56-156			
11Cl-PF3OUdS (F53B Major)	6.71	0.80	µg/kg wet	9.05		74.1	46-156			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	17.6	2.0	µg/kg wet	24.0		73.4	62-129			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	89.1	10	µg/kg wet	120		74.3	63-134			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	88.3	10	µg/kg wet	120		73.6	50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.41	0.40	µg/kg wet	4.27		80.0	56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.84	0.40	µg/kg wet	4.80		80.0	51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.86	0.40	µg/kg wet	4.80		80.4	55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.49	0.40	µg/kg wet	4.80		72.7	48-161			
Surrogate: 13C4-PFBA	*9.78*		µg/kg wet	9.99		97.8	10-130			
Surrogate: 13C5-PFPeA	*4.70*		µg/kg wet	5.00		94.1	35-150			

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B363113 - Draft Method 1633										
LCS (B363113-BS1)				Prepared: 01/12/24 Analyzed: 01/15/24						
Surrogate: 13C5-PFHxA	*2.43*		µg/kg wet	2.50		97.2	55-150			
Surrogate: 13C4-PFHpA	*2.44*		µg/kg wet	2.50		97.5	55-150			
Surrogate: 13C8-PFOA	*2.36*		µg/kg wet	2.50		94.4	60-140			
Surrogate: 13C9-PFNA	*1.20*		µg/kg wet	1.25		96.0	55-140			
Surrogate: 13C6-PFDA	*1.23*		µg/kg wet	1.25		98.8	50-140			
Surrogate: 13C7-PFUnA	*1.18*		µg/kg wet	1.25		94.7	30-140			
Surrogate: 13C2-PFDoA	*1.24*		µg/kg wet	1.25		99.1	10-150			
Surrogate: 13C2-PFTeDA	*1.02*		µg/kg wet	1.25		81.3	10-130			
Surrogate: 13C3-PFBS	*2.51*		µg/kg wet	2.50		100	55-150			
Surrogate: 13C3-PFHxS	*2.46*		µg/kg wet	2.50		98.4	55-150			
Surrogate: 13C8-PFOS	*2.34*		µg/kg wet	2.50		93.8	45-140			
Surrogate: 13C2-4:2FTS	*5.16*		µg/kg wet	5.00		103	60-200			
Surrogate: 13C2-6:2FTS	*4.91*		µg/kg wet	5.00		98.3	60-200			
Surrogate: 13C2-8:2FTS	*4.31*		µg/kg wet	5.00		86.3	50-200			
Surrogate: 13C8-PFOSA	*2.40*		µg/kg wet	2.50		96.3	30-130			
Surrogate: D3-NMeFOSA	*1.97*		µg/kg wet	2.50		79.0	15-130			
Surrogate: D5-NEtFOSA	*1.90*		µg/kg wet	2.50		76.2	10-130			
Surrogate: D3-NMeFOSAA	*5.47*		µg/kg wet	5.00		109	45-200			
Surrogate: D5-NEtFOSAA	*5.41*		µg/kg wet	5.00		108	10-200			
Surrogate: D7-NMeFOSE	*21.8*		µg/kg wet	25.0		87.3	10-150			
Surrogate: D9-NEtFOSE	*21.0*		µg/kg wet	25.0		83.9	10-150			
Surrogate: 13C3-HFPO-DA	*9.48*		µg/kg wet	9.99		94.8	25-160			
MRL Check (B363113-MRL1)				Prepared: 01/12/24 Analyzed: 01/15/24						
Perfluorobutanoic acid (PFBA)	0.655	0.77	µg/kg wet	0.770		85.0	44-157			J
Perfluoropentanoic acid (PFPeA)	0.326	0.39	µg/kg wet	0.385		84.7	57-148			J
Perfluorohexanoic acid (PFHxA)	0.166	0.19	µg/kg wet	0.193		86.1	62-149			J
Perfluoroheptanoic acid (PFHpA)	0.162	0.19	µg/kg wet	0.193		84.2	56-150			J
Perfluorooctanoic acid (PFOA)	0.147	0.19	µg/kg wet	0.193		76.4	57-161			J
Perfluorononanoic acid (PFNA)	0.161	0.19	µg/kg wet	0.193		83.7	53-157			J
Perfluorodecanoic acid (PFDA)	0.145	0.19	µg/kg wet	0.193		75.5	43-158			J
Perfluoroundecanoic acid (PFUnA)	0.154	0.19	µg/kg wet	0.193		80.1	50-155			J
Perfluorododecanoic acid (PFDoA)	0.144	0.19	µg/kg wet	0.193		74.5	60-141			J
Perfluorotridecanoic acid (PFTrDA)	0.145	0.19	µg/kg wet	0.193		75.1	52-140			J
Perfluorotetradecanoic acid (PFTeDA)	0.162	0.19	µg/kg wet	0.193		84.0	52-156			J
Perfluorobutanesulfonic acid (PFBS)	0.153	0.19	µg/kg wet	0.171		89.4	63-145			J
Perfluoropentanesulfonic acid (PFPeS)	0.151	0.19	µg/kg wet	0.181		83.5	58-144			J
Perfluorohexanesulfonic acid (PFHxS)	0.168	0.19	µg/kg wet	0.176		95.4	44-158			J
Perfluoroheptanesulfonic acid (PFHpS)	0.145	0.19	µg/kg wet	0.183		79.0	51-150			J
Perfluorooctanesulfonic acid (PFOS)	0.157	0.19	µg/kg wet	0.179		88.0	43-162			J
Perfluorononanesulfonic acid (PFNS)	0.141	0.19	µg/kg wet	0.185		76.0	46-151			J
Perfluorodecanesulfonic acid (PFDS)	0.138	0.19	µg/kg wet	0.186		74.3	50-144			J
Perfluorododecanesulfonic acid (PFDoS)	0.145	0.19	µg/kg wet	0.187		77.8	30-138			J
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	0.567	0.77	µg/kg wet	0.722		78.5	52-158			J
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	0.673	0.77	µg/kg wet	0.732		91.9	48-158			J
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	0.592	0.77	µg/kg wet	0.742		79.9	46-165			J
Perfluorooctanesulfonamide (PFOSA)	0.162	0.19	µg/kg wet	0.193		84.3	47-163			J
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	0.148	0.19	µg/kg wet	0.193		76.8	54-155			J
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	0.155	0.19	µg/kg wet	0.193		80.4	49-156			J

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B363113 - Draft Method 1633										
MRL Check (B363113-MRL1)				Prepared: 01/12/24 Analyzed: 01/15/24						
N-MeFOSAA (NMeFOSAA)	0.176	0.19	µg/kg wet	0.193		91.1	32-160			J
N-EtFOSAA (NEtFOSAA)	0.159	0.19	µg/kg wet	0.193		82.5	51-154			J
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	1.54	1.9	µg/kg wet	1.93		80.1	56-151			J
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	1.67	1.9	µg/kg wet	1.93		86.5	60-147			J
Hexafluoropropylene oxide dimer acid (HFPO-DA)	0.789	0.77	µg/kg wet	0.770		102	58-154			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.737	0.77	µg/kg wet	0.727		101	61-148			J
9Cl-PF3ONS (F53B Minor)	0.694	0.77	µg/kg wet	0.722		96.1	44-167			J
11Cl-PF3OUdS (F53B Major)	0.681	0.77	µg/kg wet	0.727		93.7	36-158			J
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	1.56	1.9	µg/kg wet	1.93		81.1	32-161			J
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	8.01	9.6	µg/kg wet	9.63		83.2	39-156			J
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	7.77	9.6	µg/kg wet	9.63		80.7	36-149			J
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.339	0.39	µg/kg wet	0.343		98.8	56-144			J
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.377	0.39	µg/kg wet	0.385		97.8	48-150			J
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.386	0.39	µg/kg wet	0.385		100	49-154			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.361	0.39	µg/kg wet	0.385		93.8	47-160			J
Surrogate: 13C4-PFBA	*8.57*		µg/kg wet	9.63		89.0	10-130			
Surrogate: 13C5-PFPeA	*4.08*		µg/kg wet	4.82		84.7	35-150			
Surrogate: 13C5-PFHxA	*2.08*		µg/kg wet	2.41		86.4	55-150			
Surrogate: 13C4-PFHpA	*2.09*		µg/kg wet	2.41		86.8	55-150			
Surrogate: 13C8-PFOA	*2.13*		µg/kg wet	2.41		88.3	60-140			
Surrogate: 13C9-PFNA	*1.04*		µg/kg wet	1.20		86.5	55-140			
Surrogate: 13C6-PFDA	*1.04*		µg/kg wet	1.20		86.6	50-140			
Surrogate: 13C7-PFUnA	*1.02*		µg/kg wet	1.20		84.7	30-140			
Surrogate: 13C2-PFDoA	*1.08*		µg/kg wet	1.20		89.4	10-150			
Surrogate: 13C2-PFTeDA	*0.923*		µg/kg wet	1.20		76.7	10-130			
Surrogate: 13C3-PFBS	*2.11*		µg/kg wet	2.41		87.5	55-150			
Surrogate: 13C3-PFHxS	*2.08*		µg/kg wet	2.41		86.5	55-150			
Surrogate: 13C8-PFOS	*2.11*		µg/kg wet	2.41		87.4	45-140			
Surrogate: 13C2-4:2FTS	*4.15*		µg/kg wet	4.82		86.2	60-200			
Surrogate: 13C2-6:2FTS	*3.83*		µg/kg wet	4.82		79.6	60-200			
Surrogate: 13C2-8:2FTS	*3.52*		µg/kg wet	4.82		73.2	50-200			
Surrogate: 13C8-PFOSA	*2.11*		µg/kg wet	2.41		87.8	30-130			
Surrogate: D3-NMeFOSA	*1.65*		µg/kg wet	2.41		68.5	15-130			
Surrogate: D5-NEtFOSA	*1.58*		µg/kg wet	2.41		65.4	10-130			
Surrogate: D3-NMeFOSAA	*4.81*		µg/kg wet	4.82		100	45-200			
Surrogate: D5-NEtFOSAA	*4.68*		µg/kg wet	4.82		97.2	10-200			
Surrogate: D7-NMeFOSE	*19.8*		µg/kg wet	24.1		82.4	10-150			
Surrogate: D9-NEtFOSE	*18.3*		µg/kg wet	24.1		75.9	10-150			
Surrogate: 13C3-HFPO-DA	*8.38*		µg/kg wet	9.63		87.0	25-160			
Matrix Spike (B363113-MS2)		**Source: 23L0876-02RE1**		Prepared: 01/12/24 Analyzed: 01/15/24						
Perfluorobutanoic acid (PFBA)	8.17	0.79	µg/kg dry	9.48	0.243	83.6	58-148			
Perfluoropentanoic acid (PFPeA)	3.96	0.40	µg/kg dry	4.74	0.0454	82.5	54-152			
Perfluorohexanoic acid (PFHxA)	2.08	0.20	µg/kg dry	2.37	0.0470	86.0	55-152			
Perfluoroheptanoic acid (PFHpA)	2.15	0.20	µg/kg dry	2.37	0.0898	86.9	54-154			

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QUALITY CONTROL

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B363113 - Draft Method 1633										
Matrix Spike (B363113-MS2)	**Source: 23L0876-02RE1**			Prepared: 01/12/24 Analyzed: 01/15/24						
Perfluorooctanoic acid (PFOA)	2.21	0.20	µg/kg dry	2.37	0.152	86.7	52-161			
Perfluorononanoic acid (PFNA)	2.45	0.20	µg/kg dry	2.37	0.185	95.5	59-149			
Perfluorodecanoic acid (PFDA)	2.29	0.20	µg/kg dry	2.37	0.105	92.2	52-147			
Perfluoroundecanoic acid (PFUnA)	2.31	0.20	µg/kg dry	2.37	0.142	91.6	48-159			
Perfluorododecanoic acid (PFDoA)	2.10	0.20	µg/kg dry	2.37	0.0435	86.9	64-142			
Perfluorotridecanoic acid (PFTrDA)	1.88	0.20	µg/kg dry	2.37	0.0365	77.8	49-148			
Perfluorotetradecanoic acid (PFTeDA)	2.07	0.20	µg/kg dry	2.37	ND	87.2	47-161			
Perfluorobutanesulfonic acid (PFBS)	1.78	0.20	µg/kg dry	2.10	ND	84.6	62-144			
Perfluoropentanesulfonic acid (PFPeS)	1.80	0.20	µg/kg dry	2.23	ND	80.7	59-151			
Perfluorohexanesulfonic acid (PFHxS)	1.77	0.20	µg/kg dry	2.17	ND	81.7	57-146			
Perfluoroheptanesulfonic acid (PFHpS)	1.88	0.20	µg/kg dry	2.26	ND	83.4	55-152			
Perfluorooctanesulfonic acid (PFOS)	2.96	0.20	µg/kg dry	2.20	0.663	104	58-149			
Perfluorononanesulfonic acid (PFNS)	1.81	0.20	µg/kg dry	2.28	ND	79.3	52-148			
Perfluorodecanesulfonic acid (PFDS)	1.87	0.20	µg/kg dry	2.29	ND	81.8	51-147			
Perfluorododecanesulfonic acid (PFDoS)	1.15	0.20	µg/kg dry	2.30	ND	49.8	36-145			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	7.68	0.79	µg/kg dry	8.89	ND	86.5	67-146			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	7.73	0.79	µg/kg dry	9.01	ND	85.9	61-151			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	7.40	0.79	µg/kg dry	9.12	ND	81.1	63-152			
Perfluorooctanesulfonamide (PFOSA)	1.97	0.20	µg/kg dry	2.37	ND	83.3	61-148			
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	2.08	0.20	µg/kg dry	2.37	ND	87.9	63-145			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	2.08	0.20	µg/kg dry	2.37	ND	87.6	65-139			
N-MeFOSAA (NMeFOSAA)	1.92	0.20	µg/kg dry	2.37	ND	81.1	58-144			
N-EtFOSAA (NEtFOSAA)	1.94	0.20	µg/kg dry	2.37	ND	82.0	59-146			
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	19.1	2.0	µg/kg dry	23.7	ND	80.5	71-136			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	21.2	2.0	µg/kg dry	23.7	ND	89.6	69-137			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	8.46	0.79	µg/kg dry	9.48	ND	89.3	63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	8.55	0.79	µg/kg dry	8.95	ND	95.6	68-146			
9Cl-PF3ONS (F53B Minor)	8.60	0.79	µg/kg dry	8.89	ND	96.7	56-156			
11Cl-PF3OUdS (F53B Major)	8.93	0.79	µg/kg dry	8.95	ND	99.8	46-156			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	17.1	2.0	µg/kg dry	23.7	ND	72.3	62-129			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	86.1	9.9	µg/kg dry	119	ND	72.7	63-134			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	104	9.9	µg/kg dry	119	ND	87.8	50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	4.26	0.40	µg/kg dry	4.22	ND	101	56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.84	0.40	µg/kg dry	4.74	ND	102	51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.89	0.40	µg/kg dry	4.74	ND	103	55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.32	0.40	µg/kg dry	4.74	ND	91.2	48-161			
Surrogate: 13C4-PFBA	*8.31*		µg/kg dry	9.88		84.2	10-130			
Surrogate: 13C5-PFPeA	*3.84*		µg/kg dry	4.94		77.8	35-150			
Surrogate: 13C5-PFHxA	*2.03*		µg/kg dry	2.47		82.4	55-150			
Surrogate: 13C4-PFHpA	*2.14*		µg/kg dry	2.47		86.7	55-150			
Surrogate: 13C8-PFOA	*2.03*		µg/kg dry	2.47		82.3	60-140			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B363113 - Draft Method 1633										
Matrix Spike (B363113-MS2)	**Source: 23L0876-02RE1**			Prepared: 01/12/24 Analyzed: 01/15/24						
Surrogate: 13C9-PFNA	*0.993*		µg/kg dry	1.23		80.4	55-140			
Surrogate: 13C6-PFDA	*1.05*		µg/kg dry	1.23		85.0	50-140			
Surrogate: 13C7-PFUnA	*1.07*		µg/kg dry	1.23		86.9	30-140			
Surrogate: 13C2-PFDoA	*1.15*		µg/kg dry	1.23		92.8	10-150			
Surrogate: 13C2-PFTeDA	*0.745*		µg/kg dry	1.23		60.3	10-130			
Surrogate: 13C3-PFBS	*2.05*		µg/kg dry	2.47		82.9	55-150			
Surrogate: 13C3-PFHxS	*2.14*		µg/kg dry	2.47		86.5	55-150			
Surrogate: 13C8-PFOS	*2.04*		µg/kg dry	2.47		82.8	45-140			
Surrogate: 13C2-4:2FTS	*6.66*		µg/kg dry	4.94		135	60-200			
Surrogate: 13C2-6:2FTS	*6.68*		µg/kg dry	4.94		135	60-200			
Surrogate: 13C2-8:2FTS	*7.93*		µg/kg dry	4.94		161	50-200			
Surrogate: 13C8-PFOSA	*2.02*		µg/kg dry	2.47		81.9	30-130			
Surrogate: D3-NMeFOSA	*0.784*		µg/kg dry	2.47		31.8	15-130			
Surrogate: D5-NEtFOSA	*0.524*		µg/kg dry	2.47		21.2	10-130			
Surrogate: D3-NMeFOSAA	*6.96*		µg/kg dry	4.94		141	45-200			
Surrogate: D5-NEtFOSAA	*7.45*		µg/kg dry	4.94		151	10-200			
Surrogate: D7-NMeFOSE	*9.71*		µg/kg dry	24.7		39.3	10-150			
Surrogate: D9-NEtFOSE	*6.84*		µg/kg dry	24.7		27.7	10-150			
Surrogate: 13C3-HFPO-DA	*8.12*		µg/kg dry	9.88		82.3	25-160			
Matrix Spike Dup (B363113-MSD2)	**Source: 23L0876-02RE1**			Prepared: 01/12/24 Analyzed: 01/15/24						
Perfluorobutanoic acid (PFBA)	8.31	0.80	µg/kg dry	9.57	0.243	84.3	58-148	1.75	20	
Perfluoropentanoic acid (PFPeA)	4.12	0.40	µg/kg dry	4.79	0.0454	85.2	54-152	4.04	20	
Perfluorohexanoic acid (PFHxA)	2.12	0.20	µg/kg dry	2.39	0.0470	86.8	55-152	1.88	25	
Perfluoroheptanoic acid (PFHpA)	2.22	0.20	µg/kg dry	2.39	0.0898	89.2	54-154	3.41	25	
Perfluorooctanoic acid (PFOA)	2.29	0.20	µg/kg dry	2.39	0.152	89.3	52-161	3.69	25	
Perfluorononanoic acid (PFNA)	2.57	0.20	µg/kg dry	2.39	0.185	99.8	59-149	4.93	25	
Perfluorodecanoic acid (PFDA)	2.27	0.20	µg/kg dry	2.39	0.105	90.7	52-147	0.713	25	
Perfluoroundecanoic acid (PFUnA)	2.37	0.20	µg/kg dry	2.39	0.142	93.0	48-159	2.29	30	
Perfluorododecanoic acid (PFDoA)	2.21	0.20	µg/kg dry	2.39	0.0435	90.7	64-142	5.07	25	
Perfluorotridecanoic acid (PFTrDA)	1.95	0.20	µg/kg dry	2.39	0.0365	79.8	49-148	3.38	25	
Perfluorotetradecanoic acid (PFTeDA)	2.09	0.20	µg/kg dry	2.39	ND	87.4	47-161	1.26	25	
Perfluorobutanesulfonic acid (PFBS)	1.81	0.20	µg/kg dry	2.12	ND	85.2	62-144	1.59	20	
Perfluoropentanesulfonic acid (PFPeS)	1.86	0.20	µg/kg dry	2.25	ND	82.9	59-151	3.70	25	
Perfluorohexanesulfonic acid (PFHxS)	1.80	0.20	µg/kg dry	2.19	ND	82.0	57-146	1.37	25	
Perfluoroheptanesulfonic acid (PFHpS)	1.95	0.20	µg/kg dry	2.28	ND	85.3	55-152	3.30	25	
Perfluorooctanesulfonic acid (PFOS)	3.27	0.20	µg/kg dry	2.22	0.663	117	58-149	9.94	20	
Perfluorononanesulfonic acid (PFNS)	1.87	0.20	µg/kg dry	2.30	ND	81.0	52-148	3.06	25	
Perfluorodecanesulfonic acid (PFDS)	1.95	0.20	µg/kg dry	2.31	ND	84.3	51-147	3.86	25	
Perfluorododecanesulfonic acid (PFDoS)	1.27	0.20	µg/kg dry	2.32	ND	54.7	36-145	10.2	30	
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	8.25	0.80	µg/kg dry	8.97	ND	92.0	67-146	7.14	25	
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	7.95	0.80	µg/kg dry	9.09	ND	87.5	61-151	2.79	30	
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	7.80	0.80	µg/kg dry	9.21	ND	84.6	63-152	5.19	30	
Perfluorooctanesulfonamide (PFOSA)	2.02	0.20	µg/kg dry	2.39	ND	84.5	61-148	2.45	20	
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	2.01	0.20	µg/kg dry	2.39	ND	83.9	63-145	3.64	25	
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	2.05	0.20	µg/kg dry	2.39	ND	85.8	65-139	1.09	25	
N-MeFOSAA (NMeFOSAA)	1.96	0.20	µg/kg dry	2.39	ND	81.9	58-144	2.03	25	
N-EtFOSAA (NEtFOSAA)	2.10	0.20	µg/kg dry	2.39	ND	88.0	59-146	8.01	25	

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B363113 - Draft Method 1633										
Matrix Spike Dup (B363113-MSD2)	**Source: 23L0876-02RE1**			Prepared: 01/12/24 Analyzed: 01/15/24						
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	20.0	2.0	µg/kg dry	23.9	ND	83.4	71-136	4.56	20	
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	21.6	2.0	µg/kg dry	23.9	ND	90.2	69-137	1.64	25	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	9.16	0.80	µg/kg dry	9.57	ND	95.7	63-144	7.89	25	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	9.15	0.80	µg/kg dry	9.03	ND	101	68-146	6.76	20	
9Cl-PF3ONS (F53B Minor)	9.23	0.80	µg/kg dry	8.97	ND	103	56-156	7.06	30	
11Cl-PF3OUdS (F53B Major)	9.54	0.80	µg/kg dry	9.03	ND	106	46-156	6.56	35	
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	17.6	2.0	µg/kg dry	23.9	ND	73.6	62-129	2.67	20	
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	85.6	10	µg/kg dry	120	ND	71.5	63-134	0.608	20	
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	102	10	µg/kg dry	120	ND	84.9	50-138	2.33	25	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	4.28	0.40	µg/kg dry	4.26	ND	100	56-151	0.374	20	
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.66	0.40	µg/kg dry	4.79	ND	97.3	51-145	3.79	25	
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.97	0.40	µg/kg dry	4.79	ND	104	55-148	1.57	20	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.34	0.40	µg/kg dry	4.79	ND	90.7	48-161	0.429	35	
Surrogate: 13C4-PFBA	*7.90*		µg/kg dry	9.97		79.2	10-130			
Surrogate: 13C5-PFPeA	*3.82*		µg/kg dry	4.98		76.6	35-150			
Surrogate: 13C5-PFHxA	*2.07*		µg/kg dry	2.49		83.1	55-150			
Surrogate: 13C4-PFHpA	*2.15*		µg/kg dry	2.49		86.3	55-150			
Surrogate: 13C8-PFOA	*2.12*		µg/kg dry	2.49		85.2	60-140			
Surrogate: 13C9-PFNA	*1.02*		µg/kg dry	1.25		82.1	55-140			
Surrogate: 13C6-PFDA	*1.08*		µg/kg dry	1.25		86.6	50-140			
Surrogate: 13C7-PFUnA	*1.08*		µg/kg dry	1.25		86.6	30-140			
Surrogate: 13C2-PFDoA	*1.13*		µg/kg dry	1.25		90.5	10-150			
Surrogate: 13C2-PFTeDA	*0.762*		µg/kg dry	1.25		61.2	10-130			
Surrogate: 13C3-PFBS	*2.03*		µg/kg dry	2.49		81.3	55-150			
Surrogate: 13C3-PFHxS	*2.09*		µg/kg dry	2.49		83.8	55-150			
Surrogate: 13C8-PFOS	*2.08*		µg/kg dry	2.49		83.6	45-140			
Surrogate: 13C2-4:2FTS	*6.56*		µg/kg dry	4.98		132	60-200			
Surrogate: 13C2-6:2FTS	*5.85*		µg/kg dry	4.98		117	60-200			
Surrogate: 13C2-8:2FTS	*7.43*		µg/kg dry	4.98		149	50-200			
Surrogate: 13C8-PFOSA	*2.00*		µg/kg dry	2.49		80.1	30-130			
Surrogate: D3-NMeFOSA	*1.07*		µg/kg dry	2.49		43.1	15-130			
Surrogate: D5-NEtFOSA	*0.787*		µg/kg dry	2.49		31.6	10-130			
Surrogate: D3-NMeFOSAA	*7.40*		µg/kg dry	4.98		148	45-200			
Surrogate: D5-NEtFOSAA	*7.35*		µg/kg dry	4.98		147	10-200			
Surrogate: D7-NMeFOSE	*10.6*		µg/kg dry	24.9		42.7	10-150			
Surrogate: D9-NEtFOSE	*7.92*		µg/kg dry	24.9		31.8	10-150			
Surrogate: 13C3-HFPO-DA	*7.89*		µg/kg dry	9.97		79.2	25-160			

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361144 - % Solids										
Duplicate (B361144-DUP3)	**Source: 23L0876-02**		Prepared & Analyzed: 12/19/23							
% Solids	58.7		% Wt		57.9			1.32	10	

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
H-06	Sample was extracted past the recommended holding time.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
PF-22	Qualifier ion ratio >150% of associated calibration. Detection is suspect.
PF-23	Qualifier ion ratio <50% of associated calibration. Detection is suspect.
S-29	Extracted Internal Standard is outside of control limits.
Z-01	Analyte detected in method blank >1/3 MRL

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
Draft Method 1633 in Soil	
Perfluorobutanoic acid (PFBA)	NH-P,NY,PA,WV
Perfluoropentanoic acid (PFPeA)	NH-P,NY,PA,WV
Perfluorohexanoic acid (PFHxA)	NH-P,NY,PA,WV
Perfluoroheptanoic acid (PFHpA)	NH-P,NY,PA,WV
Perfluorooctanoic acid (PFOA)	NH-P,NY,PA,WV
Perfluorononanoic acid (PFNA)	NH-P,NY,PA,WV
Perfluorodecanoic acid (PFDA)	NH-P,NY,PA,WV
Perfluoroundecanoic acid (PFUnA)	NH-P,NY,PA,WV
Perfluorododecanoic acid (PFDoA)	NH-P,NY,PA,WV
Perfluorotridecanoic acid (PFTrDA)	NH-P,NY,PA,WV
Perfluorotetradecanoic acid (PFTeDA)	NH-P,PA,WV
Perfluorobutanesulfonic acid (PFBS)	NH-P,PA,WV
Perfluoropentanesulfonic acid (PFPeS)	NH-P,PA,WV
Perfluorohexanesulfonic acid (PFHxS)	NH-P,PA,WV
Perfluoroheptanesulfonic acid (PFHpS)	NH-P,PA,WV
Perfluorooctanesulfonic acid (PFOS)	NH-P,NY,PA,WV
Perfluorononanesulfonic acid (PFNS)	NH-P,PA,WV
Perfluorodecanesulfonic acid (PFDS)	NH-P,PA,WV
Perfluorododecanesulfonic acid (PFDoS)	NH-P,PA,WV
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	NH-P,PA,WV
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	NH-P,PA,WV
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	NH-P,NY,PA,WV
Perfluorooctanesulfonamide (PFOSA)	NH-P,PA,WV
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	NH-P,PA,WV
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	NH-P,PA,WV
N-MeFOSAA (NMeFOSAA)	NH-P,NY,PA,WV
N-EtFOSAA (NEtFOSAA)	NH-P,PA,WV
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	NH-P,PA,WV
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	NH-P,PA,WV
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P,PA,WV
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,PA,WV
9Cl-PF3ONS (F53B Minor)	NH-P,PA,WV
11Cl-PF3OUdS (F53B Major)	NH-P,PA,WV
3-Perfluoropropyl propanoic acid (FPrPA)(3:3FTCA)	NH-P,PA,WV
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	NH-P,PA,WV
3-Perfluoroheptyl propanoic acid (FHpPA)(7:3FTCA)	NH-P,PA,WV
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NH-P,PA,WV
Perfluoro-3-methoxypropanoic acid (PFMPA)	NH-P,PA,WV
Perfluoro-4-methoxybutanoic acid (PFMBA)	NH-P,PA,WV
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH-P,PA,WV
Draft Method 1633 in Water	
Perfluorobutanoic acid (PFBA)	NH-P,NY,PA,WV,CT
Perfluoropentanoic acid (PFPeA)	NH-P,NY,PA,WV,CT
Perfluorohexanoic acid (PFHxA)	NH-P,NY,PA,WV,CT
Perfluoroheptanoic acid (PFHpA)	NH-P,NY,PA,WV,CT
Perfluorooctanoic acid (PFOA)	NH-P,NY,PA,WV,CT

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
Draft Method 1633 in Water	
Perfluorononanoic acid (PFNA)	NH-P,NY,PA,WV,CT
Perfluorodecanoic acid (PFDA)	NH-P,NY,PA,WV,CT
Perfluoroundecanoic acid (PFUnA)	NH-P,NY,PA,WV,CT
Perfluorododecanoic acid (PFDoA)	NH-P,NY,PA,WV,CT
Perfluorotridecanoic acid (PFTrDA)	NH-P,NY,PA,WV,CT
Perfluorotetradecanoic acid (PFTeDA)	NH-P,NY,PA,WV,CT
Perfluorobutanesulfonic acid (PFBS)	NH-P,NY,PA,WV,CT
Perfluoropentanesulfonic acid (PFPeS)	NH-P,NY,PA,WV,CT
Perfluorohexanesulfonic acid (PFHxS)	NH-P,NY,PA,WV,CT
Perfluoroheptanesulfonic acid (PFHpS)	NH-P,NY,PA,WV,CT
Perfluorooctanesulfonic acid (PFOS)	NH-P,NY,PA,WV,CT
Perfluorononanesulfonic acid (PFNS)	NH-P,PA,WV,CT
Perfluorodecanesulfonic acid (PFDS)	NH-P,PA,WV,CT
Perfluorododecanesulfonic acid (PFDoS)	NH-P,PA,WV,CT
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	NH-P,PA,WV,CT
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	NH-P,NY,PA,WV,CT
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	NH-P,NY,PA,WV,CT
Perfluorooctanesulfonamide (PFOSA)	NH-P,PA,WV,CT
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	NH-P,PA,WV,CT
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	NH-P,PA,WV,CT
N-MeFOSAA (NMeFOSAA)	NH-P,NY,PA,WV,CT
N-EtFOSAA (NEtFOSAA)	NH-P,NY,PA,WV,CT
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	NH-P,PA,WV,CT
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	NH-P,PA,WV,CT
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P,NY,PA,WV,CT
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,NY,PA,WV,CT
9Cl-PF3ONS (F53B Minor)	NH-P,NY,PA,WV,CT
11Cl-PF3OUdS (F53B Major)	NH-P,NY,PA,WV,CT
3-Perfluoropropyl propanoic acid (FPrPA)(3:3FTCA)	NH-P,PA,WV,CT
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	NH-P,PA,WV,CT
3-Perfluoroheptyl propanoic acid (FHpPA)(7:3FTCA)	NH-P,PA,WV,CT
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NH-P,NY,PA,WV,CT
Perfluoro-3-methoxypropanoic acid (PFMPA)	NH-P,NY,PA,WV,CT
Perfluoro-4-methoxybutanoic acid (PFMBA)	NH-P,PA,WV,CT
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH-P,PA,WV,CT

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2024
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2024
WV	West Virginia DEP Division of Water and Waste Management	419	08/31/2024

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Fax: 612-607-6344
https://www.pacelabs.com/
1800 Elm Street SE
Minneapolis, MN 55414

CHAIN OF CUSTODY RECORD (New York)

23L0876

CLIENT: SYRACUSE SAND AND GRAVEL
Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/
Company Name: (ALPHA - OMEGA)
Address: P.O. Box 6418, Syr, NY 13212
Phone:
Project Name:
Project Location: ALPHA PORTLAND SITE DEC # 734006
Project Number: TDK PROJECT NO. 2021063
Project Manager: JOHN HERRMANN, TDK ENGINEERING
Pace Analytical Quote Name/Number: TDK ALPHA PORTLAND 00143967
Invoice Recipient:
Sampled By: JCH, TDK ENGINEERING

Requested Turnaround Time:
7-Day ☐ 10-Day ☑
Due Date:

Rush - Approval Required:
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery:
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #:

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	Conc Code	VOCs - TCL + TICs	SVOCs - TCL + TICs	Metals - TAL	PFAS	1,4-Dioxane	PCBs	VOCs - % Solids	# of Containers	[2] Preservation Code	[3] Container Code
	MW-2 (2')	12/1/23 8:30 Am			✓	S	A		✓	✓		✓	✓				
	" "	"	"		✓	S	A							✓			
1	" "	"	"		✓	S	P				✓						
	" "	"	"		✓	S	V	✓									
	SB-4 (4')	12/4/23	9:20 Am		✓	S	A		✓	✓		✓	✓				
	" "	"	"		✓	S	A							✓			
2	" "	"	"		✓	S	P				✓						
	" "	"	"		✓	S	V	✓									
	EQUIP. DECONN	12/4/23			✓	O*	V	✓									

ANALYSIS REQUESTED

Filtered Metals Samples:
☐ Field Filtered
☐ Lab to Filter

Orthophosphate Samples:
☐ Field Filtered
☐ Lab to Filter

Comments: PLEASE FORWARD RESULTS TO: JHERRMANN@TDKENGINEERING.COM
CAT B DELIVERABLES PACKAGE
* EQUIPMENT DECON WATER

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

[1] Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] Container Codes:
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

	Relinquished by: (signature)	Date/Time:
	[signature]	12/5/23; 1:40 Pm
	Received by: (signature)	Date/Time:
	Jessica Hawkes	12/5/23; 1:40 PM
	Relinquished by: (signature)	Date/Time:
	Jessica Hawkes	12/5/23; 2:24 PM
	Received by: (signature)	Date/Time:
	[signature] PACE	12/5 1430
	Relinquished by: (signature)	Date/Time:
	[signature] PACE	12/5 1700
	Received by: (signature)	Date/Time:
	[signature]	12/6/23 1000

Regulatory Requirements/Reporting Information:
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375

Deliverables:
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Other:
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

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Fax: 612-607-6344
https://www.pacelabs.com/
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Minneapolis, MN 55414

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

23L0576

Client: Syracuse Sand and Gravel (Alpha-Omega)
Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/
Address: P.O. Box 6418, Syracuse, NY 13212
Phone:
Project Name:
Project Location: Alpha Portland Site: DEC # 734006
Project Number: TDK Project No. 2021063
Project Manager: John Herrmann, TDK Engineering
Pace Analytical Quote Name/Number TDK Alpha Portland
Invoice Recipient: 0014397
Sampled By: JCH, TDK Engineering

Requested Turnaround Time:
7-Day ☐ 10-Day ☑
Due Date:

Rush Approval Required:
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery:
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #:

ANALYSIS REQUESTED

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	Conc Code	VOCs - TCL+TICs	SVOCs - TCL+TICs	Metals - TAL	PFAS	1,4-Dioxane	PCBs	VOCs - % Solids	# of Containers
	MS - SB-4(4')	12/4/23	9:00am		✓	S	A		✓	✓		✓	✓		
	"	"	"		✓	S	A							✓	
2	"	"	"		✓	S	P				✓				
	"	"	"		✓	S	V	✓							
	MSD - SB-4(4')	"	"		✓	S	A		✓	✓		✓	✓		
	"	"	"		✓	S	A							✓	
2	"	"	"		✓	S	P				✓				
	"	"	"		✓	S	V	✓							

[2]Preservation Code
[3]Container Code

Aqueous/Water Samples:
☐ Field Filtered
☐ Lab to Filter

Drinking Water Samples:
☐ Field Filtered
☐ Lab to Filter

Comments: Please forward results to: JHerrmann@TDKEngineering.com
CAT B Deliverables Package

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] **Container Codes:**
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

	Relinquished by: (signature)	Date/Time:
		12/5/23; 1:40 pm
	Received by: (signature)	Date/Time:
	Jessica Hawker	12/5/23; 1:48 pm
	Relinquished by: (signature)	Date/Time:
	Jessica Hawker	12/5/23; 2:24 pm
	Received by: (signature)	Date/Time:
	PACE	12/5 1430
	Relinquished by: (signature)	Date/Time:
	PACE	12/5 1700
	Received by: (signature)	Date/Time:
	29	12/6/23 1000

Regulatory Requirements / Report Limits:
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375
Other:

Deliverables:
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Other:
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

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Doc # 380 Rev 1_03242017

Page 3 of 3

CHAIN OF CUSTODY RECORD (New York)

23L0876

CLIENT: SYRACUSE SAND AND GRAVEL
ntact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/
any Name: (ALPHA - OMEGA)
ess: P.O. Box 6418, Syracuse, NY 13212
e:
ct Name:
ct Location: ALPHA PORTLAND SITE : DEC #734006
ct Number: TDK PROJECT NO. 2021063
ct Manager: JOHN HERRMANN, TDK ENGINEERING
Analytical Quote Name/Number TDK ALPHA PORTLAND
ce Recipient: 00143967
led By:

Requested Turnaround Time
7-Day ☐ 10-Day ☑
Due Date:

Rush Approval Required
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #:

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	Conc Code	VOCs - TCL + TICs	SVOCs - TCL + TICs	Metals - TAL	PFAS	1,4-Dioxane	PCBs	VOCs - % Solids	# of Containers	[2] Preservation Code	[3] Container Code
2	DUPLICATE				✓	S	A		✓	✓		✓	✓				
	"				✓	S	A							✓			
3	"				✓	S	P				✓						
	"				✓	S	V	✓									

ANALYSIS REQUESTED

Dissolved Metals Samples
☐ Field Filtered
☐ Lab to Filter

Orthophosphate Samples
☐ Field Filtered
☐ Lab to Filter

nents: PLEASE FORWARD RESULTS TO:
JHERRMANN@TDKENGINEERING.COM
CAT B DELIVERABLES PACKAGE

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

[1] **Matrix Codes:**
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ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

	Date/Time
quished by: (signature)	12/5/23; 1:40 pm
ived by: (signature)	12/5/23; 1:48 pm
quished by: (signature)	12/5/23; 2:24pm
ived by: (signature)	12/5 1430
quished by: (signature)	12/5 1700
ived by: (signature)	12/6/23 1000

Program & Regulatory Information
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375

Deliverables
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

NELAC and AIHA-LAP, LLC Accredited

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-ELON-0001 v07_Sample Receiving Checklist
	Effective Date: 07/13/2023

Log In Back-Sheet

Client Syracuse Sand & Gravel

Project 734006

MCP/RCP Required NO

Deliverable Package Requirement CAT B

Location NY

PWSID# (When Applicable) NA

Arrival Method:

Courier ☑ Fed Ex ☐ Walk In ☐ Other ☐

Received By / Date / Time CR 12/6/23 1000

Back-Sheet By / Date / Time CR 12/6/23 1903

Temperature Method GUN # 5

Temp < 6° C Actual Temperature 2.9

Rush Samples: Yes / (No) Notify

Short Hold: Yes / (No) Notify

Notes regarding Samples/COC outside of SOP:

Login Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy) Any False statement will be brought to the attention of the Client – True or False

	True	False
Received on Ice	☑	☐
Received in Cooler	☑	☐
Custody Seal: DATE TIME	☐	☑
COC Relinquished	☑	☐
COC/Samples Labels Agree	☑	☐
All Samples in Good Condition	☑	☐
Samples Received within Holding Time	☑	☐
Is there enough Volume	☑	☐
Proper Media/Container Used	☑	☐
Splitting Samples Required	☐	☑
MS/MSD	☑	☐
Trip Blanks	☐	☑
Lab to Filters	☐	☑
COC Legible	☑	☐

COC Included: (Check all included)

Client ☑ Analysis ☑ Sampler Name ☑

Project ☑ IDs ☑ Collection Date/Time ☑

All Samples Proper pH: (N/A) ☐ ☐

Additional Container Notes

Note: West Virginia requires all samples to have their temperature taken. Note any outliers.

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-ELON-0001 v07_Sample Receiving Checklist
	Effective Date: 07/13/2023

Sample																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Soils Jars (Circle Amb/Clear) 16oz Amb/Clear																				
8oz Amb/Clear																				
4oz Amb/Clear																				
2oz Amb/Clear																				
Ambers 1 Liter Unpreserved																				
1 Liter HCL																				
1 Liter Sulfuric																				
250mL Sulfuric																				
250mL Phosphoric																				
250mL HCl																				
100mL Unpreserved																				
Plastics 1 Liter Unpreserved																				
1 Liter Sulfuric																				
500mL Unpreserved																				
500mL Sulfuric																				
250mL Unpreserved																				
250mL Trizma																				
250mL Sulfuric																				
250mL Nitric																				
250mL NaOH																				
250mL Ammonium Acetate																				
250mL NaOH/Zinc																				
VOA Vials Unpreserved																				
VOA Vials HCl																				
VOA Vials MeOH																				
VOA Vials D.I. Water																				
VOA Vials BiSulfate																				
Other / Fill in Col/Bact																				
Other / Fill in	1	2	1																	
Other / Fill in																				
Other / Fill in																				
Other / Fill in																				
Other / Fill in																				

125 ml plastic

Qualtrax ID: 120836

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GROUNDWATER

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

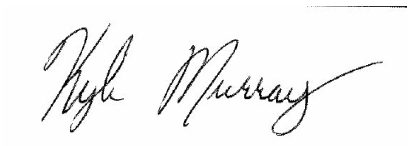
January 31, 2024

Richard Riccelli
Syracuse Sand & Gravel, LLC
6131 E Taft Road
North Syracuse, NY 13212

Project Location: Dewitt, NY
Client Job Number:
Project Number: 2021063
Laboratory Work Order Number: 24A1629

Enclosed are results of analyses for samples as received by the laboratory on January 18, 2024. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kyle A. Murray
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Syracuse Sand & Gravel, LLC
6131 E Taft Road
North Syracuse, NY 13212
ATTN: Richard Riccelli

REPORT DATE: 1/31/2024

PURCHASE ORDER NUMBER: 734006

PROJECT NUMBER: 2021063

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 24A1629

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Dewitt, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-5	24A1629-01	Ground Water		SW-846 6010D	
				SW-846 7470A	
				SW-846 8082A	
				SW-846 8260D	
				SW-846 8270E	
MW-5FD	24A1629-02	Ground Water		SW-846 6010D	
				SW-846 7470A	
				SW-846 8082A	
				SW-846 8260D	
				SW-846 8270E	
MW-3	24A1629-03	Ground Water		SW-846 6010D	
				SW-846 7470A	
				SW-846 8082A	
				SW-846 8260D	
				SW-846 8270E	
EQ RINSE SAMPLE	24A1629-04	Equipment Blank Water		SW-846 8260D	
TRIP BLANK	24A1629-05	Trip Blank Water		SW-846 8260D	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

SW-846 6010D

Qualifications:

MS-19

Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representative of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.

Analyte & Samples(s) Qualified:

Calcium
24A1629-01[MW-5], B363670-MS1, B363670-MSD1, B363670-PS2

Potassium
24A1629-01[MW-5], B363670-MS1, B363670-MSD1

Sodium
24A1629-01[MW-5], B363670-MS1, B363670-MSD1

Z-01

Matrix Spike and Matrix Spike Duplicate recoveries are outside of control limits. Analysis is in control based on Laboratory Fortified Blank and Post Digestion Spike recoveries.

Analyte & Samples(s) Qualified:

Aluminum
24A1629-01[MW-5], B363670-MS5, B363670-MSD5

Z-01a

Matrix Spike and Matrix Spike Duplicate recoveries are outside of control limits. Analysis is in control based on Laboratory Fortified Blank and Post Digestion Spike recoveries. Possibility of non-homogenous sample aliquot cannot be eliminated.

Analyte & Samples(s) Qualified:

Magnesium
24A1629-01[MW-5], B363670-MS2, B363670-MSD2, B363670-PS2

Manganese
24A1629-01[MW-5], B363670-MS2, B363670-MSD2, B363670-PS2

SW-846 8260D

Qualifications:

MS-24

Either matrix spike or matrix spike duplicate is outside of control limits, but the other is within limits. Analysis is in control based on laboratory fortified blank recovery.

Analyte & Samples(s) Qualified:

Dichlorodifluoromethane (Freon 12)
B363716-MS1

Trichloroethylene
B363716-MS1

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:

Carbon Disulfide
24A1629-01[MW-5], 24A1629-02[MW-5FD], 24A1629-03[MW-3], 24A1629-04[EQ RINSE SAMPLE], 24A1629-05[TRIP BLANK], B363716-BLK1, B363716-BS1, B363716-BSD1, B363716-MS1, B363716-MSD1, S099440-CCV1

V-20

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:

1,2-Dichloroethane
B363716-BS1, B363716-BSD1, B363716-MS1, B363716-MSD1, S099440-CCV1

Bromomethane
B363716-BS1, B363716-BSD1, B363716-MS1, B363716-MSD1, S099440-CCV1

SW-846 8270E

Qualifications:

L-04

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.

Analyte & Samples(s) Qualified:

Caprolactam
24A1629-01[MW-5], 24A1629-02[MW-5FD], B363891-BLK1, B363891-BS1, B363891-BSD1

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L-07

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:

Hexachlorobutadiene
B363891-BS1

Hexachlorocyclopentadiene
B363891-BS1

Hexachloroethane
B363891-BS1

MS-09

Matrix spike recovery and/or matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

Analyte & Samples(s) Qualified:

Caprolactam
B363891-MS1, B363891-MSD1

R-06

Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.

Analyte & Samples(s) Qualified:

Phenol
B363891-MS1, B363891-MSD1

S-07

One associated surrogate standard recovery is outside of control limits but the other(s) is/are within limits. All recoveries are > 10%.

Analyte & Samples(s) Qualified:

2,4,6-Tribromophenol
B363891-MS1

V-04

Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria. Reported result is estimated.

Analyte & Samples(s) Qualified:

2,4-Dinitrophenol
24A1629-01[MW-5], 24A1629-02[MW-5FD], 24A1629-03[MW-3], B363891-BLK1, B363891-BS1, B363891-BSD1, B363891-MS1, B363891-MSD1, S099572-CCV1, S099783-CCV1

Di-n-octylphthalate
24A1629-01[MW-5], 24A1629-02[MW-5FD], 24A1629-03[MW-3], B363891-BLK1, B363891-BS1, B363891-BSD1, B363891-MS1, B363891-MSD1, S099572-CCV1, S099783-CCV1

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:

1,2,4,5-Tetrachlorobenzene
24A1629-01[MW-5], 24A1629-02[MW-5FD], B363891-BLK1, B363891-BS1, B363891-BSD1, S099572-CCV1

Bis(2-chloroisopropyl)ether
24A1629-03[MW-3], B363891-MS1, B363891-MSD1, S099783-CCV1

Butylbenzylphthalate
24A1629-03[MW-3], B363891-MS1, B363891-MSD1, S099783-CCV1

Di-n-octylphthalate
24A1629-03[MW-3], B363891-MS1, B363891-MSD1, S099783-CCV1

Hexachlorobutadiene
24A1629-01[MW-5], 24A1629-02[MW-5FD], B363891-BLK1, B363891-BS1, B363891-BSD1, S099572-CCV1

Hexachlorocyclopentadiene
24A1629-01[MW-5], 24A1629-02[MW-5FD], 24A1629-03[MW-3], B363891-BLK1, B363891-BS1, B363891-BSD1, B363891-MS1, B363891-MSD1, S099572-CCV1, S099783-CCV1

V-34

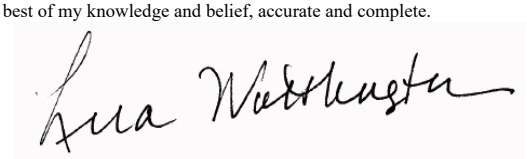
Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

Analyte & Samples(s) Qualified:

Benzaldehyde
S096618-ICV1

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The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: MW-5

Sample ID: 24A1629-01 | Start Date/Time: 1/16/2024 12:35:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 12:39:00PM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	12	50	2.0	µg/L	1	J	SW-846 8260D	1/18/24	1/20/24 1:21	MFF
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
Carbon Disulfide	ND	5.0	1.6	µg/L	1	V-05	SW-846 8260D	1/18/24	1/20/24 1:21	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
cis-1,2-Dichloroethylene	0.58	1.0	0.14	µg/L	1	J	SW-846 8260D	1/18/24	1/20/24 1:21	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
1,4-Dioxane	ND	50	18	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
Methyl Acetate	ND	1.0	0.61	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
Toluene	0.31	1.0	0.22	µg/L	1	J	SW-846 8260D	1/18/24	1/20/24 1:21	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: MW-5

Sample ID: 24A1629-01 | Start Date/Time: 1/16/2024 12:35:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 12:39:00PM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
Trichloroethylene	5.5	1.0	0.17	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:21	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
1,2-Dichloroethane-d4	111	70-130		1/20/24	1:21
Toluene-d8	99.0	70-130		1/20/24	1:21
4-Bromofluorobenzene	85.8	70-130		1/20/24	1:21

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Project Location: Dewitt, NY
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Work Order: 24A1629

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Sample Matrix: Ground Water
Stop Date/Time: 1/16/2024 12:39:00PM

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
Sulfur dioxide	83	µg/L	1175450	1.244	1	007446-09-5	90	SW-846 8260D	1/18/24	1/20/24 1:21	MFF

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: MW-5

Sample ID: 24A1629-01 | Start Date/Time: 1/16/2024 12:35:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 12:39:00PM

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Atrazine	ND	18	1.5	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Benzaldehyde	ND	9.1	0.66	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Biphenyl	ND	18	0.83	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Caprolactam	ND	9.1	0.65	µg/L	1	L-04	SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Acenaphthene	ND	4.5	0.71	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Acenaphthylene	ND	4.5	0.58	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Acetophenone	ND	9.1	0.45	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Anthracene	ND	4.5	0.49	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Benzo(a)anthracene	ND	4.5	0.34	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Benzo(a)pyrene	ND	4.5	0.39	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Benzo(b)fluoranthene	ND	4.5	0.29	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Benzo(g,h,i)perylene	ND	4.5	0.47	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Benzo(k)fluoranthene	ND	4.5	0.41	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Bis(2-chloroethoxy)methane	ND	9.1	0.52	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Bis(2-chloroethyl)ether	ND	9.1	0.41	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Bis(2-chloroisopropyl)ether	ND	9.1	0.68	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Bis(2-Ethylhexyl)phthalate	ND	9.1	0.29	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
4-Bromophenylphenylether	ND	9.1	0.64	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Butylbenzylphthalate	ND	9.1	0.36	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Carbazole	ND	9.1	0.41	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
4-Chloroaniline	ND	9.1	4.7	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
4-Chloro-3-methylphenol	ND	9.1	0.57	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
2-Chloronaphthalene	ND	9.1	0.74	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
2-Chlorophenol	ND	9.1	0.37	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
4-Chlorophenylphenylether	ND	9.1	0.79	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Chrysene	ND	4.5	0.41	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Dibenz(a,h)anthracene	ND	4.5	0.43	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Dibenzofuran	ND	4.5	0.78	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Di-n-butylphthalate	ND	9.1	0.45	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
3,3-Dichlorobenzidine	ND	9.1	0.41	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
2,4-Dichlorophenol	ND	9.1	0.42	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Diethylphthalate	ND	9.1	0.50	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
2,4-Dimethylphenol	ND	9.1	0.37	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Dimethylphthalate	ND	9.1	0.40	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
4,6-Dinitro-2-methylphenol	ND	18	2.1	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
2,4-Dinitrophenol	ND	9.1	1.2	µg/L	1	V-04	SW-846 8270E	1/22/24	1/24/24 15:50	BGL
2,4-Dinitrotoluene	ND	9.1	0.32	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
2,6-Dinitrotoluene	ND	9.1	0.50	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Di-n-octylphthalate	ND	9.1	0.30	µg/L	1	V-04	SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Fluoranthene	ND	4.5	0.51	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Fluorene	ND	4.5	0.69	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Hexachlorobenzene	ND	9.1	0.65	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Hexachlorobutadiene	ND	9.1	1.1	µg/L	1	V-05	SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Hexachlorocyclopentadiene	ND	9.1	2.6	µg/L	1	V-05	SW-846 8270E	1/22/24	1/24/24 15:50	BGL

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: MW-5

Sample ID: 24A1629-01 | Start Date/Time: 1/16/2024 12:35:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 12:39:00PM

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachloroethane	ND	9.1	1.1	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Indeno(1,2,3-cd)pyrene	ND	4.5	0.43	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Isophorone	ND	9.1	0.49	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
2-Methylnaphthalene	ND	4.5	0.84	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
2-Methylphenol	ND	9.1	0.41	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
3/4-Methylphenol	0.97	9.1	0.43	µg/L	1	J	SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Naphthalene	ND	4.5	0.82	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
2-Nitroaniline	ND	9.1	0.45	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
3-Nitroaniline	ND	9.1	0.47	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
4-Nitroaniline	ND	9.1	0.40	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Nitrobenzene	ND	9.1	0.61	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
2-Nitrophenol	ND	9.1	0.49	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
4-Nitrophenol	ND	9.1	1.2	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	9.1	0.43	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
N-Nitrosodi-n-propylamine	ND	9.1	0.59	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Pentachlorophenol	ND	9.1	0.43	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Phenanthrene	ND	4.5	0.65	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Phenol	24	9.1	0.54	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Pyrene	ND	4.5	0.42	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
1,2,4,5-Tetrachlorobenzene	ND	9.1	1.1	µg/L	1	V-05	SW-846 8270E	1/22/24	1/24/24 15:50	BGL
2,4,5-Trichlorophenol	ND	9.1	0.41	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL
2,4,6-Trichlorophenol	ND	9.1	0.34	µg/L	1		SW-846 8270E	1/22/24	1/24/24 15:50	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	46.3	15-110		1/24/24 15:50
Phenol-d6	33.9	15-110		1/24/24 15:50
Nitrobenzene-d5	74.1	30-130		1/24/24 15:50
2-Fluorobiphenyl	62.6	30-130		1/24/24 15:50
2,4,6-Tribromophenol	82.5	15-110		1/24/24 15:50
p-Terphenyl-d14	80.0	30-130		1/24/24 15:50

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Project Location: Dewitt, NY
Sample Description:
Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: MW-5

Sample ID: 24A1629-01
Start Date/Time: 1/16/2024 12:35:00PM

Sample Matrix: Ground Water
Stop Date/Time: 1/16/2024 12:39:00PM

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.19	0.031	µg/L	1		SW-846 8270E	1/19/24	1/23/24 15:48	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,4-Dioxane-d8	20.5	15-110		1/23/24 15:48

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: MW-5

Sample ID: 24A1629-01 | Start Date/Time: 1/16/2024 12:35:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 12:39:00PM

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
n-Hexadecanoic acid	11	µg/L	103970	8.189	1	000057-10-3	91	SW-846 8270E	1/22/24	1/24/24 15:50	BGL
Octadecanoic acid	16	µg/L	149987	8.905	1	000057-11-4	98	SW-846 8270E	1/22/24	1/24/24 15:50	BGL

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: MW-5

Sample ID: 24A1629-01 | Start Date/Time: 1/16/2024 12:35:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 12:39:00PM

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.18	0.11	µg/L	1		SW-846 8082A	1/22/24	1/23/24 13:06	SFM
Aroclor-1221 [1]	ND	0.18	0.072	µg/L	1		SW-846 8082A	1/22/24	1/23/24 13:06	SFM
Aroclor-1232 [1]	ND	0.18	0.066	µg/L	1		SW-846 8082A	1/22/24	1/23/24 13:06	SFM
Aroclor-1242 [1]	ND	0.18	0.066	µg/L	1		SW-846 8082A	1/22/24	1/23/24 13:06	SFM
Aroclor-1248 [1]	ND	0.18	0.057	µg/L	1		SW-846 8082A	1/22/24	1/23/24 13:06	SFM
Aroclor-1254 [1]	ND	0.18	0.067	µg/L	1		SW-846 8082A	1/22/24	1/23/24 13:06	SFM
Aroclor-1260 [1]	ND	0.18	0.10	µg/L	1		SW-846 8082A	1/22/24	1/23/24 13:06	SFM
Aroclor-1262 [1]	ND	0.18	0.11	µg/L	1		SW-846 8082A	1/22/24	1/23/24 13:06	SFM
Aroclor-1268 [1]	ND	0.18	0.061	µg/L	1		SW-846 8082A	1/22/24	1/23/24 13:06	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	70.3	30-150		1/23/24 13:06
Decachlorobiphenyl [2]	65.8	30-150		1/23/24 13:06
Tetrachloro-m-xylene [1]	70.6	30-150		1/23/24 13:06
Tetrachloro-m-xylene [2]	68.5	30-150		1/23/24 13:06

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: MW-5

Sample ID: 24A1629-01 | Start Date/Time: 1/16/2024 12:35:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 12:39:00PM

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	1.6	0.10	0.040	mg/L	2	Z-01	SW-846 6010D	1/18/24	1/29/24 19:21	NC
Antimony	ND	0.050	0.011	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:28	MJH
Arsenic	ND	0.010	0.0073	mg/L	1		SW-846 6010D	1/18/24	1/22/24 15:07	MJH
Barium	0.062	0.050	0.0057	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:28	MJH
Beryllium	ND	0.0040	0.0012	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:28	MJH
Cadmium	ND	0.0040	0.0013	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:28	MJH
Calcium	98	0.50	0.091	mg/L	1	MS-19	SW-846 6010D	1/18/24	1/19/24 17:28	MJH
Chromium	ND	0.010	0.0093	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:28	MJH
Cobalt	ND	0.010	0.0017	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:28	MJH
Copper	ND	0.010	0.0047	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:28	MJH
Iron	0.12	0.050	0.023	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:28	MJH
Lead	ND	0.010	0.0065	mg/L	1		SW-846 6010D	1/18/24	1/22/24 15:07	MJH
Magnesium	0.060	0.050	0.016	mg/L	1	Z-01a	SW-846 6010D	1/18/24	1/22/24 15:07	MJH
Manganese	0.0029	0.010	0.0028	mg/L	1	Z-01a, J	SW-846 6010D	1/18/24	1/22/24 15:07	MJH
Mercury	ND	0.00020	0.00014	mg/L	1		SW-846 7470A	1/19/24	1/22/24 15:55	AAJ
Nickel	0.0067	0.010	0.0024	mg/L	1	J	SW-846 6010D	1/18/24	1/22/24 15:07	MJH
Potassium	68	2.0	0.33	mg/L	1	MS-19	SW-846 6010D	1/18/24	1/19/24 17:28	MJH
Selenium	ND	0.050	0.018	mg/L	1		SW-846 6010D	1/18/24	1/22/24 15:07	MJH
Silver	ND	0.010	0.0027	mg/L	1		SW-846 6010D	1/18/24	1/22/24 15:07	MJH
Sodium	35	2.0	0.74	mg/L	1	MS-19	SW-846 6010D	1/18/24	1/19/24 17:28	MJH
Thallium	ND	0.050	0.019	mg/L	1		SW-846 6010D	1/18/24	1/22/24 15:07	MJH
Vanadium	0.0083	0.010	0.0071	mg/L	1	J	SW-846 6010D	1/18/24	1/22/24 15:07	MJH
Zinc	ND	0.010	0.0040	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:28	MJH

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: MW-5FD

Sample ID: 24A1629-02 | Start Date/Time: 1/16/2024 12:40:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 12:44:00PM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
Carbon Disulfide	ND	5.0	1.6	µg/L	1	V-05	SW-846 8260D	1/18/24	1/20/24 1:48	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
cis-1,2-Dichloroethylene	0.37	1.0	0.14	µg/L	1	J	SW-846 8260D	1/18/24	1/20/24 1:48	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
1,4-Dioxane	ND	50	18	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
Methyl Acetate	ND	1.0	0.61	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: MW-5FD

Sample ID: 24A1629-02 | Start Date/Time: 1/16/2024 12:40:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 12:44:00PM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
Trichloroethylene	4.1	1.0	0.17	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	1/18/24	1/20/24 1:48	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
1,2-Dichloroethane-d4	112	70-130		1/20/24	1:48
Toluene-d8	101	70-130		1/20/24	1:48
4-Bromofluorobenzene	85.6	70-130		1/20/24	1:48

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: MW-5FD

Sample ID: 24A1629-02 | Start Date/Time: 1/16/2024 12:40:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 12:44:00PM

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
Sulfur dioxide	17	µg/L	239155	1.199	1	007446-09-5	90	SW-846 8260D	1/18/24	1/20/24 1:48	MFF

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: MW-5FD

Sample ID: 24A1629-02 | Start Date/Time: 1/16/2024 12:40:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 12:44:00PM

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Atrazine	ND	18	1.5	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Benzaldehyde	ND	9.1	0.66	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Biphenyl	ND	18	0.83	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Caprolactam	ND	9.1	0.65	µg/L	1	L-04	SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Acenaphthene	ND	4.5	0.71	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Acenaphthylene	ND	4.5	0.58	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Acetophenone	ND	9.1	0.45	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Anthracene	ND	4.5	0.49	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Benzo(a)anthracene	ND	4.5	0.34	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Benzo(a)pyrene	ND	4.5	0.39	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Benzo(b)fluoranthene	ND	4.5	0.29	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Benzo(g,h,i)perylene	ND	4.5	0.47	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Benzo(k)fluoranthene	ND	4.5	0.42	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Bis(2-chloroethoxy)methane	ND	9.1	0.52	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Bis(2-chloroethyl)ether	ND	9.1	0.42	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Bis(2-chloroisopropyl)ether	ND	9.1	0.68	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Bis(2-Ethylhexyl)phthalate	ND	9.1	0.29	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
4-Bromophenylphenylether	ND	9.1	0.64	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Butylbenzylphthalate	ND	9.1	0.36	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Carbazole	ND	9.1	0.42	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
4-Chloroaniline	ND	9.1	4.7	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
4-Chloro-3-methylphenol	ND	9.1	0.57	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
2-Chloronaphthalene	ND	9.1	0.74	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
2-Chlorophenol	ND	9.1	0.37	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
4-Chlorophenylphenylether	ND	9.1	0.79	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Chrysene	ND	4.5	0.42	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Dibenz(a,h)anthracene	ND	4.5	0.43	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Dibenzofuran	ND	4.5	0.78	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Di-n-butylphthalate	ND	9.1	0.45	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
3,3-Dichlorobenzidine	ND	9.1	0.42	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
2,4-Dichlorophenol	ND	9.1	0.42	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Diethylphthalate	ND	9.1	0.50	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
2,4-Dimethylphenol	ND	9.1	0.37	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Dimethylphthalate	ND	9.1	0.40	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
4,6-Dinitro-2-methylphenol	ND	18	2.1	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
2,4-Dinitrophenol	ND	9.1	1.2	µg/L	1	V-04	SW-846 8270E	1/22/24	1/24/24 16:11	BGL
2,4-Dinitrotoluene	ND	9.1	0.32	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
2,6-Dinitrotoluene	ND	9.1	0.50	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Di-n-octylphthalate	ND	9.1	0.30	µg/L	1	V-04	SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Fluoranthene	ND	4.5	0.51	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Fluorene	ND	4.5	0.69	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Hexachlorobenzene	ND	9.1	0.65	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Hexachlorobutadiene	ND	9.1	1.1	µg/L	1	V-05	SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Hexachlorocyclopentadiene	ND	9.1	2.6	µg/L	1	V-05	SW-846 8270E	1/22/24	1/24/24 16:11	BGL

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: MW-5FD

Sample ID: 24A1629-02 | Start Date/Time: 1/16/2024 12:40:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 12:44:00PM

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachloroethane	ND	9.1	1.1	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Indeno(1,2,3-cd)pyrene	ND	4.5	0.43	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Isophorone	ND	9.1	0.49	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
2-Methylnaphthalene	ND	4.5	0.85	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
2-Methylphenol	ND	9.1	0.42	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
3/4-Methylphenol	1.0	9.1	0.44	µg/L	1	J	SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Naphthalene	ND	4.5	0.82	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
2-Nitroaniline	ND	9.1	0.45	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
3-Nitroaniline	ND	9.1	0.47	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
4-Nitroaniline	ND	9.1	0.40	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Nitrobenzene	ND	9.1	0.61	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
2-Nitrophenol	ND	9.1	0.49	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
4-Nitrophenol	ND	9.1	1.2	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	9.1	0.44	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
N-Nitrosodi-n-propylamine	ND	9.1	0.59	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Pentachlorophenol	ND	9.1	0.44	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Phenanthrene	ND	4.5	0.65	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Phenol	17	9.1	0.54	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Pyrene	ND	4.5	0.42	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
1,2,4,5-Tetrachlorobenzene	ND	9.1	1.1	µg/L	1	V-05	SW-846 8270E	1/22/24	1/24/24 16:11	BGL
2,4,5-Trichlorophenol	ND	9.1	0.41	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL
2,4,6-Trichlorophenol	ND	9.1	0.34	µg/L	1		SW-846 8270E	1/22/24	1/24/24 16:11	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	55.1	15-110		1/24/24 16:11
Phenol-d6	39.2	15-110		1/24/24 16:11
Nitrobenzene-d5	90.4	30-130		1/24/24 16:11
2-Fluorobiphenyl	78.5	30-130		1/24/24 16:11
2,4,6-Tribromophenol	103	15-110		1/24/24 16:11
p-Terphenyl-d14	110	30-130		1/24/24 16:11

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Project Location: Dewitt, NY
Sample Description:
Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: MW-5FD

Sample ID: 24A1629-02
Start Date/Time: 1/16/2024 12:40:00PM

Sample Matrix: Ground Water
Stop Date/Time: 1/16/2024 12:44:00PM

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.19	0.031	µg/L	1		SW-846 8270E	1/19/24	1/23/24 16:46	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,4-Dioxane-d8	20.6	15-110		1/23/24 16:46

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: MW-5FD

Sample ID: 24A1629-02 | Start Date/Time: 1/16/2024 12:40:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 12:44:00PM

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
Benzeneacetic acid	30	µg/L	145910	5.291	1	000103-82-2	95	SW-846 8270E	1/22/24	1/24/24 16:11	BGL
n-Hexadecanoic acid	17	µg/L	131742	8.189	1	000057-10-3	94	SW-846 8270E	1/22/24	1/24/24 16:11	BGL
Octadecanoic acid	19	µg/L	154775	8.908	1	000057-11-4	98	SW-846 8270E	1/22/24	1/24/24 16:11	BGL

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: MW-5FD

Sample ID: 24A1629-02 | Start Date/Time: 1/16/2024 12:40:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 12:44:00PM

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.18	0.11	µg/L	1		SW-846 8082A	1/22/24	1/23/24 13:23	SFM
Aroclor-1221 [1]	ND	0.18	0.071	µg/L	1		SW-846 8082A	1/22/24	1/23/24 13:23	SFM
Aroclor-1232 [1]	ND	0.18	0.065	µg/L	1		SW-846 8082A	1/22/24	1/23/24 13:23	SFM
Aroclor-1242 [1]	ND	0.18	0.065	µg/L	1		SW-846 8082A	1/22/24	1/23/24 13:23	SFM
Aroclor-1248 [1]	ND	0.18	0.056	µg/L	1		SW-846 8082A	1/22/24	1/23/24 13:23	SFM
Aroclor-1254 [1]	ND	0.18	0.066	µg/L	1		SW-846 8082A	1/22/24	1/23/24 13:23	SFM
Aroclor-1260 [1]	ND	0.18	0.10	µg/L	1		SW-846 8082A	1/22/24	1/23/24 13:23	SFM
Aroclor-1262 [1]	ND	0.18	0.11	µg/L	1		SW-846 8082A	1/22/24	1/23/24 13:23	SFM
Aroclor-1268 [1]	ND	0.18	0.061	µg/L	1		SW-846 8082A	1/22/24	1/23/24 13:23	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	94.0	30-150		1/23/24 13:23
Decachlorobiphenyl [2]	87.5	30-150		1/23/24 13:23
Tetrachloro-m-xylene [1]	67.4	30-150		1/23/24 13:23
Tetrachloro-m-xylene [2]	65.0	30-150		1/23/24 13:23

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Project Location: Dewitt, NY
Sample Description:
Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: MW-5FD

Sample ID: 24A1629-02
Start Date/Time: 1/16/2024 12:40:00PM

Sample Matrix: Ground Water
Stop Date/Time: 1/16/2024 12:44:00PM

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	1.3	0.050	0.020	mg/L	1		SW-846 6010D	1/18/24	1/26/24 20:16	NC
Antimony	ND	0.050	0.011	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:34	MJH
Arsenic	ND	0.010	0.0073	mg/L	1		SW-846 6010D	1/18/24	1/22/24 15:13	MJH
Barium	0.043	0.050	0.0057	mg/L	1	J	SW-846 6010D	1/18/24	1/19/24 17:34	MJH
Beryllium	ND	0.0040	0.0012	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:34	MJH
Cadmium	ND	0.0040	0.0013	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:34	MJH
Calcium	100	0.50	0.091	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:34	MJH
Chromium	ND	0.010	0.0093	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:34	MJH
Cobalt	ND	0.010	0.0017	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:34	MJH
Copper	ND	0.010	0.0047	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:34	MJH
Iron	0.079	0.050	0.023	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:34	MJH
Lead	ND	0.010	0.0065	mg/L	1		SW-846 6010D	1/18/24	1/22/24 15:13	MJH
Magnesium	ND	0.050	0.016	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:34	MJH
Manganese	ND	0.010	0.0028	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:34	MJH
Mercury	ND	0.00020	0.00014	mg/L	1		SW-846 7470A	1/19/24	1/22/24 15:57	AAJ
Nickel	0.0054	0.010	0.0024	mg/L	1	J	SW-846 6010D	1/18/24	1/22/24 15:13	MJH
Potassium	48	2.0	0.33	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:34	MJH
Selenium	ND	0.050	0.018	mg/L	1		SW-846 6010D	1/18/24	1/22/24 15:13	MJH
Silver	ND	0.010	0.0027	mg/L	1		SW-846 6010D	1/18/24	1/22/24 15:13	MJH
Sodium	34	2.0	0.74	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:34	MJH
Thallium	ND	0.050	0.019	mg/L	1		SW-846 6010D	1/18/24	1/22/24 15:13	MJH
Vanadium	ND	0.010	0.0071	mg/L	1		SW-846 6010D	1/18/24	1/22/24 15:13	MJH
Zinc	ND	0.010	0.0040	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:34	MJH

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: MW-3

Sample ID: 24A1629-03 | Start Date/Time: 1/16/2024 3:35:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 3:39:00PM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
Carbon Disulfide	ND	5.0	1.6	µg/L	1	V-05	SW-846 8260D	1/18/24	1/20/24 2:15	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
1,4-Dioxane	ND	50	18	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
Methyl Acetate	ND	1.0	0.61	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: MW-3

Sample ID: 24A1629-03 | Start Date/Time: 1/16/2024 3:35:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 3:39:00PM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
Trichloroethylene	3.5	1.0	0.17	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	1/18/24	1/20/24 2:15	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	112	70-130		1/20/24 2:15
Toluene-d8	94.4	70-130		1/20/24 2:15
4-Bromofluorobenzene	85.7	70-130		1/20/24 2:15

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: MW-3

Sample ID: 24A1629-03 | Start Date/Time: 1/16/2024 3:35:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 3:39:00PM

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
Sulfur dioxide	7.5	µg/L	101011	1.196	1	007446-09-5	90	SW-846 8260D	1/18/24	1/20/24 2:15	MFF

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: MW-3

Sample ID: 24A1629-03 | Start Date/Time: 1/16/2024 3:35:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 3:39:00PM

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Atrazine	ND	18	1.5	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Benzaldehyde	ND	9.2	0.66	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Biphenyl	ND	18	0.85	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Caprolactam	ND	9.2	0.66	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Acenaphthene	ND	4.6	0.72	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Acenaphthylene	ND	4.6	0.59	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Acetophenone	ND	9.2	0.46	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Anthracene	ND	4.6	0.50	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Benzo(a)anthracene	ND	4.6	0.35	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Benzo(a)pyrene	ND	4.6	0.40	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Benzo(b)fluoranthene	ND	4.6	0.30	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Benzo(g,h,i)perylene	ND	4.6	0.48	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Benzo(k)fluoranthene	ND	4.6	0.42	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Bis(2-chloroethoxy)methane	ND	9.2	0.53	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Bis(2-chloroethyl)ether	ND	9.2	0.42	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Bis(2-chloroisopropyl)ether	ND	9.2	0.69	µg/L	1	V-05	SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Bis(2-Ethylhexyl)phthalate	ND	9.2	0.30	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
4-Bromophenylphenylether	ND	9.2	0.65	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Butylbenzylphthalate	ND	9.2	0.36	µg/L	1	V-05	SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Carbazole	ND	9.2	0.42	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
4-Chloroaniline	ND	9.2	4.8	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
4-Chloro-3-methylphenol	ND	9.2	0.58	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
2-Chloronaphthalene	ND	9.2	0.75	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
2-Chlorophenol	ND	9.2	0.38	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
4-Chlorophenylphenylether	ND	9.2	0.80	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Chrysene	ND	4.6	0.42	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Dibenz(a,h)anthracene	ND	4.6	0.44	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Dibenzofuran	ND	4.6	0.79	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Di-n-butylphthalate	ND	9.2	0.46	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
3,3-Dichlorobenzidine	ND	9.2	0.42	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
2,4-Dichlorophenol	ND	9.2	0.43	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Diethylphthalate	ND	9.2	0.51	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
2,4-Dimethylphenol	ND	9.2	0.38	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Dimethylphthalate	ND	9.2	0.40	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
4,6-Dinitro-2-methylphenol	ND	18	2.1	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
2,4-Dinitrophenol	ND	9.2	1.2	µg/L	1	V-04	SW-846 8270E	1/22/24	1/30/24 13:36	BGL
2,4-Dinitrotoluene	ND	9.2	0.32	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
2,6-Dinitrotoluene	ND	9.2	0.51	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Di-n-octylphthalate	ND	9.2	0.30	µg/L	1	V-04, V-05	SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Fluoranthene	ND	4.6	0.52	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Fluorene	ND	4.6	0.70	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Hexachlorobenzene	ND	9.2	0.66	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Hexachlorobutadiene	ND	9.2	1.1	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Hexachlorocyclopentadiene	ND	9.2	2.6	µg/L	1	V-05	SW-846 8270E	1/22/24	1/30/24 13:36	BGL

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: MW-3

Sample ID: 24A1629-03 | Start Date/Time: 1/16/2024 3:35:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 3:39:00PM

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachloroethane	ND	9.2	1.1	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Indeno(1,2,3-cd)pyrene	ND	4.6	0.44	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Isophorone	ND	9.2	0.50	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
2-Methylnaphthalene	ND	4.6	0.86	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
2-Methylphenol	ND	9.2	0.42	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
3/4-Methylphenol	ND	9.2	0.44	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Naphthalene	ND	4.6	0.83	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
2-Nitroaniline	ND	9.2	0.46	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
3-Nitroaniline	ND	9.2	0.48	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
4-Nitroaniline	ND	9.2	0.40	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Nitrobenzene	ND	9.2	0.62	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
2-Nitrophenol	ND	9.2	0.50	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
4-Nitrophenol	ND	9.2	1.2	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	9.2	0.44	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
N-Nitrosodi-n-propylamine	ND	9.2	0.60	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Pentachlorophenol	ND	9.2	0.44	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Phenanthrene	ND	4.6	0.66	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Phenol	ND	9.2	0.54	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
Pyrene	ND	4.6	0.42	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
1,2,4,5-Tetrachlorobenzene	ND	9.2	1.1	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
2,4,5-Trichlorophenol	ND	9.2	0.42	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL
2,4,6-Trichlorophenol	ND	9.2	0.35	µg/L	1		SW-846 8270E	1/22/24	1/30/24 13:36	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	53.6	15-110		1/30/24 13:36
Phenol-d6	40.8	15-110		1/30/24 13:36
Nitrobenzene-d5	85.5	30-130		1/30/24 13:36
2-Fluorobiphenyl	75.1	30-130		1/30/24 13:36
2,4,6-Tribromophenol	108	15-110		1/30/24 13:36
p-Terphenyl-d14	95.4	30-130		1/30/24 13:36

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: MW-3

Sample ID: 24A1629-03 | Start Date/Time: 1/16/2024 3:35:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 3:39:00PM

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.19	0.031	µg/L	1		SW-846 8270E	1/19/24	1/23/24 17:06	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
1,4-Dioxane-d8	20.1	15-110		1/23/24 17:06	

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: MW-3

Sample ID: 24A1629-03 | Start Date/Time: 1/16/2024 3:35:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 3:39:00PM

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8270E	1/22/24	1/30/24 13:36	BGL

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: MW-3

Sample ID: 24A1629-03 | Start Date/Time: 1/16/2024 3:35:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 3:39:00PM

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.18	0.11	µg/L	1		SW-846 8082A	1/22/24	1/23/24 13:40	SFM
Aroclor-1221 [1]	ND	0.18	0.074	µg/L	1		SW-846 8082A	1/22/24	1/23/24 13:40	SFM
Aroclor-1232 [1]	ND	0.18	0.067	µg/L	1		SW-846 8082A	1/22/24	1/23/24 13:40	SFM
Aroclor-1242 [1]	ND	0.18	0.067	µg/L	1		SW-846 8082A	1/22/24	1/23/24 13:40	SFM
Aroclor-1248 [1]	ND	0.18	0.058	µg/L	1		SW-846 8082A	1/22/24	1/23/24 13:40	SFM
Aroclor-1254 [1]	ND	0.18	0.069	µg/L	1		SW-846 8082A	1/22/24	1/23/24 13:40	SFM
Aroclor-1260 [1]	ND	0.18	0.11	µg/L	1		SW-846 8082A	1/22/24	1/23/24 13:40	SFM
Aroclor-1262 [1]	ND	0.18	0.11	µg/L	1		SW-846 8082A	1/22/24	1/23/24 13:40	SFM
Aroclor-1268 [1]	ND	0.18	0.063	µg/L	1		SW-846 8082A	1/22/24	1/23/24 13:40	SFM

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	89.9	30-150		1/23/24 13:40
Decachlorobiphenyl [2]	82.8	30-150		1/23/24 13:40
Tetrachloro-m-xylene [1]	57.7	30-150		1/23/24 13:40
Tetrachloro-m-xylene [2]	55.9	30-150		1/23/24 13:40

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Project Location: Dewitt, NY
Sample Description:
Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: MW-3

Sample ID: 24A1629-03
Start Date/Time: 1/16/2024 3:35:00PM

Sample Matrix: Ground Water
Stop Date/Time: 1/16/2024 3:39:00PM

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	0.18	0.050	0.020	mg/L	1		SW-846 6010D	1/18/24	1/26/24 20:22	NC
Antimony	ND	0.050	0.011	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:41	MJH
Arsenic	ND	0.010	0.0073	mg/L	1		SW-846 6010D	1/18/24	1/22/24 15:19	MJH
Barium	0.076	0.050	0.0057	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:41	MJH
Beryllium	ND	0.0040	0.0012	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:41	MJH
Cadmium	ND	0.0040	0.0013	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:41	MJH
Calcium	57	0.50	0.091	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:41	MJH
Chromium	ND	0.010	0.0093	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:41	MJH
Cobalt	ND	0.010	0.0017	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:41	MJH
Copper	ND	0.010	0.0047	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:41	MJH
Iron	0.32	0.050	0.023	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:41	MJH
Lead	ND	0.010	0.0065	mg/L	1		SW-846 6010D	1/18/24	1/22/24 15:19	MJH
Magnesium	4.6	0.050	0.016	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:41	MJH
Manganese	0.18	0.010	0.0028	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:41	MJH
Mercury	ND	0.00020	0.00014	mg/L	1		SW-846 7470A	1/19/24	1/22/24 15:58	AAJ
Nickel	ND	0.010	0.0024	mg/L	1		SW-846 6010D	1/18/24	1/22/24 15:19	MJH
Potassium	6.5	2.0	0.33	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:41	MJH
Selenium	ND	0.050	0.018	mg/L	1		SW-846 6010D	1/18/24	1/22/24 15:19	MJH
Silver	ND	0.010	0.0027	mg/L	1		SW-846 6010D	1/18/24	1/22/24 15:19	MJH
Sodium	3.2	2.0	0.74	mg/L	1		SW-846 6010D	1/18/24	1/19/24 17:41	MJH
Thallium	ND	0.050	0.019	mg/L	1		SW-846 6010D	1/18/24	1/22/24 15:19	MJH
Vanadium	ND	0.010	0.0071	mg/L	1		SW-846 6010D	1/18/24	1/22/24 15:19	MJH
Zinc	0.0041	0.010	0.0040	mg/L	1	J	SW-846 6010D	1/18/24	1/19/24 17:41	MJH

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: EQ RINSE SAMPLE

Sample ID: 24A1629-04 | Start Date/Time: 1/16/2024 3:45:00PM

Sample Matrix: Equipment Blank Water | Stop Date/Time: 1/16/2024 3:49:00PM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
Carbon Disulfide	ND	5.0	1.6	µg/L	1	V-05	SW-846 8260D	1/18/24	1/20/24 3:35	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
Chloroform	4.2	2.0	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
1,4-Dioxane	ND	50	18	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
Methyl Acetate	ND	1.0	0.61	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: EQ RINSE SAMPLE

Sample ID: 24A1629-04 | Start Date/Time: 1/16/2024 3:45:00PM

Sample Matrix: Equipment Blank Water | Stop Date/Time: 1/16/2024 3:49:00PM

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	1/18/24	1/20/24 3:35	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	111	70-130		1/20/24 3:35
Toluene-d8	100	70-130		1/20/24 3:35
4-Bromofluorobenzene	87.4	70-130		1/20/24 3:35

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: EQ RINSE SAMPLE

Sample ID: 24A1629-04 | Start Date/Time: 1/16/2024 3:45:00PM

Sample Matrix: Equipment Blank Water | Stop Date/Time: 1/16/2024 3:49:00PM

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	1/18/24	1/20/24 3:35	MFF

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: TRIP BLANK | Sampled: 1/16/2024 00:00

Sample ID: 24A1629-05

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
Carbon Disulfide	ND	5.0	1.6	µg/L	1	V-05	SW-846 8260D	1/18/24	1/20/24 0:55	MFF
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
1,4-Dioxane	ND	50	18	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
Methyl Acetate	ND	1.0	0.61	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: TRIP BLANK | Sampled: 1/16/2024 00:00

Sample ID: 24A1629-05

Sample Matrix: Trip Blank Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	1/18/24	1/20/24 0:55	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
1,2-Dichloroethane-d4	110	70-130		1/20/24	0:55
Toluene-d8	97.5	70-130		1/20/24	0:55
4-Bromofluorobenzene	87.3	70-130		1/20/24	0:55

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1629

Date Received: 1/18/2024

Field Sample #: TRIP BLANK | Sampled: 1/16/2024 00:00

Sample ID: 24A1629-05

Sample Matrix: Trip Blank Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	1/18/24	1/20/24 0:55	MFF

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Sample Extraction Data

Prep Method:SW-846 3005A **Analytical Method:SW-846 6010D**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24A1629-01 [MW-5]	B363670	50.0	50.0	01/18/24
24A1629-02 [MW-5FD]	B363670	50.0	50.0	01/18/24
24A1629-03 [MW-3]	B363670	50.0	50.0	01/18/24

Prep Method:SW-846 7470A Prep **Analytical Method:SW-846 7470A**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24A1629-01 [MW-5]	B363815	10.0	10.0	01/19/24
24A1629-02 [MW-5FD]	B363815	10.0	10.0	01/19/24
24A1629-03 [MW-3]	B363815	10.0	10.0	01/19/24

Prep Method:SW-846 3510C **Analytical Method:SW-846 8082A**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24A1629-01 [MW-5]	B363890	112	2.00	01/22/24
24A1629-02 [MW-5FD]	B363890	113	2.00	01/22/24
24A1629-03 [MW-3]	B363890	109	2.00	01/22/24

Prep Method:SW-846 5030B **Analytical Method:SW-846 8260D**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24A1629-01 [MW-5]	B363716	5	5.00	01/18/24
24A1629-02 [MW-5FD]	B363716	5	5.00	01/18/24
24A1629-03 [MW-3]	B363716	5	5.00	01/18/24
24A1629-04 [EQ RINSE SAMPLE]	B363716	5	5.00	01/18/24
24A1629-05 [TRIP BLANK]	B363716	5	5.00	01/18/24

Prep Method:SW-846 3510C **Analytical Method:SW-846 8270E**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24A1629-01 [MW-5]	B363839	1060	1.00	01/19/24
24A1629-02 [MW-5FD]	B363839	1040	1.00	01/19/24
24A1629-03 [MW-3]	B363839	1040	1.00	01/19/24

Prep Method:SW-846 3510C **Analytical Method:SW-846 8270E**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24A1629-01 [MW-5]	B363891	110	1.00	01/22/24
24A1629-02 [MW-5FD]	B363891	110	1.00	01/22/24
24A1629-03 [MW-3]	B363891	109	1.00	01/22/24

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B363716 - SW-846 5030B										
Blank (B363716-BLK1)				Prepared: 01/18/24 Analyzed: 01/20/24						
Acetone	ND	50	µg/L							
Benzene	ND	1.0	µg/L							
Bromochloromethane	ND	1.0	µg/L							
Bromodichloromethane	ND	0.50	µg/L							
Bromoform	ND	1.0	µg/L							
Bromomethane	ND	2.0	µg/L							
2-Butanone (MEK)	ND	20	µg/L							
Carbon Disulfide	ND	5.0	µg/L							V-05
Carbon Tetrachloride	ND	5.0	µg/L							
Chlorobenzene	ND	1.0	µg/L							
Chlorodibromomethane	ND	0.50	µg/L							
Chloroethane	ND	2.0	µg/L							
Chloroform	ND	2.0	µg/L							
Chloromethane	ND	2.0	µg/L							
Cyclohexane	ND	5.0	µg/L							
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L							
1,2-Dibromoethane (EDB)	ND	0.50	µg/L							
1,2-Dichlorobenzene	ND	1.0	µg/L							
1,3-Dichlorobenzene	ND	1.0	µg/L							
1,4-Dichlorobenzene	ND	1.0	µg/L							
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L							
1,1-Dichloroethane	ND	1.0	µg/L							
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							
Ethylbenzene	ND	1.0	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
Methyl Acetate	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methyl Cyclohexane	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Styrene	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B363716 - SW-846 5030B											
Blank (B363716-BLK1)				Prepared: 01/18/24 Analyzed: 01/20/24							
o-Xylene	ND	1.0	µg/L								
Xylenes (total)	ND	1.0	µg/L								
Surrogate: 1,2-Dichloroethane-d4	*27.2*		µg/L	25.0		109	70-130				
Surrogate: Toluene-d8	*24.3*		µg/L	25.0		97.2	70-130				
Surrogate: 4-Bromofluorobenzene	*22.1*		µg/L	25.0		88.2	70-130				
LCS (B363716-BS1)				Prepared: 01/18/24 Analyzed: 01/19/24							
Acetone	91.5	50	µg/L	100		91.5	70-160				†
Benzene	10.4	1.0	µg/L	10.0		104	70-130				
Bromochloromethane	11.0	1.0	µg/L	10.0		110	70-130				
Bromodichloromethane	11.5	0.50	µg/L	10.0		115	70-130				
Bromoform	8.92	1.0	µg/L	10.0		89.2	70-130				
Bromomethane	12.8	2.0	µg/L	10.0		128	40-160			V-20	†
2-Butanone (MEK)	96.2	20	µg/L	100		96.2	40-160				†
Carbon Disulfide	73.4	5.0	µg/L	100		73.4	70-130			V-05	
Carbon Tetrachloride	11.6	5.0	µg/L	10.0		116	70-130				
Chlorobenzene	10.2	1.0	µg/L	10.0		102	70-130				
Chlorodibromomethane	11.0	0.50	µg/L	10.0		110	70-130				
Chloroethane	9.34	2.0	µg/L	10.0		93.4	70-130				
Chloroform	10.9	2.0	µg/L	10.0		109	70-130				
Chloromethane	10.9	2.0	µg/L	10.0		109	40-160				†
Cyclohexane	9.50	5.0	µg/L	10.0		95.0	70-130				
1,2-Dibromo-3-chloropropane (DBCP)	8.69	5.0	µg/L	10.0		86.9	70-130				
1,2-Dibromoethane (EDB)	10.9	0.50	µg/L	10.0		109	70-130				
1,2-Dichlorobenzene	10.2	1.0	µg/L	10.0		102	70-130				
1,3-Dichlorobenzene	10.3	1.0	µg/L	10.0		103	70-130				
1,4-Dichlorobenzene	9.36	1.0	µg/L	10.0		93.6	70-130				
Dichlorodifluoromethane (Freon 12)	12.0	2.0	µg/L	10.0		120	40-160				†
1,1-Dichloroethane	10.1	1.0	µg/L	10.0		101	70-130				
1,2-Dichloroethane	12.0	1.0	µg/L	10.0		120	70-130			V-20	
1,1-Dichloroethylene	9.80	1.0	µg/L	10.0		98.0	70-130				
cis-1,2-Dichloroethylene	10.2	1.0	µg/L	10.0		102	70-130				
trans-1,2-Dichloroethylene	9.74	1.0	µg/L	10.0		97.4	70-130				
1,2-Dichloropropane	11.9	1.0	µg/L	10.0		119	70-130				
cis-1,3-Dichloropropene	11.2	0.50	µg/L	10.0		112	70-130				
trans-1,3-Dichloropropene	11.2	0.50	µg/L	10.0		112	70-130				
1,4-Dioxane	85.3	50	µg/L	100		85.3	40-130				†
Ethylbenzene	10.3	1.0	µg/L	10.0		103	70-130				
2-Hexanone (MBK)	89.5	10	µg/L	100		89.5	70-160				†
Isopropylbenzene (Cumene)	9.77	1.0	µg/L	10.0		97.7	70-130				
Methyl Acetate	11.0	1.0	µg/L	10.0		110	70-130				
Methyl tert-Butyl Ether (MTBE)	9.65	1.0	µg/L	10.0		96.5	70-130				
Methyl Cyclohexane	10.8	1.0	µg/L	10.0		108	70-130				
Methylene Chloride	9.72	5.0	µg/L	10.0		97.2	70-130				
4-Methyl-2-pentanone (MIBK)	98.2	10	µg/L	100		98.2	70-160				†
Styrene	9.59	1.0	µg/L	10.0		95.9	70-130				
1,1,2,2-Tetrachloroethane	8.92	0.50	µg/L	10.0		89.2	70-130				
Tetrachloroethylene	11.7	1.0	µg/L	10.0		117	70-130				
Toluene	11.6	1.0	µg/L	10.0		116	70-130				
1,2,3-Trichlorobenzene	8.40	5.0	µg/L	10.0		84.0	70-130				
1,2,4-Trichlorobenzene	7.94	1.0	µg/L	10.0		79.4	70-130				
1,1,1-Trichloroethane	11.4	1.0	µg/L	10.0		114	70-130				

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B363716 - SW-846 5030B											
LCS (B363716-BS1)				Prepared: 01/18/24 Analyzed: 01/19/24							
1,1,2-Trichloroethane	11.3	1.0	µg/L	10.0		113	70-130				
Trichloroethylene	11.9	1.0	µg/L	10.0		119	70-130				
Trichlorofluoromethane (Freon 11)	11.1	2.0	µg/L	10.0		111	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.64	1.0	µg/L	10.0		96.4	70-130				
Vinyl Chloride	11.0	2.0	µg/L	10.0		110	40-160				†
m+p Xylene	20.2	2.0	µg/L	20.0		101	70-130				
o-Xylene	9.79	1.0	µg/L	10.0		97.9	70-130				
Xylenes (total)	30.0	1.0	µg/L	30.0		100	0-200				
Surrogate: 1,2-Dichloroethane-d4	*26.4*		µg/L	25.0		106	70-130				
Surrogate: Toluene-d8	*26.5*		µg/L	25.0		106	70-130				
Surrogate: 4-Bromofluorobenzene	*23.2*		µg/L	25.0		92.9	70-130				
LCS Dup (B363716-BSD1)				Prepared: 01/18/24 Analyzed: 01/19/24							
Acetone	95.7	50	µg/L	100		95.7	70-160	4.44	25		†
Benzene	11.2	1.0	µg/L	10.0		112	70-130	6.67	25		
Bromochloromethane	12.1	1.0	µg/L	10.0		121	70-130	9.78	25		
Bromodichloromethane	11.5	0.50	µg/L	10.0		115	70-130	0.0868	25		
Bromoform	9.05	1.0	µg/L	10.0		90.5	70-130	1.45	25		
Bromomethane	13.2	2.0	µg/L	10.0		132	40-160	3.08	25	V-20	†
2-Butanone (MEK)	107	20	µg/L	100		107	40-160	10.6	25		†
Carbon Disulfide	72.6	5.0	µg/L	100		72.6	70-130	1.12	25	V-05	
Carbon Tetrachloride	11.9	5.0	µg/L	10.0		119	70-130	2.39	25		
Chlorobenzene	10.5	1.0	µg/L	10.0		105	70-130	2.91	25		
Chlorodibromomethane	11.0	0.50	µg/L	10.0		110	70-130	0.272	25		
Chloroethane	8.94	2.0	µg/L	10.0		89.4	70-130	4.38	25		
Chloroform	11.5	2.0	µg/L	10.0		115	70-130	5.90	25		
Chloromethane	10.9	2.0	µg/L	10.0		109	40-160	0.00	25		†
Cyclohexane	10.2	5.0	µg/L	10.0		102	70-130	7.59	25		
1,2-Dibromo-3-chloropropane (DBCP)	9.16	5.0	µg/L	10.0		91.6	70-130	5.27	25		
1,2-Dibromoethane (EDB)	11.3	0.50	µg/L	10.0		113	70-130	2.88	25		
1,2-Dichlorobenzene	10.4	1.0	µg/L	10.0		104	70-130	2.14	25		
1,3-Dichlorobenzene	10.3	1.0	µg/L	10.0		103	70-130	0.485	25		
1,4-Dichlorobenzene	9.44	1.0	µg/L	10.0		94.4	70-130	0.851	25		
Dichlorodifluoromethane (Freon 12)	12.1	2.0	µg/L	10.0		121	40-160	0.666	25		†
1,1-Dichloroethane	10.3	1.0	µg/L	10.0		103	70-130	1.86	25		
1,2-Dichloroethane	12.6	1.0	µg/L	10.0		126	70-130	4.38	25	V-20	
1,1-Dichloroethylene	9.93	1.0	µg/L	10.0		99.3	70-130	1.32	25		
cis-1,2-Dichloroethylene	10.1	1.0	µg/L	10.0		101	70-130	1.47	25		
trans-1,2-Dichloroethylene	9.51	1.0	µg/L	10.0		95.1	70-130	2.39	25		
1,2-Dichloropropane	11.6	1.0	µg/L	10.0		116	70-130	1.95	25		
cis-1,3-Dichloropropene	11.4	0.50	µg/L	10.0		114	70-130	1.68	25		
trans-1,3-Dichloropropene	11.2	0.50	µg/L	10.0		112	70-130	0.357	25		
1,4-Dioxane	84.3	50	µg/L	100		84.3	40-130	1.13	50		† ‡
Ethylbenzene	10.6	1.0	µg/L	10.0		106	70-130	2.58	25		
2-Hexanone (MBK)	100	10	µg/L	100		100	70-160	11.5	25		†
Isopropylbenzene (Cumene)	9.85	1.0	µg/L	10.0		98.5	70-130	0.815	25		
Methyl Acetate	10.9	1.0	µg/L	10.0		109	70-130	0.914	25		
Methyl tert-Butyl Ether (MTBE)	9.71	1.0	µg/L	10.0		97.1	70-130	0.620	25		
Methyl Cyclohexane	10.4	1.0	µg/L	10.0		104	70-130	4.25	25		
Methylene Chloride	9.48	5.0	µg/L	10.0		94.8	70-130	2.50	25		
4-Methyl-2-pentanone (MIBK)	105	10	µg/L	100		105	70-160	6.76	25		†
Styrene	10.1	1.0	µg/L	10.0		101	70-130	4.88	25		

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B363716 - SW-846 5030B											
LCS Dup (B363716-BSD1)				Prepared: 01/18/24 Analyzed: 01/19/24							
1,1,2,2-Tetrachloroethane	9.29	0.50	µg/L	10.0		92.9		70-130	4.06	25	
Tetrachloroethylene	11.9	1.0	µg/L	10.0		119		70-130	1.69	25	
Toluene	11.5	1.0	µg/L	10.0		115		70-130	0.954	25	
1,2,3-Trichlorobenzene	8.38	5.0	µg/L	10.0		83.8		70-130	0.238	25	
1,2,4-Trichlorobenzene	7.60	1.0	µg/L	10.0		76.0		70-130	4.38	25	
1,1,1-Trichloroethane	11.9	1.0	µg/L	10.0		119		70-130	4.46	25	
1,1,2-Trichloroethane	11.4	1.0	µg/L	10.0		114		70-130	0.618	25	
Trichloroethylene	12.0	1.0	µg/L	10.0		120		70-130	1.42	25	
Trichlorofluoromethane (Freon 11)	11.2	2.0	µg/L	10.0		112		70-130	1.43	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.82	1.0	µg/L	10.0		98.2		70-130	1.85	25	
Vinyl Chloride	11.3	2.0	µg/L	10.0		113		40-160	1.97	25	†
m+p Xylene	20.8	2.0	µg/L	20.0		104		70-130	2.82	25	
o-Xylene	10.2	1.0	µg/L	10.0		102		70-130	4.40	25	
Xylenes (total)	31.1	1.0	µg/L	30.0		104		0-200	3.34		
Surrogate: 1,2-Dichloroethane-d4	*26.6*		µg/L	25.0		106		70-130			
Surrogate: Toluene-d8	*26.0*		µg/L	25.0		104		70-130			
Surrogate: 4-Bromofluorobenzene	*23.6*		µg/L	25.0		94.6		70-130			
Matrix Spike (B363716-MS1)	**Source: 24A1629-01**			Prepared: 01/18/24 Analyzed: 01/20/24							
Acetone	97.6	50	µg/L	100	12.0	85.6		70-130			
Benzene	10.7	1.0	µg/L	10.0	ND	107		70-130			
Bromochloromethane	11.1	1.0	µg/L	10.0	ND	111		70-130			
Bromodichloromethane	12.3	0.50	µg/L	10.0	ND	123		70-130			
Bromoform	8.27	1.0	µg/L	10.0	ND	82.7		70-130			
Bromomethane	9.43	2.0	µg/L	10.0	ND	94.3		70-130			V-20
2-Butanone (MEK)	90.8	20	µg/L	100	ND	90.8		70-130			
Carbon Disulfide	76.1	5.0	µg/L	100	ND	76.1		70-130			V-05
Carbon Tetrachloride	12.7	5.0	µg/L	10.0	ND	127		70-130			
Chlorobenzene	10.3	1.0	µg/L	10.0	ND	103		70-130			
Chlorodibromomethane	11.0	0.50	µg/L	10.0	ND	110		70-130			
Chloroethane	11.8	2.0	µg/L	10.0	ND	118		70-130			
Chloroform	11.4	2.0	µg/L	10.0	ND	114		70-130			
Chloromethane	11.9	2.0	µg/L	10.0	ND	119		70-130			
Cyclohexane	9.75	5.0	µg/L	10.0	ND	97.5		70-130			
1,2-Dibromo-3-chloropropane (DBCP)	8.42	5.0	µg/L	10.0	ND	84.2		70-130			
1,2-Dibromoethane (EDB)	11.0	0.50	µg/L	10.0	ND	110		70-130			
1,2-Dichlorobenzene	10.3	1.0	µg/L	10.0	ND	103		70-130			
1,3-Dichlorobenzene	9.95	1.0	µg/L	10.0	ND	99.5		70-130			
1,4-Dichlorobenzene	9.01	1.0	µg/L	10.0	ND	90.1		70-130			
Dichlorodifluoromethane (Freon 12)	13.4	2.0	µg/L	10.0	ND	**134**	*	70-130			MS-24
1,1-Dichloroethane	10.7	1.0	µg/L	10.0	ND	107		70-130			
1,2-Dichloroethane	12.8	1.0	µg/L	10.0	ND	128		70-130			V-20
1,1-Dichloroethylene	10.7	1.0	µg/L	10.0	ND	107		70-130			
cis-1,2-Dichloroethylene	10.7	1.0	µg/L	10.0	0.580	102		70-130			
trans-1,2-Dichloroethylene	10.0	1.0	µg/L	10.0	ND	100		70-130			
1,2-Dichloropropane	11.5	1.0	µg/L	10.0	ND	115		70-130			
cis-1,3-Dichloropropene	10.1	0.50	µg/L	10.0	ND	101		70-130			
trans-1,3-Dichloropropene	9.94	0.50	µg/L	10.0	ND	99.4		70-130			
1,4-Dioxane	74.9	50	µg/L	100	ND	74.9		70-130			
Ethylbenzene	10.4	1.0	µg/L	10.0	ND	104		70-130			
2-Hexanone (MBK)	85.5	10	µg/L	100	ND	85.5		70-130			
Isopropylbenzene (Cumene)	9.46	1.0	µg/L	10.0	ND	94.6		70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B363716 - SW-846 5030B											
Matrix Spike (B363716-MS1)	**Source: 24A1629-01**			Prepared: 01/18/24 Analyzed: 01/20/24							
Methyl Acetate	9.81	1.0	µg/L	10.0	ND	98.1		70-130			
Methyl tert-Butyl Ether (MTBE)	9.44	1.0	µg/L	10.0	ND	94.4		70-130			
Methyl Cyclohexane	10.7	1.0	µg/L	10.0	ND	107		70-130			
Methylene Chloride	9.95	5.0	µg/L	10.0	ND	99.5		70-130			
4-Methyl-2-pentanone (MIBK)	92.6	10	µg/L	100	ND	92.6		70-130			
Styrene	9.15	1.0	µg/L	10.0	ND	91.5		70-130			
1,1,2,2-Tetrachloroethane	8.86	0.50	µg/L	10.0	ND	88.6		70-130			
Tetrachloroethylene	12.6	1.0	µg/L	10.0	ND	126		70-130			
Toluene	12.0	1.0	µg/L	10.0	0.310	116		70-130			
1,2,3-Trichlorobenzene	8.07	5.0	µg/L	10.0	ND	80.7		70-130			
1,2,4-Trichlorobenzene	7.16	1.0	µg/L	10.0	ND	71.6		70-130			
1,1,1-Trichloroethane	12.1	1.0	µg/L	10.0	ND	121		70-130			
1,1,2-Trichloroethane	11.4	1.0	µg/L	10.0	ND	114		70-130			
Trichloroethylene	18.7	1.0	µg/L	10.0	5.53	**132**	*	70-130			MS-24
Trichlorofluoromethane (Freon 11)	13.0	2.0	µg/L	10.0	ND	130		70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.91	1.0	µg/L	10.0	ND	99.1		70-130			
Vinyl Chloride	11.6	2.0	µg/L	10.0	ND	116		70-130			
m+p Xylene	20.5	2.0	µg/L	20.0	ND	103		70-130			
o-Xylene	9.44	1.0	µg/L	10.0	ND	94.4		70-130			
Xylenes (total)	30.0	1.0	µg/L	30.0	ND	99.8		0-200			
Surrogate: 1,2-Dichloroethane-d4	*27.9*		µg/L	25.0		112		70-130			
Surrogate: Toluene-d8	*26.3*		µg/L	25.0		105		70-130			
Surrogate: 4-Bromofluorobenzene	*23.8*		µg/L	25.0		95.2		70-130			
Matrix Spike Dup (B363716-MSD1)	**Source: 24A1629-01**			Prepared: 01/18/24 Analyzed: 01/20/24							
Acetone	93.8	50	µg/L	100	12.0	81.8		70-130	4.00	30	
Benzene	10.3	1.0	µg/L	10.0	ND	103		70-130	3.91	30	
Bromochloromethane	10.4	1.0	µg/L	10.0	ND	104		70-130	6.15	30	
Bromodichloromethane	10.9	0.50	µg/L	10.0	ND	109		70-130	12.2	30	
Bromoform	8.27	1.0	µg/L	10.0	ND	82.7		70-130	0.00	30	
Bromomethane	7.97	2.0	µg/L	10.0	ND	79.7		70-130	16.8	30	V-20
2-Butanone (MEK)	88.1	20	µg/L	100	ND	88.1		70-130	3.04	30	
Carbon Disulfide	74.7	5.0	µg/L	100	ND	74.7		70-130	1.91	30	V-05
Carbon Tetrachloride	12.2	5.0	µg/L	10.0	ND	122		70-130	3.77	30	
Chlorobenzene	10.1	1.0	µg/L	10.0	ND	101		70-130	1.96	30	
Chlorodibromomethane	10.1	0.50	µg/L	10.0	ND	101		70-130	8.05	30	
Chloroethane	12.7	2.0	µg/L	10.0	ND	127		70-130	7.61	30	
Chloroform	10.8	2.0	µg/L	10.0	ND	108		70-130	4.59	30	
Chloromethane	9.75	2.0	µg/L	10.0	ND	97.5		70-130	19.7	30	
Cyclohexane	9.64	5.0	µg/L	10.0	ND	96.4		70-130	1.13	30	
1,2-Dibromo-3-chloropropane (DBCP)	8.57	5.0	µg/L	10.0	ND	85.7		70-130	1.77	30	
1,2-Dibromoethane (EDB)	10.1	0.50	µg/L	10.0	ND	101		70-130	8.70	30	
1,2-Dichlorobenzene	9.96	1.0	µg/L	10.0	ND	99.6		70-130	3.74	30	
1,3-Dichlorobenzene	9.79	1.0	µg/L	10.0	ND	97.9		70-130	1.62	30	
1,4-Dichlorobenzene	9.36	1.0	µg/L	10.0	ND	93.6		70-130	3.81	30	
Dichlorodifluoromethane (Freon 12)	12.6	2.0	µg/L	10.0	ND	126		70-130	6.13	30	
1,1-Dichloroethane	10.2	1.0	µg/L	10.0	ND	102		70-130	4.97	30	
1,2-Dichloroethane	11.8	1.0	µg/L	10.0	ND	118		70-130	8.12	30	V-20
1,1-Dichloroethylene	10.1	1.0	µg/L	10.0	ND	101		70-130	5.10	30	
cis-1,2-Dichloroethylene	10.3	1.0	µg/L	10.0	0.580	96.9		70-130	4.47	30	
trans-1,2-Dichloroethylene	9.61	1.0	µg/L	10.0	ND	96.1		70-130	4.08	30	
1,2-Dichloropropane	10.7	1.0	µg/L	10.0	ND	107		70-130	7.28	30	

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B363716 - SW-846 5030B										
Matrix Spike Dup (B363716-MSD1)	**Source: 24A1629-01**			Prepared: 01/18/24 Analyzed: 01/20/24						
cis-1,3-Dichloropropene	9.57	0.50	µg/L	10.0	ND	95.7	70-130	5.69	30	
trans-1,3-Dichloropropene	9.13	0.50	µg/L	10.0	ND	91.3	70-130	8.50	30	
1,4-Dioxane	72.0	50	µg/L	100	ND	72.0	70-130	3.96	30	
Ethylbenzene	10.2	1.0	µg/L	10.0	ND	102	70-130	2.43	30	
2-Hexanone (MBK)	79.9	10	µg/L	100	ND	79.9	70-130	6.79	30	
Isopropylbenzene (Cumene)	9.35	1.0	µg/L	10.0	ND	93.5	70-130	1.17	30	
Methyl Acetate	9.42	1.0	µg/L	10.0	ND	94.2	70-130	4.06	30	
Methyl tert-Butyl Ether (MTBE)	8.79	1.0	µg/L	10.0	ND	87.9	70-130	7.13	30	
Methyl Cyclohexane	9.87	1.0	µg/L	10.0	ND	98.7	70-130	7.88	30	
Methylene Chloride	9.42	5.0	µg/L	10.0	ND	94.2	70-130	5.47	30	
4-Methyl-2-pentanone (MIBK)	87.0	10	µg/L	100	ND	87.0	70-130	6.23	30	
Styrene	9.09	1.0	µg/L	10.0	ND	90.9	70-130	0.658	30	
1,1,2,2-Tetrachloroethane	8.79	0.50	µg/L	10.0	ND	87.9	70-130	0.793	30	
Tetrachloroethylene	11.4	1.0	µg/L	10.0	ND	114	70-130	9.94	30	
Toluene	11.0	1.0	µg/L	10.0	0.310	106	70-130	8.82	30	
1,2,3-Trichlorobenzene	8.07	5.0	µg/L	10.0	ND	80.7	70-130	0.00	30	
1,2,4-Trichlorobenzene	7.44	1.0	µg/L	10.0	ND	74.4	70-130	3.84	30	
1,1,1-Trichloroethane	11.5	1.0	µg/L	10.0	ND	115	70-130	5.16	30	
1,1,2-Trichloroethane	10.4	1.0	µg/L	10.0	ND	104	70-130	8.80	30	
Trichloroethylene	17.6	1.0	µg/L	10.0	5.53	121	70-130	5.78	30	
Trichlorofluoromethane (Freon 11)	12.4	2.0	µg/L	10.0	ND	124	70-130	4.90	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.76	1.0	µg/L	10.0	ND	97.6	70-130	1.53	30	
Vinyl Chloride	11.1	2.0	µg/L	10.0	ND	111	70-130	3.88	30	
m+p Xylene	20.3	2.0	µg/L	20.0	ND	101	70-130	1.23	20	
o-Xylene	9.61	1.0	µg/L	10.0	ND	96.1	70-130	1.78	30	
Xylenes (total)	29.9	1.0	µg/L	30.0	ND	99.6	0-200	0.267		
Surrogate: 1,2-Dichloroethane-d4	*27.5*		µg/L	25.0		110	70-130			
Surrogate: Toluene-d8	*24.7*		µg/L	25.0		98.7	70-130			
Surrogate: 4-Bromofluorobenzene	*23.3*		µg/L	25.0		93.4	70-130			

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QUALITY CONTROL

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B363716 - SW-846 5030B										
Blank (B363716-BLK1)				Prepared: 01/18/24 Analyzed: 01/20/24						
No TICs Found	0.0		µg/L							

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B363891 - SW-846 3510C										
Blank (B363891-BLK1)				Prepared: 01/22/24 Analyzed: 01/24/24						
Atrazine	ND	20	µg/L							
Benzaldehyde	ND	10	µg/L							
Biphenyl	ND	20	µg/L							
Caprolactam	ND	10	µg/L							L-04
Acenaphthene	ND	5.0	µg/L							
Acenaphthylene	ND	5.0	µg/L							
Acetophenone	ND	10	µg/L							
Anthracene	ND	5.0	µg/L							
Benzo(a)anthracene	ND	5.0	µg/L							
Benzo(a)pyrene	ND	5.0	µg/L							
Benzo(b)fluoranthene	ND	5.0	µg/L							
Benzo(g,h,i)perylene	ND	5.0	µg/L							
Benzo(k)fluoranthene	ND	5.0	µg/L							
Bis(2-chloroethoxy)methane	ND	10	µg/L							
Bis(2-chloroethyl)ether	ND	10	µg/L							
Bis(2-chloroisopropyl)ether	ND	10	µg/L							
Bis(2-Ethylhexyl)phthalate	ND	10	µg/L							
4-Bromophenylphenylether	ND	10	µg/L							
Butylbenzylphthalate	ND	10	µg/L							
Carbazole	ND	10	µg/L							
4-Chloroaniline	ND	10	µg/L							
4-Chloro-3-methylphenol	ND	10	µg/L							
2-Chloronaphthalene	ND	10	µg/L							
2-Chlorophenol	ND	10	µg/L							
4-Chlorophenylphenylether	ND	10	µg/L							
Chrysene	ND	5.0	µg/L							
Dibenz(a,h)anthracene	ND	5.0	µg/L							
Dibenzofuran	ND	5.0	µg/L							
Di-n-butylphthalate	ND	10	µg/L							
3,3-Dichlorobenzidine	ND	10	µg/L							
2,4-Dichlorophenol	ND	10	µg/L							
Diethylphthalate	ND	10	µg/L							
2,4-Dimethylphenol	ND	10	µg/L							
Dimethylphthalate	ND	10	µg/L							
4,6-Dinitro-2-methylphenol	ND	20	µg/L							
2,4-Dinitrophenol	ND	10	µg/L							V-04
2,4-Dinitrotoluene	ND	10	µg/L							
2,6-Dinitrotoluene	ND	10	µg/L							
Di-n-octylphthalate	ND	10	µg/L							V-04
Fluoranthene	ND	5.0	µg/L							
Fluorene	ND	5.0	µg/L							
Hexachlorobenzene	ND	10	µg/L							
Hexachlorobutadiene	ND	10	µg/L							V-05
Hexachlorocyclopentadiene	ND	10	µg/L							V-05
Hexachloroethane	ND	10	µg/L							
Indeno(1,2,3-cd)pyrene	ND	5.0	µg/L							
Isophorone	ND	10	µg/L							
2-Methylnaphthalene	ND	5.0	µg/L							
2-Methylphenol	ND	10	µg/L							
3/4-Methylphenol	ND	10	µg/L							
Naphthalene	ND	5.0	µg/L							
2-Nitroaniline	ND	10	µg/L							

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B363891 - SW-846 3510C											
Blank (B363891-BLK1)				Prepared: 01/22/24 Analyzed: 01/24/24							
3-Nitroaniline	ND	10	µg/L								
4-Nitroaniline	ND	10	µg/L								
Nitrobenzene	ND	10	µg/L								
2-Nitrophenol	ND	10	µg/L								
4-Nitrophenol	ND	10	µg/L								
N-Nitrosodiphenylamine/Diphenylamine	ND	10	µg/L								
N-Nitrosodi-n-propylamine	ND	10	µg/L								
Pentachlorophenol	ND	10	µg/L								
Phenanthrene	ND	5.0	µg/L								
Phenol	ND	10	µg/L								
Pyrene	ND	5.0	µg/L								
1,2,4,5-Tetrachlorobenzene	ND	10	µg/L								V-05
2,4,5-Trichlorophenol	ND	10	µg/L								
2,4,6-Trichlorophenol	ND	10	µg/L								
Surrogate: 2-Fluorophenol	*226*		µg/L	400		56.5		15-110			
Surrogate: Phenol-d6	*160*		µg/L	400		40.1		15-110			
Surrogate: Nitrobenzene-d5	*164*		µg/L	200		82.1		30-130			
Surrogate: 2-Fluorobiphenyl	*126*		µg/L	200		62.9		30-130			
Surrogate: 2,4,6-Tribromophenol	*382*		µg/L	400		95.5		15-110			
Surrogate: p-Terphenyl-d14	*205*		µg/L	200		102		30-130			
LCS (B363891-BS1)				Prepared: 01/22/24 Analyzed: 01/24/24							
Atrazine	89.8	20	µg/L	100		89.8		40-140			
Benzaldehyde	55.2	10	µg/L	100		55.2		40-140			
Biphenyl	66.8	20	µg/L	100		66.8		40-140			
Caprolactam	25.9	10	µg/L	100		**25.9**	*	40-140			L-04
Acenaphthene	71.0	5.0	µg/L	100		71.0		40-140			
Acenaphthylene	72.9	5.0	µg/L	100		72.9		40-140			
Acetophenone	85.7	10	µg/L	100		85.7		40-140			
Anthracene	80.0	5.0	µg/L	100		80.0		40-140			
Benzo(a)anthracene	80.2	5.0	µg/L	100		80.2		40-140			
Benzo(a)pyrene	84.5	5.0	µg/L	100		84.5		40-140			
Benzo(b)fluoranthene	84.4	5.0	µg/L	100		84.4		40-140			
Benzo(g,h,i)perylene	90.2	5.0	µg/L	100		90.2		40-140			
Benzo(k)fluoranthene	90.2	5.0	µg/L	100		90.2		40-140			
Bis(2-chloroethoxy)methane	87.9	10	µg/L	100		87.9		40-140			
Bis(2-chloroethyl)ether	85.0	10	µg/L	100		85.0		40-140			
Bis(2-chloroisopropyl)ether	91.7	10	µg/L	100		91.7		40-140			
Bis(2-Ethylhexyl)phthalate	89.0	10	µg/L	100		89.0		40-140			
4-Bromophenylphenylether	76.2	10	µg/L	100		76.2		40-140			
Butylbenzylphthalate	90.3	10	µg/L	100		90.3		40-140			
Carbazole	86.4	10	µg/L	100		86.4		40-140			
4-Chloroaniline	80.9	10	µg/L	100		80.9		40-140			
4-Chloro-3-methylphenol	89.7	10	µg/L	100		89.7		30-130			
2-Chloronaphthalene	54.8	10	µg/L	100		54.8		40-140			
2-Chlorophenol	81.2	10	µg/L	100		81.2		30-130			
4-Chlorophenylphenylether	77.3	10	µg/L	100		77.3		40-140			
Chrysene	78.5	5.0	µg/L	100		78.5		40-140			
Dibenz(a,h)anthracene	87.8	5.0	µg/L	100		87.8		40-140			
Dibenzofuran	74.9	5.0	µg/L	100		74.9		40-140			
Di-n-butylphthalate	89.0	10	µg/L	100		89.0		40-140			
3,3-Dichlorobenzidine	103	10	µg/L	100		103		40-140			

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B363891 - SW-846 3510C												
LCS (B363891-BS1)				Prepared: 01/22/24 Analyzed: 01/24/24								
2,4-Dichlorophenol	83.0	10	µg/L	100		83.0		30-130				
Diethylphthalate	84.8	10	µg/L	100		84.8		40-140				
2,4-Dimethylphenol	72.4	10	µg/L	100		72.4		30-130				
Dimethylphthalate	81.0	10	µg/L	100		81.0		40-140				
4,6-Dinitro-2-methylphenol	81.6	20	µg/L	100		81.6		30-130				
2,4-Dinitrophenol	62.3	10	µg/L	100		62.3		30-130			V-04	
2,4-Dinitrotoluene	84.5	10	µg/L	100		84.5		40-140				
2,6-Dinitrotoluene	84.5	10	µg/L	100		84.5		40-140				
Di-n-octylphthalate	87.1	10	µg/L	100		87.1		40-140			V-04	
Fluoranthene	84.3	5.0	µg/L	100		84.3		40-140				
Fluorene	76.7	5.0	µg/L	100		76.7		40-140				
Hexachlorobenzene	74.8	10	µg/L	100		74.8		40-140				
Hexachlorobutadiene	35.1	10	µg/L	100		**35.1**	*	40-140			L-07, V-05	
Hexachlorocyclopentadiene	28.4	10	µg/L	100		**28.4**	*	30-140			L-07, V-05	†
Hexachloroethane	35.8	10	µg/L	100		**35.8**	*	40-140			L-07	
Indeno(1,2,3-cd)pyrene	88.9	5.0	µg/L	100		88.9		40-140				
Isophorone	87.8	10	µg/L	100		87.8		40-140				
2-Methylnaphthalene	62.9	5.0	µg/L	100		62.9		40-140				
2-Methylphenol	79.2	10	µg/L	100		79.2		30-130				
3/4-Methylphenol	78.0	10	µg/L	100		78.0		30-130				
Naphthalene	54.0	5.0	µg/L	100		54.0		40-140				
2-Nitroaniline	82.4	10	µg/L	100		82.4		40-140				
3-Nitroaniline	85.3	10	µg/L	100		85.3		40-140				
4-Nitroaniline	76.9	10	µg/L	100		76.9		40-140				
Nitrobenzene	74.5	10	µg/L	100		74.5		40-140				
2-Nitrophenol	73.7	10	µg/L	100		73.7		30-130				
4-Nitrophenol	54.1	10	µg/L	100		54.1		10-130				†
N-Nitrosodiphenylamine/Diphenylamine	91.3	10	µg/L	100		91.3		40-140				
N-Nitrosodi-n-propylamine	89.3	10	µg/L	100		89.3		40-140				
Pentachlorophenol	74.2	10	µg/L	100		74.2		30-130				
Phenanthrene	79.4	5.0	µg/L	100		79.4		40-140				
Phenol	44.0	10	µg/L	100		44.0		20-130				†
Pyrene	78.7	5.0	µg/L	100		78.7		40-140				
1,2,4,5-Tetrachlorobenzene	52.6	10	µg/L	100		52.6		40-140			V-05	
2,4,5-Trichlorophenol	77.5	10	µg/L	100		77.5		30-130				
2,4,6-Trichlorophenol	74.8	10	µg/L	100		74.8		30-130				
Surrogate: 2-Fluorophenol	*234*		µg/L	400		58.6		15-110				
Surrogate: Phenol-d6	*186*		µg/L	400		46.4		15-110				
Surrogate: Nitrobenzene-d5	*170*		µg/L	200		84.8		30-130				
Surrogate: 2-Fluorobiphenyl	*142*		µg/L	200		70.8		30-130				
Surrogate: 2,4,6-Tribromophenol	*355*		µg/L	400		88.8		15-110				
Surrogate: p-Terphenyl-d14	*175*		µg/L	200		87.6		30-130				

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B363891 - SW-846 3510C												
LCS Dup (B363891-BSD1)				Prepared: 01/22/24 Analyzed: 01/24/24								
Atrazine	86.5	20	µg/L	100		86.5		40-140	3.78	20		
Benzaldehyde	58.6	10	µg/L	100		58.6		40-140	5.97	20		
Biphenyl	73.8	20	µg/L	100		73.8		40-140	9.93	20		
Caprolactam	24.5	10	µg/L	100		**24.5**	*	40-140	5.32	20	L-04	
Acenaphthene	72.7	5.0	µg/L	100		72.7		40-140	2.30	20		
Acenaphthylene	77.9	5.0	µg/L	100		77.9		40-140	6.56	20		
Acetophenone	84.9	10	µg/L	100		84.9		40-140	0.961	20		
Anthracene	84.4	5.0	µg/L	100		84.4		40-140	5.37	20		
Benzo(a)anthracene	84.5	5.0	µg/L	100		84.5		40-140	5.25	20		
Benzo(a)pyrene	89.0	5.0	µg/L	100		89.0		40-140	5.23	20		
Benzo(b)fluoranthene	87.0	5.0	µg/L	100		87.0		40-140	2.98	20		
Benzo(g,h,i)perylene	86.9	5.0	µg/L	100		86.9		40-140	3.67	20		
Benzo(k)fluoranthene	92.6	5.0	µg/L	100		92.6		40-140	2.60	20		
Bis(2-chloroethoxy)methane	87.6	10	µg/L	100		87.6		40-140	0.422	20		
Bis(2-chloroethyl)ether	87.5	10	µg/L	100		87.5		40-140	2.84	20		
Bis(2-chloroisopropyl)ether	92.9	10	µg/L	100		92.9		40-140	1.35	20		
Bis(2-Ethylhexyl)phthalate	99.6	10	µg/L	100		99.6		40-140	11.2	20		
4-Bromophenylphenylether	83.7	10	µg/L	100		83.7		40-140	9.36	20		
Butylbenzylphthalate	99.9	10	µg/L	100		99.9		40-140	10.0	20		
Carbazole	87.7	10	µg/L	100		87.7		40-140	1.56	20		
4-Chloroaniline	83.0	10	µg/L	100		83.0		40-140	2.50	20		
4-Chloro-3-methylphenol	88.8	10	µg/L	100		88.8		30-130	1.03	20		
2-Chloronaphthalene	61.9	10	µg/L	100		61.9		40-140	12.2	20		
2-Chlorophenol	84.2	10	µg/L	100		84.2		30-130	3.72	20		
4-Chlorophenylphenylether	79.5	10	µg/L	100		79.5		40-140	2.73	20		
Chrysene	80.6	5.0	µg/L	100		80.6		40-140	2.64	20		
Dibenz(a,h)anthracene	85.9	5.0	µg/L	100		85.9		40-140	2.23	20		
Dibenzofuran	77.0	5.0	µg/L	100		77.0		40-140	2.70	20		
Di-n-butylphthalate	93.6	10	µg/L	100		93.6		40-140	5.11	20		
3,3-Dichlorobenzidine	114	10	µg/L	100		114		40-140	9.74	20		
2,4-Dichlorophenol	87.1	10	µg/L	100		87.1		30-130	4.82	20		
Diethylphthalate	83.8	10	µg/L	100		83.8		40-140	1.19	20		
2,4-Dimethylphenol	76.0	10	µg/L	100		76.0		30-130	4.82	20		
Dimethylphthalate	81.7	10	µg/L	100		81.7		40-140	0.848	50		‡
4,6-Dinitro-2-methylphenol	88.0	20	µg/L	100		88.0		30-130	7.60	50		‡
2,4-Dinitrophenol	67.2	10	µg/L	100		67.2		30-130	7.57	50	V-04	‡
2,4-Dinitrotoluene	81.1	10	µg/L	100		81.1		40-140	4.14	20		
2,6-Dinitrotoluene	85.9	10	µg/L	100		85.9		40-140	1.62	20		
Di-n-octylphthalate	105	10	µg/L	100		105		40-140	18.4	20	V-04	
Fluoranthene	85.6	5.0	µg/L	100		85.6		40-140	1.60	20		
Fluorene	77.8	5.0	µg/L	100		77.8		40-140	1.37	20		
Hexachlorobenzene	80.0	10	µg/L	100		80.0		40-140	6.68	20		
Hexachlorobutadiene	41.6	10	µg/L	100		41.6		40-140	16.9	20	V-05	
Hexachlorocyclopentadiene	37.0	10	µg/L	100		37.0		30-140	26.4	50	V-05	† ‡
Hexachloroethane	42.0	10	µg/L	100		42.0		40-140	15.8	50		‡
Indeno(1,2,3-cd)pyrene	89.2	5.0	µg/L	100		89.2		40-140	0.236	50		‡
Isophorone	87.1	10	µg/L	100		87.1		40-140	0.835	20		
2-Methylnaphthalene	65.4	5.0	µg/L	100		65.4		40-140	3.88	20		
2-Methylphenol	81.5	10	µg/L	100		81.5		30-130	2.91	20		
3/4-Methylphenol	78.3	10	µg/L	100		78.3		30-130	0.422	20		
Naphthalene	57.3	5.0	µg/L	100		57.3		40-140	5.91	20		
2-Nitroaniline	82.2	10	µg/L	100		82.2		40-140	0.219	20		

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B363891 - SW-846 3510C												
LCS Dup (B363891-BSD1)				Prepared: 01/22/24 Analyzed: 01/24/24								
3-Nitroaniline	84.1	10	µg/L	100		84.1		40-140	1.49	20		
4-Nitroaniline	74.2	10	µg/L	100		74.2		40-140	3.57	20		
Nitrobenzene	77.0	10	µg/L	100		77.0		40-140	3.34	20		
2-Nitrophenol	79.3	10	µg/L	100		79.3		30-130	7.25	20		
4-Nitrophenol	54.6	10	µg/L	100		54.6		10-130	0.957	50		† ‡
N-Nitrosodiphenylamine/Diphenylamine	99.2	10	µg/L	100		99.2		40-140	8.27	20		
N-Nitrosodi-n-propylamine	88.5	10	µg/L	100		88.5		40-140	0.889	20		
Pentachlorophenol	78.2	10	µg/L	100		78.2		30-130	5.21	50		‡
Phenanthrene	82.4	5.0	µg/L	100		82.4		40-140	3.67	20		
Phenol	45.6	10	µg/L	100		45.6		20-130	3.42	20		†
Pyrene	82.9	5.0	µg/L	100		82.9		40-140	5.25	20		
1,2,4,5-Tetrachlorobenzene	61.6	10	µg/L	100		61.6		40-140	15.8	20	V-05	
2,4,5-Trichlorophenol	82.3	10	µg/L	100		82.3		30-130	6.01	20		
2,4,6-Trichlorophenol	81.4	10	µg/L	100		81.4		30-130	8.50	50		‡
Surrogate: 2-Fluorophenol	*231*		µg/L	400		57.7		15-110				
Surrogate: Phenol-d6	*179*		µg/L	400		44.7		15-110				
Surrogate: Nitrobenzene-d5	*167*		µg/L	200		83.4		30-130				
Surrogate: 2-Fluorobiphenyl	*144*		µg/L	200		72.1		30-130				
Surrogate: 2,4,6-Tribromophenol	*332*		µg/L	400		83.0		15-110				
Surrogate: p-Terphenyl-d14	*176*		µg/L	200		88.1		30-130				
Matrix Spike (B363891-MS1)	**Source: 24A1629-01**			Prepared: 01/22/24 Analyzed: 01/30/24								
Atrazine	108	18	µg/L	90.4	ND	119		40-140				
Benzaldehyde	59.3	9.0	µg/L	90.4	ND	65.7		40-140				
Biphenyl	80.8	18	µg/L	90.4	ND	89.4		40-140				
Caprolactam	30.5	9.0	µg/L	90.4	ND	**33.8**	*	40-140			MS-09	
Acenaphthene	81.8	4.5	µg/L	90.4	ND	90.5		40-140				
Acenaphthylene	84.2	4.5	µg/L	90.4	ND	93.2		40-140				
Acetophenone	87.1	9.0	µg/L	90.4	ND	96.4		40-140				
Anthracene	90.3	4.5	µg/L	90.4	ND	100		40-140				
Benzo(a)anthracene	87.7	4.5	µg/L	90.4	ND	97.0		40-140				
Benzo(a)pyrene	93.3	4.5	µg/L	90.4	ND	103		40-140				
Benzo(b)fluoranthene	87.3	4.5	µg/L	90.4	ND	96.6		40-140				
Benzo(g,h,i)perylene	98.2	4.5	µg/L	90.4	ND	109		40-140				
Benzo(k)fluoranthene	93.1	4.5	µg/L	90.4	ND	103		40-140				
Bis(2-chloroethoxy)methane	90.0	9.0	µg/L	90.4	ND	99.6		40-140				
Bis(2-chloroethyl)ether	81.6	9.0	µg/L	90.4	ND	90.3		40-140				
Bis(2-chloroisopropyl)ether	81.1	9.0	µg/L	90.4	ND	89.7		40-140			V-05	
Bis(2-Ethylhexyl)phthalate	96.3	9.0	µg/L	90.4	ND	107		40-140				
4-Bromophenylphenylether	92.5	9.0	µg/L	90.4	ND	102		40-140				
Butylbenzylphthalate	95.5	9.0	µg/L	90.4	ND	106		40-140			V-05	
Carbazole	98.9	9.0	µg/L	90.4	ND	109		40-140				
4-Chloroaniline	85.2	9.0	µg/L	90.4	ND	94.3		40-140				
4-Chloro-3-methylphenol	105	9.0	µg/L	90.4	ND	116		30-130				
2-Chloronaphthalene	60.9	9.0	µg/L	90.4	ND	67.4		40-140				
2-Chlorophenol	84.0	9.0	µg/L	90.4	ND	93.0		30-130				
4-Chlorophenylphenylether	88.0	9.0	µg/L	90.4	ND	97.4		40-140				
Chrysene	83.8	4.5	µg/L	90.4	ND	92.7		40-140				
Dibenz(a,h)anthracene	96.1	4.5	µg/L	90.4	ND	106		40-140				
Dibenzofuran	86.4	4.5	µg/L	90.4	ND	95.6		40-140				
Di-n-butylphthalate	99.4	9.0	µg/L	90.4	ND	110		40-140				
3,3-Dichlorobenzidine	118	9.0	µg/L	90.4	ND	130		40-140				

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B363891 - SW-846 3510C											
Matrix Spike (B363891-MS1)		**Source: 24A1629-01**		Prepared: 01/22/24 Analyzed: 01/30/24							
2,4-Dichlorophenol	97.6	9.0	µg/L	90.4	ND	108		30-130			
Diethylphthalate	92.6	9.0	µg/L	90.4	ND	102		40-140			
2,4-Dimethylphenol	79.5	9.0	µg/L	90.4	ND	88.0		30-130			
Dimethylphthalate	90.3	9.0	µg/L	90.4	ND	99.9		40-140			
4,6-Dinitro-2-methylphenol	102	18	µg/L	90.4	ND	113		30-130			
2,4-Dinitrophenol	100	9.0	µg/L	90.4	ND	111		30-130			V-04
2,4-Dinitrotoluene	96.2	9.0	µg/L	90.4	ND	107		40-140			
2,6-Dinitrotoluene	95.3	9.0	µg/L	90.4	ND	106		40-140			
Di-n-octylphthalate	101	9.0	µg/L	90.4	ND	111		40-140			V-04, V-05
Fluoranthene	97.5	4.5	µg/L	90.4	ND	108		40-140			
Fluorene	87.4	4.5	µg/L	90.4	ND	96.7		40-140			
Hexachlorobenzene	91.0	9.0	µg/L	90.4	ND	101		40-140			
Hexachlorobutadiene	52.3	9.0	µg/L	90.4	ND	57.9		40-140			
Hexachlorocyclopentadiene	40.1	9.0	µg/L	90.4	ND	44.4		30-130			V-05
Hexachloroethane	49.4	9.0	µg/L	90.4	ND	54.7		40-140			
Indeno(1,2,3-cd)pyrene	98.9	4.5	µg/L	90.4	ND	109		40-140			
Isophorone	92.9	9.0	µg/L	90.4	ND	103		40-140			
2-Methylnaphthalene	78.7	4.5	µg/L	90.4	ND	87.1		40-140			
2-Methylphenol	85.3	9.0	µg/L	90.4	ND	94.3		30-130			
3/4-Methylphenol	82.6	9.0	µg/L	90.4	0.969	90.4		30-130			
Naphthalene	67.8	4.5	µg/L	90.4	ND	75.1		40-140			
2-Nitroaniline	86.7	9.0	µg/L	90.4	ND	95.9		40-140			
3-Nitroaniline	94.7	9.0	µg/L	90.4	ND	105		40-140			
4-Nitroaniline	88.8	9.0	µg/L	90.4	ND	98.2		40-140			
Nitrobenzene	78.5	9.0	µg/L	90.4	ND	86.8		40-140			
2-Nitrophenol	84.1	9.0	µg/L	90.4	ND	93.0		30-130			
4-Nitrophenol	61.4	9.0	µg/L	90.4	ND	67.9		30-130			
N-Nitrosodiphenylamine/Diphenylamine	106	9.0	µg/L	90.4	ND	117		40-140			
N-Nitrosodi-n-propylamine	88.6	9.0	µg/L	90.4	ND	98.1		40-140			
Pentachlorophenol	111	9.0	µg/L	90.4	ND	122		30-130			
Phenanthrene	89.0	4.5	µg/L	90.4	ND	98.5		40-140			
Phenol	79.1	9.0	µg/L	90.4	23.7	61.3		30-130			R-06
Pyrene	84.7	4.5	µg/L	90.4	ND	93.7		40-140			
1,2,4,5-Tetrachlorobenzene	68.8	9.0	µg/L	90.4	ND	76.1		40-140			
2,4,5-Trichlorophenol	92.6	9.0	µg/L	90.4	ND	102		30-130			
2,4,6-Trichlorophenol	92.0	9.0	µg/L	90.4	ND	102		30-130			
Surrogate: 2-Fluorophenol	*212*		µg/L	361		58.6		15-110			
Surrogate: Phenol-d6	*163*		µg/L	361		45.2		15-110			
Surrogate: Nitrobenzene-d5	*160*		µg/L	181		88.5		30-130			
Surrogate: 2-Fluorobiphenyl	*155*		µg/L	181		85.5		30-130			
Surrogate: 2,4,6-Tribromophenol	*439*		µg/L	361		**121**	*	15-110			S-07
Surrogate: p-Terphenyl-d14	*179*		µg/L	181		99.2		30-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B363891 - SW-846 3510C											
Matrix Spike Dup (B363891-MSD1)	**Source: 24A1629-01**			Prepared: 01/22/24 Analyzed: 01/30/24							
Atrazine	90.0	18	µg/L	89.5	ND	101		40-140	18.0	30	
Benzaldehyde	53.7	8.9	µg/L	89.5	ND	60.0		40-140	10.1	30	
Biphenyl	74.0	18	µg/L	89.5	ND	82.7		40-140	8.82	30	
Caprolactam	23.4	8.9	µg/L	89.5	ND	**26.2**	*	40-140	26.4	30	MS-09
Acenaphthene	72.0	4.5	µg/L	89.5	ND	80.5		40-140	12.7	30	
Acenaphthylene	74.5	4.5	µg/L	89.5	ND	83.3		40-140	12.2	30	
Acetophenone	74.4	8.9	µg/L	89.5	ND	83.2		40-140	15.7	30	
Anthracene	81.6	4.5	µg/L	89.5	ND	91.2		40-140	10.1	30	
Benzo(a)anthracene	79.6	4.5	µg/L	89.5	ND	89.0		40-140	9.70	30	
Benzo(a)pyrene	83.9	4.5	µg/L	89.5	ND	93.8		40-140	10.6	30	
Benzo(b)fluoranthene	81.5	4.5	µg/L	89.5	ND	91.1		40-140	6.87	30	
Benzo(g,h,i)perylene	75.1	4.5	µg/L	89.5	ND	84.0		40-140	26.6	30	
Benzo(k)fluoranthene	86.1	4.5	µg/L	89.5	ND	96.3		40-140	7.78	30	
Bis(2-chloroethoxy)methane	78.7	8.9	µg/L	89.5	ND	88.0		40-140	13.4	30	
Bis(2-chloroethyl)ether	73.2	8.9	µg/L	89.5	ND	81.8		40-140	10.9	30	
Bis(2-chloroisopropyl)ether	74.1	8.9	µg/L	89.5	ND	82.8		40-140	9.05	30	V-05
Bis(2-Ethylhexyl)phthalate	91.6	8.9	µg/L	89.5	ND	102		40-140	5.07	30	
4-Bromophenylphenylether	85.5	8.9	µg/L	89.5	ND	95.6		40-140	7.82	30	
Butylbenzylphthalate	89.6	8.9	µg/L	89.5	ND	100		40-140	6.39	30	V-05
Carbazole	86.1	8.9	µg/L	89.5	ND	96.2		40-140	13.9	30	
4-Chloroaniline	68.1	8.9	µg/L	89.5	ND	76.1		40-140	22.3	30	
4-Chloro-3-methylphenol	86.7	8.9	µg/L	89.5	ND	96.9		30-130	19.1	30	
2-Chloronaphthalene	57.7	8.9	µg/L	89.5	ND	64.5		40-140	5.35	30	
2-Chlorophenol	73.1	8.9	µg/L	89.5	ND	81.7		30-130	14.0	30	
4-Chlorophenylphenylether	76.6	8.9	µg/L	89.5	ND	85.7		40-140	13.8	30	
Chrysene	75.4	4.5	µg/L	89.5	ND	84.3		40-140	10.6	30	
Dibenz(a,h)anthracene	75.6	4.5	µg/L	89.5	ND	84.5		40-140	23.8	30	
Dibenzofuran	75.1	4.5	µg/L	89.5	ND	84.0		40-140	13.9	30	
Di-n-butylphthalate	90.1	8.9	µg/L	89.5	ND	101		40-140	9.79	30	
3,3-Dichlorobenzidine	104	8.9	µg/L	89.5	ND	116		40-140	12.7	30	
2,4-Dichlorophenol	87.1	8.9	µg/L	89.5	ND	97.4		30-130	11.3	30	
Diethylphthalate	79.4	8.9	µg/L	89.5	ND	88.7		40-140	15.3	30	
2,4-Dimethylphenol	70.4	8.9	µg/L	89.5	ND	78.7		30-130	12.2	30	
Dimethylphthalate	77.9	8.9	µg/L	89.5	ND	87.1		40-140	14.8	30	
4,6-Dinitro-2-methylphenol	96.1	18	µg/L	89.5	ND	107		30-130	5.87	30	
2,4-Dinitrophenol	91.0	8.9	µg/L	89.5	ND	102		30-130	9.67	30	V-04
2,4-Dinitrotoluene	80.8	8.9	µg/L	89.5	ND	90.3		40-140	17.5	30	
2,6-Dinitrotoluene	82.9	8.9	µg/L	89.5	ND	92.7		40-140	14.0	30	
Di-n-octylphthalate	102	8.9	µg/L	89.5	ND	114		40-140	1.73	30	V-04, V-05
Fluoranthene	86.0	4.5	µg/L	89.5	ND	96.1		40-140	12.5	30	
Fluorene	75.5	4.5	µg/L	89.5	ND	84.4		40-140	14.6	30	
Hexachlorobenzene	83.9	8.9	µg/L	89.5	ND	93.8		40-140	8.11	30	
Hexachlorobutadiene	50.8	8.9	µg/L	89.5	ND	56.8		40-140	3.05	30	
Hexachlorocyclopentadiene	40.3	8.9	µg/L	89.5	ND	45.1		30-130	0.535	30	V-05
Hexachloroethane	46.1	8.9	µg/L	89.5	ND	51.6		40-140	6.92	30	
Indeno(1,2,3-cd)pyrene	78.3	4.5	µg/L	89.5	ND	87.5		40-140	23.3	30	
Isophorone	81.4	8.9	µg/L	89.5	ND	91.0		40-140	13.2	30	
2-Methylnaphthalene	70.8	4.5	µg/L	89.5	ND	79.1		40-140	10.6	30	
2-Methylphenol	70.9	8.9	µg/L	89.5	ND	79.3		30-130	18.3	30	
3/4-Methylphenol	68.5	8.9	µg/L	89.5	0.969	75.5		30-130	18.7	30	
Naphthalene	63.4	4.5	µg/L	89.5	ND	70.9		40-140	6.72	30	
2-Nitroaniline	76.1	8.9	µg/L	89.5	ND	85.0		40-140	13.0	30	

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD		RPD Limit	Notes
Batch B363891 - SW-846 3510C											
Matrix Spike Dup (B363891-MSD1)	**Source: 24A1629-01**			Prepared: 01/22/24 Analyzed: 01/30/24							
3-Nitroaniline	78.3	8.9	µg/L	89.5	ND	87.5	40-140	19.0		30	
4-Nitroaniline	73.5	8.9	µg/L	89.5	ND	82.2	40-140	18.8		30	
Nitrobenzene	69.3	8.9	µg/L	89.5	ND	77.5	40-140	12.3		30	
2-Nitrophenol	74.4	8.9	µg/L	89.5	ND	83.2	30-130	12.2		30	
4-Nitrophenol	49.2	8.9	µg/L	89.5	ND	55.1	30-130	22.0		30	
N-Nitrosodiphenylamine/Diphenylamine	97.0	8.9	µg/L	89.5	ND	108	40-140	8.90		30	
N-Nitrosodi-n-propylamine	75.3	8.9	µg/L	89.5	ND	84.2	40-140	16.3		30	
Pentachlorophenol	99.6	8.9	µg/L	89.5	ND	111	30-130	10.5		30	
Phenanthrene	79.6	4.5	µg/L	89.5	ND	89.0	40-140	11.2		30	
Phenol	56.6	8.9	µg/L	89.5	23.7	36.8	30-130	**33.1**	*	30	R-06
Pyrene	80.1	4.5	µg/L	89.5	ND	89.5	40-140	5.61		30	
1,2,4,5-Tetrachlorobenzene	65.8	8.9	µg/L	89.5	ND	73.6	40-140	4.37		30	
2,4,5-Trichlorophenol	81.3	8.9	µg/L	89.5	ND	90.9	30-130	13.0		30	
2,4,6-Trichlorophenol	81.4	8.9	µg/L	89.5	ND	91.0	30-130	12.2		30	
Surrogate: 2-Fluorophenol	*191*		µg/L	358		53.5	15-110				
Surrogate: Phenol-d6	*139*		µg/L	358		38.8	15-110				
Surrogate: Nitrobenzene-d5	*147*		µg/L	179		82.4	30-130				
Surrogate: 2-Fluorobiphenyl	*144*		µg/L	179		80.6	30-130				
Surrogate: 2,4,6-Tribromophenol	*374*		µg/L	358		104	15-110				
Surrogate: p-Terphenyl-d14	*171*		µg/L	179		95.6	30-130				

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QUALITY CONTROL

1,4-Dioxane by isotope dilution GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B363839 - SW-846 3510C										
Blank (B363839-BLK1)				Prepared: 01/19/24 Analyzed: 01/23/24						
1,4-Dioxane	ND	0.20	µg/L							
Surrogate: 1,4-Dioxane-d8	*2.05*		µg/L	10.0		20.5	15-110			
LCS (B363839-BS1)				Prepared: 01/19/24 Analyzed: 01/23/24						
1,4-Dioxane	12.7	0.20	µg/L	10.0		127	40-140			
Surrogate: 1,4-Dioxane-d8	*2.14*		µg/L	10.0		21.4	15-110			
LCS Dup (B363839-BSD1)				Prepared: 01/19/24 Analyzed: 01/23/24						
1,4-Dioxane	12.5	0.20	µg/L	10.0		125	40-140	1.50	30	
Surrogate: 1,4-Dioxane-d8	*2.25*		µg/L	10.0		22.5	15-110			
Matrix Spike (B363839-MS1)	**Source: 24A1629-01**			Prepared: 01/19/24 Analyzed: 01/23/24						
1,4-Dioxane	12.2	0.19	µg/L	9.43	ND	129	30-140			
Surrogate: 1,4-Dioxane-d8	*2.13*		µg/L	9.43		22.5	15-110			
Matrix Spike Dup (B363839-MSD1)	**Source: 24A1629-01**			Prepared: 01/19/24 Analyzed: 01/23/24						
1,4-Dioxane	12.1	0.19	µg/L	9.43	ND	128	30-140	0.722	30	
Surrogate: 1,4-Dioxane-d8	*1.94*		µg/L	9.43		20.5	15-110			

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QUALITY CONTROL

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B363891 - SW-846 3510C										
Blank (B363891-BLK1)				Prepared: 01/22/24 Analyzed: 01/24/24						
No TICs Found	0.0		µg/L							

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B363890 - SW-846 3510C										
Blank (B363890-BLK1)				Prepared: 01/22/24 Analyzed: 01/23/24						
Aroclor-1016	ND	0.20	µg/L							
Aroclor-1016 [2C]	ND	0.20	µg/L							
Aroclor-1221	ND	0.20	µg/L							
Aroclor-1221 [2C]	ND	0.20	µg/L							
Aroclor-1232	ND	0.20	µg/L							
Aroclor-1232 [2C]	ND	0.20	µg/L							
Aroclor-1242	ND	0.20	µg/L							
Aroclor-1242 [2C]	ND	0.20	µg/L							
Aroclor-1248	ND	0.20	µg/L							
Aroclor-1248 [2C]	ND	0.20	µg/L							
Aroclor-1254	ND	0.20	µg/L							
Aroclor-1254 [2C]	ND	0.20	µg/L							
Aroclor-1260	ND	0.20	µg/L							
Aroclor-1260 [2C]	ND	0.20	µg/L							
Aroclor-1262	ND	0.20	µg/L							
Aroclor-1262 [2C]	ND	0.20	µg/L							
Aroclor-1268	ND	0.20	µg/L							
Aroclor-1268 [2C]	ND	0.20	µg/L							
Surrogate: Decachlorobiphenyl	*3.84*		µg/L	4.00		96.0	30-150			
Surrogate: Decachlorobiphenyl [2C]	*3.54*		µg/L	4.00		88.4	30-150			
Surrogate: Tetrachloro-m-xylene	*2.21*		µg/L	4.00		55.2	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*2.14*		µg/L	4.00		53.4	30-150			
LCS (B363890-BS1)				Prepared: 01/22/24 Analyzed: 01/23/24						
Aroclor-1016	0.75	0.20	µg/L	1.00		74.9	40-140			
Aroclor-1016 [2C]	0.76	0.20	µg/L	1.00		75.6	40-140			
Aroclor-1260	0.77	0.20	µg/L	1.00		77.2	40-140			
Aroclor-1260 [2C]	0.70	0.20	µg/L	1.00		70.2	40-140			
Surrogate: Decachlorobiphenyl	*3.97*		µg/L	4.00		99.2	30-150			
Surrogate: Decachlorobiphenyl [2C]	*3.65*		µg/L	4.00		91.2	30-150			
Surrogate: Tetrachloro-m-xylene	*2.60*		µg/L	4.00		65.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*2.51*		µg/L	4.00		62.8	30-150			
LCS Dup (B363890-BSD1)				Prepared: 01/22/24 Analyzed: 01/23/24						
Aroclor-1016	0.87	0.20	µg/L	1.00		86.7	40-140	14.7	20	
Aroclor-1016 [2C]	0.86	0.20	µg/L	1.00		86.4	40-140	13.3	20	
Aroclor-1260	0.90	0.20	µg/L	1.00		89.7	40-140	15.0	20	
Aroclor-1260 [2C]	0.82	0.20	µg/L	1.00		81.7	40-140	15.2	20	
Surrogate: Decachlorobiphenyl	*3.97*		µg/L	4.00		99.3	30-150			
Surrogate: Decachlorobiphenyl [2C]	*3.74*		µg/L	4.00		93.5	30-150			
Surrogate: Tetrachloro-m-xylene	*2.44*		µg/L	4.00		61.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*2.38*		µg/L	4.00		59.4	30-150			

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B363890 - SW-846 3510C										
Matrix Spike (B363890-MS1)		**Source: 24A1629-01**		Prepared: 01/22/24 Analyzed: 01/23/24						
Aroclor-1016	0.68	0.18	µg/L	0.894	ND	75.8	40-140			
Aroclor-1016 [2C]	0.71	0.18	µg/L	0.894	ND	79.2	40-140			
Aroclor-1260	0.67	0.18	µg/L	0.894	ND	75.0	40-140			
Aroclor-1260 [2C]	0.62	0.18	µg/L	0.894	ND	69.6	40-140			
Surrogate: Decachlorobiphenyl	*3.27*		µg/L	3.58		91.3	30-150			
Surrogate: Decachlorobiphenyl [2C]	*3.02*		µg/L	3.58		84.4	30-150			
Surrogate: Tetrachloro-m-xylene	*2.51*		µg/L	3.58		70.1	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*2.42*		µg/L	3.58		67.6	30-150			
Matrix Spike Dup (B363890-MSD1)		**Source: 24A1629-01**		Prepared: 01/22/24 Analyzed: 01/23/24						
Aroclor-1016	0.77	0.18	µg/L	0.895	ND	85.5	40-140	12.1	50	
Aroclor-1016 [2C]	0.77	0.18	µg/L	0.895	ND	86.2	40-140	8.44	50	
Aroclor-1260	0.71	0.18	µg/L	0.895	ND	79.5	40-140	5.86	50	
Aroclor-1260 [2C]	0.67	0.18	µg/L	0.895	ND	74.5	40-140	6.84	50	
Surrogate: Decachlorobiphenyl	*3.50*		µg/L	3.58		97.7	30-150			
Surrogate: Decachlorobiphenyl [2C]	*3.26*		µg/L	3.58		91.1	30-150			
Surrogate: Tetrachloro-m-xylene	*2.86*		µg/L	3.58		79.8	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*2.77*		µg/L	3.58		77.4	30-150			

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B363670 - SW-846 3005A										
Blank (B363670-BLK1)				Prepared: 01/18/24 Analyzed: 01/19/24						
Antimony	ND	0.050	mg/L							
Barium	ND	0.050	mg/L							
Beryllium	ND	0.0040	mg/L							
Cadmium	ND	0.0040	mg/L							
Calcium	ND	0.50	mg/L							
Chromium	ND	0.010	mg/L							
Cobalt	ND	0.010	mg/L							
Copper	ND	0.010	mg/L							
Iron	ND	0.050	mg/L							
Magnesium	ND	0.050	mg/L							
Manganese	ND	0.010	mg/L							
Potassium	ND	2.0	mg/L							
Sodium	ND	2.0	mg/L							
Zinc	0.0070	0.010	mg/L							J
Blank (B363670-BLK2)				Prepared: 01/18/24 Analyzed: 01/22/24						
Arsenic	ND	0.010	mg/L							
Lead	ND	0.010	mg/L							
Nickel	ND	0.010	mg/L							
Selenium	ND	0.050	mg/L							
Silver	ND	0.010	mg/L							
Thallium	ND	0.050	mg/L							
Vanadium	ND	0.010	mg/L							
Blank (B363670-BLK3)				Prepared: 01/18/24 Analyzed: 01/26/24						
Aluminum	ND	0.050	mg/L							
LCS (B363670-BS1)				Prepared: 01/18/24 Analyzed: 01/19/24						
Antimony	0.469	0.050	mg/L	0.500		93.9	80-120			
Barium	0.450	0.050	mg/L	0.500		90.0	80-120			
Beryllium	0.487	0.0040	mg/L	0.500		97.4	80-120			
Cadmium	0.478	0.0040	mg/L	0.500		95.6	80-120			
Calcium	3.77	0.50	mg/L	4.00		94.2	80-120			
Chromium	0.480	0.010	mg/L	0.500		96.1	80-120			
Cobalt	0.472	0.010	mg/L	0.500		94.4	80-120			
Copper	0.937	0.010	mg/L	1.00		93.7	80-120			
Iron	3.82	0.050	mg/L	4.00		95.5	80-120			
Magnesium	3.85	0.050	mg/L	4.00		96.2	80-120			
Manganese	0.475	0.010	mg/L	0.500		95.1	80-120			
Potassium	3.82	2.0	mg/L	4.00		95.5	80-120			
Sodium	3.86	2.0	mg/L	4.00		96.4	80-120			
Zinc	0.965	0.010	mg/L	1.00		96.5	80-120			

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B363670 - SW-846 3005A											
LCS (B363670-BS2)				Prepared: 01/18/24 Analyzed: 01/22/24							
Arsenic	0.459	0.010	mg/L	0.500		91.8		80-120			
Lead	0.483	0.010	mg/L	0.500		96.7		80-120			
Nickel	0.496	0.010	mg/L	0.500		99.2		80-120			
Selenium	0.488	0.050	mg/L	0.500		97.6		80-120			
Silver	0.512	0.010	mg/L	0.500		102		80-120			
Thallium	0.454	0.050	mg/L	0.500		90.8		80-120			
Vanadium	0.489	0.010	mg/L	0.500		97.8		80-120			
LCS (B363670-BS3)				Prepared: 01/18/24 Analyzed: 01/26/24							
Aluminum	0.437	0.050	mg/L	0.500		87.5		80-120			
LCS Dup (B363670-BSD1)				Prepared: 01/18/24 Analyzed: 01/19/24							
Antimony	0.477	0.050	mg/L	0.500		95.4		80-120	1.59	20	
Barium	0.460	0.050	mg/L	0.500		92.0		80-120	2.18	20	
Beryllium	0.497	0.0040	mg/L	0.500		99.4		80-120	2.02	20	
Cadmium	0.485	0.0040	mg/L	0.500		97.0		80-120	1.42	20	
Calcium	3.87	0.50	mg/L	4.00		96.8		80-120	2.68	20	
Chromium	0.488	0.010	mg/L	0.500		97.6		80-120	1.53	20	
Cobalt	0.483	0.010	mg/L	0.500		96.5		80-120	2.24	20	
Copper	0.949	0.010	mg/L	1.00		94.9		80-120	1.33	20	
Iron	3.94	0.050	mg/L	4.00		98.4		80-120	3.02	20	
Magnesium	3.95	0.050	mg/L	4.00		98.8		80-120	2.63	20	
Manganese	0.490	0.010	mg/L	0.500		97.9		80-120	2.93	20	
Potassium	3.92	2.0	mg/L	4.00		98.1		80-120	2.67	20	
Sodium	3.94	2.0	mg/L	4.00		98.4		80-120	2.02	20	
Zinc	0.982	0.010	mg/L	1.00		98.2		80-120	1.74	20	
LCS Dup (B363670-BSD2)				Prepared: 01/18/24 Analyzed: 01/22/24							
Arsenic	0.458	0.010	mg/L	0.500		91.6		80-120	0.148	20	
Lead	0.484	0.010	mg/L	0.500		96.8		80-120	0.104	20	
Nickel	0.505	0.010	mg/L	0.500		101		80-120	1.77	30	
Selenium	0.491	0.050	mg/L	0.500		98.2		80-120	0.583	20	
Silver	0.522	0.010	mg/L	0.500		104		80-120	1.96	20	
Thallium	0.461	0.050	mg/L	0.500		92.2		80-120	1.55	20	
Vanadium	0.498	0.010	mg/L	0.500		99.6		80-120	1.85	20	
LCS Dup (B363670-BSD3)				Prepared: 01/18/24 Analyzed: 01/26/24							
Aluminum	0.446	0.050	mg/L	0.500		89.3		80-120	2.07	30	
Matrix Spike (B363670-MS1)		**Source: 24A1629-01**		Prepared: 01/18/24 Analyzed: 01/19/24							
Antimony	0.504	0.050	mg/L	0.500	ND	101		75-125			
Barium	0.554	0.050	mg/L	0.500	0.0625	98.2		75-125			
Beryllium	0.518	0.0040	mg/L	0.500	ND	104		75-125			
Cadmium	0.499	0.0040	mg/L	0.500	ND	99.7		75-125			
Calcium	62.2	0.50	mg/L	4.00	97.9	**-893**	*	75-125			MS-19
Chromium	0.503	0.010	mg/L	0.500	ND	101		75-125			
Cobalt	0.487	0.010	mg/L	0.500	ND	97.5		75-125			
Copper	0.966	0.010	mg/L	1.00	ND	96.6		75-125			
Iron	4.41	0.050	mg/L	4.00	0.120	107		75-125			
Potassium	10.9	2.0	mg/L	4.00	68.4	**-1440**	*	75-125			MS-19
Sodium	7.61	2.0	mg/L	4.00	35.0	**-684**	*	75-125			MS-19
Zinc	0.991	0.010	mg/L	1.00	ND	99.1		75-125			

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD		RPD Limit	Notes
Batch B363670 - SW-846 3005A												
Matrix Spike (B363670-MS2)		**Source: 24A1629-01**		Prepared: 01/18/24 Analyzed: 01/22/24								
Arsenic	0.475	0.010	mg/L	0.500	ND	94.9		75-125				
Lead	0.485	0.010	mg/L	0.500	ND	97.0		75-125				
Magnesium	8.66	0.050	mg/L	4.00	0.0600	**215**	*	75-125				Z-01a
Manganese	0.672	0.010	mg/L	0.500	0.00287	**134**	*	75-125				Z-01a
Nickel	0.494	0.010	mg/L	0.500	0.00675	97.5		75-125				
Selenium	0.495	0.050	mg/L	0.500	ND	99.0		75-125				
Silver	0.527	0.010	mg/L	0.500	ND	105		75-125				
Thallium	0.497	0.050	mg/L	0.500	ND	99.4		75-125				
Vanadium	0.508	0.010	mg/L	0.500	0.00828	99.9		75-125				
Matrix Spike (B363670-MS5)		**Source: 24A1629-01**		Prepared: 01/18/24 Analyzed: 01/29/24								
Aluminum	1.04	0.10	mg/L	0.500	1.55	**-103**	*	75-125				Z-01
Matrix Spike Dup (B363670-MSD1)		**Source: 24A1629-01**		Prepared: 01/18/24 Analyzed: 01/19/24								
Antimony	0.465	0.050	mg/L	0.500	ND	93.1		75-125	8.00		20	
Barium	0.519	0.050	mg/L	0.500	0.0625	91.2		75-125	6.54		20	
Beryllium	0.485	0.0040	mg/L	0.500	ND	96.9		75-125	6.67		20	
Cadmium	0.460	0.0040	mg/L	0.500	ND	92.0		75-125	8.02		20	
Calcium	61.7	0.50	mg/L	4.00	97.9	**-906**	*	75-125	0.884		20	MS-19
Chromium	0.463	0.010	mg/L	0.500	ND	92.6		75-125	8.27		20	
Cobalt	0.446	0.010	mg/L	0.500	ND	89.3		75-125	8.73		20	
Copper	0.891	0.010	mg/L	1.00	ND	89.1		75-125	8.15		20	
Iron	4.10	0.050	mg/L	4.00	0.120	99.4		75-125	7.45		20	
Potassium	10.4	2.0	mg/L	4.00	68.4	**-1450**	*	75-125	4.15		20	MS-19
Sodium	7.15	2.0	mg/L	4.00	35.0	**-696**	*	75-125	6.25		20	MS-19
Zinc	0.912	0.010	mg/L	1.00	ND	91.2		75-125	8.28		20	
Matrix Spike Dup (B363670-MSD2)		**Source: 24A1629-01**		Prepared: 01/18/24 Analyzed: 01/22/24								
Arsenic	0.462	0.010	mg/L	0.500	ND	92.4		75-125	2.74		20	
Lead	0.469	0.010	mg/L	0.500	ND	93.7		75-125	3.46		20	
Magnesium	8.61	0.050	mg/L	4.00	0.0600	**214**	*	75-125	0.519		20	Z-01a
Manganese	0.661	0.010	mg/L	0.500	0.00287	**132**	*	75-125	1.67		20	Z-01a
Nickel	0.476	0.010	mg/L	0.500	0.00675	93.8		75-125	3.87		20	
Selenium	0.480	0.050	mg/L	0.500	ND	96.0		75-125	3.13		20	
Silver	0.505	0.010	mg/L	0.500	ND	101		75-125	4.20		20	
Thallium	0.482	0.050	mg/L	0.500	ND	96.4		75-125	3.00		20	
Vanadium	0.486	0.010	mg/L	0.500	0.00828	95.6		75-125	4.24		20	
Matrix Spike Dup (B363670-MSD5)		**Source: 24A1629-01**		Prepared: 01/18/24 Analyzed: 01/29/24								
Aluminum	0.801	0.10	mg/L	0.500	1.55	**-151**	*	75-125	**26.1**	*	20	Z-01
Post Spike (B363670-PS2)		**Source: 24A1629-01**		Prepared: 01/18/24 Analyzed: 01/22/24								
Arsenic	2.03		mg/L	2.00	0.00546	101		75-125				
Barium	2.14		mg/L	2.00	0.0612	104		75-125				
Beryllium	2.23		mg/L	2.00	0.000156	112		75-125				
Cadmium	2.09		mg/L	2.00	0.0000873	105		75-125				
Calcium	118		mg/L	16.0	96.0	**136**	*	75-125				MS-19
Chromium	2.04		mg/L	2.00	0.000860	102		75-125				
Cobalt	2.02		mg/L	2.00	-0.000327	101		75-125				
Iron	16.4		mg/L	16.0	0.118	102		75-125				
Lead	1.98		mg/L	2.00	0.00378	98.9		75-125				
Magnesium	16.4		mg/L	16.0	0.0588	102		75-125				Z-01a
Manganese	2.04		mg/L	2.00	0.00282	102		75-125				Z-01a
Nickel	2.03		mg/L	2.00	0.00661	101		75-125				

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B363670 - SW-846 3005A										
Post Spike (B363670-PS2)	**Source: 24A1629-01**			Prepared: 01/18/24 Analyzed: 01/22/24						
Potassium	85.8		mg/L	16.0	67.0	118	75-125			
Selenium	2.13		mg/L	2.00	-0.0173	107	75-125			
Silver	2.08		mg/L	2.00	-0.000651	104	75-125			
Sodium	52.9		mg/L	16.0	34.3	116	75-125			
Thallium	2.13		mg/L	2.00	0.0100	106	75-125			
Vanadium	2.10		mg/L	2.00	0.00812	104	75-125			
Zinc	4.07		mg/L	4.00	0.00286	102	75-125			
Post Spike (B363670-PS4)	**Source: 24A1629-01**			Prepared: 01/18/24 Analyzed: 01/29/24						
Aluminum	5.60		mg/L	4.00	1.52	102	75-125			
Dilution Check (B363670-SRL2)	**Source: 24A1629-01**			Prepared: 01/18/24 Analyzed: 01/22/24						
Arsenic	ND	0.050	mg/L		ND				20	
Barium	0.0679	0.25	mg/L		0.0625			8.34	20	J
Beryllium	ND	0.020	mg/L		ND				20	
Cadmium	ND	0.020	mg/L		ND				20	
Calcium	102	2.5	mg/L		97.9			4.17	20	
Chromium	ND	0.050	mg/L		ND				20	
Cobalt	ND	0.050	mg/L		ND				20	
Iron	0.136	0.25	mg/L		0.120			12.0	20	J
Lead	ND	0.050	mg/L		ND				20	
Magnesium	ND	0.25	mg/L		ND				20	
Manganese	ND	0.050	mg/L		ND				20	
Nickel	ND	0.050	mg/L		ND				20	
Potassium	70.8	10	mg/L		68.4			3.53	20	
Selenium	ND	0.25	mg/L		ND				20	
Silver	ND	0.050	mg/L		ND				20	
Sodium	36.4	10	mg/L		35.0			4.08	20	
Thallium	ND	0.25	mg/L		ND				20	
Vanadium	ND	0.050	mg/L		ND				20	
Zinc	ND	0.050	mg/L		ND				20	
Batch B363815 - SW-846 7470A Prep										
Blank (B363815-BLK1)				Prepared: 01/19/24 Analyzed: 01/22/24						
Mercury	ND	0.00020	mg/L							
LCS (B363815-BS1)				Prepared: 01/19/24 Analyzed: 01/22/24						
Mercury	0.00374	0.00020	mg/L	0.00402		93.0	80-120			
LCS Dup (B363815-BSD1)				Prepared: 01/19/24 Analyzed: 01/22/24						
Mercury	0.00378	0.00020	mg/L	0.00402		94.1	80-120	1.23	20	

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B363815 - SW-846 7470A Prep										
Matrix Spike (B363815-MS1)		**Source: 24A1629-01**		Prepared: 01/19/24 Analyzed: 01/22/24						
Mercury	0.00395	0.00020	mg/L	0.00402	ND	98.2	75-125			
Matrix Spike Dup (B363815-MSD1)		**Source: 24A1629-01**		Prepared: 01/19/24 Analyzed: 01/22/24						
Mercury	0.00382	0.00020	mg/L	0.00402	ND	95.0	75-125	3.41	20	

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS

Lab Sample ID: B363890-BS1

Date(s) Analyzed: 01/23/2024 01/23/2024

Instrument ID (1): ECD10

Instrument ID (2): ECD10

GC Column (1): ID: (mm)

GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.75	
	2	0.000	0.000	0.000	0.76	1.3
Aroclor-1260	1	0.000	0.000	0.000	0.77	
	2	0.000	0.000	0.000	0.70	9.5

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS Dup

Lab Sample ID: B363890-BSD1 Date(s) Analyzed: 01/23/2024 01/23/2024

Instrument ID (1): ECD10 Instrument ID (2): ECD10

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.87	
	2	0.000	0.000	0.000	0.86	1.2
Aroclor-1260	1	0.000	0.000	0.000	0.90	
	2	0.000	0.000	0.000	0.82	9.3

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Matrix Spike

Lab Sample ID: B363890-MS1 Date(s) Analyzed: 01/23/2024 01/23/2024

Instrument ID (1): ECD10 Instrument ID (2): ECD10

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.68	
	2	0.000	0.000	0.000	0.71	4.3
Aroclor-1260	1	0.000	0.000	0.000	0.67	
	2	0.000	0.000	0.000	0.62	7.8

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Matrix Spike Dup

Lab Sample ID: B363890-MSD1 Date(s) Analyzed: 01/23/2024 01/23/2024

Instrument ID (1): ECD10 Instrument ID (2): ECD10

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.77	
	2	0.000	0.000	0.000	0.77	0.0
Aroclor-1260	1	0.000	0.000	0.000	0.71	
	2	0.000	0.000	0.000	0.67	5.8

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.

J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
L-04	Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
MS-09	Matrix spike recovery and/or matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.
MS-19	Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representative of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.
MS-24	Either matrix spike or matrix spike duplicate is outside of control limits, but the other is within limits. Analysis is in control based on laboratory fortified blank recovery.
R-06	Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.
S-07	One associated surrogate standard recovery is outside of control limits but the other(s) is/are within limits. All recoveries are > 10%.
V-04	Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria. Reported result is estimated.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
V-34	Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.
Z-01	Matrix Spike and Matrix Spike Duplicate recoveries are outside of control limits. Analysis is in control based on Laboratory Fortified Blank and Post Digestion Spike recoveries.
Z-01a	Matrix Spike and Matrix Spike Duplicate recoveries are outside of control limits. Analysis is in control based on Laboratory Fortified Blank and Post Digestion Spike recoveries. Possibility of non-homogenous sample aliquot cannot be eliminated.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 6010D in Water	
Aluminum	CT,NH,NY,ME,VA,NC
Antimony	CT,NH,NY,ME,VA,NC
Arsenic	CT,NH,NY,ME,VA,RI,NC
Barium	CT,NH,NY,ME,VA,NC
Beryllium	CT,NH,NY,ME,VA,NC
Cadmium	CT,NH,NY,ME,VA,NC
Calcium	CT,NH,NY,ME,VA,NC
Chromium	CT,NH,NY,ME,VA,NC
Cobalt	CT,NH,NY,ME,VA,NC
Copper	CT,NH,NY,ME,VA,NC
Iron	CT,NH,NY,ME,VA,NC
Lead	CT,NH,NY,ME,VA,NC
Magnesium	CT,NH,NY,ME,VA,NC
Manganese	CT,NH,NY,ME,VA,NC
Nickel	CT,NH,NY,ME,VA,NC
Potassium	CT,NH,NY,ME,VA,NC
Selenium	CT,NH,NY,ME,VA,NC
Silver	CT,NH,NY,ME,VA,NC
Sodium	CT,NH,NY,ME,VA,NC
Thallium	CT,NH,NY,VA,NC
Vanadium	CT,NH,NY,ME,VA,NC
Zinc	CT,NH,NY,ME,VA,NC
SW-846 7470A in Water	
Mercury	CT,NH,NY,NC,ME,VA
SW-846 8082A in Water	
Aroclor-1016	CT,NH,NY,NC,ME,VA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1221	CT,NH,NY,NC,ME,VA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1232	CT,NH,NY,NC,ME,VA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1242	CT,NH,NY,NC,ME,VA
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1248	CT,NH,NY,NC,ME,VA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1254	CT,NH,NY,NC,ME,VA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1260	CT,NH,NY,NC,ME,VA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1262	NH,NY,NC,ME,VA
Aroclor-1262 [2C]	NH,NY,NC,ME,VA
Aroclor-1268	NH,NY,NC,ME,VA
Aroclor-1268 [2C]	NH,NY,NC,ME,VA
SW-846 8260D in Water	
Acetone	CT,ME,NH,VA,NY
Benzene	CT,ME,NH,VA,NY

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260D in Water	
Bromochloromethane	ME,NH,VA,NY
Bromodichloromethane	CT,ME,NH,VA,NY
Bromoform	CT,ME,NH,VA,NY
Bromomethane	CT,ME,NH,VA,NY
2-Butanone (MEK)	CT,ME,NH,VA,NY
Carbon Disulfide	CT,ME,NH,VA,NY
Carbon Tetrachloride	CT,ME,NH,VA,NY
Chlorobenzene	CT,ME,NH,VA,NY
Chlorodibromomethane	CT,ME,NH,VA,NY
Chloroethane	CT,ME,NH,VA,NY
Chloroform	CT,ME,NH,VA,NY
Chloromethane	CT,ME,NH,VA,NY
Cyclohexane	ME,NY
1,2-Dibromo-3-chloropropane (DBCP)	ME,NY
1,2-Dibromoethane (EDB)	ME,NY
1,2-Dichlorobenzene	CT,ME,NH,VA,NY
1,3-Dichlorobenzene	CT,ME,NH,VA,NY
1,4-Dichlorobenzene	CT,ME,NH,VA,NY
Dichlorodifluoromethane (Freon 12)	ME,NH,VA,NY
1,1-Dichloroethane	CT,ME,NH,VA,NY
1,2-Dichloroethane	CT,ME,NH,VA,NY
1,1-Dichloroethylene	CT,ME,NH,VA,NY
cis-1,2-Dichloroethylene	ME,NY
trans-1,2-Dichloroethylene	CT,ME,NH,VA,NY
1,2-Dichloropropane	CT,ME,NH,VA,NY
cis-1,3-Dichloropropene	CT,ME,NH,VA,NY
trans-1,3-Dichloropropene	CT,ME,NH,VA,NY
1,4-Dioxane	ME,NY
Ethylbenzene	CT,ME,NH,VA,NY
Hexachlorobutadiene	CT,ME,NH,VA,NY
2-Hexanone (MBK)	CT,ME,NH,VA,NY
Isopropylbenzene (Cumene)	ME,VA,NY
Methyl Acetate	ME,NY
Methyl tert-Butyl Ether (MTBE)	CT,ME,NH,VA,NY
Methyl Cyclohexane	NY
Methylene Chloride	CT,ME,NH,VA,NY
4-Methyl-2-pentanone (MIBK)	CT,ME,NH,VA,NY
Naphthalene	ME,NH,VA,NY
Styrene	CT,ME,NH,VA,NY
1,1,2,2-Tetrachloroethane	CT,ME,NH,VA,NY
Tetrachloroethylene	CT,ME,NH,VA,NY
Toluene	CT,ME,NH,VA,NY
1,2,3-Trichlorobenzene	ME,NH,VA,NY
1,2,4-Trichlorobenzene	CT,ME,NH,VA,NY
1,1,1-Trichloroethane	CT,ME,NH,VA,NY
1,1,2-Trichloroethane	CT,ME,NH,VA,NY
Trichloroethylene	CT,ME,NH,VA,NY

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260D in Water	
Trichlorofluoromethane (Freon 11)	CT,ME,NH,VA,NY
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	VA,NY
Vinyl Chloride	CT,ME,NH,VA,NY
Xylenes (total)	ME,NY
SW-846 8270E in Water	
1,4-Dioxane	NY,NH
Acenaphthene	CT,NY,NC,ME,NH,VA
Acenaphthylene	CT,NY,NC,ME,NH,VA
Acetophenone	NY,NC
Anthracene	CT,NY,NC,ME,NH,VA
Benzo(a)anthracene	CT,NY,NC,ME,NH,VA
Benzo(a)pyrene	CT,NY,NC,ME,NH,VA
Benzo(b)fluoranthene	CT,NY,NC,ME,NH,VA
Benzo(g,h,i)perylene	CT,NY,NC,ME,NH,VA
Benzo(k)fluoranthene	CT,NY,NC,ME,NH,VA
Bis(2-chloroethoxy)methane	CT,NY,NC,ME,NH,VA
Bis(2-chloroethyl)ether	CT,NY,NC,ME,NH,VA
Bis(2-chloroisopropyl)ether	CT,NY,NC,ME,NH,VA
Bis(2-Ethylhexyl)phthalate	CT,NY,NC,ME,NH,VA
4-Bromophenylphenylether	CT,NY,NC,ME,NH,VA
Butylbenzylphthalate	CT,NY,NC,ME,NH,VA
Carbazole	NC
4-Chloroaniline	CT,NY,NC,ME,NH,VA
4-Chloro-3-methylphenol	CT,NY,NC,ME,NH,VA
2-Chloronaphthalene	CT,NY,NC,ME,NH,VA
2-Chlorophenol	CT,NY,NC,ME,NH,VA
4-Chlorophenylphenylether	CT,NY,NC,ME,NH,VA
Chrysene	CT,NY,NC,ME,NH,VA
Dibenz(a,h)anthracene	CT,NY,NC,ME,NH,VA
Dibenzofuran	CT,NY,NC,ME,NH,VA
Di-n-butylphthalate	CT,NY,NC,ME,NH,VA
1,2-Dichlorobenzene	CT,NY,NC,ME,NH,VA
1,3-Dichlorobenzene	CT,NY,NC,ME,NH,VA
1,4-Dichlorobenzene	CT,NY,NC,ME,NH,VA
3,3-Dichlorobenzidine	CT,NY,NC,ME,NH,VA
2,4-Dichlorophenol	CT,NY,NC,ME,NH,VA
Diethylphthalate	CT,NY,NC,ME,NH,VA
2,4-Dimethylphenol	CT,NY,NC,ME,NH,VA
Dimethylphthalate	CT,NY,NC,ME,NH,VA
4,6-Dinitro-2-methylphenol	CT,NY,NC,ME,NH,VA
2,4-Dinitrophenol	CT,NY,NC,ME,NH,VA
2,4-Dinitrotoluene	CT,NY,NC,ME,NH,VA
2,6-Dinitrotoluene	CT,NY,NC,ME,NH,VA
Di-n-octylphthalate	CT,NY,NC,ME,NH,VA
Fluoranthene	CT,NY,NC,ME,NH,VA
Fluorene	NY,NC,ME,NH,VA

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8270E in Water	
Hexachlorobenzene	CT,NY,NC,ME,NH,VA
Hexachlorobutadiene	CT,NY,NC,ME,NH,VA
Hexachlorocyclopentadiene	CT,NY,NC,ME,NH,VA
Hexachloroethane	CT,NY,NC,ME,NH,VA
Indeno(1,2,3-cd)pyrene	CT,NY,NC,ME,NH,VA
Isophorone	CT,NY,NC,ME,NH,VA
2-Methylnaphthalene	CT,NY,NC,ME,NH,VA
2-Methylphenol	CT,NY,NC,NH,VA
3/4-Methylphenol	CT,NY,NC,NH,VA
Naphthalene	CT,NY,NC,ME,NH,VA
2-Nitroaniline	CT,NY,NC,ME,NH,VA
3-Nitroaniline	CT,NY,NC,ME,NH,VA
4-Nitroaniline	CT,NY,NC,ME,NH,VA
Nitrobenzene	CT,NY,NC,ME,NH,VA
2-Nitrophenol	CT,NY,NC,ME,NH,VA
4-Nitrophenol	CT,NY,NC,ME,NH,VA
N-Nitrosodi-n-propylamine	CT,NY,NC,ME,NH,VA
Pentachlorophenol	CT,NY,NC,ME,NH,VA
Phenanthrene	CT,NY,NC,ME,NH,VA
Phenol	CT,NY,NC,ME,NH,VA
Pyrene	CT,NY,NC,ME,NH,VA
1,2,4,5-Tetrachlorobenzene	NY,NC
1,2,4-Trichlorobenzene	CT,NY,NC,ME,NH,VA
2,4,5-Trichlorophenol	CT,NY,NC,ME,NH,VA
2,4,6-Trichlorophenol	CT,NY,NC,ME,NH,VA
2-Fluorophenol	NC

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
RI	Rhode Island Department of Health	LAO00373	12/30/2024
NC	North Carolina Div. of Water Quality	652	12/31/2024
ME	State of Maine	MA00100	06/9/2025
VA	Commonwealth of Virginia	460217	12/14/2024

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24A1629

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Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

1800 Elm Street SE
Minneapolis, MN 55414

Page 1 of 1

CLIENT: SYRACUSE SAND AND GRAVEL
LOCATION: ALPHA PORTLAND SITE DEC #734006

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: Miller Environmental Group

Address: 532 Erie Blvd E, Syracuse, NY 13202

Phone: 315-451-6660

Project Location: Dewitt, New York

Project Number: NY22-10632 TDK # 20210631

Project Manager: Jonathan Wilkins / John Herrmann, TDK

Pace Analytical Quote Name/Number: Alpha Standard Rates

Invoice Recipient: JWilkins@MillerEnv.com

Sampled By: Jonathan Wilkins (Miller)

Turnaround Time Requested
7-Day ☐ 10-Day ☐
Due Date: Standard T.A.T.

Approved By:
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☑ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To: JHERRMANN@TDKENVIRONMENTAL.COM
Fax To #: TDKENVIRONMENTAL.COM

* JCH, 1/17/24

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	Conc Code
1	MW-5	1-16-24 12:35	1-16-24 12:39	N/A	X	GW	
2	MW-5FD	1-16-24 12:40	1-16-24 12:44		X	GW	
1	MS	1-16-24 12:45	1-16-24 12:49		X	GW	
1	MSD	1-16-24 12:50	1-16-24 12:54		X	GW	
3	MW-3	1-16-24 15:35	1-16-24 15:39		X	GW	
4	EQ RINSE Sample	1-16-24 15:45	1-16-24 15:49		X	GW	
5	TRIP BLANK	1-16-24 N/A	1-16-24 N/A	↓	X	GW	

ANALYSIS REQUESTED

Preservation Code	2	2	1	2	2	2	1
	H	I	N	I	I	I	I
	V	A	P	A	P	A	P

# of Containers	3	3	1	3	3	3	1
Container Code	V	A	P	A	P	A	P

	VOC's 8260D	SVOC's 8270	METALS	PCBs 8082	PFAS 1633	1-4 DIOXANE	TSS
1	X	X	X	X	X	X	X
2	X	X	X	X	X	X	X
1	X	X	X	X	X	X	X
1	X	X	X	X	X	X	X
3	X	X	X	X	X	X	X
4	X	X	X	X	X	X	X
5	X						

Unpreserved Water Samples
☐ Field Filtered
☑ Lab to Filter

Preserved Water Samples
☐ Field Filtered
☐ Lab to Filter

**TSS only needed for PFAS 1633. VOCs & SVOCs to report TCL list + TICs per client. KAM 1/18/2024

Comments: STANDARD TURNAROUND TIME, PLEASE COPY JWILKINS@MILLERENV.COM IN ALL CORRESPONDENCE.
CAT B DELIVERABLES PACKAGE PACE QUOTE: TDK ALPHA PORTLAND 00143967

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

[1] Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] Container Codes:
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

	Date/Time:
Relinquished by: (signature)	1-17-24 @ 11:15
Received by: (signature)	1-17-24 11:15
Relinquished by: (signature) 3.9/2.4	1/18/24 7:58
Received by: (signature)	
Relinquished by: (signature)	
Received by: (signature)	

Program & Regulatory Requirements
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375

Deliverables
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Other
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

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Phone: 612-607-6400
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https://www.pacelabs.com/

Doc # 380 Rev 1_03242017

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CHAIN OF CUSTODY RECORD (New York)

1800 Elm Street SE
Minneapolis, MN 55414

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Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: MILLER ENVIRONMENTAL GROUP
Address: 532 STATE FAIR BLVD, SYRACUSE, NY 13204
Phone: 315-451-6666
Project Name: FORMER ALPHA PORTLAND SITE
Project Location: OGLE ROAD, DEWITT, NEW YORK
Project Number: NY12240032
Project Manager: JONATHAN WILKINS
Pace Analytical Quote Name/Number: MILLER STANDARD RATES
Invoice Recipient: JWILKINS@MILLERENV.COM
Sampled By: JONATHAN WILKINS

Requested Turnaround Time:
7-Day ☐ 10-Day ☐
Due Date: STANDARD T.A.T.

Prior Approval Required:
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery:
Format: PDF ☑ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To: JHERMAN@
Fax To #: TDKENGINEERING.COM

ANALYSIS REQUESTED

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	Matrix Code	Conc Code	VOC's 8260D	SVOC's 8270	METALS	PCBs 8082	TAL 1633	1-4 DIOXANE	TSS	# of Containers	Preservation Code	Container Code
	MW-5	1-16-24 12:35	1-16-24 12:39	N/A	X	GW		X	X	X	X	X	X	X	2	H	V
	MW-5FD	1-16-24 12:40	1-16-24 12:44		X	GW		X	X	X	X	X	X	X	2	H	V
	MS	1-16-24 12:45	1-16-24 12:49		X	GW		X	X	X	X	X	X	X	2	H	V
	MSD	1-16-24 12:50	1-16-24 12:54		X	GW		X	X	X	X	X	X	X	2	H	V
	MW-3	1-16-24 15:35	1-16-24 15:39		X	GW		X	X	X	X	X	X	X	2	H	V
	EQ RINSE SAMPLE	1-16-24 15:45	1-16-24 15:49		X	GW		X							1	I	V
	TRIP BLANK	1-16-24 N/A	1-16-24 N/A	↓	X	GW		X							1	I	V

Field Filtered Matrix Soil: ☐ Field Filtered ☑ Lab to Filter

Orthophosphate Samples: ☐ Field Filtered ☐ Lab to Filter

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] **Container Codes:**
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Comments: STANDARD TURNAROUND TIME. PLEASE COPY JWILKINS@MILLERENV.COM ON ALL CORRESPONDENCE.

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time:
	1-17-24 @ 11:15
Received by: (signature)	Date/Time:
	1-17-24 11:15
Relinquished by: (signature)	Date/Time:
	1-17 1700
Received by: (signature)	Date/Time:
3912.C	1/18/24 755
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Program / Regulatory Information:
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375
Other:

Deliverables:
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Other: NELAC and AIHA-LAP, LLC Accredited

Project Entity:
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other:
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY:
☐ Soxhlet
☐ Non Soxhlet

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-ELON-0001 v07_Sample Receiving Checklist
	Effective Date: 07/13/2023

Log In Back-Sheet

Client Syracuse Sand and Gravel

Project NA

MCP/RCP Required NA

Deliverable Package Requirement NA

Location Arphn parkland Site

PWSID# (When Applicable) NA

Arrival Method:

Courier ☑ Fed Ex ☐ Walk In ☐ Other ☐

Received By / Date / Time LA 11/8/24 758

Back-Sheet By / Date / Time LA 11/8/24 839

Temperature Method Gun #5

Temp ☑ 6° C Actual Temperature 3.9/2.0

Rush Samples: Yes / (No) Notify

Short Hold: Yes / (No) Notify

Notes regarding Samples/COC outside of SOP:

Login Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy) Any False statement will be brought to the attention of the Client – True or False

	True	False
Received on Ice	☑	☐
Received in Cooler	☑	☐
Custody Seal: DATE TIME	☐	☑
COC Relinquished	☑	☐
COC/Samples Labels Agree	☑	☐
All Samples in Good Condition	☑	☐
Samples Received within Holding Time	☑	☐
Is there enough Volume	☑	☐
Proper Media/Container Used	☑	☐
Splitting Samples Required	☐	☑
MS/MSD	☑	☐
Trip Blanks	☑	☐
Lab to Filters	☐	☑
COC Legible	☑	☐

COC Included: (Check all included)

Client	☑	Analysis	☑	Sampler Name	☑
Project	☑	IDs	☑	Collection Date/Time	☑

All Samples Proper pH: (N/A) ☐ ☐

Additional Container Notes

Note: West Virginia requires all samples to have their temperature taken. Note any outliers.

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-ELON-0001 v07_Sample Receiving Checklist
	Effective Date: 07/13/2023

Sample																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Soils Jars (Circle Amb/Clear) 16oz Amb/Clear																				
8oz Amb/Clear																				
4oz Amb/Clear																				
2oz Amb/Clear																				
Ambers 1 Liter Unpreserved	5	2	1																	
HCL																				
Sulfuric																				
250mL Sulfuric																				
Phosphoric																				
HCl																				
100mL Unpreserved	12	4	1																	
Plastics 1 Liter Unpreserved																				
Sulfuric																				
500mL Unpreserved																				
Sulfuric																				
250mL Unpreserved																				
Trizma																				
Sulfuric																				
Nitric	3	1	1																	
NaOH																				
Ammonium Acetate																				
NaOH/Zinc																				
VOA Vials Unpreserved																				
HCl	5	2	1	1	1															
MeOH																				
D.I. Water																				
BiSulfate																				
Other / Fill in Col/Bact																				

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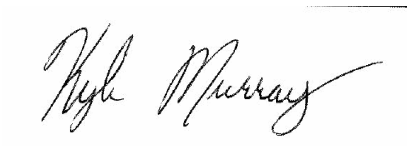
January 26, 2024

John Herrmann
Syracuse Sand & Gravel, LLC
6131 E Taft Road
North Syracuse, NY 13212

Project Location: Dewitt, NY
Client Job Number:
Project Number: 00143967
Laboratory Work Order Number: 24A1630

Enclosed are results of analyses for samples as received by the laboratory on January 18, 2024. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kyle A. Murray
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Syracuse Sand & Gravel, LLC
6131 E Taft Road
North Syracuse, NY 13212
ATTN: John Herrmann

REPORT DATE: 1/26/2024

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 00143967

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 24A1630

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Dewitt, NY

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
MW-5	24A1630-01	Ground Water		Draft Method 1633	
MW-5FD	24A1630-02	Ground Water		Draft Method 1633	
MW-3	24A1630-03	Ground Water		Draft Method 1633	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

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Draft Method 1633

Qualifications:

MS-23

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is outside of the method specified criteria. Reduced precision anticipated for any reported result for this compound.

Analyte & Samples(s) Qualified:

11Cl-PF3OUdS (F53B Major)
B363706-MS1

9Cl-PF3ONS (F53B Minor)
B363706-MS1

Perfluoro-3-methoxypropanoic acid (PFMPA)
B363706-MSD1

Perfluorodecanesulfonic acid (PFDS)
B363706-MS1

Perfluorododecanesulfonic acid (PFDoS)
B363706-MS1

PF-17

Extracted Internal Standard recovery is outside of control limits. Data is not significantly affected since associated analyte is not detected and bias is on the high side.

Analyte & Samples(s) Qualified:

13C2-4:2FTS
24A1630-02[MW-5FD]

1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS
24A1630-02[MW-5FD]

PF-18

Re-analysis confirmed Extracted Internal Standard failure due to matrix effects.

Analyte & Samples(s) Qualified:

13C2-4:2FTS
24A1630-01[MW-5], B363706-MS1, B363706-MSD1

13C2-6:2FTS
24A1630-01[MW-5], B363706-MS1, B363706-MSD1

1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS
24A1630-01[MW-5], B363706-MS1, B363706-MSD1

1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS
24A1630-01[MW-5], B363706-MS1, B363706-MSD1

PF-22A

Qualifier ion ratio >150% of associated calibration.

Analyte & Samples(s) Qualified:

Perfluorooctanesulfonamide (PFOSA)
24A1630-02[MW-5FD]

R-06

Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.

Analyte & Samples(s) Qualified:

11Cl-PF3OUdS (F53B Major)
B363706-MSD1

9Cl-PF3ONS (F53B Minor)
B363706-MSD1

Perfluorodecanesulfonic acid (PFDS)
B363706-MSD1

Perfluorododecanesulfonic acid (PFDoS)
B363706-MSD1

Perfluorotridecanoic acid (PFTrDA)
B363706-MSD1

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S-29

Extracted Internal Standard is outside of control limits.

Analyte & Samples(s) Qualified:

13C2-PFTeDA
B363706-MS1

13C4-PFBA
B363706-MSD1

D7-NMeFOSE
B363706-MS1

D9-NEtFOSE
B363706-MS1

N-ethylperfluorooctanesulfonamidoethanol (NEtFO
B363706-MS1

N-methylperfluorooctanesulfonamidoethanol(NMeF
B363706-MS1

Perfluorobutanoic acid (PFBA)
B363706-MSD1

Perfluorotetradecanoic acid (PFTeDA)
B363706-MS1

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Dewitt, NY
Sample Description:
Work Order: 24A1630

Date Received: 1/18/2024

Field Sample #: MW-5

Sample ID: 24A1630-01
Start Date/Time: 1/16/2024 12:35:00PM

Sample Matrix: Ground Water
Stop Date/Time: 1/16/2024 12:39:00PM

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	10	3.7	1.4	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
Perfluoropentanoic acid (PFPeA)	ND	1.9	0.32	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
Perfluorohexanoic acid (PFHxA)	1.2	0.93	0.20	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
Perfluoroheptanoic acid (PFHpA)	0.74	0.93	0.24	ng/L	1	J	Draft Method 1633	1/24/24	1/25/24 15:23	AMS
Perfluorooctanoic acid (PFOA)	2.0	0.93	0.21	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
Perfluorononanoic acid (PFNA)	0.34	0.93	0.18	ng/L	1	J	Draft Method 1633	1/24/24	1/25/24 15:23	AMS
Perfluorodecanoic acid (PFDA)	ND	0.93	0.17	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.93	0.25	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.93	0.24	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.93	0.25	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.93	0.23	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
Perfluorobutanesulfonic acid (PFBS)	1.1	0.93	0.24	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.93	0.22	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
Perfluorohexanesulfonic acid (PFHxS)	0.69	0.93	0.19	ng/L	1	J	Draft Method 1633	1/24/24	1/25/24 15:23	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.93	0.28	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
Perfluorooctanesulfonic acid (PFOS)	2.3	0.93	0.30	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.93	0.27	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.93	0.29	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.93	0.25	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.7	0.65	ng/L	1	PF-18	Draft Method 1633	1/24/24	1/25/24 15:23	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	1.3	3.7	0.92	ng/L	1	PF-18, J	Draft Method 1633	1/24/24	1/25/24 15:23	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.7	1.0	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
Perfluorooctanesulfonamide (PFOSA)	0.82	0.93	0.29	ng/L	1	J	Draft Method 1633	1/24/24	1/25/24 15:23	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.93	0.39	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.93	0.29	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.93	0.41	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.93	0.21	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.3	2.4	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.3	2.3	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.7	0.97	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.7	0.64	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.7	0.79	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
11Cl-PF3OUdS (F53B Major)	ND	3.7	0.90	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.3	1.7	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	47	9.5	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	47	8.2	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.46	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	0.46	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1630

Date Received: 1/18/2024

Field Sample #: MW-5

Sample ID: 24A1630-01 | Start Date/Time: 1/16/2024 12:35:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 12:39:00PM

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	0.37	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.81	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:23	AMS

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
13C4-PFBA	77.1		10-130		1/25/24 15:23
13C5-PFPeA	71.8		35-150		1/25/24 15:23
13C5-PFHxA	75.6		55-150		1/25/24 15:23
13C4-PFHpA	82.5		55-150		1/25/24 15:23
13C8-PFOA	77.2		60-140		1/25/24 15:23
13C9-PFNA	74.5		55-140		1/25/24 15:23
13C6-PFDA	78.1		50-140		1/25/24 15:23
13C7-PFUnA	68.4		30-140		1/25/24 15:23
13C2-PFDoA	57.7		10-150		1/25/24 15:23
13C2-PFTeDA	34.1		10-130		1/25/24 15:23
13C3-PFBS	75.5		55-150		1/25/24 15:23
13C3-PFHxS	74.4		55-150		1/25/24 15:23
13C8-PFOS	71.5		45-140		1/25/24 15:23
13C2-4:2FTS	**249**	*	60-200	PF-18	1/25/24 15:23
13C2-6:2FTS	**219**	*	60-200	PF-18	1/25/24 15:23
13C2-8:2FTS	68.9		50-200		1/25/24 15:23
13C8-PFOSA	69.1		30-130		1/25/24 15:23
D3-NMeFOSA	52.5		15-130		1/25/24 15:23
D5-NEtFOSA	44.8		10-130		1/25/24 15:23
D3-NMeFOSAA	81.4		45-200		1/25/24 15:23
D5-NEtFOSAA	65.8		10-200		1/25/24 15:23
D7-NMeFOSE	26.4		10-150		1/25/24 15:23
D9-NEtFOSE	17.0		10-150		1/25/24 15:23
13C3-HFPO-DA	69.3		25-160		1/25/24 15:23

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1630

Date Received: 1/18/2024

Field Sample #: MW-5

Sample ID: 24A1630-01 | Start Date/Time: 1/16/2024 12:35:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 12:39:00PM

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	10	mg/L	1		Draft Method 1633	1/22/24	1/22/24 12:57	LL

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1630

Date Received: 1/18/2024

Field Sample #: MW-5FD

Sample ID: 24A1630-02 | Start Date/Time: 1/16/2024 12:40:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 12:44:00PM

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	8.0	3.6	1.3	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
Perfluoropentanoic acid (PFPeA)	ND	1.8	0.31	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
Perfluorohexanoic acid (PFHxA)	1.3	0.90	0.19	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
Perfluoroheptanoic acid (PFHpA)	0.84	0.90	0.23	ng/L	1	J	Draft Method 1633	1/24/24	1/25/24 15:39	AMS
Perfluorooctanoic acid (PFOA)	1.8	0.90	0.20	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
Perfluorononanoic acid (PFNA)	0.34	0.90	0.17	ng/L	1	J	Draft Method 1633	1/24/24	1/25/24 15:39	AMS
Perfluorodecanoic acid (PFDA)	ND	0.90	0.17	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.90	0.25	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.90	0.23	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.90	0.24	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.90	0.23	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
Perfluorobutanesulfonic acid (PFBS)	1.0	0.90	0.23	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.90	0.21	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
Perfluorohexanesulfonic acid (PFHxS)	0.75	0.90	0.19	ng/L	1	J	Draft Method 1633	1/24/24	1/25/24 15:39	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.90	0.28	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
Perfluorooctanesulfonic acid (PFOS)	2.1	0.90	0.29	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.90	0.27	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.90	0.28	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.90	0.24	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.6	0.63	ng/L	1	PF-17	Draft Method 1633	1/24/24	1/25/24 15:39	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.6	0.89	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.6	0.98	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
Perfluorooctanesulfonamide (PFOSA)	0.79	0.90	0.28	ng/L	1	PF-22A, J	Draft Method 1633	1/24/24	1/25/24 15:39	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.90	0.37	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.90	0.28	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.90	0.40	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.90	0.20	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.0	2.4	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.0	2.2	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.6	0.94	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.6	0.62	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.6	0.77	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
11Cl-PF3OUdS (F53B Major)	ND	3.6	0.87	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.0	1.6	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	45	9.2	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	45	8.0	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8	0.44	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.8	0.45	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1630

Date Received: 1/18/2024

Field Sample #: MW-5FD

Sample ID: 24A1630-02 | Start Date/Time: 1/16/2024 12:40:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 12:44:00PM

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.8	0.36	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8	0.78	ng/L	1		Draft Method 1633	1/24/24	1/25/24 15:39	AMS

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
13C4-PFBA	69.4		10-130		1/25/24 15:39
13C5-PFPeA	66.2		35-150		1/25/24 15:39
13C5-PFHxA	71.1		55-150		1/25/24 15:39
13C4-PFHpA	73.8		55-150		1/25/24 15:39
13C8-PFOA	68.4		60-140		1/25/24 15:39
13C9-PFNA	67.2		55-140		1/25/24 15:39
13C6-PFDA	71.8		50-140		1/25/24 15:39
13C7-PFUnA	63.0		30-140		1/25/24 15:39
13C2-PFDoA	54.4		10-150		1/25/24 15:39
13C2-PFTeDA	37.7		10-130		1/25/24 15:39
13C3-PFBS	68.9		55-150		1/25/24 15:39
13C3-PFHxS	68.2		55-150		1/25/24 15:39
13C8-PFOS	64.8		45-140		1/25/24 15:39
13C2-4:2FTS	**211**	*	60-200	PF-17	1/25/24 15:39
13C2-6:2FTS	186		60-200		1/25/24 15:39
13C2-8:2FTS	65.4		50-200		1/25/24 15:39
13C8-PFOSA	59.6		30-130		1/25/24 15:39
D3-NMeFOSA	45.8		15-130		1/25/24 15:39
D5-NEtFOSA	38.7		10-130		1/25/24 15:39
D3-NMeFOSAA	74.0		45-200		1/25/24 15:39
D5-NEtFOSAA	62.3		10-200		1/25/24 15:39
D7-NMeFOSE	32.5		10-150		1/25/24 15:39
D9-NEtFOSE	23.4		10-150		1/25/24 15:39
13C3-HFPO-DA	65.1		25-160		1/25/24 15:39

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1630

Date Received: 1/18/2024

Field Sample #: MW-5FD

Sample ID: 24A1630-02 | Start Date/Time: 1/16/2024 12:40:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 12:44:00PM

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	12	10	10	mg/L	1		Draft Method 1633	1/22/24	1/22/24 12:57	LL

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1630

Date Received: 1/18/2024

Field Sample #: MW-3

Sample ID: 24A1630-03 | Start Date/Time: 1/16/2024 3:35:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 3:39:00PM

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	5.9	3.9	1.4	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
Perfluoropentanoic acid (PFPeA)	ND	2.0	0.34	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
Perfluorohexanoic acid (PFHxA)	0.83	0.98	0.21	ng/L	1	J	Draft Method 1633	1/24/24	1/25/24 16:26	AMS
Perfluoroheptanoic acid (PFHpA)	0.56	0.98	0.25	ng/L	1	J	Draft Method 1633	1/24/24	1/25/24 16:26	AMS
Perfluorooctanoic acid (PFOA)	0.79	0.98	0.22	ng/L	1	J	Draft Method 1633	1/24/24	1/25/24 16:26	AMS
Perfluorononanoic acid (PFNA)	0.30	0.98	0.19	ng/L	1	J	Draft Method 1633	1/24/24	1/25/24 16:26	AMS
Perfluorodecanoic acid (PFDA)	ND	0.98	0.18	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.98	0.27	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.98	0.25	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.98	0.27	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.98	0.25	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
Perfluorobutanesulfonic acid (PFBS)	0.51	0.98	0.26	ng/L	1	J	Draft Method 1633	1/24/24	1/25/24 16:26	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.98	0.23	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
Perfluorohexanesulfonic acid (PFHxS)	0.23	0.98	0.20	ng/L	1	J	Draft Method 1633	1/24/24	1/25/24 16:26	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.98	0.30	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
Perfluorooctanesulfonic acid (PFOS)	0.81	0.98	0.31	ng/L	1	J	Draft Method 1633	1/24/24	1/25/24 16:26	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.98	0.29	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.98	0.31	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.98	0.26	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.9	0.68	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	2.8	3.9	0.97	ng/L	1	J	Draft Method 1633	1/24/24	1/25/24 16:26	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.9	1.1	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.98	0.30	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.98	0.41	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.98	0.30	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.98	0.43	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.98	0.22	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.8	2.6	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.8	2.4	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.9	1.0	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.9	0.67	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.9	0.84	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
11Cl-PF3OUdS (F53B Major)	ND	3.9	0.95	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.8	1.8	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	49	10	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	49	8.6	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	0.48	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	0.49	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1630

Date Received: 1/18/2024

Field Sample #: MW-3

Sample ID: 24A1630-03 | Start Date/Time: 1/16/2024 3:35:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 3:39:00PM

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	0.39	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	0.85	ng/L	1		Draft Method 1633	1/24/24	1/25/24 16:26	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	79.2	10-130		1/25/24 16:26
13C5-PFPeA	76.7	35-150		1/25/24 16:26
13C5-PFHxA	78.0	55-150		1/25/24 16:26
13C4-PFHpA	77.8	55-150		1/25/24 16:26
13C8-PFOA	73.9	60-140		1/25/24 16:26
13C9-PFNA	74.9	55-140		1/25/24 16:26
13C6-PFDA	72.9	50-140		1/25/24 16:26
13C7-PFUnA	66.1	30-140		1/25/24 16:26
13C2-PFDoA	62.7	10-150		1/25/24 16:26
13C2-PFTeDA	49.8	10-130		1/25/24 16:26
13C3-PFBS	80.2	55-150		1/25/24 16:26
13C3-PFHxS	71.2	55-150		1/25/24 16:26
13C8-PFOS	69.7	45-140		1/25/24 16:26
13C2-4:2FTS	127	60-200		1/25/24 16:26
13C2-6:2FTS	73.2	60-200		1/25/24 16:26
13C2-8:2FTS	56.4	50-200		1/25/24 16:26
13C8-PFOSA	70.2	30-130		1/25/24 16:26
D3-NMeFOSA	50.4	15-130		1/25/24 16:26
D5-NEtFOSA	45.4	10-130		1/25/24 16:26
D3-NMeFOSAA	70.0	45-200		1/25/24 16:26
D5-NEtFOSAA	66.6	10-200		1/25/24 16:26
D7-NMeFOSE	44.2	10-150		1/25/24 16:26
D9-NEtFOSE	34.3	10-150		1/25/24 16:26
13C3-HFPO-DA	73.7	25-160		1/25/24 16:26

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Project Location: Dewitt, NY | Sample Description: | Work Order: 24A1630

Date Received: 1/18/2024

Field Sample #: MW-3

Sample ID: 24A1630-03 | Start Date/Time: 1/16/2024 3:35:00PM

Sample Matrix: Ground Water | Stop Date/Time: 1/16/2024 3:39:00PM

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	10	mg/L	1		Draft Method 1633	1/22/24	1/22/24 12:57	LL

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Sample Extraction Data

Prep Method:Draft Method 1633 **Analytical Method:Draft Method 1633** **Leachates were extracted on 1/22/2024 per NO PREP in Batch B363884**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
24A1630-01 [MW-5]	B363706	536	5.00	01/24/24
24A1630-02 [MW-5FD]	B363706	554	5.00	01/24/24
24A1630-03 [MW-3]	B363706	509	5.00	01/24/24

Draft Method 1633

Lab Number [Field ID]	Batch	Initial [mL]	Date
24A1630-01 [MW-5]	B363884	50.0	01/22/24
24A1630-02 [MW-5FD]	B363884	50.0	01/22/24
24A1630-03 [MW-3]	B363884	50.0	01/22/24

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B363706 - Draft Method 1633										
Blank (B363706-BLK1)				Prepared: 01/24/24 Analyzed: 01/25/24						
Perfluorobutanoic acid (PFBA)	ND	3.9	ng/L							
Perfluoropentanoic acid (PFPeA)	ND	2.0	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	0.98	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	0.98	ng/L							
Perfluorooctanoic acid (PFOA)	ND	0.98	ng/L							
Perfluorononanoic acid (PFNA)	ND	0.98	ng/L							
Perfluorodecanoic acid (PFDA)	ND	0.98	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	0.98	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	0.98	ng/L							
Perfluorotridecanoic acid (PFTrDA)	ND	0.98	ng/L							
Perfluorotetradecanoic acid (PFTeDA)	ND	0.98	ng/L							
Perfluorobutanesulfonic acid (PFBS)	ND	0.98	ng/L							
Perfluoropentanesulfonic acid (PFPeS)	ND	0.98	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	0.98	ng/L							
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.98	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	0.98	ng/L							
Perfluorononanesulfonic acid (PFNS)	ND	0.98	ng/L							
Perfluorodecanesulfonic acid (PFDS)	ND	0.98	ng/L							
Perfluorododecanesulfonic acid (PFDoS)	ND	0.98	ng/L							
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.9	ng/L							
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.9	ng/L							
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.9	ng/L							
Perfluorooctanesulfonamide (PFOSA)	ND	0.98	ng/L							
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.98	ng/L							
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.98	ng/L							
N-MeFOSAA (NMeFOSAA)	ND	0.98	ng/L							
N-EtFOSAA (NEtFOSAA)	ND	0.98	ng/L							
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.8	ng/L							
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.8	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.9	ng/L							
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.9	ng/L							
9Cl-PF3ONS (F53B Minor)	ND	3.9	ng/L							
11Cl-PF3OUdS (F53B Major)	ND	3.9	ng/L							
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.8	ng/L							
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	49	ng/L							
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	49	ng/L							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	ng/L							
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	ng/L							
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	ng/L							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	ng/L							
Surrogate: 13C4-PFBA	*89.7*		ng/L	98.4		91.2	10-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B363706 - Draft Method 1633										
Blank (B363706-BLK1)				Prepared: 01/24/24 Analyzed: 01/25/24						
Surrogate: 13C5-PFPeA	*46.4*		ng/L	49.2		94.3	35-150			
Surrogate: 13C5-PFHxA	*22.2*		ng/L	24.6		90.3	55-150			
Surrogate: 13C4-PFHpA	*22.1*		ng/L	24.6		89.8	55-150			
Surrogate: 13C8-PFOA	*22.4*		ng/L	24.6		91.3	60-140			
Surrogate: 13C9-PFNA	*11.1*		ng/L	12.3		89.9	55-140			
Surrogate: 13C6-PFDA	*11.0*		ng/L	12.3		89.1	50-140			
Surrogate: 13C7-PFUnA	*9.91*		ng/L	12.3		80.6	30-140			
Surrogate: 13C2-PFDoA	*9.92*		ng/L	12.3		80.7	10-150			
Surrogate: 13C2-PFTeDA	*10.7*		ng/L	12.3		86.9	10-130			
Surrogate: 13C3-PFBS	*23.5*		ng/L	24.6		95.6	55-150			
Surrogate: 13C3-PFHxS	*21.4*		ng/L	24.6		87.1	55-150			
Surrogate: 13C8-PFOS	*20.7*		ng/L	24.6		84.1	45-140			
Surrogate: 13C2-4:2FTS	*42.9*		ng/L	49.2		87.3	60-200			
Surrogate: 13C2-6:2FTS	*41.6*		ng/L	49.2		84.6	60-200			
Surrogate: 13C2-8:2FTS	*38.0*		ng/L	49.2		77.3	50-200			
Surrogate: 13C8-PFOSA	*20.2*		ng/L	24.6		81.9	30-130			
Surrogate: D3-NMeFOSA	*17.9*		ng/L	24.6		72.6	15-130			
Surrogate: D5-NEtFOSA	*18.5*		ng/L	24.6		75.3	10-130			
Surrogate: D3-NMeFOSAA	*43.1*		ng/L	49.2		87.6	45-200			
Surrogate: D5-NEtFOSAA	*41.8*		ng/L	49.2		84.9	10-200			
Surrogate: D7-NMeFOSE	*201*		ng/L	246		81.7	10-150			
Surrogate: D9-NEtFOSE	*178*		ng/L	246		72.5	10-150			
Surrogate: 13C3-HFPO-DA	*94.1*		ng/L	98.4		95.7	25-160			
LCS (B363706-BS1)				Prepared: 01/24/24 Analyzed: 01/25/24						
Perfluorobutanoic acid (PFBA)	99.9	4.0	ng/L	95.3		105	58-148			
Perfluoropentanoic acid (PFPeA)	46.3	2.0	ng/L	47.6		97.3	54-152			
Perfluorohexanoic acid (PFHxA)	23.8	0.99	ng/L	23.8		99.9	55-152			
Perfluoroheptanoic acid (PFHpA)	24.1	0.99	ng/L	23.8		101	54-154			
Perfluorooctanoic acid (PFOA)	23.2	0.99	ng/L	23.8		97.6	52-161			
Perfluorononanoic acid (PFNA)	23.6	0.99	ng/L	23.8		99.1	59-149			
Perfluorodecanoic acid (PFDA)	23.6	0.99	ng/L	23.8		99.1	52-147			
Perfluoroundecanoic acid (PFUnA)	23.8	0.99	ng/L	23.8		99.8	48-159			
Perfluorododecanoic acid (PFDoA)	24.5	0.99	ng/L	23.8		103	64-142			
Perfluorotridecanoic acid (PFTrDA)	22.3	0.99	ng/L	23.8		93.6	49-148			
Perfluorotetradecanoic acid (PFTeDA)	24.3	0.99	ng/L	23.8		102	47-161			
Perfluorobutanesulfonic acid (PFBS)	21.8	0.99	ng/L	21.1		103	62-144			
Perfluoropentanesulfonic acid (PFPeS)	22.0	0.99	ng/L	22.4		98.1	59-151			
Perfluorohexanesulfonic acid (PFHxS)	21.5	0.99	ng/L	21.8		98.6	57-146			
Perfluoroheptanesulfonic acid (PFHpS)	22.5	0.99	ng/L	22.7		99.1	55-152			
Perfluorooctanesulfonic acid (PFOS)	21.2	0.99	ng/L	22.1		95.9	58-149			
Perfluorononanesulfonic acid (PFNS)	24.4	0.99	ng/L	22.9		107	52-148			
Perfluorodecanesulfonic acid (PFDS)	21.2	0.99	ng/L	23.0		92.2	51-147			
Perfluorododecanesulfonic acid (PFDoS)	20.4	0.99	ng/L	23.1		88.2	36-145			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	90.2	4.0	ng/L	89.3		101	67-146			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	95.0	4.0	ng/L	90.5		105	61-151			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	96.7	4.0	ng/L	91.7		105	63-152			
Perfluorooctanesulfonamide (PFOSA)	23.9	0.99	ng/L	23.8		100	61-148			
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	22.1	0.99	ng/L	23.8		92.7	63-145			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B363706 - Draft Method 1633										
LCS (B363706-BS1)				Prepared: 01/24/24 Analyzed: 01/25/24						
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	20.6	0.99	ng/L	23.8		86.4	65-139			
N-MeFOSAA (NMeFOSAA)	21.8	0.99	ng/L	23.8		91.4	58-144			
N-EtFOSAA (NEtFOSAA)	24.2	0.99	ng/L	23.8		102	59-146			
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	240	9.9	ng/L	238		101	71-136			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	259	9.9	ng/L	238		109	69-137			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	84.6	4.0	ng/L	95.3		88.9	63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	77.1	4.0	ng/L	89.9		85.7	68-146			
9Cl-PF3ONS (F53B Minor)	78.0	4.0	ng/L	89.3		87.3	56-156			
11Cl-PF3OUdS (F53B Major)	75.1	4.0	ng/L	89.9		83.6	46-156			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	235	9.9	ng/L	238		98.5	62-129			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	1150	50	ng/L	1190		96.5	63-134			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	1060	50	ng/L	1190		89.1	50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	41.0	2.0	ng/L	38.5		107	56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	44.3	2.0	ng/L	43.3		102	51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	45.7	2.0	ng/L	43.3		106	55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	48.6	2.0	ng/L	43.3		112	48-161			
Surrogate: 13C4-PFBA	*85.5*		ng/L	99.2		86.2	10-130			
Surrogate: 13C5-PFPeA	*43.9*		ng/L	49.6		88.5	35-150			
Surrogate: 13C5-PFHxA	*21.5*		ng/L	24.8		86.6	55-150			
Surrogate: 13C4-PFHpA	*20.7*		ng/L	24.8		83.3	55-150			
Surrogate: 13C8-PFOA	*20.8*		ng/L	24.8		83.9	60-140			
Surrogate: 13C9-PFNA	*10.5*		ng/L	12.4		84.4	55-140			
Surrogate: 13C6-PFDA	*10.8*		ng/L	12.4		87.5	50-140			
Surrogate: 13C7-PFUnA	*10.5*		ng/L	12.4		84.8	30-140			
Surrogate: 13C2-PFDoA	*10.6*		ng/L	12.4		85.7	10-150			
Surrogate: 13C2-PFTeDA	*10.4*		ng/L	12.4		83.8	10-130			
Surrogate: 13C3-PFBS	*22.0*		ng/L	24.8		88.8	55-150			
Surrogate: 13C3-PFHxS	*21.0*		ng/L	24.8		84.7	55-150			
Surrogate: 13C8-PFOS	*21.0*		ng/L	24.8		84.7	45-140			
Surrogate: 13C2-4:2FTS	*43.3*		ng/L	49.6		87.3	60-200			
Surrogate: 13C2-6:2FTS	*43.2*		ng/L	49.6		87.1	60-200			
Surrogate: 13C2-8:2FTS	*39.6*		ng/L	49.6		79.9	50-200			
Surrogate: 13C8-PFOSA	*19.9*		ng/L	24.8		80.4	30-130			
Surrogate: D3-NMeFOSA	*19.1*		ng/L	24.8		77.1	15-130			
Surrogate: D5-NEtFOSA	*20.3*		ng/L	24.8		82.0	10-130			
Surrogate: D3-NMeFOSAA	*44.5*		ng/L	49.6		89.8	45-200			
Surrogate: D5-NEtFOSAA	*44.4*		ng/L	49.6		89.5	10-200			
Surrogate: D7-NMeFOSE	*201*		ng/L	248		81.0	10-150			
Surrogate: D9-NEtFOSE	*180*		ng/L	248		72.7	10-150			
Surrogate: 13C3-HFPO-DA	*89.6*		ng/L	99.2		90.2	25-160			
MRL Check (B363706-MRL1)				Prepared: 01/24/24 Analyzed: 01/25/24						
Perfluorobutanoic acid (PFBA)	7.71	4.0	ng/L	7.92		97.3	44-157			
Perfluoropentanoic acid (PFPeA)	3.54	2.0	ng/L	3.96		89.2	57-148			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B363706 - Draft Method 1633										
MRL Check (B363706-MRL1)				Prepared: 01/24/24 Analyzed: 01/25/24						
Perfluorohexanoic acid (PFHxA)	1.83	0.99	ng/L	1.98		92.2	62-149			
Perfluoroheptanoic acid (PFHpA)	1.76	0.99	ng/L	1.98		88.8	56-150			
Perfluorooctanoic acid (PFOA)	1.87	0.99	ng/L	1.98		94.3	57-161			
Perfluorononanoic acid (PFNA)	1.66	0.99	ng/L	1.98		84.0	53-157			
Perfluorodecanoic acid (PFDA)	1.79	0.99	ng/L	1.98		90.6	43-158			
Perfluoroundecanoic acid (PFUnA)	1.65	0.99	ng/L	1.98		83.2	50-155			
Perfluorododecanoic acid (PFDoA)	1.72	0.99	ng/L	1.98		86.9	60-141			
Perfluorotridecanoic acid (PFTrDA)	1.70	0.99	ng/L	1.98		85.9	52-140			
Perfluorotetradecanoic acid (PFTeDA)	1.69	0.99	ng/L	1.98		85.2	52-156			
Perfluorobutanesulfonic acid (PFBS)	1.60	0.99	ng/L	1.76		91.1	63-145			
Perfluoropentanesulfonic acid (PFPeS)	1.77	0.99	ng/L	1.86		94.9	58-144			
Perfluorohexanesulfonic acid (PFHxS)	1.61	0.99	ng/L	1.81		89.1	44-158			
Perfluoroheptanesulfonic acid (PFHpS)	1.78	0.99	ng/L	1.89		94.1	51-150			
Perfluorooctanesulfonic acid (PFOS)	1.59	0.99	ng/L	1.84		86.4	43-162			
Perfluorononanesulfonic acid (PFNS)	1.65	0.99	ng/L	1.91		86.8	46-151			
Perfluorodecanesulfonic acid (PFDS)	1.43	0.99	ng/L	1.91		74.9	50-144			
Perfluorododecanesulfonic acid (PFDoS)	1.50	0.99	ng/L	1.92		78.1	30-138			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	6.51	4.0	ng/L	7.43		87.7	52-158			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	6.86	4.0	ng/L	7.53		91.1	48-158			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	6.81	4.0	ng/L	7.63		89.3	46-165			
Perfluorooctanesulfonamide (PFOSA)	1.82	0.99	ng/L	1.98		92.0	47-163			
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	1.71	0.99	ng/L	1.98		86.3	54-155			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	1.67	0.99	ng/L	1.98		84.2	49-156			
N-MeFOSAA (NMeFOSAA)	1.94	0.99	ng/L	1.98		98.0	32-160			
N-EtFOSAA (NEtFOSAA)	2.04	0.99	ng/L	1.98		103	51-154			
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	17.6	9.9	ng/L	19.8		88.9	56-151			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	19.4	9.9	ng/L	19.8		97.7	60-147			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	6.91	4.0	ng/L	7.92		87.2	58-154			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	6.43	4.0	ng/L	7.48		86.0	61-148			
9Cl-PF3ONS (F53B Minor)	6.17	4.0	ng/L	7.43		83.1	44-167			
11Cl-PF3OUdS (F53B Major)	5.57	4.0	ng/L	7.48		74.5	36-158			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	15.5	9.9	ng/L	19.8		78.2	32-161			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	74.9	50	ng/L	99.1		75.6	39-156			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	69.1	50	ng/L	99.1		69.7	36-149			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	2.93	2.0	ng/L	3.20		91.5	56-144			
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.24	2.0	ng/L	3.60		89.9	48-150			
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.24	2.0	ng/L	3.60		90.0	49-154			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.82	2.0	ng/L	3.60		106	47-160			
Surrogate: 13C4-PFBA	*79.9*		ng/L	99.1		80.6	10-130			
Surrogate: 13C5-PFPeA	*40.6*		ng/L	49.5		82.0	35-150			
Surrogate: 13C5-PFHxA	*19.4*		ng/L	24.8		78.2	55-150			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B363706 - Draft Method 1633											
MRL Check (B363706-MRL1)				Prepared: 01/24/24 Analyzed: 01/25/24							
Surrogate: 13C4-PFHpA	*18.7*		ng/L	24.8		75.6		55-150			
Surrogate: 13C8-PFOA	*19.1*		ng/L	24.8		77.2		60-140			
Surrogate: 13C9-PFNA	*9.45*		ng/L	12.4		76.3		55-140			
Surrogate: 13C6-PFDA	*9.46*		ng/L	12.4		76.4		50-140			
Surrogate: 13C7-PFUnA	*8.48*		ng/L	12.4		68.5		30-140			
Surrogate: 13C2-PFDoA	*8.28*		ng/L	12.4		66.9		10-150			
Surrogate: 13C2-PFTeDA	*8.02*		ng/L	12.4		64.8		10-130			
Surrogate: 13C3-PFBS	*20.3*		ng/L	24.8		82.0		55-150			
Surrogate: 13C3-PFHxS	*18.4*		ng/L	24.8		74.3		55-150			
Surrogate: 13C8-PFOS	*18.3*		ng/L	24.8		74.1		45-140			
Surrogate: 13C2-4:2FTS	*37.1*		ng/L	49.5		74.9		60-200			
Surrogate: 13C2-6:2FTS	*36.4*		ng/L	49.5		73.4		60-200			
Surrogate: 13C2-8:2FTS	*33.7*		ng/L	49.5		68.0		50-200			
Surrogate: 13C8-PFOSA	*17.1*		ng/L	24.8		68.9		30-130			
Surrogate: D3-NMeFOSA	*15.3*		ng/L	24.8		61.8		15-130			
Surrogate: D5-NEtFOSA	*15.1*		ng/L	24.8		60.8		10-130			
Surrogate: D3-NMeFOSAA	*37.5*		ng/L	49.5		75.7		45-200			
Surrogate: D5-NEtFOSAA	*36.7*		ng/L	49.5		74.0		10-200			
Surrogate: D7-NMeFOSE	*164*		ng/L	248		66.3		10-150			
Surrogate: D9-NEtFOSE	*143*		ng/L	248		57.8		10-150			
Surrogate: 13C3-HFPO-DA	*79.3*		ng/L	99.1		80.0		25-160			
Matrix Spike (B363706-MS1)	**Source: 24A1630-01**			Prepared: 01/24/24 Analyzed: 01/25/24							
Perfluorobutanoic acid (PFBA)	92.0	3.6	ng/L	85.9	10.1	95.3		58-148			
Perfluoropentanoic acid (PFPeA)	37.7	1.8	ng/L	43.0	ND	87.7		54-152			
Perfluorohexanoic acid (PFHxA)	21.2	0.90	ng/L	21.5	1.23	92.8		55-152			
Perfluoroheptanoic acid (PFHpA)	21.1	0.90	ng/L	21.5	0.741	94.5		54-154			
Perfluorooctanoic acid (PFOA)	21.1	0.90	ng/L	21.5	2.05	88.5		52-161			
Perfluorononanoic acid (PFNA)	20.0	0.90	ng/L	21.5	0.340	91.5		59-149			
Perfluorodecanoic acid (PFDA)	19.6	0.90	ng/L	21.5	ND	91.2		52-147			
Perfluoroundecanoic acid (PFUnA)	20.7	0.90	ng/L	21.5	ND	96.4		48-159			
Perfluorododecanoic acid (PFDoA)	21.2	0.90	ng/L	21.5	ND	98.5		64-142			
Perfluorotridecanoic acid (PFTrDA)	10.8	0.90	ng/L	21.5	ND	50.2		49-148			
Perfluorotetradecanoic acid (PFTeDA)	21.5	0.90	ng/L	21.5	ND	100		47-161			S-29
Perfluorobutanesulfonic acid (PFBS)	19.9	0.90	ng/L	19.1	1.09	98.4		62-144			
Perfluoropentanesulfonic acid (PFPeS)	19.6	0.90	ng/L	20.2	ND	96.8		59-151			
Perfluorohexanesulfonic acid (PFHxS)	19.4	0.90	ng/L	19.7	0.693	95.3		57-146			
Perfluoroheptanesulfonic acid (PFHpS)	24.8	0.90	ng/L	20.5	ND	121		55-152			
Perfluorooctanesulfonic acid (PFOS)	21.7	0.90	ng/L	19.9	2.30	97.4		58-149			
Perfluorononanesulfonic acid (PFNS)	15.2	0.90	ng/L	20.7	ND	73.5		52-148			
Perfluorodecanesulfonic acid (PFDS)	9.13	0.90	ng/L	20.7	ND	**44.1**	*	51-147			MS-23
Perfluorododecanesulfonic acid (PFDoS)	3.35	0.90	ng/L	20.8	ND	**16.1**	*	36-145			MS-23
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	78.7	3.6	ng/L	80.6	ND	97.7		67-146			PF-18
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	84.4	3.6	ng/L	81.6	1.34	102		61-151			PF-18
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	78.4	3.6	ng/L	82.7	ND	94.8		63-152			
Perfluorooctanesulfonamide (PFOSA)	21.9	0.90	ng/L	21.5	0.819	98.0		61-148			
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	19.4	0.90	ng/L	21.5	ND	90.1		63-145			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	18.8	0.90	ng/L	21.5	ND	87.3		65-139			
N-MeFOSAA (NMeFOSAA)	20.2	0.90	ng/L	21.5	ND	94.2		58-144			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B363706 - Draft Method 1633											
Matrix Spike (B363706-MS1)	**Source: 24A1630-01**			Prepared: 01/24/24 Analyzed: 01/25/24							
N-EtFOSAA (NEtFOSAA)	20.0	0.90	ng/L	21.5	ND	93.0		59-146			
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	194	9.0	ng/L	215	ND	90.2		71-136			S-29
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	209	9.0	ng/L	215	ND	97.2		69-137			S-29
Hexafluoropropylene oxide dimer acid (HFPO-DA)	74.3	3.6	ng/L	85.9	ND	86.4		63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	72.2	3.6	ng/L	81.1	ND	89.1		68-146			
9Cl-PF3ONS (F53B Minor)	43.9	3.6	ng/L	80.6	ND	**54.5**	*	56-156			MS-23
11Cl-PF3OUdS (F53B Major)	17.8	3.6	ng/L	81.1	ND	**22.0**	*	46-156			MS-23
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	250	9.0	ng/L	215	ND	116		62-129			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	1260	45	ng/L	1070	ND	118		63-134			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	925	45	ng/L	1070	ND	86.1		50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	35.6	1.8	ng/L	34.8	ND	102		56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	35.9	1.8	ng/L	39.1	ND	91.8		51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	40.2	1.8	ng/L	39.1	ND	103		55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	35.8	1.8	ng/L	39.1	ND	91.7		48-161			
Surrogate: 13C4-PFBA	*66.1*		ng/L	89.5		73.9		10-130			
Surrogate: 13C5-PFPeA	*31.5*		ng/L	44.8		70.3		35-150			
Surrogate: 13C5-PFHxA	*16.2*		ng/L	22.4		72.3		55-150			
Surrogate: 13C4-PFHpA	*16.4*		ng/L	22.4		73.2		55-150			
Surrogate: 13C8-PFOA	*15.7*		ng/L	22.4		70.3		60-140			
Surrogate: 13C9-PFNA	*7.49*		ng/L	11.2		66.9		55-140			
Surrogate: 13C6-PFDA	*6.10*		ng/L	11.2		54.5		50-140			
Surrogate: 13C7-PFUnA	*4.25*		ng/L	11.2		38.0		30-140			
Surrogate: 13C2-PFDoA	*2.90*		ng/L	11.2		25.9		10-150			
Surrogate: 13C2-PFTeDA	*1.08*		ng/L	11.2		**9.68**	*	10-130			S-29
Surrogate: 13C3-PFBS	*15.7*		ng/L	22.4		70.2		55-150			
Surrogate: 13C3-PFHxS	*14.8*		ng/L	22.4		66.0		55-150			
Surrogate: 13C8-PFOS	*11.5*		ng/L	22.4		51.4		45-140			
Surrogate: 13C2-4:2FTS	*112*		ng/L	44.8		**251**	*	60-200			PF-18
Surrogate: 13C2-6:2FTS	*91.0*		ng/L	44.8		**203**	*	60-200			PF-18
Surrogate: 13C2-8:2FTS	*24.3*		ng/L	44.8		54.2		50-200			
Surrogate: 13C8-PFOSA	*11.8*		ng/L	22.4		52.8		30-130			
Surrogate: D3-NMeFOSA	*7.10*		ng/L	22.4		31.7		15-130			
Surrogate: D5-NEtFOSA	*4.47*		ng/L	22.4		20.0		10-130			
Surrogate: D3-NMeFOSAA	*22.8*		ng/L	44.8		50.9		45-200			
Surrogate: D5-NEtFOSAA	*16.5*		ng/L	44.8		36.8		10-200			
Surrogate: D7-NMeFOSE	*10.1*		ng/L	224		**4.49**	*	10-150			S-29
Surrogate: D9-NEtFOSE	*5.78*		ng/L	224		**2.58**	*	10-150			S-29
Surrogate: 13C3-HFPO-DA	*60.3*		ng/L	89.5		67.3		25-160			
Matrix Spike Dup (B363706-MSD1)	**Source: 24A1630-01**			Prepared: 01/24/24 Analyzed: 01/25/24							
Perfluorobutanoic acid (PFBA)	97.3	3.6	ng/L	85.6	10.1	102		58-148	5.65	20	S-29
Perfluoropentanoic acid (PFPeA)	37.2	1.8	ng/L	42.8	ND	86.9		54-152	1.27	20	
Perfluorohexanoic acid (PFHxA)	20.9	0.89	ng/L	21.4	1.23	91.8		55-152	1.45	25	
Perfluoroheptanoic acid (PFHpA)	21.4	0.89	ng/L	21.4	0.741	96.4		54-154	1.46	25	
Perfluorooctanoic acid (PFOA)	20.9	0.89	ng/L	21.4	2.05	88.2		52-161	0.592	25	

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD		RPD Limit	Notes
Batch B363706 - Draft Method 1633												
Matrix Spike Dup (B363706-MSD1)	**Source: 24A1630-01**			Prepared: 01/24/24 Analyzed: 01/25/24								
Perfluorononanoic acid (PFNA)	19.3	0.89	ng/L	21.4	0.340	88.5		59-149	3.71		25	
Perfluorodecanoic acid (PFDA)	19.3	0.89	ng/L	21.4	ND	90.4		52-147	1.31		25	
Perfluoroundecanoic acid (PFUnA)	20.5	0.89	ng/L	21.4	ND	95.7		48-159	1.08		30	
Perfluorododecanoic acid (PFDoA)	20.6	0.89	ng/L	21.4	ND	96.3		64-142	2.57		25	
Perfluorotridecanoic acid (PFTrDA)	14.6	0.89	ng/L	21.4	ND	68.0		49-148	**29.7**	*	25	R-06
Perfluorotetradecanoic acid (PFTeDA)	20.4	0.89	ng/L	21.4	ND	95.3		47-161	5.26		25	
Perfluorobutanesulfonic acid (PFBS)	19.0	0.89	ng/L	19.0	1.09	94.1		62-144	4.64		20	
Perfluoropentanesulfonic acid (PFPeS)	18.4	0.89	ng/L	20.1	ND	91.4		59-151	6.14		25	
Perfluorohexanesulfonic acid (PFHxS)	19.4	0.89	ng/L	19.6	0.693	95.4		57-146	0.287		25	
Perfluoroheptanesulfonic acid (PFHpS)	21.3	0.89	ng/L	20.4	ND	105		55-152	15.0		25	
Perfluorooctanesulfonic acid (PFOS)	20.5	0.89	ng/L	19.8	2.30	91.8		58-149	5.63		20	
Perfluorononanesulfonic acid (PFNS)	19.5	0.89	ng/L	20.6	ND	94.6		52-148	24.6		25	
Perfluorodecanesulfonic acid (PFDS)	16.1	0.89	ng/L	20.7	ND	77.7		51-147	**54.9**	*	25	R-06
Perfluorododecanesulfonic acid (PFDoS)	9.12	0.89	ng/L	20.8	ND	43.9		36-145	**92.6**	*	30	R-06
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	74.6	3.6	ng/L	80.2	ND	93.0		67-146	5.27		25	PF-18
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	82.1	3.6	ng/L	81.3	1.34	99.3		61-151	2.79		30	PF-18
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	82.9	3.6	ng/L	82.4	ND	101		63-152	5.49		30	
Perfluorooctanesulfonamide (PFOSA)	21.3	0.89	ng/L	21.4	0.819	95.6		61-148	2.84		20	
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	18.8	0.89	ng/L	21.4	ND	87.8		63-145	3.02		25	
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	19.0	0.89	ng/L	21.4	ND	88.9		65-139	1.45		25	
N-MeFOSAA (NMeFOSAA)	19.4	0.89	ng/L	21.4	ND	90.7		58-144	4.21		25	
N-EtFOSAA (NEtFOSAA)	21.0	0.89	ng/L	21.4	ND	98.2		59-146	5.05		25	
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	188	8.9	ng/L	214	ND	88.0		71-136	2.86		20	
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	208	8.9	ng/L	214	ND	97.3		69-137	0.341		25	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	74.8	3.6	ng/L	85.6	ND	87.4		63-144	0.702		25	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	74.7	3.6	ng/L	80.8	ND	92.4		68-146	3.30		20	
9Cl-PF3ONS (F53B Minor)	66.8	3.6	ng/L	80.2	ND	83.3		56-156	**41.4**	*	30	R-06
11Cl-PF3OUdS (F53B Major)	49.7	3.6	ng/L	80.8	ND	61.6		46-156	**94.6**	*	35	R-06
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	231	8.9	ng/L	214	ND	108		62-129	7.73		20	
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	1240	45	ng/L	1070	ND	116		63-134	1.89		20	
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	981	45	ng/L	1070	ND	91.7		50-138	5.90		25	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	34.9	1.8	ng/L	34.6	ND	101		56-151	1.89		20	
Perfluoro-3-methoxypropanoic acid (PFMPA)	12.9	1.8	ng/L	38.9	ND	**33.3**	*	51-145	**93.9**	*	25	MS-23
Perfluoro-4-methoxybutanoic acid (PFMBA)	38.2	1.8	ng/L	38.9	ND	98.3		55-148	5.04		20	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	34.0	1.8	ng/L	38.9	ND	87.4		48-161	5.19		35	
Surrogate: 13C4-PFBA	*7.32*		ng/L	89.2		**8.21**	*	10-130				S-29
Surrogate: 13C5-PFPeA	*33.2*		ng/L	44.6		74.4		35-150				
Surrogate: 13C5-PFHxA	*16.8*		ng/L	22.3		75.3		55-150				
Surrogate: 13C4-PFHpA	*16.9*		ng/L	22.3		75.7		55-150				
Surrogate: 13C8-PFOA	*16.7*		ng/L	22.3		74.7		60-140				
Surrogate: 13C9-PFNA	*8.08*		ng/L	11.1		72.5		55-140				

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B363706 - Draft Method 1633											
Matrix Spike Dup (B363706-MSD1)		**Source: 24A1630-01**		Prepared: 01/24/24 Analyzed: 01/25/24							
Surrogate: 13C6-PFDA	*7.78*		ng/L	11.1		69.8		50-140			
Surrogate: 13C7-PFUnA	*6.79*		ng/L	11.1		61.0		30-140			
Surrogate: 13C2-PFDoA	*6.11*		ng/L	11.1		54.8		10-150			
Surrogate: 13C2-PFTeDA	*3.52*		ng/L	11.1		31.6		10-130			
Surrogate: 13C3-PFBS	*17.0*		ng/L	22.3		76.1		55-150			
Surrogate: 13C3-PFHxS	*16.3*		ng/L	22.3		73.0		55-150			
Surrogate: 13C8-PFOS	*14.5*		ng/L	22.3		65.2		45-140			
Surrogate: 13C2-4:2FTS	*110*		ng/L	44.6		**248**	*	60-200			PF-18
Surrogate: 13C2-6:2FTS	*94.9*		ng/L	44.6		**213**	*	60-200			PF-18
Surrogate: 13C2-8:2FTS	*31.8*		ng/L	44.6		71.3		50-200			
Surrogate: 13C8-PFOSA	*14.5*		ng/L	22.3		64.8		30-130			
Surrogate: D3-NMeFOSA	*12.5*		ng/L	22.3		56.0		15-130			
Surrogate: D5-NEtFOSA	*10.7*		ng/L	22.3		47.8		10-130			
Surrogate: D3-NMeFOSAA	*35.4*		ng/L	44.6		79.4		45-200			
Surrogate: D5-NEtFOSAA	*30.2*		ng/L	44.6		67.8		10-200			
Surrogate: D7-NMeFOSE	*52.7*		ng/L	223		23.6		10-150			
Surrogate: D9-NEtFOSE	*34.2*		ng/L	223		15.3		10-150			
Surrogate: 13C3-HFPO-DA	*63.7*		ng/L	89.2		71.4		25-160			

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B363884 - Draft Method 1633										
Blank (B363884-BLK1)				Prepared & Analyzed: 01/22/24						
Total Suspended Solids	ND	5.0	mg/L							
LCS (B363884-BS1)				Prepared & Analyzed: 01/22/24						
Total Suspended Solids	200	5.0	mg/L	200		100	64.1-125			

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
MS-23	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is outside of the method specified criteria. Reduced precision anticipated for any reported result for this compound.
PF-17	Extracted Internal Standard recovery is outside of control limits. Data is not significantly affected since associated analyte is not detected and bias is on the high side.
PF-18	Re-analysis confirmed Extracted Internal Standard failure due to matrix effects.
PF-22A	Qualifier ion ratio >150% of associated calibration.
R-06	Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.
S-29	Extracted Internal Standard is outside of control limits.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
Draft Method 1633 in Water	
Total Suspended Solids	CT,MA,NH,NY,RI,NC,ME,VA
Perfluorobutanoic acid (PFBA)	NH-P,NY,PA,WV,CT
Perfluoropentanoic acid (PFPeA)	NH-P,NY,PA,WV,CT
Perfluorohexanoic acid (PFHxA)	NH-P,NY,PA,WV,CT
Perfluoroheptanoic acid (PFHpA)	NH-P,NY,PA,WV,CT
Perfluorooctanoic acid (PFOA)	NH-P,NY,PA,WV,CT
Perfluorononanoic acid (PFNA)	NH-P,NY,PA,WV,CT
Perfluorodecanoic acid (PFDA)	NH-P,NY,PA,WV,CT
Perfluoroundecanoic acid (PFUnA)	NH-P,NY,PA,WV,CT
Perfluorododecanoic acid (PFDoA)	NH-P,NY,PA,WV,CT
Perfluorotridecanoic acid (PFTrDA)	NH-P,NY,PA,WV,CT
Perfluorotetradecanoic acid (PFTeDA)	NH-P,NY,PA,WV,CT
Perfluorobutanesulfonic acid (PFBS)	NH-P,NY,PA,WV,CT
Perfluoropentanesulfonic acid (PFPeS)	NH-P,NY,PA,WV,CT
Perfluorohexanesulfonic acid (PFHxS)	NH-P,NY,PA,WV,CT
Perfluoroheptanesulfonic acid (PFHpS)	NH-P,NY,PA,WV,CT
Perfluorooctanesulfonic acid (PFOS)	NH-P,NY,PA,WV,CT
Perfluorononanesulfonic acid (PFNS)	NH-P,PA,WV,CT
Perfluorodecanesulfonic acid (PFDS)	NH-P,PA,WV,CT
Perfluorododecanesulfonic acid (PFDoS)	NH-P,PA,WV,CT
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	NH-P,PA,WV,CT
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	NH-P,NY,PA,WV,CT
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	NH-P,NY,PA,WV,CT
Perfluorooctanesulfonamide (PFOSA)	NH-P,PA,WV,CT
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	NH-P,PA,WV,CT
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	NH-P,PA,WV,CT
N-MeFOSAA (NMeFOSAA)	NH-P,NY,PA,WV,CT
N-EtFOSAA (NEtFOSAA)	NH-P,NY,PA,WV,CT
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	NH-P,PA,WV,CT
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	NH-P,PA,WV,CT
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P,NY,PA,WV,CT
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,NY,PA,WV,CT
9Cl-PF3ONS (F53B Minor)	NH-P,NY,PA,WV,CT
11Cl-PF3OUdS (F53B Major)	NH-P,NY,PA,WV,CT
3-Perfluoropropyl propanoic acid (FPrPA)(3:3FTCA)	NH-P,PA,WV,CT
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	NH-P,PA,WV,CT
3-Perfluoroheptyl propanoic acid (FHpPA)(7:3FTCA)	NH-P,PA,WV,CT
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NH-P,NY,PA,WV,CT
Perfluoro-3-methoxypropanoic acid (PFMPA)	NH-P,NY,PA,WV,CT
Perfluoro-4-methoxybutanoic acid (PFMBA)	NH-P,PA,WV,CT
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH-P,PA,WV,CT

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Code	Description	Number	Expires
MA	Massachusetts DEP	M-MA100	06/30/2024
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
RI	Rhode Island Department of Health	LAO00373	12/30/2024
NC	North Carolina Div. of Water Quality	652	12/31/2024
ME	State of Maine	MA00100	06/9/2025
VA	Commonwealth of Virginia	460217	12/14/2024
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2024
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2024
WV	West Virginia DEP Division of Water and Waste Management	419	08/31/2024

C4A1650 KM

Pace Analytical

Fax: 612-607-6344

https://www.pacelabs.com/

Doc # 380 Rev 1_03242017

CLIENT: SYRACUSE SAND AND GRAVEL

Location: ALPHA PORTLAND SITE DEC #734006

CHAIN OF CUSTODY RECORD (New York)

1800 Elm Street SE
Minneapolis, MN 55414

Page 1 of 1

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: ~~Miller Environmental Group~~

Address: ~~532 State Fair Blvd, Syracuse, NY 13209~~

Phone: ~~315-451-6660~~

Project Name: ~~Former Alpha Portland Site~~

Project Location: ~~Kyle Road, Downy Road Yard~~

Project Number: ~~Miller0083~~ TDK #202103

Project Manager: ~~Timothy Jenkins~~ John Herdman, TDK

Pace Analytical Quote Name/Number ~~Miller Standard Rates~~

Invoice Recipient: ~~TJenkins@Millerenv.com~~

Sampled By: Jonathan Jenkins (Miller)

Turnaround Time:
7-Day ☐ 10-Day ☐
Due Date: STANDARD T.A.T.

Approval required:
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery:
Format: PDF ☑ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To: JHERDMAN@
Fax To #: TDKENGINEERING.COM

* JCH, 1/17/24

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	Matrix Code	Conc Code
1	MW-5	1-16-24 12:35	1-16-24 12:39	N/A	X	GW	
2	MW-5FD	1-16-24 12:40	1-16-24 12:44		X	GW	
1	MS	1-16-24 12:45	1-16-24 12:49		X	GW	
1	MSD	1-16-24 12:50	1-16-24 12:54		X	GW	
3	MW-3	1-16-24 15:35	1-16-24 15:39		X	GW	
	EQ RINSE Sample	1-16-24 15:45	1-16-24 15:49		X	GW	
	Trip Blank	1-16-24 N/A	1-16-24 N/A	↓	X	GW	

ANALYSIS REQUESTED

# of Containers	2	2	1	2	2	2	1
[2] Preservation Code	H	I	N	I	I	I	I
[1] Container Code	V	A	P	A	P	A	P
	VOC's 8260D	SVOC's 8270	Metals	PCB's 8082	PAH's 1633	1-4 Dioxane	TSS

Filtered Samples:
☐ Field Filtered
☑ Lab to Filter

Unfiltered Samples:
☐ Field Filtered
☐ Lab to Filter

[1] Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] Container Codes:
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Comments: STANDARD TURNAROUND TIME, ~~PLEASE COPY TJENKINS@MILLERENV.COM IN ALL CORRESPONDENCE.~~
CAT B DELIVERABLES PACKAGE PACE QUOTE: TDK ALPHA PORTLAND 00143967

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time:
	1-17-24 @ 11:15
Received by: (signature)	Date/Time:
	1-17-24 11:15
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:
3.9.20	1/18/24 TS
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Program/Regulatory Requirements:
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375

Deliverables:
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

NELAC and AIHA-LAP, LLC Accredited

Project Entity:
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other:
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY:
☐ Soxhlet
☐ Non Soxhlet

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-ELON-0001 v07_Sample Receiving Checklist
	Effective Date: 07/13/2023

Log In Back-Sheet

Client Syracuse Sand and Gravel

Project NA

MCP/RCP Required NA

Deliverable Package Requirement NA

Location Alpha Portland Site

PWSID# (When Applicable) NA

Arrival Method:

Courier ☑ Fed Ex ☐ Walk In ☐ Other ☐

Received By / Date / Time LA 1/18/24 758

Back-Sheet By / Date / Time LA 1/18/24 853

Temperature Method Gun # 5

Temp ☑ 6° C Actual Temperature 3.4 / 2.0

Rush Samples: Yes / (No) Notify

Short Hold: Yes / (No) Notify

Notes regarding Samples/COC outside of SOP:

Login Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy) Any False statement will be brought to the attention of the Client – True or False

	True	False
Received on Ice	☑	☐
Received in Cooler	☑	☐
Custody Seal: DATE TIME	☐	☑
COC Relinquished	☑	☐
COC/Samples Labels Agree	☑	☐
All Samples in Good Condition	☑	☐
Samples Received within Holding Time	☑	☐
Is there enough Volume	☑	☐
Proper Media/Container Used	☑	☐
Splitting Samples Required	☐	☐
MS/MSD	☑	☑ (NA)
Trip Blanks	☐	☑
Lab to Filters	☐	☑
COC Legible	☑	☐

COC Included: (Check all included)

Client	☑	Analysis	☑	Sampler Name	☑
Project	☑	IDs	☑	Collection Date/Time	☑

All Samples Proper pH: (N/A) ☐ ☐

Additional Container Notes

Note: West Virginia requires all samples to have their temperature taken. Note any outliers.

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-ELON-0001 v07_Sample Receiving Checklist
	Effective Date: 07/13/2023

Sample																				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Soils Jars (Circle Amb/Clear) — 16oz Amb/Clear																				
8oz Amb/Clear																				
4oz Amb/Clear																				
2oz Amb/Clear																				
Ambers — 1 Liter — Unpreserved																				
1 Liter — HCL																				
1 Liter — Sulfuric																				
250mL — Sulfuric																				
250mL — Phosphoric																				
250mL — HCl																				
100mL — Unpreserved																				
Plastics — 1 Liter — Unpreserved																				
1 Liter — Sulfuric																				
500mL — Unpreserved	1	2	3	4																
500mL — Sulfuric																				
250mL — Unpreserved																				
250mL — Trizma																				
250mL — Sulfuric																				
250mL — Nitric																				
250mL — NaOH																				
250mL — Ammonium Acetate																				
250mL — NaOH/Zinc																				
VOA Vials — Unpreserved																				
VOA Vials — HCl																				
VOA Vials — MeOH																				
VOA Vials — D.I. Water																				
VOA Vials — BiSulfate																				
VOA Vials — Col/Bact																				
Other / Fill in — 125 mL Plastic	2	1	1																	
Other / Fill in																				
Other / Fill in																				
Other / Fill in																				
Other / Fill in																				

SEDIMENT AND SURFACE WATER

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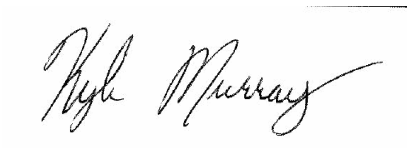
January 30, 2024

Richard Riccelli
Syracuse Sand & Gravel, LLC
6131 E Taft Road
North Syracuse, NY 13212

Project Location: Alpha Portland site
Client Job Number:
Project Number: 00143967
Laboratory Work Order Number: 23L2638

Enclosed are results of analyses for samples as received by the laboratory on December 19, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kyle A. Murray
Project Manager

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Syracuse Sand & Gravel, LLC
6131 E Taft Road
North Syracuse, NY 13212
ATTN: Richard Riccelli

REPORT DATE: 1/30/2024

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 00143967

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23L2638

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Alpha Portland site

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SS-1	23L2638-01	Sediment		SM 2540G	
				SW-846 6010D	
				SW-846 7196A	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8270E	
SS-2	23L2638-02	Sediment		SM 2540G	
				SW-846 6010D	
				SW-846 7196A	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8260D	
				SW-846 8270E	
SS-3	23L2638-03	Sediment		SM 2540G	
				SW-846 6010D	
				SW-846 7196A	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8260D	
				SW-846 8270E	
SS-4	23L2638-04	Sediment		SM 2540G	
				SW-846 6010D	
				SW-846 7196A	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8260D	
				SW-846 8270E	
SS-5	23L2638-05	Sediment		SM 2540G	
				SW-846 6010D	
				SW-846 7196A	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8260D	
				SW-846 8270E	
SS-6	23L2638-06	Sediment		SM 2540G	
				SW-846 6010D	
				SW-846 7196A	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8260D	
				SW-846 8270E	

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Syracuse Sand & Gravel, LLC
6131 E Taft Road
North Syracuse, NY 13212
ATTN: Richard Riccelli

REPORT DATE: 1/30/2024

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 00143967

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23L2638

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Alpha Portland site

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
Duplicate	23L2638-07	Sediment		SM 2540G	
				SW-846 6010D	
				SW-846 7196A	
				SW-846 7471B	
				SW-846 8082A	
				SW-846 8260D	
				SW-846 8270E	
SW-1	23L2638-08	Surface Water		SW-846 6010D	
				SW-846 7470A	
				SW-846 8082A	
				SW-846 8260D	
				SW-846 8270E	
SW-2	23L2638-09	Surface Water		SW-846 6010D	
				SW-846 7470A	
				SW-846 8082A	
				SW-846 8260D	
				SW-846 8270E	
SW-3	23L2638-10	Surface Water		SW-846 6010D	
				SW-846 7470A	
				SW-846 8082A	
				SW-846 8260D	
				SW-846 8270E	
SW-4	23L2638-11	Surface Water		SW-846 6010D	
				SW-846 7470A	
				SW-846 8082A	
				SW-846 8260D	
				SW-846 8270E	
SW-5	23L2638-12	Surface Water		SW-846 6010D	
				SW-846 7470A	
				SW-846 8082A	
				SW-846 8260D	
				SW-846 8270E	
SW-6	23L2638-13	Surface Water		SW-846 6010D	
				SW-846 7470A	
				SW-846 8082A	
				SW-846 8260D	
				SW-846 8270E	

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Syracuse Sand & Gravel, LLC
6131 E Taft Road
North Syracuse, NY 13212
ATTN: Richard Riccelli

REPORT DATE: 1/30/2024

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 00143967

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23L2638

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Alpha Portland site

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
Duplicate	23L2638-14	Surface Water		SW-846 6010D	
				SW-846 7470A	
				SW-846 8082A	
				SW-846 8260D	
				SW-846 8270E	
Equip Deconn	23L2638-15	Water		SW-846 8260D	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

REVISED 01-30-24: Hex Cr added per client.

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SW-846 6010D

Qualifications:

L-07

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:

Beryllium

B361688-BSD1

MS-12

Matrix spike recovery and matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a high bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

Analyte & Samples(s) Qualified:

Aluminum

B361499-PS2

MS-19

Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representative of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.

Analyte & Samples(s) Qualified:

Aluminum

23L2638-04[SS-4], B361688-MS1, B361688-MSD1, B361688-PS1

Calcium

23L2638-04[SS-4], 23L2638-09[SW-2], 23L2638-11[SW-4], B361499-MS1, B361688-MS2, B361688-MSD2, B361688-PS2, B362023-MS1

Iron

B361688-MS3, B361688-MSD3, B361688-PS3

Magnesium

B361688-MS3, B361688-MSD3, B361688-PS3

Manganese

23L2638-04[SS-4], B361688-MS1, B361688-MSD1, B361688-PS1

Potassium

23L2638-04[SS-4], B361688-MS1

Z-01

Matrix spike, spike duplicate and post spike recovery is outside of control limits . Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated. BS/BSD is within criteria.

Analyte & Samples(s) Qualified:

Selenium

23L2638-04[SS-4], B361688-MS1, B361688-MSD1, B361688-PS1

Z-01a

Matrix spike, spike duplicate and post spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias cannot be eliminated.

Analyte & Samples(s) Qualified:

Antimony

23L2638-04[SS-4], B361688-MS1, B361688-MSD1, B361688-PS1

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Z-02

Post spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank and dilution check recovery. Possibility of sample matrix effects that lead to low bias for reported result cannot be eliminated.

Analyte & Samples(s) Qualified:

Arsenic
23L2638-04[SS-4], B361688-PS1

Barium
23L2638-04[SS-4], B361688-PS1

Beryllium
23L2638-04[SS-4], B361688-PS1

Cadmium
23L2638-04[SS-4], B361688-PS1

Chromium
23L2638-04[SS-4], B361688-PS1

Cobalt
23L2638-04[SS-4], B361688-PS1

Nickel
23L2638-04[SS-4], B361688-PS1

Silver
23L2638-04[SS-4], B361688-PS1

Sodium
23L2638-04[SS-4], B361688-PS1

Vanadium
23L2638-04[SS-4], B361688-PS1

Zinc
23L2638-04[SS-4], B361688-PS1

SW-846 7196A

Qualifications:

H-10

Analysis was requested after the recommended holding time had passed.

Analyte & Samples(s) Qualified:

Hexavalent Chromium
23L2638-01[SS-1], 23L2638-02[SS-2], 23L2638-03[SS-3], 23L2638-04[SS-4], 23L2638-05[SS-5], 23L2638-06[SS-6], 23L2638-07[Duplicate]

MS-16

For solid method SW846-7196A, the matrix spike is outside of control limits. pH and ORP results were indicative of reducing conditions. Reanalysis is not required. Analysis is in control based on LCS recoveries.

Analyte & Samples(s) Qualified:

Hexavalent Chromium
23L2638-04[SS-4], B364445-MS3, B364445-MS4, B364445-MS5, B364445-MSD3

W-06

Elevated method reporting limit due to intense color of sample

Analyte & Samples(s) Qualified:

Hexavalent Chromium
23L2638-01[SS-1], 23L2638-02[SS-2], 23L2638-03[SS-3], 23L2638-05[SS-5], 23L2638-07[Duplicate]

SW-846 7471B

Qualifications:

R-05

Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.

Analyte & Samples(s) Qualified:

Mercury
B361709-BS1, B361709-BSD1

SW-846 8260D

Qualifications:

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L-02

Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.

Analyte & Samples(s) Qualified:

Bromomethane

B361293-BS1, B361293-BSD1

L-07

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:

1,2-Dibromo-3-chloropropane (DBCP)

B361401-BS1

1,2-Dichloroethane

B361401-BS1

MS-07A

Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.

Analyte & Samples(s) Qualified:

1,2-Dibromo-3-chloropropane (DBCP)

23L2638-04[SS-4], B361293-MS1, B361293-MSD1

1,4-Dioxane

23L2638-04[SS-4], B361293-MS1, B361293-MSD1

Chloromethane

23L2638-04[SS-4], B361293-MS1, B361293-MSD1

MS-23

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is outside of the method specified criteria. Reduced precision anticipated for any reported result for this compound.

Analyte & Samples(s) Qualified:

Bromomethane

B361293-MS1

Chloroethane

B361293-MS1

MS-24

Either matrix spike or matrix spike duplicate is outside of control limits, but the other is within limits. Analysis is in control based on laboratory fortified blank recovery.

Analyte & Samples(s) Qualified:

Methyl tert-Butyl Ether (MTBE)

B361293-MS1

R-06

Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.

Analyte & Samples(s) Qualified:

Bromomethane

23L2638-04[SS-4], B361293-MS1, B361293-MSD1

Chloroethane

23L2638-04[SS-4], B361293-MS1, B361293-MSD1

V-20

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:

1,2-Dichloroethane

B361401-BS1, B361401-BSD1, B361401-MS1, B361401-MSD1, S098219-CCV1

2-Hexanone (MBK)

B361401-BS1, B361401-BSD1, B361401-MS1, B361401-MSD1, S098219-CCV1

4-Methyl-2-pentanone (MIBK)

B361401-BS1, B361401-BSD1, B361401-MS1, B361401-MSD1, S098219-CCV1

Bromomethane

B361293-BS1, B361293-BSD1, B361293-MS1, B361293-MSD1, S098081-CCV1

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V-36

Initial calibration verification (ICV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:

Acetone

B361293-BS1, B361293-BSD1, B361293-MS1, B361293-MSD1, S098081-CCV1

SW-846 8270E

Qualifications:

B

Analyte is found in the associated laboratory blank as well as in the sample.

Analyte & Samples(s) Qualified:

Heptane, 2,3-dimethyl-

B361490-BLK1

Heptane, 2,5-dimethyl-

B361490-BLK1

H-06

Sample was extracted past the recommended holding time.

Analyte & Samples(s) Qualified:

23L2638-12RE1[SW-5]

L-04

Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.

Analyte & Samples(s) Qualified:

Caprolactam

23L2638-08[SW-1], 23L2638-09[SW-2], 23L2638-10[SW-3], 23L2638-11[SW-4], 23L2638-12[SW-5], 23L2638-13[SW-6], 23L2638-14[Duplicate], B361356-BLK1, B361356-BS1, B361356-BSD1

L-07

Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.

Analyte & Samples(s) Qualified:

Benzaldehyde

B361490-BSD1

MS-09

Matrix spike recovery and/or matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

Analyte & Samples(s) Qualified:

3,3-Dichlorobenzidine

23L2638-04[SS-4], B361310-MS1, B361310-MSD1

4-Chloroaniline

23L2638-04[SS-4], B361310-MS1, B361310-MSD1

Benzaldehyde

23L2638-04[SS-4], B361310-MS1, B361310-MSD1

Caprolactam

23L2638-11[SW-4], B361356-MS1, B361356-MSD1

Hexachlorocyclopentadiene

23L2638-04[SS-4], B361310-MS1, B361310-MSD1

Hexachloroethane

23L2638-11[SW-4], B361356-MS1, B361356-MSD1

MS-22

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.

Analyte & Samples(s) Qualified:

3-Nitroaniline

B361310-MS1

Hexachlorobutadiene

B361356-MSD1

Pentachlorophenol

B361310-MSD1

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R-06

Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.

Analyte & Samples(s) Qualified:

3,3-Dichlorobenzidine
23L2638-04[SS-4], B361310-MS1, B361310-MSD1

4-Nitroaniline
B361310-MS1, B361310-MSD1

RL-12

Elevated reporting limit due to matrix interference.

Analyte & Samples(s) Qualified:

23L2638-01[SS-1], 23L2638-02[SS-2], 23L2638-03[SS-3], 23L2638-04[SS-4], 23L2638-05[SS-5], 23L2638-06[SS-6], 23L2638-07[Duplicate]

S-07

One associated surrogate standard recovery is outside of control limits but the other(s) is/are within limits. All recoveries are > 10%.

Analyte & Samples(s) Qualified:

2,4,6-Tribromophenol
23L2638-07[Duplicate]

S-09

Sample was re-extracted outside of holding time since surrogate standard recovery was outside of control limits in initial analysis. Initial data is reported since confirmation analysis also had unacceptable surrogate, confirming matrix interference.

Analyte & Samples(s) Qualified:

1,4-Dioxane-d8
23L2638-12[SW-5], 23L2638-12RE1[SW-5]

V-04

Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria. Reported result is estimated.

Analyte & Samples(s) Qualified:

2,4-Dinitrophenol
23L2638-08[SW-1], 23L2638-09[SW-2], 23L2638-10[SW-3], 23L2638-11[SW-4], 23L2638-12[SW-5], 23L2638-13[SW-6], 23L2638-14[Duplicate], B361356-BLK1, B361356-BS1, B361356-BSD1, B361356-MS1, B361356-MSD1, S098222-CCV1, S098526-CCV1

Di-n-octylphthalate
23L2638-08[SW-1], 23L2638-09[SW-2], 23L2638-10[SW-3], 23L2638-11[SW-4], 23L2638-12[SW-5], 23L2638-13[SW-6], 23L2638-14[Duplicate], B361356-BLK1, B361356-BS1, B361356-BSD1, B361356-MS1, B361356-MSD1, S098222-CCV1, S098526-CCV1

V-05

Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Analyte & Samples(s) Qualified:

Hexachlorocyclopentadiene
23L2638-08[SW-1], 23L2638-09[SW-2], 23L2638-10[SW-3], 23L2638-11[SW-4], 23L2638-12[SW-5], 23L2638-13[SW-6], 23L2638-14[Duplicate], B361356-BLK1, B361356-BS1, B361356-BSD1, B361356-MS1, B361356-MSD1, S098222-CCV1, S098526-CCV1

Pentachlorophenol
23L2638-01[SS-1], 23L2638-02[SS-2], 23L2638-03[SS-3], 23L2638-04[SS-4], 23L2638-05[SS-5], 23L2638-06[SS-6], 23L2638-07[Duplicate], B361310-MS1, B361310-MSD1, B361490-BLK1, B361490-BS1, B361490-BSD1, S098381-CCV1

V-06

Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for this compound.

Analyte & Samples(s) Qualified:

4-Nitrophenol
B361310-BLK1, B361310-BS1, B361310-BSD1, S098336-CCV1

Atrazine
B361310-BLK1, B361310-BS1, B361310-BSD1, S098336-CCV2

Bis(2-chloroisopropyl)ether
S098537-CCV1

Caprolactam
23L2638-01[SS-1], 23L2638-02[SS-2], 23L2638-03[SS-3], 23L2638-04[SS-4], 23L2638-05[SS-5], 23L2638-06[SS-6], 23L2638-07[Duplicate], B361310-BLK1, B361310-BS1, B361310-BSD1, B361310-MS1, B361310-MSD1, B361490-BLK1, B361490-BS1, B361490-BSD1, S098336-CCV2, S098381-CCV2

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V-34

Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.

Analyte & Samples(s) Qualified:

Benzaldehyde

23L2638-01[SS-1], 23L2638-02[SS-2], 23L2638-03[SS-3], 23L2638-04[SS-4], 23L2638-05[SS-5], 23L2638-06[SS-6], 23L2638-07[Duplicate], B361310-BLK1, B361310-BS1, B361310-BSD1, B361310-MS1, B361310-MSD1, B361490-BLK1, B361490-BS1, B361490-BSD1, S096618-ICV1, S097351-ICV1, S098336-CCV2, S098381-CCV2

The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Lisa A. Worthington
Technical Representative

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-1 | Sampled: 12/15/2023 09:05

Sample ID: 23L2638-01

Sample Matrix: Sediment

Sample Flags: RL-12

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Atrazine	ND	1.7	0.12	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Benzaldehyde	ND	0.84	0.081	mg/Kg dry	1	V-34	SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Biphenyl	ND	1.7	0.13	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Caprolactam	ND	0.84	0.12	mg/Kg dry	1	V-06	SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Acenaphthene	ND	0.42	0.16	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Acenaphthylene	ND	0.42	0.17	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Acetophenone	ND	0.84	0.17	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Anthracene	ND	0.42	0.16	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Benzo(a)anthracene	ND	0.42	0.15	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Benzo(a)pyrene	ND	0.42	0.14	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Benzo(b)fluoranthene	ND	0.42	0.14	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Benzo(g,h,i)perylene	ND	0.42	0.18	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Benzo(k)fluoranthene	ND	0.42	0.15	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Bis(2-chloroethoxy)methane	ND	0.84	0.17	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Bis(2-chloroethyl)ether	ND	0.84	0.18	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Bis(2-chloroisopropyl)ether	ND	0.84	0.35	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Bis(2-Ethylhexyl)phthalate	ND	0.84	0.17	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
4-Bromophenylphenylether	ND	0.84	0.17	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Butylbenzylphthalate	ND	0.84	0.16	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Carbazole	ND	0.42	0.16	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
4-Chloroaniline	ND	1.6	0.15	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
4-Chloro-3-methylphenol	ND	1.6	0.17	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
2-Chloronaphthalene	ND	0.84	0.15	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
2-Chlorophenol	ND	0.84	0.17	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
4-Chlorophenylphenylether	ND	0.84	0.16	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Chrysene	ND	0.42	0.15	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Dibenz(a,h)anthracene	ND	0.42	0.16	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Dibenzofuran	ND	0.84	0.17	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Di-n-butylphthalate	ND	0.84	0.15	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
3,3-Dichlorobenzidine	ND	0.42	0.11	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
2,4-Dichlorophenol	ND	0.84	0.16	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Diethylphthalate	ND	0.84	0.16	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
2,4-Dimethylphenol	ND	0.84	0.22	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Dimethylphthalate	ND	0.84	0.17	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
4,6-Dinitro-2-methylphenol	ND	0.84	0.69	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
2,4-Dinitrophenol	ND	1.6	0.74	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
2,4-Dinitrotoluene	ND	0.84	0.17	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
2,6-Dinitrotoluene	ND	0.84	0.19	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Di-n-octylphthalate	ND	0.84	0.17	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Fluoranthene	ND	0.42	0.15	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Fluorene	ND	0.42	0.16	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Hexachlorobenzene	ND	0.84	0.18	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Hexachlorobutadiene	ND	0.84	0.17	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Hexachlorocyclopentadiene	ND	0.84	0.55	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-1 | Sampled: 12/15/2023 09:05

Sample ID: 23L2638-01

Sample Matrix: Sediment

Sample Flags: RL-12

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachloroethane	ND	0.84	0.16	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Indeno(1,2,3-cd)pyrene	ND	0.42	0.18	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Isophorone	ND	0.84	0.17	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
2-Methylnaphthalene	ND	0.42	0.17	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
2-Methylphenol	ND	0.84	0.17	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
3/4-Methylphenol	ND	0.84	0.18	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Naphthalene	ND	0.42	0.17	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
2-Nitroaniline	ND	0.84	0.17	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
3-Nitroaniline	ND	0.84	0.20	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
4-Nitroaniline	ND	0.84	0.14	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Nitrobenzene	ND	0.84	0.18	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
2-Nitrophenol	ND	0.84	0.17	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
4-Nitrophenol	ND	1.6	0.35	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	0.84	0.17	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
N-Nitrosodi-n-propylamine	ND	0.84	0.18	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Pentachlorophenol	ND	0.84	0.38	mg/Kg dry	1	V-05	SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Phenanthrene	ND	0.42	0.16	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Phenol	ND	0.84	0.20	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Pyrene	ND	0.42	0.17	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
1,2,4,5-Tetrachlorobenzene	ND	0.84	0.17	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
2,4,5-Trichlorophenol	ND	0.84	0.16	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL
2,4,6-Trichlorophenol	ND	0.84	0.16	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 17:02	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	56.7	30-130		12/26/23 17:02
Phenol-d6	61.5	30-130		12/26/23 17:02
Nitrobenzene-d5	67.7	30-130		12/26/23 17:02
2-Fluorobiphenyl	79.3	30-130		12/26/23 17:02
2,4,6-Tribromophenol	58.6	30-130		12/26/23 17:02
p-Terphenyl-d14	72.0	30-130		12/26/23 17:02

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-1 | Sampled: 12/15/2023 09:05

Sample ID: 23L2638-01

Sample Matrix: Sediment

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.063	0.026	mg/Kg dry	1		SW-846 8270E	12/27/23	12/28/23 19:04	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
1,4-Dioxane-d8	38.2	15-110		12/28/23 19:04	

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-1 | Sampled: 12/15/2023 09:05

Sample ID: 23L2638-01

Sample Matrix: Sediment

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
Heptane, 2,3-dimethyl-	1.3	mg/Kg dry	337559	2.521	1	003074-71-3	91	SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Heptane, 2,5-dimethyl-	1.2	mg/Kg dry	309773	2.421	1	002216-30-0	91	SW-846 8270E	12/20/23	12/26/23 17:02	BGL
Tentatively Identified Compounds	0.0	mg/Kg dry			1	NA		SW-846 8270E	12/20/23	12/26/23 17:02	BGL

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-1 | Sampled: 12/15/2023 09:05

Sample ID: 23L2638-01

Sample Matrix: Sediment

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.10	0.027	mg/Kg dry	4		SW-846 8082A	12/20/23	12/23/23 10:21	TG
Aroclor-1221 [1]	ND	0.10	0.055	mg/Kg dry	4		SW-846 8082A	12/20/23	12/23/23 10:21	TG
Aroclor-1232 [1]	ND	0.10	0.034	mg/Kg dry	4		SW-846 8082A	12/20/23	12/23/23 10:21	TG
Aroclor-1242 [1]	ND	0.10	0.031	mg/Kg dry	4		SW-846 8082A	12/20/23	12/23/23 10:21	TG
Aroclor-1248 [1]	ND	0.10	0.026	mg/Kg dry	4		SW-846 8082A	12/20/23	12/23/23 10:21	TG
Aroclor-1254 [1]	ND	0.10	0.031	mg/Kg dry	4		SW-846 8082A	12/20/23	12/23/23 10:21	TG
Aroclor-1260 [1]	ND	0.10	0.028	mg/Kg dry	4		SW-846 8082A	12/20/23	12/23/23 10:21	TG
Aroclor-1262 [1]	ND	0.10	0.031	mg/Kg dry	4		SW-846 8082A	12/20/23	12/23/23 10:21	TG
Aroclor-1268 [1]	ND	0.10	0.034	mg/Kg dry	4		SW-846 8082A	12/20/23	12/23/23 10:21	TG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	93.3	30-150		12/23/23 10:21
Decachlorobiphenyl [2]	106	30-150		12/23/23 10:21
Tetrachloro-m-xylene [1]	92.4	30-150		12/23/23 10:21
Tetrachloro-m-xylene [2]	91.9	30-150		12/23/23 10:21

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-1 | Sampled: 12/15/2023 09:05

Sample ID: 23L2638-01

Sample Matrix: Sediment

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	7200	20	4.5	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:07	HNN
Antimony	ND	2.0	0.37	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:07	HNN
Arsenic	11	4.0	0.59	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:07	HNN
Barium	260	2.0	0.26	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:07	HNN
Beryllium	0.47	0.20	0.083	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:07	HNN
Cadmium	0.30	0.40	0.16	mg/Kg dry	1	J	SW-846 6010D	12/26/23	12/27/23 15:07	HNN
Calcium	68000	200	73	mg/Kg dry	10		SW-846 6010D	12/26/23	12/29/23 1:39	HNN
Chromium	13	0.81	0.13	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:07	HNN
Cobalt	12	2.0	0.27	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:07	HNN
Copper	25	0.81	0.18	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:07	HNN
Iron	33000	200	40	mg/Kg dry	10		SW-846 6010D	12/26/23	12/29/23 1:39	HNN
Lead	22	0.61	0.35	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:07	HNN
Magnesium	21000	200	28	mg/Kg dry	10		SW-846 6010D	12/26/23	12/29/23 1:39	HNN
Manganese	2400	0.40	0.15	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:07	HNN
Mercury	0.015	0.031	0.013	mg/Kg dry	1	J	SW-846 7471B	12/26/23	12/28/23 11:07	AAJ
Nickel	26	0.81	0.23	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:07	HNN
Potassium	1100	200	53	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:07	HNN
Selenium	ND	4.0	0.95	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:07	HNN
Silver	ND	0.40	0.19	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:07	HNN
Sodium	140	200	44	mg/Kg dry	1	J	SW-846 6010D	12/26/23	12/27/23 15:07	HNN
Thallium	ND	2.0	0.59	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:07	HNN
Vanadium	19	0.81	0.33	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:07	HNN
Zinc	190	0.81	0.50	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:07	HNN

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-1 | Sampled: 12/15/2023 09:05

Sample ID: 23L2638-01

Sample Matrix: Sediment

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	77.4			% Wt	1		SM 2540G	12/20/23	12/20/23 9:53	DV
Hexavalent Chromium	ND	0.41	0.29	mg/Kg dry	2	W-06, H-10	SW-846 7196A	1/29/24	1/30/24 8:20	LL

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-2 | Sampled: 12/15/2023 10:15

Sample ID: 23L2638-02

Sample Matrix: Sediment

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.20	0.019	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
Benzene	ND	0.0041	0.0012	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
Bromochloromethane	ND	0.0041	0.0016	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
Bromodichloromethane	ND	0.0041	0.0011	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
Bromoform	ND	0.0041	0.0013	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
Bromomethane	ND	0.020	0.0035	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
2-Butanone (MEK)	ND	0.082	0.013	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
Carbon Disulfide	ND	0.020	0.016	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
Carbon Tetrachloride	ND	0.0041	0.0016	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
Chlorobenzene	ND	0.0041	0.0011	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
Chlorodibromomethane	ND	0.0020	0.0013	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
Chloroethane	ND	0.041	0.0023	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
Chloroform	ND	0.0082	0.0013	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
Chloromethane	ND	0.020	0.0020	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
Cyclohexane	ND	0.020	0.0083	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0041	0.0016	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
1,2-Dibromoethane (EDB)	ND	0.0020	0.0016	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
1,2-Dichlorobenzene	ND	0.0041	0.0011	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
1,3-Dichlorobenzene	ND	0.0041	0.0011	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
1,4-Dichlorobenzene	ND	0.0041	0.0012	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.041	0.0021	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
1,1-Dichloroethane	ND	0.0041	0.0014	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
1,2-Dichloroethane	ND	0.0041	0.0014	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
1,1-Dichloroethylene	ND	0.0082	0.0017	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
cis-1,2-Dichloroethylene	ND	0.0041	0.0013	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
trans-1,2-Dichloroethylene	ND	0.0041	0.0015	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
1,2-Dichloropropane	ND	0.0041	0.0013	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
cis-1,3-Dichloropropene	ND	0.0020	0.0011	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
trans-1,3-Dichloropropene	ND	0.0020	0.0013	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
1,4-Dioxane	ND	0.20	0.093	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
Ethylbenzene	ND	0.0041	0.0012	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
2-Hexanone (MBK)	ND	0.041	0.010	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
Isopropylbenzene (Cumene)	ND	0.0041	0.0013	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
Methyl Acetate	ND	0.0041	0.0029	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0082	0.0014	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
Methyl Cyclohexane	ND	0.0082	0.0016	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
Methylene Chloride	ND	0.041	0.0020	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.041	0.0091	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
Styrene	ND	0.0041	0.0010	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
1,1,2,2-Tetrachloroethane	ND	0.0020	0.0011	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
Tetrachloroethylene	ND	0.0041	0.0017	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
Toluene	ND	0.0041	0.0014	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
1,2,3-Trichlorobenzene	ND	0.0041	0.0012	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
1,2,4-Trichlorobenzene	ND	0.0041	0.0012	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-2 | Sampled: 12/15/2023 10:15

Sample ID: 23L2638-02

Sample Matrix: Sediment

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	0.0041	0.0016	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
1,1,2-Trichloroethane	ND	0.0041	0.0011	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
Trichloroethylene	ND	0.0041	0.0016	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
Trichlorofluoromethane (Freon 11)	ND	0.020	0.0015	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.020	0.0018	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
Vinyl Chloride	ND	0.020	0.0015	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF
Xylenes (total)	ND	0.0041	0.0041	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 7:34	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	86.5	70-130		12/20/23 7:34
Toluene-d8	98.2	70-130		12/20/23 7:34
4-Bromofluorobenzene	98.4	70-130		12/20/23 7:34

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-2 | Sampled: 12/15/2023 10:15

Sample ID: 23L2638-02

Sample Matrix: Sediment

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	mg/Kg dry			1			SW-846 8260D	12/20/23	12/20/23 7:34	MFF

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-2 | Sampled: 12/15/2023 10:15

Sample ID: 23L2638-02

Sample Matrix: Sediment

Sample Flags: RL-12

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Atrazine	ND	5.4	0.37	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Benzaldehyde	ND	2.7	0.26	mg/Kg dry	2	V-34	SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Biphenyl	ND	5.4	0.42	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Caprolactam	ND	2.7	0.39	mg/Kg dry	2	V-06	SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Acenaphthene	ND	1.4	0.52	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Acenaphthylene	ND	1.4	0.53	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Acetophenone	ND	2.7	0.53	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Anthracene	ND	1.4	0.52	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Benzo(a)anthracene	ND	1.4	0.49	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Benzo(a)pyrene	ND	1.4	0.45	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Benzo(b)fluoranthene	ND	1.4	0.46	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Benzo(g,h,i)perylene	ND	1.4	0.57	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Benzo(k)fluoranthene	ND	1.4	0.49	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Bis(2-chloroethoxy)methane	ND	2.7	0.53	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Bis(2-chloroethyl)ether	ND	2.7	0.57	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Bis(2-chloroisopropyl)ether	ND	2.7	1.1	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Bis(2-Ethylhexyl)phthalate	ND	2.7	0.55	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
4-Bromophenylphenylether	ND	2.7	0.56	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Butylbenzylphthalate	ND	2.7	0.51	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Carbazole	ND	1.4	0.53	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
4-Chloroaniline	ND	5.3	0.48	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
4-Chloro-3-methylphenol	ND	5.3	0.54	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
2-Chloronaphthalene	ND	2.7	0.48	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
2-Chlorophenol	ND	2.7	0.55	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
4-Chlorophenylphenylether	ND	2.7	0.52	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Chrysene	ND	1.4	0.49	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Dibenz(a,h)anthracene	ND	1.4	0.52	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Dibenzofuran	ND	2.7	0.53	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Di-n-butylphthalate	ND	2.7	0.49	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
3,3-Dichlorobenzidine	ND	1.4	0.36	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
2,4-Dichlorophenol	ND	2.7	0.52	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Diethylphthalate	ND	2.7	0.52	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
2,4-Dimethylphenol	ND	2.7	0.71	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Dimethylphthalate	ND	2.7	0.56	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
4,6-Dinitro-2-methylphenol	ND	2.7	2.2	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
2,4-Dinitrophenol	ND	5.3	2.4	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
2,4-Dinitrotoluene	ND	2.7	0.54	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
2,6-Dinitrotoluene	ND	2.7	0.61	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Di-n-octylphthalate	ND	2.7	0.54	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Fluoranthene	ND	1.4	0.48	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Fluorene	ND	1.4	0.53	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Hexachlorobenzene	ND	2.7	0.56	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Hexachlorobutadiene	ND	2.7	0.55	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Hexachlorocyclopentadiene	ND	2.7	1.8	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-2 | Sampled: 12/15/2023 10:15

Sample ID: 23L2638-02

Sample Matrix: Sediment

Sample Flags: RL-12

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachloroethane	ND	2.7	0.53	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Indeno(1,2,3-cd)pyrene	ND	1.4	0.59	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Isophorone	ND	2.7	0.55	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
2-Methylnaphthalene	ND	1.4	0.53	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
2-Methylphenol	ND	2.7	0.54	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
3/4-Methylphenol	ND	2.7	0.59	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Naphthalene	ND	1.4	0.54	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
2-Nitroaniline	ND	2.7	0.54	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
3-Nitroaniline	ND	2.7	0.64	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
4-Nitroaniline	ND	2.7	0.46	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Nitrobenzene	ND	2.7	0.59	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
2-Nitrophenol	ND	2.7	0.56	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
4-Nitrophenol	ND	5.3	1.1	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	2.7	0.54	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
N-Nitrosodi-n-propylamine	ND	2.7	0.59	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Pentachlorophenol	ND	2.7	1.2	mg/Kg dry	2	V-05	SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Phenanthrene	0.73	1.4	0.53	mg/Kg dry	2	J	SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Phenol	ND	2.7	0.63	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Pyrene	ND	1.4	0.54	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
1,2,4,5-Tetrachlorobenzene	ND	2.7	0.55	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
2,4,5-Trichlorophenol	ND	2.7	0.52	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
2,4,6-Trichlorophenol	ND	2.7	0.52	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:22	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	41.4	30-130		12/26/23 17:22
Phenol-d6	44.6	30-130		12/26/23 17:22
Nitrobenzene-d5	52.5	30-130		12/26/23 17:22
2-Fluorobiphenyl	53.2	30-130		12/26/23 17:22
2,4,6-Tribromophenol	39.2	30-130		12/26/23 17:22
p-Terphenyl-d14	48.5	30-130		12/26/23 17:22

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-2 | Sampled: 12/15/2023 10:15

Sample ID: 23L2638-02

Sample Matrix: Sediment

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.20	0.084	mg/Kg dry	1		SW-846 8270E	12/27/23	12/28/23 19:24	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,4-Dioxane-d8	25.0	15-110		12/28/23 19:24

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-2 | Sampled: 12/15/2023 10:15

Sample ID: 23L2638-02

Sample Matrix: Sediment

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
.beta.-Sitosterol	2.5	mg/Kg dry	343480	13.719	1	000083-46-5	97	SW-846 8270E	12/20/23	12/26/23 17:22	BGL
17-Norkaur-15-ene, 13-methy...	0.89	mg/Kg dry	191796	6.492	1	003564-54-3	99	SW-846 8270E	12/20/23	12/26/23 17:22	BGL
2-Phenanthrenol, 4b,5,6,7,8...	0.79	mg/Kg dry	159629	7.704	1	000511-15-9	89	SW-846 8270E	12/20/23	12/26/23 17:22	BGL
3-Penten-2-one, 4-methyl-	0.90	mg/Kg dry	124699	2.261	1	000141-79-7	90	SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Dodecane	0.78	mg/Kg dry	167548	6.757	1	000112-40-3	86	SW-846 8270E	12/20/23	12/26/23 17:22	BGL
eicosane	0.93	mg/Kg dry	199801	6.461	1	000112-95-8	93	SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Ethyl Acetate	8.8	mg/Kg dry	1228100	2.223	1	000141-78-6	80	SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Heptacosane	0.54	mg/Kg dry	107732	8.85	1	000593-49-7	83	SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Heptadecane	1.2	mg/Kg dry	246297	7.444	1	000629-78-7	94	SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Heptadecane, 2-methyl-	0.99	mg/Kg dry	137266	12.282	1	001560-89-0	83	SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Hexadecane, 7-methyl-	0.57	mg/Kg dry	114257	8.32	1	026730-20-1	83	SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Hexadecenoic acid, Z-11-	2.3	mg/Kg dry	503705	6.311	1	002416-20-8	96	SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Lenthionine	1.5	mg/Kg dry	320761	5.704	1	000292-46-6	96	SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Naphthalene, 1,2,3,4-tetram...	0.51	mg/Kg dry	109324	5.871	1	003031-15-0	89	SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Naphthalene, 2,3-dimethyl-	0.71	mg/Kg dry	164497	4.895	1	000581-40-8	95	SW-846 8270E	12/20/23	12/26/23 17:22	BGL
n-Hexadecanoic acid	1.9	mg/Kg dry	417949	6.355	1	000057-10-3	93	SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Nonadecane	0.53	mg/Kg dry	114661	7.079	1	000629-92-5	91	SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Nonadecane, 9-methyl-	1.5	mg/Kg dry	214508	10.789	1	013287-24-6	86	SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Octacosane	0.97	mg/Kg dry	194507	9.437	1	000630-02-4	87	SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Oxirane, heptadecyl-	1.2	mg/Kg dry	162293	13.153	1	067860-04-2	95	SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Pentadecane	0.49	mg/Kg dry	114274	5.027	1	000629-62-9	93	SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Pentadecane, 8-heptyl-	0.54	mg/Kg dry	108820	7.856	1	071005-15-7	80	SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Tentatively Identified Compounds	0.0	mg/Kg dry			1	NA		SW-846 8270E	12/20/23	12/26/23 17:22	BGL
Vitamin E	0.78	mg/Kg dry	107994	12.537	1	000059-02-9	97	SW-846 8270E	12/20/23	12/26/23 17:22	BGL

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-2 | Sampled: 12/15/2023 10:15

Sample ID: 23L2638-02

Sample Matrix: Sediment

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.28	0.073	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 21:37	JMB
Aroclor-1221 [1]	ND	0.28	0.15	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 21:37	JMB
Aroclor-1232 [1]	ND	0.28	0.092	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 21:37	JMB
Aroclor-1242 [1]	ND	0.28	0.085	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 21:37	JMB
Aroclor-1248 [1]	ND	0.28	0.071	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 21:37	JMB
Aroclor-1254 [1]	ND	0.28	0.086	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 21:37	JMB
Aroclor-1260 [1]	0.092	0.28	0.076	mg/Kg dry	4	J	SW-846 8082A	12/26/23	12/26/23 21:37	JMB
Aroclor-1262 [1]	ND	0.28	0.084	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 21:37	JMB
Aroclor-1268 [1]	ND	0.28	0.094	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 21:37	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	92.5	30-150		12/26/23 21:37
Decachlorobiphenyl [2]	89.8	30-150		12/26/23 21:37
Tetrachloro-m-xylene [1]	88.1	30-150		12/26/23 21:37
Tetrachloro-m-xylene [2]	91.0	30-150		12/26/23 21:37

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-2 | Sampled: 12/15/2023 10:15

Sample ID: 23L2638-02

Sample Matrix: Sediment

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	4100	33	7.4	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:24	HNN
Antimony	ND	3.3	0.61	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:24	HNN
Arsenic	44	6.7	0.97	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:24	HNN
Barium	91	3.3	0.43	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:24	HNN
Beryllium	0.26	0.33	0.14	mg/Kg dry	1	J	SW-846 6010D	12/26/23	12/27/23 15:24	HNN
Cadmium	ND	0.67	0.27	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:24	HNN
Calcium	180000	330	120	mg/Kg dry	10		SW-846 6010D	12/26/23	12/29/23 1:46	HNN
Chromium	11	1.3	0.21	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:24	HNN
Cobalt	6.2	3.3	0.45	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:24	HNN
Copper	15	1.3	0.29	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:24	HNN
Iron	35000	330	67	mg/Kg dry	10		SW-846 6010D	12/26/23	12/29/23 1:46	HNN
Lead	21	1.0	0.58	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:24	HNN
Magnesium	22000	330	46	mg/Kg dry	10		SW-846 6010D	12/26/23	12/29/23 1:46	HNN
Manganese	180	0.67	0.24	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:24	HNN
Mercury	0.041	0.049	0.021	mg/Kg dry	1	J	SW-846 7471B	12/26/23	12/28/23 11:09	AAJ
Nickel	31	1.3	0.37	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:24	HNN
Potassium	390	330	87	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:24	HNN
Selenium	ND	6.7	1.6	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:24	HNN
Silver	ND	0.67	0.32	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:24	HNN
Sodium	290	330	73	mg/Kg dry	1	J	SW-846 6010D	12/26/23	12/27/23 15:24	HNN
Thallium	ND	3.3	0.98	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:24	HNN
Vanadium	8.3	1.3	0.55	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:24	HNN
Zinc	30	1.3	0.82	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:24	HNN

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-2 | Sampled: 12/15/2023 10:15

Sample ID: 23L2638-02

Sample Matrix: Sediment

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	48.8			% Wt	1		SM 2540G	12/20/23	12/20/23 9:53	DV
Hexavalent Chromium	ND	0.65	0.47	mg/Kg dry	2	H-10, W-06	SW-846 7196A	1/29/24	1/30/24 8:20	LL

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-3 | Sampled: 12/15/2023 11:00

Sample ID: 23L2638-03

Sample Matrix: Sediment

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	0.047	0.30	0.027	mg/Kg dry	1	J	SW-846 8260D	12/20/23	12/20/23 8:00	MFF
Benzene	ND	0.0060	0.0017	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
Bromochloromethane	ND	0.0060	0.0023	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
Bromodichloromethane	ND	0.0060	0.0016	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
Bromoform	ND	0.0060	0.0018	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
Bromomethane	ND	0.030	0.0052	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
2-Butanone (MEK)	ND	0.12	0.019	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
Carbon Disulfide	ND	0.030	0.024	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
Carbon Tetrachloride	ND	0.0060	0.0024	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
Chlorobenzene	ND	0.0060	0.0017	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
Chlorodibromomethane	ND	0.0030	0.0019	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
Chloroethane	ND	0.060	0.0033	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
Chloroform	ND	0.012	0.0019	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
Chloromethane	ND	0.030	0.0030	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
Cyclohexane	ND	0.030	0.012	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0060	0.0024	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
1,2-Dibromoethane (EDB)	ND	0.0030	0.0023	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
1,2-Dichlorobenzene	ND	0.0060	0.0016	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
1,3-Dichlorobenzene	ND	0.0060	0.0017	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
1,4-Dichlorobenzene	ND	0.0060	0.0018	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.060	0.0031	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
1,1-Dichloroethane	ND	0.0060	0.0021	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
1,2-Dichloroethane	ND	0.0060	0.0020	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
1,1-Dichloroethylene	ND	0.012	0.0025	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
cis-1,2-Dichloroethylene	ND	0.0060	0.0019	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
trans-1,2-Dichloroethylene	ND	0.0060	0.0022	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
1,2-Dichloropropane	ND	0.0060	0.0019	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
cis-1,3-Dichloropropene	ND	0.0030	0.0017	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
trans-1,3-Dichloropropene	ND	0.0030	0.0018	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
1,4-Dioxane	ND	0.30	0.14	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
Ethylbenzene	ND	0.0060	0.0018	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
2-Hexanone (MBK)	ND	0.060	0.015	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
Isopropylbenzene (Cumene)	ND	0.0060	0.0019	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
Methyl Acetate	ND	0.0060	0.0043	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.012	0.0020	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
Methyl Cyclohexane	ND	0.012	0.0023	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
Methylene Chloride	ND	0.060	0.0029	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.060	0.013	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
Styrene	ND	0.0060	0.0015	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
1,1,2,2-Tetrachloroethane	ND	0.0030	0.0017	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
Tetrachloroethylene	ND	0.0060	0.0025	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
Toluene	ND	0.0060	0.0020	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
1,2,3-Trichlorobenzene	ND	0.0060	0.0017	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
1,2,4-Trichlorobenzene	ND	0.0060	0.0018	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-3 | Sampled: 12/15/2023 11:00

Sample ID: 23L2638-03

Sample Matrix: Sediment

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	0.0060	0.0023	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
1,1,2-Trichloroethane	ND	0.0060	0.0016	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
Trichloroethylene	ND	0.0060	0.0024	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
Trichlorofluoromethane (Freon 11)	ND	0.030	0.0022	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.030	0.0026	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
Vinyl Chloride	ND	0.030	0.0022	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF
Xylenes (total)	ND	0.0060	0.0060	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:00	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	85.6	70-130		12/20/23 8:00
Toluene-d8	98.8	70-130		12/20/23 8:00
4-Bromofluorobenzene	97.0	70-130		12/20/23 8:00

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-3 | Sampled: 12/15/2023 11:00

Sample ID: 23L2638-03

Sample Matrix: Sediment

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	mg/Kg dry			1			SW-846 8260D	12/20/23	12/20/23 8:00	MFF

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-3 | Sampled: 12/15/2023 11:00

Sample ID: 23L2638-03

Sample Matrix: Sediment

Sample Flags: RL-12

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Atrazine	ND	16	1.1	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Benzaldehyde	ND	8.0	0.77	mg/Kg dry	2	V-34	SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Biphenyl	ND	16	1.3	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Caprolactam	ND	8.0	1.1	mg/Kg dry	2	V-06	SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Acenaphthene	ND	4.0	1.5	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Acenaphthylene	ND	4.0	1.6	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Acetophenone	ND	8.0	1.6	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Anthracene	ND	4.0	1.5	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Benzo(a)anthracene	ND	4.0	1.4	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Benzo(a)pyrene	ND	4.0	1.3	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Benzo(b)fluoranthene	ND	4.0	1.4	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Benzo(g,h,i)perylene	ND	4.0	1.7	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Benzo(k)fluoranthene	ND	4.0	1.4	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Bis(2-chloroethoxy)methane	ND	8.0	1.6	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Bis(2-chloroethyl)ether	ND	8.0	1.7	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Bis(2-chloroisopropyl)ether	ND	8.0	3.4	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Bis(2-Ethylhexyl)phthalate	ND	8.0	1.6	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
4-Bromophenylphenylether	ND	8.0	1.7	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Butylbenzylphthalate	ND	8.0	1.5	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Carbazole	ND	4.0	1.6	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
4-Chloroaniline	ND	16	1.4	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
4-Chloro-3-methylphenol	ND	16	1.6	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
2-Chloronaphthalene	ND	8.0	1.4	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
2-Chlorophenol	ND	8.0	1.6	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
4-Chlorophenylphenylether	ND	8.0	1.6	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Chrysene	ND	4.0	1.4	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Dibenz(a,h)anthracene	ND	4.0	1.5	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Dibenzofuran	ND	8.0	1.6	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Di-n-butylphthalate	ND	8.0	1.5	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
3,3-Dichlorobenzidine	ND	4.0	1.1	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
2,4-Dichlorophenol	ND	8.0	1.5	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Diethylphthalate	ND	8.0	1.6	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
2,4-Dimethylphenol	ND	8.0	2.1	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Dimethylphthalate	ND	8.0	1.6	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
4,6-Dinitro-2-methylphenol	ND	8.0	6.5	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
2,4-Dinitrophenol	ND	16	7.0	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
2,4-Dinitrotoluene	ND	8.0	1.6	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
2,6-Dinitrotoluene	ND	8.0	1.8	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Di-n-octylphthalate	ND	8.0	1.6	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Fluoranthene	ND	4.0	1.4	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Fluorene	ND	4.0	1.6	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Hexachlorobenzene	ND	8.0	1.7	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Hexachlorobutadiene	ND	8.0	1.6	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Hexachlorocyclopentadiene	ND	8.0	5.2	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-3 | Sampled: 12/15/2023 11:00

Sample ID: 23L2638-03

Sample Matrix: Sediment

Sample Flags: RL-12

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachloroethane	ND	8.0	1.6	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Indeno(1,2,3-cd)pyrene	ND	4.0	1.8	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Isophorone	ND	8.0	1.6	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
2-Methylnaphthalene	ND	4.0	1.6	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
2-Methylphenol	ND	8.0	1.6	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
3/4-Methylphenol	ND	8.0	1.7	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Naphthalene	ND	4.0	1.6	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
2-Nitroaniline	ND	8.0	1.6	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
3-Nitroaniline	ND	8.0	1.9	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
4-Nitroaniline	ND	8.0	1.4	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Nitrobenzene	ND	8.0	1.7	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
2-Nitrophenol	ND	8.0	1.7	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
4-Nitrophenol	ND	16	3.3	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	8.0	1.6	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
N-Nitrosodi-n-propylamine	ND	8.0	1.7	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Pentachlorophenol	ND	8.0	3.6	mg/Kg dry	2	V-05	SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Phenanthrene	ND	4.0	1.6	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Phenol	ND	8.0	1.9	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Pyrene	ND	4.0	1.6	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
1,2,4,5-Tetrachlorobenzene	ND	8.0	1.6	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
2,4,5-Trichlorophenol	ND	8.0	1.6	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
2,4,6-Trichlorophenol	ND	8.0	1.5	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 17:43	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	47.2	30-130		12/26/23 17:43
Phenol-d6	48.7	30-130		12/26/23 17:43
Nitrobenzene-d5	58.7	30-130		12/26/23 17:43
2-Fluorobiphenyl	57.9	30-130		12/26/23 17:43
2,4,6-Tribromophenol	44.6	30-130		12/26/23 17:43
p-Terphenyl-d14	48.4	30-130		12/26/23 17:43

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-3 | Sampled: 12/15/2023 11:00

Sample ID: 23L2638-03

Sample Matrix: Sediment

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.58	0.24	mg/Kg dry	1		SW-846 8270E	12/27/23	12/28/23 19:44	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,4-Dioxane-d8	40.5	15-110		12/28/23 19:44

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-3 | Sampled: 12/15/2023 11:00

Sample ID: 23L2638-03

Sample Matrix: Sediment

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
.gamma.-Sitosterol	9.7	mg/Kg dry	433419	13.722	1	000083-47-6	96	SW-846 8270E	12/20/23	12/26/23 17:43	BGL
17-Norkaur-15-ene, 13-methy...	5.8	mg/Kg dry	340903	6.492	1	003564-54-3	99	SW-846 8270E	12/20/23	12/26/23 17:43	BGL
3-Hexene-2,5-dione	5.7	mg/Kg dry	245571	3.003	1	004436-75-3	87	SW-846 8270E	12/20/23	12/26/23 17:43	BGL
eicosane	6.5	mg/Kg dry	287563	10.791	1	000112-95-8	93	SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Lenthionine	3.8	mg/Kg dry	221125	5.704	1	000292-46-6	95	SW-846 8270E	12/20/23	12/26/23 17:43	BGL
n-Hexadecanoic acid	4.8	mg/Kg dry	283293	6.355	1	000057-10-3	97	SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Octadecanal	5.6	mg/Kg dry	248559	11.906	1	000638-66-4	90	SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Oxirane, hexadecyl-	6.0	mg/Kg dry	266784	13.155	1	007390-81-0	86	SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Pentadecanal-	6.4	mg/Kg dry	285943	10.392	1	002765-11-9	90	SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Tentatively Identified Compounds	0.0	mg/Kg dry			1	NA		SW-846 8270E	12/20/23	12/26/23 17:43	BGL
Z-7-Tetradecenoic acid	3.6	mg/Kg dry	211327	6.309	1	1000130-98-4	90	SW-846 8270E	12/20/23	12/26/23 17:43	BGL

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-3 | Sampled: 12/15/2023 11:00

Sample ID: 23L2638-03

Sample Matrix: Sediment

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.88	0.23	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 21:54	JMB
Aroclor-1221 [1]	ND	0.88	0.47	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 21:54	JMB
Aroclor-1232 [1]	ND	0.88	0.29	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 21:54	JMB
Aroclor-1242 [1]	ND	0.88	0.26	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 21:54	JMB
Aroclor-1248 [1]	ND	0.88	0.22	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 21:54	JMB
Aroclor-1254 [1]	ND	0.88	0.27	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 21:54	JMB
Aroclor-1260 [2]	0.28	0.88	0.23	mg/Kg dry	4	J	SW-846 8082A	12/26/23	12/26/23 21:54	JMB
Aroclor-1262 [1]	ND	0.88	0.26	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 21:54	JMB
Aroclor-1268 [1]	ND	0.88	0.29	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 21:54	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	104	30-150		12/26/23 21:54
Decachlorobiphenyl [2]	102	30-150		12/26/23 21:54
Tetrachloro-m-xylene [1]	89.9	30-150		12/26/23 21:54
Tetrachloro-m-xylene [2]	93.1	30-150		12/26/23 21:54

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-3 | Sampled: 12/15/2023 11:00

Sample ID: 23L2638-03

Sample Matrix: Sediment

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	6900	95	21	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:29	HNN
Antimony	ND	9.5	1.7	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:29	HNN
Arsenic	ND	19	2.8	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:29	HNN
Barium	150	9.5	1.2	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:29	HNN
Beryllium	0.42	0.95	0.39	mg/Kg dry	1	J	SW-846 6010D	12/26/23	12/27/23 15:29	HNN
Cadmium	ND	1.9	0.75	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:29	HNN
Calcium	170000	950	340	mg/Kg dry	10		SW-846 6010D	12/26/23	12/29/23 1:53	HNN
Chromium	17	3.8	0.60	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:29	HNN
Cobalt	5.5	9.5	1.3	mg/Kg dry	1	J	SW-846 6010D	12/26/23	12/27/23 15:29	HNN
Copper	15	3.8	0.83	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:29	HNN
Iron	12000	95	19	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:29	HNN
Lead	16	2.8	1.6	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:29	HNN
Magnesium	9100	95	13	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:29	HNN
Manganese	220	1.9	0.69	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:29	HNN
Mercury	ND	0.15	0.065	mg/Kg dry	1		SW-846 7471B	12/26/23	12/28/23 11:11	AAJ
Nickel	15	3.8	1.1	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:29	HNN
Potassium	1200	950	250	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:29	HNN
Selenium	ND	19	4.4	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:29	HNN
Silver	ND	1.9	0.91	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:29	HNN
Sodium	640	950	210	mg/Kg dry	1	J	SW-846 6010D	12/26/23	12/27/23 15:29	HNN
Thallium	ND	9.5	2.8	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:29	HNN
Vanadium	12	3.8	1.6	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:29	HNN
Zinc	93	3.8	2.3	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:29	HNN

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-3 | Sampled: 12/15/2023 11:00

Sample ID: 23L2638-03

Sample Matrix: Sediment

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	16.6			% Wt	1		SM 2540G	12/20/23	12/20/23 9:53	DV
Hexavalent Chromium	ND	4.7	3.4	mg/Kg dry	5	H-10, W-06	SW-846 7196A	1/29/24	1/30/24 8:20	LL

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-4 | Sampled: 12/15/2023 13:39

Sample ID: 23L2638-04

Sample Matrix: Sediment

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	0.13	0.012	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
Benzene	ND	0.0027	0.00077	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
Bromochloromethane	ND	0.0027	0.0010	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
Bromodichloromethane	ND	0.0027	0.00069	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
Bromoform	ND	0.0027	0.00081	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
Bromomethane	ND	0.013	0.0023	mg/Kg dry	1	R-06	SW-846 8260D	12/20/23	12/20/23 8:25	MFF
2-Butanone (MEK)	ND	0.053	0.0083	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
Carbon Disulfide	ND	0.013	0.011	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
Carbon Tetrachloride	ND	0.0027	0.0010	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
Chlorobenzene	ND	0.0027	0.00074	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
Chlorodibromomethane	ND	0.0013	0.00084	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
Chloroethane	ND	0.027	0.0015	mg/Kg dry	1	R-06	SW-846 8260D	12/20/23	12/20/23 8:25	MFF
Chloroform	ND	0.0053	0.00083	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
Chloromethane	ND	0.013	0.0013	mg/Kg dry	1	MS-07A	SW-846 8260D	12/20/23	12/20/23 8:25	MFF
Cyclohexane	ND	0.013	0.0054	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0027	0.0011	mg/Kg dry	1	MS-07A	SW-846 8260D	12/20/23	12/20/23 8:25	MFF
1,2-Dibromoethane (EDB)	ND	0.0013	0.0010	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
1,2-Dichlorobenzene	ND	0.0027	0.00070	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
1,3-Dichlorobenzene	ND	0.0027	0.00073	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
1,4-Dichlorobenzene	ND	0.0027	0.00080	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.027	0.0014	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
1,1-Dichloroethane	ND	0.0027	0.00091	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
1,2-Dichloroethane	ND	0.0027	0.00089	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
1,1-Dichloroethylene	ND	0.0053	0.0011	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
cis-1,2-Dichloroethylene	ND	0.0027	0.00085	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
trans-1,2-Dichloroethylene	ND	0.0027	0.00097	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
1,2-Dichloropropane	ND	0.0027	0.00082	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
cis-1,3-Dichloropropene	ND	0.0013	0.00074	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
trans-1,3-Dichloropropene	ND	0.0013	0.00081	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
1,4-Dioxane	ND	0.13	0.060	mg/Kg dry	1	MS-07A	SW-846 8260D	12/20/23	12/20/23 8:25	MFF
Ethylbenzene	ND	0.0027	0.00079	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
2-Hexanone (MBK)	ND	0.027	0.0067	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
Isopropylbenzene (Cumene)	ND	0.0027	0.00083	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
Methyl Acetate	ND	0.0027	0.0019	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0053	0.00089	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
Methyl Cyclohexane	ND	0.0053	0.0010	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
Methylene Chloride	ND	0.027	0.0013	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.027	0.0059	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
Styrene	ND	0.0027	0.00066	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
1,1,2,2-Tetrachloroethane	ND	0.0013	0.00073	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
Tetrachloroethylene	ND	0.0027	0.0011	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
Toluene	ND	0.0027	0.00090	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
1,2,3-Trichlorobenzene	ND	0.0027	0.00075	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
1,2,4-Trichlorobenzene	ND	0.0027	0.00080	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-4 | Sampled: 12/15/2023 13:39

Sample ID: 23L2638-04

Sample Matrix: Sediment

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	0.0027	0.0010	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
1,1,2-Trichloroethane	ND	0.0027	0.00071	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
Trichloroethylene	ND	0.0027	0.0011	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
Trichlorofluoromethane (Freon 11)	ND	0.013	0.00099	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.013	0.0011	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
Vinyl Chloride	ND	0.013	0.00098	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF
Xylenes (total)	ND	0.0027	0.0027	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:25	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	89.7	70-130		12/20/23 8:25
Toluene-d8	97.7	70-130		12/20/23 8:25
4-Bromofluorobenzene	95.4	70-130		12/20/23 8:25

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-4 | Sampled: 12/15/2023 13:39

Sample ID: 23L2638-04

Sample Matrix: Sediment

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	mg/Kg dry			1			SW-846 8260D	12/20/23	12/20/23 8:25	MFF

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-4 | Sampled: 12/15/2023 13:39

Sample ID: 23L2638-04

Sample Matrix: Sediment

Sample Flags: RL-12

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Atrazine	ND	2.0	0.14	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Benzaldehyde	ND	1.0	0.098	mg/Kg dry	1	MS-09, V-34	SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Biphenyl	ND	2.0	0.16	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Caprolactam	ND	1.0	0.15	mg/Kg dry	1	V-06	SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Acenaphthene	ND	0.51	0.20	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Acenaphthylene	ND	0.51	0.20	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Acetophenone	ND	1.0	0.20	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Anthracene	ND	0.51	0.20	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Benzo(a)anthracene	ND	0.51	0.19	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Benzo(a)pyrene	ND	0.51	0.17	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Benzo(b)fluoranthene	ND	0.51	0.17	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Benzo(g,h,i)perylene	ND	0.51	0.21	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Benzo(k)fluoranthene	ND	0.51	0.19	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Bis(2-chloroethoxy)methane	ND	1.0	0.20	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Bis(2-chloroethyl)ether	ND	1.0	0.22	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Bis(2-chloroisopropyl)ether	ND	1.0	0.43	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Bis(2-Ethylhexyl)phthalate	ND	1.0	0.21	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
4-Bromophenylphenylether	ND	1.0	0.21	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Butylbenzylphthalate	ND	1.0	0.19	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Carbazole	ND	0.51	0.20	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
4-Chloroaniline	ND	2.0	0.18	mg/Kg dry	1	MS-09	SW-846 8270E	12/20/23	12/26/23 18:04	BGL
4-Chloro-3-methylphenol	ND	2.0	0.20	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
2-Chloronaphthalene	ND	1.0	0.18	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
2-Chlorophenol	ND	1.0	0.21	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
4-Chlorophenylphenylether	ND	1.0	0.20	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Chrysene	ND	0.51	0.19	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Dibenz(a,h)anthracene	ND	0.51	0.20	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Dibenzofuran	ND	1.0	0.20	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Di-n-butylphthalate	ND	1.0	0.19	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
3,3-Dichlorobenzidine	ND	0.51	0.14	mg/Kg dry	1	MS-09, R-06	SW-846 8270E	12/20/23	12/26/23 18:04	BGL
2,4-Dichlorophenol	ND	1.0	0.20	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Diethylphthalate	ND	1.0	0.20	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
2,4-Dimethylphenol	ND	1.0	0.27	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Dimethylphthalate	ND	1.0	0.21	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
4,6-Dinitro-2-methylphenol	ND	1.0	0.84	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
2,4-Dinitrophenol	ND	2.0	0.90	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
2,4-Dinitrotoluene	ND	1.0	0.21	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
2,6-Dinitrotoluene	ND	1.0	0.23	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Di-n-octylphthalate	ND	1.0	0.20	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Fluoranthene	ND	0.51	0.18	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Fluorene	ND	0.51	0.20	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Hexachlorobenzene	ND	1.0	0.21	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Hexachlorobutadiene	ND	1.0	0.21	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Hexachlorocyclopentadiene	ND	1.0	0.67	mg/Kg dry	1	MS-09	SW-846 8270E	12/20/23	12/26/23 18:04	BGL

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-4 | Sampled: 12/15/2023 13:39

Sample ID: 23L2638-04

Sample Matrix: Sediment

Sample Flags: RL-12

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachloroethane	ND	1.0	0.20	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Indeno(1,2,3-cd)pyrene	ND	0.51	0.22	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Isophorone	ND	1.0	0.21	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
2-Methylnaphthalene	ND	0.51	0.20	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
2-Methylphenol	ND	1.0	0.20	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
3/4-Methylphenol	ND	1.0	0.22	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Naphthalene	ND	0.51	0.21	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
2-Nitroaniline	ND	1.0	0.20	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
3-Nitroaniline	ND	1.0	0.24	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
4-Nitroaniline	ND	1.0	0.17	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Nitrobenzene	ND	1.0	0.22	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
2-Nitrophenol	ND	1.0	0.21	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
4-Nitrophenol	ND	2.0	0.43	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	1.0	0.21	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
N-Nitrosodi-n-propylamine	ND	1.0	0.22	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Pentachlorophenol	ND	1.0	0.46	mg/Kg dry	1	V-05	SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Phenanthrene	ND	0.51	0.20	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Phenol	ND	1.0	0.24	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Pyrene	ND	0.51	0.21	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
1,2,4,5-Tetrachlorobenzene	ND	1.0	0.21	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
2,4,5-Trichlorophenol	ND	1.0	0.20	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
2,4,6-Trichlorophenol	ND	1.0	0.20	mg/Kg dry	1		SW-846 8270E	12/20/23	12/26/23 18:04	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	43.5	30-130		12/26/23 18:04
Phenol-d6	45.9	30-130		12/26/23 18:04
Nitrobenzene-d5	55.4	30-130		12/26/23 18:04
2-Fluorobiphenyl	54.8	30-130		12/26/23 18:04
2,4,6-Tribromophenol	37.6	30-130		12/26/23 18:04
p-Terphenyl-d14	49.6	30-130		12/26/23 18:04

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-4 | Sampled: 12/15/2023 13:39

Sample ID: 23L2638-04

Sample Matrix: Sediment

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	0.095	0.15	0.061	mg/Kg dry	1	J	SW-846 8270E	12/27/23	12/28/23 21:23	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,4-Dioxane-d8	33.7	15-110		12/28/23 21:23

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-4 | Sampled: 12/15/2023 13:39

Sample ID: 23L2638-04

Sample Matrix: Sediment

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
.gamma.-Sitosterol	6.6	mg/Kg dry	887440	13.714	1	000083-47-6	99	SW-846 8270E	12/20/23	12/26/23 18:04	BGL
17-Norkaur-15-ene, 13-methy...	2.1	mg/Kg dry	439213	6.494	1	003564-54-3	99	SW-846 8270E	12/20/23	12/26/23 18:04	BGL
3-Penten-2-one, 4-methyl-	2.5	mg/Kg dry	432105	2.264	1	000141-79-7	91	SW-846 8270E	12/20/23	12/26/23 18:04	BGL
4-((1E)-3-Hydroxy-1-propeny...	2.5	mg/Kg dry	538419	5.825	1	1000297-95-5	96	SW-846 8270E	12/20/23	12/26/23 18:04	BGL
9-Hexadecenoic acid	2.3	mg/Kg dry	485847	6.314	1	002091-29-4	91	SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Benzaldehyde, 4-hydroxy-	1.1	mg/Kg dry	452066	4.627	1	000123-08-0	97	SW-846 8270E	12/20/23	12/26/23 18:04	BGL
eicosane	2.2	mg/Kg dry	481673	9.442	1	000112-95-8	91	SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Ethyl Acetate	2.4	mg/Kg dry	422137	2.228	1	000141-78-6	80	SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Lenthionine	5.2	mg/Kg dry	1113890	5.704	1	000292-46-6	93	SW-846 8270E	12/20/23	12/26/23 18:04	BGL
n-Hexadecanoic acid	3.0	mg/Kg dry	644268	6.358	1	000057-10-3	97	SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Octacosane	3.2	mg/Kg dry	425416	10.791	1	000630-02-4	90	SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Tentatively Identified Compounds	0.0	mg/Kg dry			1	NA		SW-846 8270E	12/20/23	12/26/23 18:04	BGL
Tetratetracontane	1.7	mg/Kg dry	381113	8.327	1	007098-22-8	90	SW-846 8270E	12/20/23	12/26/23 18:04	BGL

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-4 | Sampled: 12/15/2023 13:39

Sample ID: 23L2638-04

Sample Matrix: Sediment

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.23	0.059	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 22:11	JMB
Aroclor-1221 [1]	ND	0.23	0.12	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 22:11	JMB
Aroclor-1232 [1]	ND	0.23	0.074	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 22:11	JMB
Aroclor-1242 [1]	ND	0.23	0.069	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 22:11	JMB
Aroclor-1248 [1]	ND	0.23	0.058	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 22:11	JMB
Aroclor-1254 [1]	ND	0.23	0.069	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 22:11	JMB
Aroclor-1260 [1]	ND	0.23	0.061	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 22:11	JMB
Aroclor-1262 [1]	ND	0.23	0.068	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 22:11	JMB
Aroclor-1268 [1]	ND	0.23	0.076	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 22:11	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	102	30-150		12/26/23 22:11
Decachlorobiphenyl [2]	97.2	30-150		12/26/23 22:11
Tetrachloro-m-xylene [1]	92.7	30-150		12/26/23 22:11
Tetrachloro-m-xylene [2]	95.6	30-150		12/26/23 22:11

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-4 | Sampled: 12/15/2023 13:39

Sample ID: 23L2638-04

Sample Matrix: Sediment

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	3200	25	5.5	mg/Kg dry	1	MS-19	SW-846 6010D	12/26/23	12/27/23 15:01	HNN
Antimony	ND	2.5	0.45	mg/Kg dry	1	Z-01a	SW-846 6010D	12/26/23	12/27/23 15:01	HNN
Arsenic	3.2	4.9	0.72	mg/Kg dry	1	Z-02, J	SW-846 6010D	12/26/23	12/27/23 15:01	HNN
Barium	31	2.5	0.32	mg/Kg dry	1	Z-02	SW-846 6010D	12/26/23	12/27/23 15:01	HNN
Beryllium	0.27	0.25	0.10	mg/Kg dry	1	Z-02	SW-846 6010D	12/26/23	12/27/23 15:01	HNN
Cadmium	ND	0.49	0.20	mg/Kg dry	1	Z-02	SW-846 6010D	12/26/23	12/27/23 15:01	HNN
Calcium	310000	1200	440	mg/Kg dry	50	MS-19	SW-846 6010D	12/26/23	12/29/23 0:47	HNN
Chromium	10	0.98	0.16	mg/Kg dry	1	Z-02	SW-846 6010D	12/26/23	12/27/23 15:01	HNN
Cobalt	3.4	2.5	0.33	mg/Kg dry	1	Z-02	SW-846 6010D	12/26/23	12/27/23 15:01	HNN
Copper	10	0.98	0.21	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:01	HNN
Iron	9200	250	49	mg/Kg dry	10		SW-846 6010D	12/26/23	12/29/23 1:32	HNN
Lead	8.0	0.74	0.42	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:01	HNN
Magnesium	13000	250	34	mg/Kg dry	10		SW-846 6010D	12/26/23	12/29/23 1:32	HNN
Manganese	260	0.49	0.18	mg/Kg dry	1	MS-19	SW-846 6010D	12/26/23	12/27/23 15:01	HNN
Mercury	ND	0.034	0.015	mg/Kg dry	1		SW-846 7471B	12/26/23	12/28/23 11:13	AAJ
Nickel	18	0.98	0.27	mg/Kg dry	1	Z-02	SW-846 6010D	12/26/23	12/27/23 15:01	HNN
Potassium	980	250	64	mg/Kg dry	1	MS-19	SW-846 6010D	12/26/23	12/27/23 15:01	HNN
Selenium	ND	4.9	1.2	mg/Kg dry	1	Z-01	SW-846 6010D	12/26/23	12/27/23 15:01	HNN
Silver	ND	0.49	0.24	mg/Kg dry	1	Z-02	SW-846 6010D	12/26/23	12/27/23 15:01	HNN
Sodium	130	250	54	mg/Kg dry	1	Z-02, J	SW-846 6010D	12/26/23	12/27/23 15:01	HNN
Thallium	ND	2.5	0.72	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 15:01	HNN
Vanadium	6.6	0.98	0.41	mg/Kg dry	1	Z-02	SW-846 6010D	12/26/23	12/27/23 15:01	HNN
Zinc	23	0.98	0.60	mg/Kg dry	1	Z-02	SW-846 6010D	12/26/23	12/27/23 15:01	HNN

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-4 | Sampled: 12/15/2023 13:39

Sample ID: 23L2638-04

Sample Matrix: Sediment

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	66.1			% Wt	1		SM 2540G	12/20/23	12/20/23 9:53	DV
Hexavalent Chromium	ND	0.24	0.17	mg/Kg dry	1	H-10, MS-16	SW-846 7196A	1/29/24	1/30/24 8:20	LL

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-5 | Sampled: 12/15/2023 15:15

Sample ID: 23L2638-05

Sample Matrix: Sediment

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	0.021	0.18	0.016	mg/Kg dry	1	J	SW-846 8260D	12/20/23	12/20/23 8:51	MFF
Benzene	ND	0.0035	0.0010	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
Bromochloromethane	ND	0.0035	0.0014	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
Bromodichloromethane	ND	0.0035	0.00092	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
Bromoform	ND	0.0035	0.0011	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
Bromomethane	ND	0.018	0.0030	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
2-Butanone (MEK)	ND	0.070	0.011	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
Carbon Disulfide	ND	0.018	0.014	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
Carbon Tetrachloride	ND	0.0035	0.0014	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
Chlorobenzene	ND	0.0035	0.00099	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
Chlorodibromomethane	ND	0.0018	0.0011	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
Chloroethane	ND	0.035	0.0019	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
Chloroform	ND	0.0070	0.0011	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
Chloromethane	ND	0.018	0.0017	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
Cyclohexane	ND	0.018	0.0072	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0035	0.0014	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
1,2-Dibromoethane (EDB)	ND	0.0018	0.0013	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
1,2-Dichlorobenzene	ND	0.0035	0.00093	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
1,3-Dichlorobenzene	ND	0.0035	0.00097	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
1,4-Dichlorobenzene	ND	0.0035	0.0011	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.035	0.0018	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
1,1-Dichloroethane	ND	0.0035	0.0012	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
1,2-Dichloroethane	ND	0.0035	0.0012	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
1,1-Dichloroethylene	ND	0.0070	0.0014	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
cis-1,2-Dichloroethylene	ND	0.0035	0.0011	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
trans-1,2-Dichloroethylene	ND	0.0035	0.0013	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
1,2-Dichloropropane	ND	0.0035	0.0011	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
cis-1,3-Dichloropropene	ND	0.0018	0.00099	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
trans-1,3-Dichloropropene	ND	0.0018	0.0011	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
1,4-Dioxane	ND	0.18	0.080	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
Ethylbenzene	ND	0.0035	0.0011	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
2-Hexanone (MBK)	ND	0.035	0.0088	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
Isopropylbenzene (Cumene)	ND	0.0035	0.0011	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
Methyl Acetate	ND	0.0035	0.0025	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0070	0.0012	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
Methyl Cyclohexane	ND	0.0070	0.0014	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
Methylene Chloride	ND	0.035	0.0017	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.035	0.0078	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
Styrene	ND	0.0035	0.00087	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
1,1,2,2-Tetrachloroethane	ND	0.0018	0.00097	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
Tetrachloroethylene	ND	0.0035	0.0015	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
Toluene	ND	0.0035	0.0012	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
1,2,3-Trichlorobenzene	ND	0.0035	0.0010	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
1,2,4-Trichlorobenzene	ND	0.0035	0.0011	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-5 | Sampled: 12/15/2023 15:15

Sample ID: 23L2638-05

Sample Matrix: Sediment

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	0.0035	0.0013	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
1,1,2-Trichloroethane	ND	0.0035	0.00094	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
Trichloroethylene	ND	0.0035	0.0014	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
Trichlorofluoromethane (Freon 11)	ND	0.018	0.0013	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.018	0.0015	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
Vinyl Chloride	ND	0.018	0.0013	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF
Xylenes (total)	ND	0.0035	0.0035	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 8:51	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	84.4	70-130		12/20/23 8:51
Toluene-d8	95.8	70-130		12/20/23 8:51
4-Bromofluorobenzene	100	70-130		12/20/23 8:51

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-5 | Sampled: 12/15/2023 15:15

Sample ID: 23L2638-05

Sample Matrix: Sediment

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	mg/Kg dry			1			SW-846 8260D	12/20/23	12/20/23 8:51	MFF

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-5 | Sampled: 12/15/2023 15:15

Sample ID: 23L2638-05

Sample Matrix: Sediment

Sample Flags: RL-12

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Atrazine	ND	4.7	0.33	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Benzaldehyde	ND	2.4	0.23	mg/Kg dry	2	V-34	SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Biphenyl	ND	4.7	0.37	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Caprolactam	ND	2.4	0.34	mg/Kg dry	2	V-06	SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Acenaphthene	ND	1.2	0.46	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Acenaphthylene	ND	1.2	0.47	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Acetophenone	ND	2.4	0.47	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Anthracene	ND	1.2	0.46	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Benzo(a)anthracene	ND	1.2	0.43	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Benzo(a)pyrene	ND	1.2	0.40	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Benzo(b)fluoranthene	ND	1.2	0.40	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Benzo(g,h,i)perylene	ND	1.2	0.50	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Benzo(k)fluoranthene	ND	1.2	0.43	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Bis(2-chloroethoxy)methane	ND	2.4	0.47	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Bis(2-chloroethyl)ether	ND	2.4	0.50	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Bis(2-chloroisopropyl)ether	ND	2.4	1.0	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Bis(2-Ethylhexyl)phthalate	ND	2.4	0.49	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
4-Bromophenylphenylether	ND	2.4	0.49	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Butylbenzylphthalate	ND	2.4	0.45	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Carbazole	ND	1.2	0.47	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
4-Chloroaniline	ND	4.7	0.42	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
4-Chloro-3-methylphenol	ND	4.7	0.47	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
2-Chloronaphthalene	ND	2.4	0.42	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
2-Chlorophenol	ND	2.4	0.48	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
4-Chlorophenylphenylether	ND	2.4	0.46	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Chrysene	ND	1.2	0.43	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Dibenz(a,h)anthracene	ND	1.2	0.46	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Dibenzofuran	ND	2.4	0.47	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Di-n-butylphthalate	ND	2.4	0.44	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
3,3-Dichlorobenzidine	ND	1.2	0.32	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
2,4-Dichlorophenol	ND	2.4	0.46	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Diethylphthalate	ND	2.4	0.46	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
2,4-Dimethylphenol	ND	2.4	0.62	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Dimethylphthalate	ND	2.4	0.49	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
4,6-Dinitro-2-methylphenol	ND	2.4	2.0	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
2,4-Dinitrophenol	ND	4.7	2.1	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
2,4-Dinitrotoluene	ND	2.4	0.48	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
2,6-Dinitrotoluene	ND	2.4	0.54	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Di-n-octylphthalate	ND	2.4	0.47	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Fluoranthene	ND	1.2	0.43	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Fluorene	ND	1.2	0.47	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Hexachlorobenzene	ND	2.4	0.50	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Hexachlorobutadiene	ND	2.4	0.48	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Hexachlorocyclopentadiene	ND	2.4	1.6	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-5 | Sampled: 12/15/2023 15:15

Sample ID: 23L2638-05

Sample Matrix: Sediment

Sample Flags: RL-12

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachloroethane	ND	2.4	0.47	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Indeno(1,2,3-cd)pyrene	ND	1.2	0.52	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Isophorone	ND	2.4	0.49	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
2-Methylnaphthalene	ND	1.2	0.47	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
2-Methylphenol	ND	2.4	0.48	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
3/4-Methylphenol	ND	2.4	0.52	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Naphthalene	ND	1.2	0.48	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
2-Nitroaniline	ND	2.4	0.48	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
3-Nitroaniline	ND	2.4	0.56	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
4-Nitroaniline	ND	2.4	0.40	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Nitrobenzene	ND	2.4	0.52	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
2-Nitrophenol	ND	2.4	0.49	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
4-Nitrophenol	ND	4.7	1.0	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	2.4	0.48	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
N-Nitrosodi-n-propylamine	ND	2.4	0.52	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Pentachlorophenol	ND	2.4	1.1	mg/Kg dry	2	V-05	SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Phenanthrene	ND	1.2	0.47	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Phenol	ND	2.4	0.56	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Pyrene	ND	1.2	0.48	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
1,2,4,5-Tetrachlorobenzene	ND	2.4	0.49	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
2,4,5-Trichlorophenol	ND	2.4	0.46	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL
2,4,6-Trichlorophenol	ND	2.4	0.46	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:25	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	50.1	30-130		12/26/23 18:25
Phenol-d6	57.4	30-130		12/26/23 18:25
Nitrobenzene-d5	65.1	30-130		12/26/23 18:25
2-Fluorobiphenyl	66.0	30-130		12/26/23 18:25
2,4,6-Tribromophenol	48.5	30-130		12/26/23 18:25
p-Terphenyl-d14	64.0	30-130		12/26/23 18:25

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-5 | Sampled: 12/15/2023 15:15

Sample ID: 23L2638-05

Sample Matrix: Sediment

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.092	0.038	mg/Kg dry	1		SW-846 8270E	12/27/23	12/28/23 20:04	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
1,4-Dioxane-d8	36.0	15-110		12/28/23 20:04	

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-5 | Sampled: 12/15/2023 15:15

Sample ID: 23L2638-05

Sample Matrix: Sediment

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
16-Heptadecenal	1.1	mg/Kg dry	173548	10.395	1	1000144-57-9	95	SW-846 8270E	12/20/23	12/26/23 18:25	BGL
3,4-Dimethyl-2-pentene(c,t)	1.0	mg/Kg dry	141589	2.261	1	1000118-16-5	86	SW-846 8270E	12/20/23	12/26/23 18:25	BGL
E-9-Tetradecenoic acid	1.0	mg/Kg dry	187622	6.309	1	1000131-35-8	91	SW-846 8270E	12/20/23	12/26/23 18:25	BGL
eicosane	2.1	mg/Kg dry	325651	10.791	1	000112-95-8	91	SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Eicosane, 7-hexyl-	1.2	mg/Kg dry	192645	9.442	1	055333-99-8	86	SW-846 8270E	12/20/23	12/26/23 18:25	BGL
n-Hexadecanoic acid	1.3	mg/Kg dry	234345	6.355	1	000057-10-3	87	SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Octacosane	0.69	mg/Kg dry	110012	12.285	1	000630-02-4	87	SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Oleic Acid	1.2	mg/Kg dry	214148	6.911	1	000112-80-1	90	SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Oxirane, heptadecyl-	1.1	mg/Kg dry	170242	13.158	1	067860-04-2	91	SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Oxirane, hexadecyl-	0.91	mg/Kg dry	143350	11.912	1	007390-81-0	90	SW-846 8270E	12/20/23	12/26/23 18:25	BGL
Tentatively Identified Compounds	0.0	mg/Kg dry			1	NA		SW-846 8270E	12/20/23	12/26/23 18:25	BGL

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-5 | Sampled: 12/15/2023 15:15

Sample ID: 23L2638-05

Sample Matrix: Sediment

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.30	0.077	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 22:28	JMB
Aroclor-1221 [1]	ND	0.30	0.16	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 22:28	JMB
Aroclor-1232 [1]	ND	0.30	0.097	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 22:28	JMB
Aroclor-1242 [1]	ND	0.30	0.090	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 22:28	JMB
Aroclor-1248 [1]	ND	0.30	0.075	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 22:28	JMB
Aroclor-1254 [1]	ND	0.30	0.090	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 22:28	JMB
Aroclor-1260 [1]	ND	0.30	0.080	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 22:28	JMB
Aroclor-1262 [1]	ND	0.30	0.089	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 22:28	JMB
Aroclor-1268 [1]	ND	0.30	0.099	mg/Kg dry	4		SW-846 8082A	12/26/23	12/26/23 22:28	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	112	30-150		12/26/23 22:28
Decachlorobiphenyl [2]	108	30-150		12/26/23 22:28
Tetrachloro-m-xylene [1]	88.2	30-150		12/26/23 22:28
Tetrachloro-m-xylene [2]	91.1	30-150		12/26/23 22:28

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-5 | Sampled: 12/15/2023 15:15

Sample ID: 23L2638-05

Sample Matrix: Sediment

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	4900	30	6.6	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:04	HNN
Antimony	ND	3.0	0.55	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:04	HNN
Arsenic	1.9	5.9	0.87	mg/Kg dry	1	J	SW-846 6010D	12/26/23	12/27/23 16:04	HNN
Barium	97	3.0	0.38	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:04	HNN
Beryllium	0.28	0.30	0.12	mg/Kg dry	1	J	SW-846 6010D	12/26/23	12/27/23 16:04	HNN
Cadmium	ND	0.59	0.24	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:04	HNN
Calcium	48000	300	110	mg/Kg dry	10		SW-846 6010D	12/26/23	12/29/23 2:00	HNN
Chromium	8.6	1.2	0.19	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:04	HNN
Cobalt	4.2	3.0	0.40	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:04	HNN
Copper	12	1.2	0.26	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:04	HNN
Iron	10000	300	59	mg/Kg dry	10		SW-846 6010D	12/26/23	12/29/23 2:00	HNN
Lead	11	0.89	0.51	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:04	HNN
Magnesium	8400	300	41	mg/Kg dry	10		SW-846 6010D	12/26/23	12/29/23 2:00	HNN
Manganese	350	0.59	0.22	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:04	HNN
Mercury	0.032	0.041	0.018	mg/Kg dry	1	J	SW-846 7471B	12/26/23	12/27/23 10:24	AV
Nickel	11	1.2	0.33	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:04	HNN
Potassium	840	300	78	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:04	HNN
Selenium	ND	5.9	1.4	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:04	HNN
Silver	ND	0.59	0.28	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:04	HNN
Sodium	190	300	65	mg/Kg dry	1	J	SW-846 6010D	12/26/23	12/27/23 16:04	HNN
Thallium	ND	3.0	0.87	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:04	HNN
Vanadium	8.5	1.2	0.49	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:04	HNN
Zinc	46	1.2	0.73	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:04	HNN

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-5 | Sampled: 12/15/2023 15:15

Sample ID: 23L2638-05

Sample Matrix: Sediment

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	53.5			% Wt	1		SM 2540G	12/20/23	12/20/23 9:53	DV
Hexavalent Chromium	ND	1.5	1.1	mg/Kg dry	5	H-10, W-06	SW-846 7196A	1/29/24	1/30/24 8:20	LL

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-6 | Sampled: 12/15/2023 14:45

Sample ID: 23L2638-06

Sample Matrix: Sediment

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	0.012	0.097	0.0087	mg/Kg dry	1	J	SW-846 8260D	12/20/23	12/20/23 10:26	MFF
Benzene	ND	0.0019	0.00056	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
Bromochloromethane	ND	0.0019	0.00075	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
Bromodichloromethane	ND	0.0019	0.00050	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
Bromoform	ND	0.0019	0.00059	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
Bromomethane	ND	0.0097	0.0017	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
2-Butanone (MEK)	ND	0.039	0.0060	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
Carbon Disulfide	ND	0.0097	0.0077	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
Carbon Tetrachloride	ND	0.0019	0.00076	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
Chlorobenzene	ND	0.0019	0.00054	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
Chlorodibromomethane	ND	0.00097	0.00061	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
Chloroethane	ND	0.019	0.0011	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
Chloroform	ND	0.0039	0.00060	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
Chloromethane	ND	0.0097	0.00095	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
Cyclohexane	ND	0.0097	0.0039	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0019	0.00076	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
1,2-Dibromoethane (EDB)	ND	0.00097	0.00074	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
1,2-Dichlorobenzene	ND	0.0019	0.00051	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
1,3-Dichlorobenzene	ND	0.0019	0.00053	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
1,4-Dichlorobenzene	ND	0.0019	0.00058	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.019	0.0010	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
1,1-Dichloroethane	ND	0.0019	0.00066	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
1,2-Dichloroethane	ND	0.0019	0.00064	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
1,1-Dichloroethylene	ND	0.0039	0.00079	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
cis-1,2-Dichloroethylene	ND	0.0019	0.00061	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
trans-1,2-Dichloroethylene	ND	0.0019	0.00070	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
1,2-Dichloropropane	ND	0.0019	0.00060	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
cis-1,3-Dichloropropene	ND	0.00097	0.00054	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
trans-1,3-Dichloropropene	ND	0.00097	0.00059	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
1,4-Dioxane	ND	0.097	0.044	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
Ethylbenzene	ND	0.0019	0.00058	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
2-Hexanone (MBK)	ND	0.019	0.0049	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
Isopropylbenzene (Cumene)	ND	0.0019	0.00060	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
Methyl Acetate	ND	0.0019	0.0014	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.0039	0.00065	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
Methyl Cyclohexane	ND	0.0039	0.00075	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
Methylene Chloride	ND	0.019	0.00093	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.019	0.0043	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
Styrene	ND	0.0019	0.00048	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
1,1,2,2-Tetrachloroethane	ND	0.00097	0.00053	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
Tetrachloroethylene	ND	0.0019	0.00081	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
Toluene	ND	0.0019	0.00065	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
1,2,3-Trichlorobenzene	ND	0.0019	0.00055	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
1,2,4-Trichlorobenzene	ND	0.0019	0.00058	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-6 | Sampled: 12/15/2023 14:45

Sample ID: 23L2638-06

Sample Matrix: Sediment

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	0.0019	0.00074	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
1,1,2-Trichloroethane	ND	0.0019	0.00052	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
Trichloroethylene	ND	0.0019	0.00078	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
Trichlorofluoromethane (Freon 11)	ND	0.0097	0.00072	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.0097	0.00083	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
Vinyl Chloride	ND	0.0097	0.00071	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF
Xylenes (total)	ND	0.0019	0.0019	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:26	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	88.9	70-130		12/20/23 10:26
Toluene-d8	92.8	70-130		12/20/23 10:26
4-Bromofluorobenzene	97.5	70-130		12/20/23 10:26

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-6 | Sampled: 12/15/2023 14:45

Sample ID: 23L2638-06

Sample Matrix: Sediment

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	mg/Kg dry			1			SW-846 8260D	12/20/23	12/20/23 10:26	MFF

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-6 | Sampled: 12/15/2023 14:45

Sample ID: 23L2638-06

Sample Matrix: Sediment

Sample Flags: RL-12

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Atrazine	ND	1.7	0.12	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Benzaldehyde	ND	0.88	0.085	mg/Kg dry	2	V-34	SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Biphenyl	ND	1.7	0.14	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Caprolactam	ND	0.88	0.13	mg/Kg dry	2	V-06	SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Acenaphthene	ND	0.44	0.17	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Acenaphthylene	ND	0.44	0.17	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Acetophenone	ND	0.88	0.17	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Anthracene	ND	0.44	0.17	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Benzo(a)anthracene	ND	0.44	0.16	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Benzo(a)pyrene	ND	0.44	0.15	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Benzo(b)fluoranthene	ND	0.44	0.15	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Benzo(g,h,i)perylene	ND	0.44	0.18	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Benzo(k)fluoranthene	ND	0.44	0.16	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Bis(2-chloroethoxy)methane	ND	0.88	0.17	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Bis(2-chloroethyl)ether	ND	0.88	0.19	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Bis(2-chloroisopropyl)ether	ND	0.88	0.37	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Bis(2-Ethylhexyl)phthalate	ND	0.88	0.18	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
4-Bromophenylphenylether	ND	0.88	0.18	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Butylbenzylphthalate	ND	0.88	0.17	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Carbazole	ND	0.44	0.17	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
4-Chloroaniline	ND	1.7	0.16	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
4-Chloro-3-methylphenol	ND	1.7	0.17	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
2-Chloronaphthalene	ND	0.88	0.16	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
2-Chlorophenol	ND	0.88	0.18	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
4-Chlorophenylphenylether	ND	0.88	0.17	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Chrysene	ND	0.44	0.16	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Dibenz(a,h)anthracene	ND	0.44	0.17	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Dibenzofuran	ND	0.88	0.17	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Di-n-butylphthalate	ND	0.88	0.16	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
3,3-Dichlorobenzidine	ND	0.44	0.12	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
2,4-Dichlorophenol	ND	0.88	0.17	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Diethylphthalate	ND	0.88	0.17	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
2,4-Dimethylphenol	ND	0.88	0.23	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Dimethylphthalate	ND	0.88	0.18	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
4,6-Dinitro-2-methylphenol	ND	0.88	0.72	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
2,4-Dinitrophenol	ND	1.7	0.77	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
2,4-Dinitrotoluene	ND	0.88	0.18	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
2,6-Dinitrotoluene	ND	0.88	0.20	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Di-n-octylphthalate	ND	0.88	0.17	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Fluoranthene	0.17	0.44	0.16	mg/Kg dry	2	J	SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Fluorene	ND	0.44	0.17	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Hexachlorobenzene	ND	0.88	0.18	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Hexachlorobutadiene	ND	0.88	0.18	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Hexachlorocyclopentadiene	ND	0.88	0.57	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-6 | Sampled: 12/15/2023 14:45

Sample ID: 23L2638-06

Sample Matrix: Sediment

Sample Flags: RL-12

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachloroethane	ND	0.88	0.17	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Indeno(1,2,3-cd)pyrene	ND	0.44	0.19	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Isophorone	ND	0.88	0.18	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
2-Methylnaphthalene	ND	0.44	0.17	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
2-Methylphenol	ND	0.88	0.18	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
3/4-Methylphenol	ND	0.88	0.19	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Naphthalene	ND	0.44	0.18	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
2-Nitroaniline	ND	0.88	0.18	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
3-Nitroaniline	ND	0.88	0.21	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
4-Nitroaniline	ND	0.88	0.15	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Nitrobenzene	ND	0.88	0.19	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
2-Nitrophenol	ND	0.88	0.18	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
4-Nitrophenol	ND	1.7	0.37	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	0.88	0.18	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
N-Nitrosodi-n-propylamine	ND	0.88	0.19	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Pentachlorophenol	ND	0.88	0.40	mg/Kg dry	2	V-05	SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Phenanthrene	ND	0.44	0.17	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Phenol	ND	0.88	0.21	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Pyrene	0.18	0.44	0.18	mg/Kg dry	2	J	SW-846 8270E	12/20/23	12/26/23 18:46	BGL
1,2,4,5-Tetrachlorobenzene	ND	0.88	0.18	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
2,4,5-Trichlorophenol	ND	0.88	0.17	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL
2,4,6-Trichlorophenol	ND	0.88	0.17	mg/Kg dry	2		SW-846 8270E	12/20/23	12/26/23 18:46	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	44.5	30-130		12/26/23 18:46
Phenol-d6	49.3	30-130		12/26/23 18:46
Nitrobenzene-d5	60.6	30-130		12/26/23 18:46
2-Fluorobiphenyl	67.4	30-130		12/26/23 18:46
2,4,6-Tribromophenol	53.6	30-130		12/26/23 18:46
p-Terphenyl-d14	63.8	30-130		12/26/23 18:46

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-6 | Sampled: 12/15/2023 14:45

Sample ID: 23L2638-06

Sample Matrix: Sediment

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.066	0.027	mg/Kg dry	1		SW-846 8270E	12/28/23	1/2/24 14:41	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual					
1,4-Dioxane-d8	35.8	15-110					1/2/24 14:41	

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-6 | Sampled: 12/15/2023 14:45

Sample ID: 23L2638-06

Sample Matrix: Sediment

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
Dodecane	0.23	mg/Kg dry	134951	9.44	1	000112-40-3	86	SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Heptane, 2,3-dimethyl-	0.23	mg/Kg dry	112922	2.521	1	003074-71-3	91	SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Hexadecane	0.68	mg/Kg dry	257709	10.799	1	000544-76-3	94	SW-846 8270E	12/20/23	12/26/23 18:46	BGL
n-Hexadecanoic acid	0.40	mg/Kg dry	261252	6.355	1	000057-10-3	97	SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Oxirane, heptadecyl-	0.38	mg/Kg dry	142189	11.909	1	067860-04-2	89	SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Pentadecane	0.27	mg/Kg dry	155215	8.328	1	000629-62-9	93	SW-846 8270E	12/20/23	12/26/23 18:46	BGL
Tentatively Identified Compounds	0.0	mg/Kg dry			1	NA		SW-846 8270E	12/20/23	12/26/23 18:46	BGL

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-6 | Sampled: 12/15/2023 14:45

Sample ID: 23L2638-06

Sample Matrix: Sediment

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.11	0.027	mg/Kg dry	4		SW-846 8082A	12/20/23	12/24/23 14:03	JMB
Aroclor-1221 [1]	ND	0.11	0.057	mg/Kg dry	4		SW-846 8082A	12/20/23	12/24/23 14:03	JMB
Aroclor-1232 [1]	ND	0.11	0.035	mg/Kg dry	4		SW-846 8082A	12/20/23	12/24/23 14:03	JMB
Aroclor-1242 [1]	ND	0.11	0.032	mg/Kg dry	4		SW-846 8082A	12/20/23	12/24/23 14:03	JMB
Aroclor-1248 [1]	ND	0.11	0.027	mg/Kg dry	4		SW-846 8082A	12/20/23	12/24/23 14:03	JMB
Aroclor-1254 [2]	0.049	0.11	0.032	mg/Kg dry	4	J	SW-846 8082A	12/20/23	12/24/23 14:03	JMB
Aroclor-1260 [1]	ND	0.11	0.028	mg/Kg dry	4		SW-846 8082A	12/20/23	12/24/23 14:03	JMB
Aroclor-1262 [1]	ND	0.11	0.032	mg/Kg dry	4		SW-846 8082A	12/20/23	12/24/23 14:03	JMB
Aroclor-1268 [1]	ND	0.11	0.035	mg/Kg dry	4		SW-846 8082A	12/20/23	12/24/23 14:03	JMB

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	77.9	30-150		12/24/23 14:03
Decachlorobiphenyl [2]	84.1	30-150		12/24/23 14:03
Tetrachloro-m-xylene [1]	81.0	30-150		12/24/23 14:03
Tetrachloro-m-xylene [2]	96.0	30-150		12/24/23 14:03

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-6 | Sampled: 12/15/2023 14:45

Sample ID: 23L2638-06

Sample Matrix: Sediment

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	4200	21	4.7	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:10	HNN
Antimony	ND	2.1	0.38	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:10	HNN
Arsenic	2.6	4.2	0.61	mg/Kg dry	1	J	SW-846 6010D	12/26/23	12/27/23 16:10	HNN
Barium	81	2.1	0.27	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:10	HNN
Beryllium	0.23	0.21	0.086	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:10	HNN
Cadmium	ND	0.42	0.17	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:10	HNN
Calcium	86000	210	76	mg/Kg dry	10		SW-846 6010D	12/26/23	12/29/23 2:07	HNN
Chromium	8.4	0.84	0.13	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:10	HNN
Cobalt	3.4	2.1	0.28	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:10	HNN
Copper	9.5	0.84	0.18	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:10	HNN
Iron	12000	210	42	mg/Kg dry	10		SW-846 6010D	12/26/23	12/29/23 2:07	HNN
Lead	110	0.63	0.36	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:10	HNN
Magnesium	6800	210	29	mg/Kg dry	10		SW-846 6010D	12/26/23	12/29/23 2:07	HNN
Manganese	270	0.42	0.15	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:10	HNN
Mercury	0.030	0.030	0.013	mg/Kg dry	1	J	SW-846 7471B	12/26/23	12/27/23 10:26	AV
Nickel	7.9	0.84	0.23	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:10	HNN
Potassium	550	210	55	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:10	HNN
Selenium	ND	4.2	0.98	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:10	HNN
Silver	ND	0.42	0.20	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:10	HNN
Sodium	130	210	46	mg/Kg dry	1	J	SW-846 6010D	12/26/23	12/27/23 16:10	HNN
Thallium	ND	2.1	0.61	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:10	HNN
Vanadium	9.3	0.84	0.35	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:10	HNN
Zinc	52	0.84	0.52	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:10	HNN

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SS-6 | Sampled: 12/15/2023 14:45

Sample ID: 23L2638-06

Sample Matrix: Sediment

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	75.4			% Wt	1		SM 2540G	12/20/23	12/20/23 9:53	DV
Hexavalent Chromium	ND	0.21	0.15	mg/Kg dry	1	H-10	SW-846 7196A	1/29/24	1/30/24 8:20	LL

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: Duplicate | Sampled: 12/15/2023 00:00

Sample ID: 23L2638-07

Sample Matrix: Sediment

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	0.081	0.51	0.046	mg/Kg dry	1	J	SW-846 8260D	12/20/23	12/20/23 10:51	MFF
Benzene	ND	0.010	0.0030	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
Bromochloromethane	ND	0.010	0.0040	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
Bromodichloromethane	ND	0.010	0.0027	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
Bromoform	ND	0.010	0.0031	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
Bromomethane	ND	0.051	0.0089	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
2-Butanone (MEK)	ND	0.21	0.032	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
Carbon Disulfide	ND	0.051	0.041	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
Carbon Tetrachloride	ND	0.010	0.0040	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
Chlorobenzene	ND	0.010	0.0029	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
Chlorodibromomethane	ND	0.0051	0.0033	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
Chloroethane	ND	0.10	0.0057	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
Chloroform	ND	0.021	0.0032	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
Chloromethane	ND	0.051	0.0051	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
Cyclohexane	ND	0.051	0.021	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.010	0.0041	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
1,2-Dibromoethane (EDB)	ND	0.0051	0.0039	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
1,2-Dichlorobenzene	ND	0.010	0.0027	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
1,3-Dichlorobenzene	ND	0.010	0.0028	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
1,4-Dichlorobenzene	ND	0.010	0.0031	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
Dichlorodifluoromethane (Freon 12)	ND	0.10	0.0053	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
1,1-Dichloroethane	ND	0.010	0.0035	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
1,2-Dichloroethane	ND	0.010	0.0034	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
1,1-Dichloroethylene	ND	0.021	0.0042	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
cis-1,2-Dichloroethylene	ND	0.010	0.0033	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
trans-1,2-Dichloroethylene	ND	0.010	0.0037	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
1,2-Dichloropropane	ND	0.010	0.0032	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
cis-1,3-Dichloropropene	ND	0.0051	0.0029	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
trans-1,3-Dichloropropene	ND	0.0051	0.0031	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
1,4-Dioxane	ND	0.51	0.23	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
Ethylbenzene	ND	0.010	0.0031	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
2-Hexanone (MBK)	ND	0.10	0.026	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
Isopropylbenzene (Cumene)	ND	0.010	0.0032	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
Methyl Acetate	ND	0.010	0.0074	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
Methyl tert-Butyl Ether (MTBE)	ND	0.021	0.0035	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
Methyl Cyclohexane	ND	0.021	0.0040	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
Methylene Chloride	ND	0.10	0.0049	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
4-Methyl-2-pentanone (MIBK)	ND	0.10	0.023	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
Styrene	ND	0.010	0.0025	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
1,1,2,2-Tetrachloroethane	ND	0.0051	0.0028	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
Tetrachloroethylene	ND	0.010	0.0043	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
Toluene	ND	0.010	0.0035	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
1,2,3-Trichlorobenzene	ND	0.010	0.0029	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
1,2,4-Trichlorobenzene	ND	0.010	0.0031	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: Duplicate | Sampled: 12/15/2023 00:00

Sample ID: 23L2638-07

Sample Matrix: Sediment

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	0.010	0.0039	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
1,1,2-Trichloroethane	ND	0.010	0.0027	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
Trichloroethylene	ND	0.010	0.0041	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
Trichlorofluoromethane (Freon 11)	ND	0.051	0.0038	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.051	0.0044	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
Vinyl Chloride	ND	0.051	0.0038	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF
Xylenes (total)	ND	0.010	0.010	mg/Kg dry	1		SW-846 8260D	12/20/23	12/20/23 10:51	MFF

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	85.4	70-130		12/20/23 10:51
Toluene-d8	94.5	70-130		12/20/23 10:51
4-Bromofluorobenzene	97.0	70-130		12/20/23 10:51

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: Duplicate | Sampled: 12/15/2023 00:00

Sample ID: 23L2638-07

Sample Matrix: Sediment

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	mg/Kg dry			1			SW-846 8260D	12/20/23	12/20/23 10:51	MFF

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: Duplicate | Sampled: 12/15/2023 00:00

Sample ID: 23L2638-07

Sample Matrix: Sediment

Sample Flags: RL-12

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Atrazine	ND	9.2	0.64	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Benzaldehyde	ND	4.7	0.45	mg/Kg dry	1	V-34	SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Biphenyl	ND	9.2	0.73	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Caprolactam	ND	4.7	0.67	mg/Kg dry	1	V-06	SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Acenaphthene	ND	2.3	0.89	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Acenaphthylene	ND	2.3	0.92	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Acetophenone	ND	4.7	0.92	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Anthracene	ND	2.3	0.90	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Benzo(a)anthracene	ND	2.3	0.84	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Benzo(a)pyrene	ND	2.3	0.77	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Benzo(b)fluoranthene	ND	2.3	0.79	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Benzo(g,h,i)perylene	ND	2.3	0.98	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Benzo(k)fluoranthene	ND	2.3	0.84	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Bis(2-chloroethoxy)methane	ND	4.7	0.92	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Bis(2-chloroethyl)ether	ND	4.7	0.98	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Bis(2-chloroisopropyl)ether	ND	4.7	2.0	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Bis(2-Ethylhexyl)phthalate	ND	4.7	0.95	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
4-Bromophenylphenylether	ND	4.7	0.97	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Butylbenzylphthalate	ND	4.7	0.88	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Carbazole	ND	2.3	0.91	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
4-Chloroaniline	ND	9.1	0.83	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
4-Chloro-3-methylphenol	ND	9.1	0.92	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
2-Chloronaphthalene	ND	4.7	0.83	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
2-Chlorophenol	ND	4.7	0.94	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
4-Chlorophenylphenylether	ND	4.7	0.90	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Chrysene	ND	2.3	0.84	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Dibenz(a,h)anthracene	ND	2.3	0.90	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Dibenzofuran	ND	4.7	0.92	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Di-n-butylphthalate	ND	4.7	0.85	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
3,3-Dichlorobenzidine	ND	2.3	0.62	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
2,4-Dichlorophenol	ND	4.7	0.90	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Diethylphthalate	ND	4.7	0.90	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
2,4-Dimethylphenol	ND	4.7	1.2	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Dimethylphthalate	ND	4.7	0.96	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
4,6-Dinitro-2-methylphenol	ND	4.7	3.8	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
2,4-Dinitrophenol	ND	9.1	4.1	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
2,4-Dinitrotoluene	ND	4.7	0.93	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
2,6-Dinitrotoluene	ND	4.7	1.1	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Di-n-octylphthalate	ND	4.7	0.93	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Fluoranthene	ND	2.3	0.83	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Fluorene	ND	2.3	0.91	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Hexachlorobenzene	ND	4.7	0.97	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Hexachlorobutadiene	ND	4.7	0.94	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Hexachlorocyclopentadiene	ND	4.7	3.0	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: Duplicate | Sampled: 12/15/2023 00:00

Sample ID: 23L2638-07

Sample Matrix: Sediment

Sample Flags: RL-12

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachloroethane	ND	4.7	0.91	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Indeno(1,2,3-cd)pyrene	ND	2.3	1.0	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Isophorone	ND	4.7	0.96	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
2-Methylnaphthalene	ND	2.3	0.92	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
2-Methylphenol	ND	4.7	0.93	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
3/4-Methylphenol	ND	4.7	1.0	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Naphthalene	ND	2.3	0.94	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
2-Nitroaniline	ND	4.7	0.93	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
3-Nitroaniline	ND	4.7	1.1	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
4-Nitroaniline	ND	4.7	0.79	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Nitrobenzene	ND	4.7	1.0	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
2-Nitrophenol	ND	4.7	0.97	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
4-Nitrophenol	ND	9.1	1.9	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	4.7	0.94	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
N-Nitrosodi-n-propylamine	ND	4.7	1.0	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Pentachlorophenol	ND	4.7	2.1	mg/Kg dry	1	V-05	SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Phenanthrene	ND	2.3	0.91	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Phenol	ND	4.7	1.1	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Pyrene	ND	2.3	0.93	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
1,2,4,5-Tetrachlorobenzene	ND	4.7	0.96	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
2,4,5-Trichlorophenol	ND	4.7	0.91	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
2,4,6-Trichlorophenol	ND	4.7	0.89	mg/Kg dry	1		SW-846 8270E	12/21/23	12/26/23 15:39	BGL

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
2-Fluorophenol	34.9		30-130		12/26/23 15:39
Phenol-d6	40.1		30-130		12/26/23 15:39
Nitrobenzene-d5	44.0		30-130		12/26/23 15:39
2-Fluorobiphenyl	48.9		30-130		12/26/23 15:39
2,4,6-Tribromophenol	**25.0**	*	30-130	S-07	12/26/23 15:39
p-Terphenyl-d14	55.2		30-130		12/26/23 15:39

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: Duplicate | Sampled: 12/15/2023 00:00

Sample ID: 23L2638-07

Sample Matrix: Sediment

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.72	0.30	mg/Kg dry	1		SW-846 8270E	12/29/23	1/3/24 15:42	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual					
1,4-Dioxane-d8	38.4	15-110					1/3/24 15:42	

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: Duplicate | Sampled: 12/15/2023 00:00

Sample ID: 23L2638-07

Sample Matrix: Sediment

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
.beta.-Sitosterol	12	mg/Kg dry	416286	13.729	1	000083-46-5	99	SW-846 8270E	12/21/23	12/26/23 15:39	BGL
16-Heptadecenal	5.9	mg/Kg dry	198481	10.392	1	1000144-57-9	95	SW-846 8270E	12/21/23	12/26/23 15:39	BGL
17-Norkaur-15-ene, 13-methy...	11	mg/Kg dry	470700	6.492	1	003564-54-3	99	SW-846 8270E	12/21/23	12/26/23 15:39	BGL
3-Penten-2-one, 4-methyl-	16	mg/Kg dry	550800	2.266	1	000141-79-7	91	SW-846 8270E	12/21/23	12/26/23 15:39	BGL
eicosane	8.7	mg/Kg dry	290669	10.791	1	000112-95-8	91	SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Myristoleic acid	4.2	mg/Kg dry	183816	6.309	1	000544-64-9	91	SW-846 8270E	12/21/23	12/26/23 15:39	BGL
n-Hexadecanoic acid	5.4	mg/Kg dry	235795	6.355	1	000057-10-3	97	SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Oxirane, heptadecyl-	7.7	mg/Kg dry	257590	11.912	1	067860-04-2	95	SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Tentatively Identified Compounds	0.0	mg/Kg dry			1	NA		SW-846 8270E	12/21/23	12/26/23 15:39	BGL
Tetratetracontane	6.1	mg/Kg dry	246060	9.44	1	007098-22-8	87	SW-846 8270E	12/21/23	12/26/23 15:39	BGL

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: Duplicate | Sampled: 12/15/2023 00:00

Sample ID: 23L2638-07

Sample Matrix: Sediment

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.55	0.14	mg/Kg dry	4		SW-846 8082A	12/27/23	12/28/23 20:34	TG
Aroclor-1221 [1]	ND	0.55	0.29	mg/Kg dry	4		SW-846 8082A	12/27/23	12/28/23 20:34	TG
Aroclor-1232 [1]	ND	0.55	0.18	mg/Kg dry	4		SW-846 8082A	12/27/23	12/28/23 20:34	TG
Aroclor-1242 [1]	ND	0.55	0.16	mg/Kg dry	4		SW-846 8082A	12/27/23	12/28/23 20:34	TG
Aroclor-1248 [1]	ND	0.55	0.14	mg/Kg dry	4		SW-846 8082A	12/27/23	12/28/23 20:34	TG
Aroclor-1254 [1]	ND	0.55	0.17	mg/Kg dry	4		SW-846 8082A	12/27/23	12/28/23 20:34	TG
Aroclor-1260 [1]	0.24	0.55	0.15	mg/Kg dry	4	J	SW-846 8082A	12/27/23	12/28/23 20:34	TG
Aroclor-1262 [1]	ND	0.55	0.16	mg/Kg dry	4		SW-846 8082A	12/27/23	12/28/23 20:34	TG
Aroclor-1268 [1]	ND	0.55	0.18	mg/Kg dry	4		SW-846 8082A	12/27/23	12/28/23 20:34	TG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	53.1	30-150		12/28/23 20:34
Decachlorobiphenyl [2]	56.3	30-150		12/28/23 20:34
Tetrachloro-m-xylene [1]	65.5	30-150		12/28/23 20:34
Tetrachloro-m-xylene [2]	64.8	30-150		12/28/23 20:34

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: Duplicate | Sampled: 12/15/2023 00:00

Sample ID: 23L2638-07

Sample Matrix: Sediment

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	9000	110	25	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:15	HNN
Antimony	ND	11	2.1	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:15	HNN
Arsenic	ND	23	3.3	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:15	HNN
Barium	200	11	1.5	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:15	HNN
Beryllium	0.52	1.1	0.46	mg/Kg dry	1	J	SW-846 6010D	12/26/23	12/27/23 16:15	HNN
Cadmium	ND	2.3	0.90	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:15	HNN
Calcium	180000	1100	410	mg/Kg dry	10		SW-846 6010D	12/26/23	12/29/23 2:14	HNN
Chromium	21	4.5	0.71	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:15	HNN
Cobalt	6.7	11	1.5	mg/Kg dry	1	J	SW-846 6010D	12/26/23	12/27/23 16:15	HNN
Copper	18	4.5	0.99	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:15	HNN
Iron	16000	110	22	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:15	HNN
Lead	21	3.4	2.0	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:15	HNN
Magnesium	10000	110	15	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:15	HNN
Manganese	280	2.3	0.82	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:15	HNN
Mercury	0.099	0.17	0.071	mg/Kg dry	1	J	SW-846 7471B	12/26/23	12/27/23 10:28	AV
Nickel	18	4.5	1.3	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:15	HNN
Potassium	1500	1100	290	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:15	HNN
Selenium	ND	23	5.3	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:15	HNN
Silver	ND	2.3	1.1	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:15	HNN
Sodium	1100	1100	250	mg/Kg dry	1	J	SW-846 6010D	12/26/23	12/27/23 16:15	HNN
Thallium	ND	11	3.3	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:15	HNN
Vanadium	15	4.5	1.9	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:15	HNN
Zinc	110	4.5	2.8	mg/Kg dry	1		SW-846 6010D	12/26/23	12/27/23 16:15	HNN

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: Duplicate | Sampled: 12/15/2023 00:00

Sample ID: 23L2638-07

Sample Matrix: Sediment

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	14.0			% Wt	1		SM 2540G	12/20/23	12/20/23 9:53	DV
Hexavalent Chromium	ND	5.7	4.1	mg/Kg dry	5	H-10, W-06	SW-846 7196A	1/29/24	1/30/24 8:20	LL

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-1 | Sampled: 12/15/2023 09:05

Sample ID: 23L2638-08

Sample Matrix: Surface Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
1,4-Dioxane	ND	50	18	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
Methyl Acetate	ND	1.0	0.61	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-1 | Sampled: 12/15/2023 09:05

Sample ID: 23L2638-08

Sample Matrix: Surface Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:14	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	113	70-130		12/21/23 11:14
Toluene-d8	102	70-130		12/21/23 11:14
4-Bromofluorobenzene	95.4	70-130		12/21/23 11:14

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-1 | Sampled: 12/15/2023 09:05

Sample ID: 23L2638-08

Sample Matrix: Surface Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	12/21/23	12/21/23 11:14	EEH

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-1 | Sampled: 12/15/2023 09:05

Sample ID: 23L2638-08

Sample Matrix: Surface Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Atrazine	ND	19	1.5	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Benzaldehyde	ND	9.3	0.67	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Biphenyl	ND	19	0.85	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Caprolactam	ND	9.3	0.66	µg/L	1	L-04	SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Acenaphthene	ND	4.6	0.73	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Acenaphthylene	ND	4.6	0.59	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Acetophenone	ND	9.3	0.46	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Anthracene	ND	4.6	0.50	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Benzo(a)anthracene	ND	4.6	0.35	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Benzo(a)pyrene	ND	4.6	0.40	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Benzo(b)fluoranthene	ND	4.6	0.30	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Benzo(g,h,i)perylene	ND	4.6	0.48	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Benzo(k)fluoranthene	ND	4.6	0.42	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Bis(2-chloroethoxy)methane	ND	9.3	0.53	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Bis(2-chloroethyl)ether	ND	9.3	0.42	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Bis(2-chloroisopropyl)ether	ND	9.3	0.69	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Bis(2-Ethylhexyl)phthalate	ND	9.3	0.30	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
4-Bromophenylphenylether	ND	9.3	0.66	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Butylbenzylphthalate	ND	9.3	0.37	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Carbazole	ND	9.3	0.42	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
4-Chloroaniline	ND	9.3	4.8	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
4-Chloro-3-methylphenol	ND	9.3	0.59	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
2-Chloronaphthalene	ND	9.3	0.75	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
2-Chlorophenol	ND	9.3	0.38	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
4-Chlorophenylphenylether	ND	9.3	0.81	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Chrysene	ND	4.6	0.42	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Dibenz(a,h)anthracene	ND	4.6	0.44	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Dibenzofuran	ND	4.6	0.79	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Di-n-butylphthalate	ND	9.3	0.46	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
3,3-Dichlorobenzidine	ND	9.3	0.42	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
2,4-Dichlorophenol	ND	9.3	0.43	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Diethylphthalate	ND	9.3	0.51	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
2,4-Dimethylphenol	ND	9.3	0.38	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Dimethylphthalate	ND	9.3	0.40	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
4,6-Dinitro-2-methylphenol	ND	19	2.1	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
2,4-Dinitrophenol	ND	9.3	1.2	µg/L	1	V-04	SW-846 8270E	12/20/23	12/22/23 10:57	BGL
2,4-Dinitrotoluene	ND	9.3	0.32	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
2,6-Dinitrotoluene	ND	9.3	0.51	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Di-n-octylphthalate	ND	9.3	0.30	µg/L	1	V-04	SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Fluoranthene	ND	4.6	0.52	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Fluorene	ND	4.6	0.70	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Hexachlorobenzene	ND	9.3	0.67	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Hexachlorobutadiene	ND	9.3	1.1	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Hexachlorocyclopentadiene	ND	9.3	2.6	µg/L	1	V-05	SW-846 8270E	12/20/23	12/22/23 10:57	BGL

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-1 | Sampled: 12/15/2023 09:05

Sample ID: 23L2638-08

Sample Matrix: Surface Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachloroethane	ND	9.3	1.2	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Indeno(1,2,3-cd)pyrene	ND	4.6	0.44	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Isophorone	ND	9.3	0.50	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
2-Methylnaphthalene	ND	4.6	0.86	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
2-Methylphenol	ND	9.3	0.42	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
3/4-Methylphenol	ND	9.3	0.44	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Naphthalene	ND	4.6	0.84	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
2-Nitroaniline	ND	9.3	0.46	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
3-Nitroaniline	ND	9.3	0.48	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
4-Nitroaniline	ND	9.3	0.40	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Nitrobenzene	ND	9.3	0.63	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
2-Nitrophenol	ND	9.3	0.50	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
4-Nitrophenol	ND	9.3	1.2	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	9.3	0.44	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
N-Nitrosodi-n-propylamine	ND	9.3	0.61	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Pentachlorophenol	ND	9.3	0.44	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Phenanthrene	ND	4.6	0.66	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Phenol	ND	9.3	0.55	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
Pyrene	ND	4.6	0.43	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
1,2,4,5-Tetrachlorobenzene	ND	9.3	1.1	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
2,4,5-Trichlorophenol	ND	9.3	0.42	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL
2,4,6-Trichlorophenol	ND	9.3	0.35	µg/L	1		SW-846 8270E	12/20/23	12/22/23 10:57	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	52.6	15-110		12/22/23 10:57
Phenol-d6	36.1	15-110		12/22/23 10:57
Nitrobenzene-d5	90.2	30-130		12/22/23 10:57
2-Fluorobiphenyl	88.3	30-130		12/22/23 10:57
2,4,6-Tribromophenol	99.9	15-110		12/22/23 10:57
p-Terphenyl-d14	104	30-130		12/22/23 10:57

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-1 | Sampled: 12/15/2023 09:05

Sample ID: 23L2638-08

Sample Matrix: Surface Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.20	0.032	µg/L	1		SW-846 8270E	12/20/23	12/27/23 21:46	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
1,4-Dioxane-d8	20.2	15-110		12/27/23 21:46	

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-1 | Sampled: 12/15/2023 09:05

Sample ID: 23L2638-08

Sample Matrix: Surface Water

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8270E	12/20/23	12/22/23 10:57	BGL

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-1 | Sampled: 12/15/2023 09:05

Sample ID: 23L2638-08

Sample Matrix: Surface Water

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	0.12	µg/L	1		SW-846 8082A	12/20/23	12/21/23 15:53	TG
Aroclor-1221 [1]	ND	0.20	0.079	µg/L	1		SW-846 8082A	12/20/23	12/21/23 15:53	TG
Aroclor-1232 [1]	ND	0.20	0.072	µg/L	1		SW-846 8082A	12/20/23	12/21/23 15:53	TG
Aroclor-1242 [1]	ND	0.20	0.072	µg/L	1		SW-846 8082A	12/20/23	12/21/23 15:53	TG
Aroclor-1248 [1]	ND	0.20	0.062	µg/L	1		SW-846 8082A	12/20/23	12/21/23 15:53	TG
Aroclor-1254 [1]	ND	0.20	0.073	µg/L	1		SW-846 8082A	12/20/23	12/21/23 15:53	TG
Aroclor-1260 [1]	ND	0.20	0.11	µg/L	1		SW-846 8082A	12/20/23	12/21/23 15:53	TG
Aroclor-1262 [1]	ND	0.20	0.12	µg/L	1		SW-846 8082A	12/20/23	12/21/23 15:53	TG
Aroclor-1268 [1]	ND	0.20	0.067	µg/L	1		SW-846 8082A	12/20/23	12/21/23 15:53	TG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	90.9	30-150		12/21/23 15:53
Decachlorobiphenyl [2]	84.3	30-150		12/21/23 15:53
Tetrachloro-m-xylene [1]	79.2	30-150		12/21/23 15:53
Tetrachloro-m-xylene [2]	73.5	30-150		12/21/23 15:53

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-1 | Sampled: 12/15/2023 09:05

Sample ID: 23L2638-08

Sample Matrix: Surface Water

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	0.21	0.050	0.020	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:14	MJH
Antimony	ND	0.050	0.011	mg/L	1		SW-846 6010D	12/28/23	1/3/24 12:17	HNN
Arsenic	ND	0.010	0.0073	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:14	MJH
Barium	0.12	0.050	0.0057	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:14	MJH
Beryllium	ND	0.0040	0.0012	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:14	MJH
Cadmium	ND	0.0040	0.0013	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:14	MJH
Calcium	95	0.50	0.091	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:14	MJH
Chromium	ND	0.010	0.0093	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:14	MJH
Cobalt	ND	0.010	0.0017	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:14	MJH
Copper	0.0089	0.010	0.0047	mg/L	1	J	SW-846 6010D	12/28/23	12/29/23 14:14	MJH
Iron	0.89	0.050	0.023	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:14	MJH
Lead	ND	0.010	0.0065	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:14	MJH
Magnesium	22	0.050	0.016	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:14	MJH
Manganese	0.18	0.010	0.0028	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:14	MJH
Mercury	ND	0.00020	0.00014	mg/L	1		SW-846 7470A	12/20/23	12/21/23 12:10	AV
Nickel	0.0027	0.010	0.0024	mg/L	1	J	SW-846 6010D	12/28/23	12/29/23 14:14	MJH
Potassium	3.1	2.0	0.33	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:14	MJH
Selenium	ND	0.050	0.018	mg/L	1		SW-846 6010D	12/28/23	1/3/24 12:17	HNN
Silver	ND	0.010	0.0027	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:14	MJH
Sodium	61	2.0	0.74	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:14	MJH
Thallium	ND	0.050	0.019	mg/L	1		SW-846 6010D	12/28/23	1/3/24 12:17	HNN
Vanadium	ND	0.010	0.0071	mg/L	1		SW-846 6010D	12/28/23	1/4/24 12:19	HNN
Zinc	0.017	0.010	0.0040	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:14	MJH

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-2 | Sampled: 12/15/2023 10:15

Sample ID: 23L2638-09

Sample Matrix: Surface Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	3.7	50	2.0	µg/L	1	J	SW-846 8260D	12/21/23	12/21/23 11:40	EEH
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
1,4-Dioxane	ND	50	18	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
Methyl Acetate	ND	1.0	0.61	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-2 | Sampled: 12/15/2023 10:15

Sample ID: 23L2638-09

Sample Matrix: Surface Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	12/21/23	12/21/23 11:40	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	112	70-130		12/21/23 11:40
Toluene-d8	103	70-130		12/21/23 11:40
4-Bromofluorobenzene	94.2	70-130		12/21/23 11:40

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-2 | Sampled: 12/15/2023 10:15

Sample ID: 23L2638-09

Sample Matrix: Surface Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	12/21/23	12/21/23 11:40	EEH

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-2 | Sampled: 12/15/2023 10:15

Sample ID: 23L2638-09

Sample Matrix: Surface Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Atrazine	ND	19	1.5	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Benzaldehyde	ND	9.4	0.68	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Biphenyl	ND	19	0.86	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Caprolactam	ND	9.4	0.67	µg/L	1	L-04	SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Acenaphthene	ND	4.7	0.74	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Acenaphthylene	ND	4.7	0.60	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Acetophenone	ND	9.4	0.47	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Anthracene	ND	4.7	0.51	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Benzo(a)anthracene	0.47	4.7	0.35	µg/L	1	J	SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Benzo(a)pyrene	ND	4.7	0.41	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Benzo(b)fluoranthene	ND	4.7	0.30	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Benzo(g,h,i)perylene	ND	4.7	0.49	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Benzo(k)fluoranthene	ND	4.7	0.43	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Bis(2-chloroethoxy)methane	ND	9.4	0.54	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Bis(2-chloroethyl)ether	ND	9.4	0.43	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Bis(2-chloroisopropyl)ether	ND	9.4	0.70	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Bis(2-Ethylhexyl)phthalate	ND	9.4	0.30	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
4-Bromophenylphenylether	ND	9.4	0.67	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Butylbenzylphthalate	ND	9.4	0.37	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Carbazole	ND	9.4	0.43	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
4-Chloroaniline	ND	9.4	4.9	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
4-Chloro-3-methylphenol	ND	9.4	0.59	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
2-Chloronaphthalene	ND	9.4	0.76	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
2-Chlorophenol	ND	9.4	0.38	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
4-Chlorophenylphenylether	ND	9.4	0.82	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Chrysene	ND	4.7	0.43	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Dibenz(a,h)anthracene	ND	4.7	0.45	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Dibenzofuran	ND	4.7	0.80	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Di-n-butylphthalate	ND	9.4	0.47	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
3,3-Dichlorobenzidine	ND	9.4	0.43	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
2,4-Dichlorophenol	ND	9.4	0.44	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Diethylphthalate	ND	9.4	0.52	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
2,4-Dimethylphenol	ND	9.4	0.38	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Dimethylphthalate	ND	9.4	0.41	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
4,6-Dinitro-2-methylphenol	ND	19	2.2	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
2,4-Dinitrophenol	ND	9.4	1.3	µg/L	1	V-04	SW-846 8270E	12/20/23	12/22/23 11:18	BGL
2,4-Dinitrotoluene	ND	9.4	0.33	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
2,6-Dinitrotoluene	ND	9.4	0.52	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Di-n-octylphthalate	ND	9.4	0.31	µg/L	1	V-04	SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Fluoranthene	1.5	4.7	0.53	µg/L	1	J	SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Fluorene	ND	4.7	0.71	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Hexachlorobenzene	ND	9.4	0.68	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Hexachlorobutadiene	ND	9.4	1.2	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Hexachlorocyclopentadiene	ND	9.4	2.7	µg/L	1	V-05	SW-846 8270E	12/20/23	12/22/23 11:18	BGL

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-2 | Sampled: 12/15/2023 10:15

Sample ID: 23L2638-09

Sample Matrix: Surface Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachloroethane	ND	9.4	1.2	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Indeno(1,2,3-cd)pyrene	ND	4.7	0.45	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Isophorone	ND	9.4	0.51	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
2-Methylnaphthalene	ND	4.7	0.87	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
2-Methylphenol	ND	9.4	0.43	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
3/4-Methylphenol	ND	9.4	0.45	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Naphthalene	ND	4.7	0.85	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
2-Nitroaniline	ND	9.4	0.47	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
3-Nitroaniline	ND	9.4	0.49	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
4-Nitroaniline	ND	9.4	0.41	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Nitrobenzene	ND	9.4	0.63	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
2-Nitrophenol	ND	9.4	0.51	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
4-Nitrophenol	ND	9.4	1.2	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	9.4	0.45	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
N-Nitrosodi-n-propylamine	ND	9.4	0.61	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Pentachlorophenol	ND	9.4	0.45	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Phenanthrene	ND	4.7	0.67	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Phenol	ND	9.4	0.56	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
Pyrene	0.99	4.7	0.43	µg/L	1	J	SW-846 8270E	12/20/23	12/22/23 11:18	BGL
1,2,4,5-Tetrachlorobenzene	ND	9.4	1.1	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
2,4,5-Trichlorophenol	ND	9.4	0.42	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL
2,4,6-Trichlorophenol	ND	9.4	0.35	µg/L	1		SW-846 8270E	12/20/23	12/22/23 11:18	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	49.9	15-110		12/22/23 11:18
Phenol-d6	34.9	15-110		12/22/23 11:18
Nitrobenzene-d5	79.6	30-130		12/22/23 11:18
2-Fluorobiphenyl	77.9	30-130		12/22/23 11:18
2,4,6-Tribromophenol	92.1	15-110		12/22/23 11:18
p-Terphenyl-d14	95.1	30-130		12/22/23 11:18

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-2 | Sampled: 12/15/2023 10:15

Sample ID: 23L2638-09

Sample Matrix: Surface Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.20	0.032	µg/L	1		SW-846 8270E	12/20/23	12/27/23 22:06	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
1,4-Dioxane-d8	16.4	15-110		12/27/23 22:06	

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-2 | Sampled: 12/15/2023 10:15

Sample ID: 23L2638-09

Sample Matrix: Surface Water

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8270E	12/20/23	12/22/23 11:18	BGL

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-2 | Sampled: 12/15/2023 10:15

Sample ID: 23L2638-09

Sample Matrix: Surface Water

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.19	0.12	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:06	TG
Aroclor-1221 [1]	ND	0.19	0.075	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:06	TG
Aroclor-1232 [1]	ND	0.19	0.069	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:06	TG
Aroclor-1242 [1]	ND	0.19	0.069	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:06	TG
Aroclor-1248 [1]	ND	0.19	0.059	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:06	TG
Aroclor-1254 [1]	ND	0.19	0.070	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:06	TG
Aroclor-1260 [1]	ND	0.19	0.11	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:06	TG
Aroclor-1262 [1]	ND	0.19	0.11	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:06	TG
Aroclor-1268 [1]	ND	0.19	0.064	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:06	TG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	76.7	30-150		12/21/23 16:06
Decachlorobiphenyl [2]	89.8	30-150		12/21/23 16:06
Tetrachloro-m-xylene [1]	71.0	30-150		12/21/23 16:06
Tetrachloro-m-xylene [2]	80.0	30-150		12/21/23 16:06

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-2 | Sampled: 12/15/2023 10:15

Sample ID: 23L2638-09

Sample Matrix: Surface Water

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	0.042	0.050	0.020	mg/L	1	J	SW-846 6010D	12/21/23	12/28/23 22:17	HNN
Antimony	ND	0.050	0.011	mg/L	1		SW-846 6010D	12/21/23	12/26/23 14:59	HNN
Arsenic	ND	0.010	0.0073	mg/L	1		SW-846 6010D	12/21/23	12/26/23 14:59	HNN
Barium	0.14	0.050	0.0057	mg/L	1		SW-846 6010D	12/21/23	12/26/23 14:59	HNN
Beryllium	ND	0.0040	0.0012	mg/L	1		SW-846 6010D	12/21/23	12/26/23 14:59	HNN
Cadmium	ND	0.0040	0.0013	mg/L	1		SW-846 6010D	12/21/23	12/26/23 14:59	HNN
Calcium	79	0.50	0.091	mg/L	1	MS-19	SW-846 6010D	12/21/23	12/26/23 14:59	HNN
Chromium	ND	0.010	0.0093	mg/L	1		SW-846 6010D	12/21/23	12/26/23 14:59	HNN
Cobalt	ND	0.010	0.0017	mg/L	1		SW-846 6010D	12/21/23	12/26/23 14:59	HNN
Copper	ND	0.010	0.0047	mg/L	1		SW-846 6010D	12/21/23	12/26/23 14:59	HNN
Iron	0.074	0.050	0.023	mg/L	1		SW-846 6010D	12/21/23	12/26/23 14:59	HNN
Lead	ND	0.010	0.0065	mg/L	1		SW-846 6010D	12/21/23	12/26/23 14:59	HNN
Magnesium	18	0.050	0.016	mg/L	1		SW-846 6010D	12/21/23	12/26/23 14:59	HNN
Manganese	0.016	0.010	0.0028	mg/L	1		SW-846 6010D	12/21/23	12/26/23 14:59	HNN
Mercury	ND	0.00020	0.00014	mg/L	1		SW-846 7470A	12/20/23	12/21/23 12:12	AV
Nickel	ND	0.010	0.0024	mg/L	1		SW-846 6010D	12/21/23	12/26/23 14:59	HNN
Potassium	2.9	2.0	0.33	mg/L	1		SW-846 6010D	12/21/23	12/26/23 14:59	HNN
Selenium	ND	0.050	0.018	mg/L	1		SW-846 6010D	12/21/23	12/26/23 14:59	HNN
Silver	ND	0.010	0.0027	mg/L	1		SW-846 6010D	12/21/23	12/26/23 14:59	HNN
Sodium	65	2.0	0.74	mg/L	1		SW-846 6010D	12/21/23	12/26/23 14:59	HNN
Thallium	ND	0.050	0.019	mg/L	1		SW-846 6010D	12/21/23	12/26/23 14:59	HNN
Vanadium	ND	0.010	0.0071	mg/L	1		SW-846 6010D	12/21/23	12/26/23 14:59	HNN
Zinc	ND	0.010	0.0040	mg/L	1		SW-846 6010D	12/21/23	12/26/23 14:59	HNN

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-3 | Sampled: 12/15/2023 11:00

Sample ID: 23L2638-10

Sample Matrix: Surface Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	3.9	50	2.0	µg/L	1	J	SW-846 8260D	12/21/23	12/21/23 12:06	EEH
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
1,4-Dioxane	ND	50	18	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
Methyl Acetate	ND	1.0	0.61	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-3 | Sampled: 12/15/2023 11:00

Sample ID: 23L2638-10

Sample Matrix: Surface Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:06	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	115	70-130		12/21/23 12:06
Toluene-d8	102	70-130		12/21/23 12:06
4-Bromofluorobenzene	95.6	70-130		12/21/23 12:06

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-3 | Sampled: 12/15/2023 11:00

Sample ID: 23L2638-10

Sample Matrix: Surface Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	12/21/23	12/21/23 12:06	EEH

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-3 | Sampled: 12/15/2023 11:00

Sample ID: 23L2638-10

Sample Matrix: Surface Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Atrazine	ND	19	1.5	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Benzaldehyde	ND	9.3	0.67	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Biphenyl	ND	19	0.85	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Caprolactam	ND	9.3	0.66	µg/L	1	L-04	SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Acenaphthene	ND	4.6	0.73	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Acenaphthylene	ND	4.6	0.59	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Acetophenone	ND	9.3	0.47	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Anthracene	ND	4.6	0.50	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Benzo(a)anthracene	ND	4.6	0.35	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Benzo(a)pyrene	ND	4.6	0.40	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Benzo(b)fluoranthene	ND	4.6	0.30	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Benzo(g,h,i)perylene	ND	4.6	0.48	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Benzo(k)fluoranthene	ND	4.6	0.42	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Bis(2-chloroethoxy)methane	ND	9.3	0.53	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Bis(2-chloroethyl)ether	ND	9.3	0.42	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Bis(2-chloroisopropyl)ether	ND	9.3	0.70	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Bis(2-Ethylhexyl)phthalate	ND	9.3	0.30	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
4-Bromophenylphenylether	ND	9.3	0.66	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Butylbenzylphthalate	ND	9.3	0.37	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Carbazole	ND	9.3	0.42	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
4-Chloroaniline	ND	9.3	4.8	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
4-Chloro-3-methylphenol	ND	9.3	0.59	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
2-Chloronaphthalene	ND	9.3	0.75	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
2-Chlorophenol	ND	9.3	0.38	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
4-Chlorophenylphenylether	ND	9.3	0.81	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Chrysene	ND	4.6	0.42	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Dibenz(a,h)anthracene	ND	4.6	0.44	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Dibenzofuran	ND	4.6	0.79	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Di-n-butylphthalate	ND	9.3	0.47	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
3,3-Dichlorobenzidine	ND	9.3	0.42	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
2,4-Dichlorophenol	ND	9.3	0.43	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Diethylphthalate	ND	9.3	0.52	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
2,4-Dimethylphenol	ND	9.3	0.38	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Dimethylphthalate	ND	9.3	0.41	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
4,6-Dinitro-2-methylphenol	ND	19	2.1	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
2,4-Dinitrophenol	ND	9.3	1.2	µg/L	1	V-04	SW-846 8270E	12/20/23	12/22/23 12:03	BGL
2,4-Dinitrotoluene	ND	9.3	0.32	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
2,6-Dinitrotoluene	ND	9.3	0.51	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Di-n-octylphthalate	ND	9.3	0.30	µg/L	1	V-04	SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Fluoranthene	ND	4.6	0.52	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Fluorene	ND	4.6	0.70	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Hexachlorobenzene	ND	9.3	0.67	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Hexachlorobutadiene	ND	9.3	1.1	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Hexachlorocyclopentadiene	ND	9.3	2.6	µg/L	1	V-05	SW-846 8270E	12/20/23	12/22/23 12:03	BGL

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-3 | Sampled: 12/15/2023 11:00

Sample ID: 23L2638-10

Sample Matrix: Surface Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachloroethane	ND	9.3	1.2	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Indeno(1,2,3-cd)pyrene	ND	4.6	0.44	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Isophorone	ND	9.3	0.50	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
2-Methylnaphthalene	ND	4.6	0.86	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
2-Methylphenol	ND	9.3	0.42	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
3/4-Methylphenol	ND	9.3	0.45	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Naphthalene	ND	4.6	0.84	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
2-Nitroaniline	ND	9.3	0.46	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
3-Nitroaniline	ND	9.3	0.48	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
4-Nitroaniline	ND	9.3	0.41	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Nitrobenzene	ND	9.3	0.63	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
2-Nitrophenol	ND	9.3	0.50	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
4-Nitrophenol	ND	9.3	1.2	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	9.3	0.45	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
N-Nitrosodi-n-propylamine	ND	9.3	0.61	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Pentachlorophenol	ND	9.3	0.45	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Phenanthrene	ND	4.6	0.66	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Phenol	ND	9.3	0.55	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
Pyrene	ND	4.6	0.43	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
1,2,4,5-Tetrachlorobenzene	ND	9.3	1.1	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
2,4,5-Trichlorophenol	ND	9.3	0.42	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL
2,4,6-Trichlorophenol	ND	9.3	0.35	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:03	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	48.0	15-110		12/22/23 12:03
Phenol-d6	34.1	15-110		12/22/23 12:03
Nitrobenzene-d5	76.9	30-130		12/22/23 12:03
2-Fluorobiphenyl	70.0	30-130		12/22/23 12:03
2,4,6-Tribromophenol	90.6	15-110		12/22/23 12:03
p-Terphenyl-d14	87.5	30-130		12/22/23 12:03

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-3 | Sampled: 12/15/2023 11:00

Sample ID: 23L2638-10

Sample Matrix: Surface Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.19	0.031	µg/L	1		SW-846 8270E	12/20/23	12/27/23 22:26	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
1,4-Dioxane-d8	25.6	15-110		12/27/23 22:26	

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-3 | Sampled: 12/15/2023 11:00

Sample ID: 23L2638-10

Sample Matrix: Surface Water

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8270E	12/20/23	12/22/23 12:03	BGL

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-3 | Sampled: 12/15/2023 11:00

Sample ID: 23L2638-10

Sample Matrix: Surface Water

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.18	0.12	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:18	TG
Aroclor-1221 [1]	ND	0.18	0.075	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:18	TG
Aroclor-1232 [1]	ND	0.18	0.068	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:18	TG
Aroclor-1242 [1]	ND	0.18	0.068	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:18	TG
Aroclor-1248 [1]	ND	0.18	0.059	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:18	TG
Aroclor-1254 [1]	ND	0.18	0.069	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:18	TG
Aroclor-1260 [1]	ND	0.18	0.11	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:18	TG
Aroclor-1262 [1]	ND	0.18	0.11	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:18	TG
Aroclor-1268 [1]	ND	0.18	0.064	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:18	TG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	64.0	30-150		12/21/23 16:18
Decachlorobiphenyl [2]	59.9	30-150		12/21/23 16:18
Tetrachloro-m-xylene [1]	53.1	30-150		12/21/23 16:18
Tetrachloro-m-xylene [2]	49.5	30-150		12/21/23 16:18

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-3 | Sampled: 12/15/2023 11:00

Sample ID: 23L2638-10

Sample Matrix: Surface Water

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	0.024	0.050	0.020	mg/L	1	J	SW-846 6010D	12/28/23	12/29/23 14:19	MJH
Antimony	ND	0.050	0.011	mg/L	1		SW-846 6010D	12/28/23	1/3/24 12:23	HNN
Arsenic	ND	0.010	0.0073	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:19	MJH
Barium	0.14	0.050	0.0057	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:19	MJH
Beryllium	ND	0.0040	0.0012	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:19	MJH
Cadmium	ND	0.0040	0.0013	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:19	MJH
Calcium	80	0.50	0.091	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:19	MJH
Chromium	ND	0.010	0.0093	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:19	MJH
Cobalt	ND	0.010	0.0017	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:19	MJH
Copper	ND	0.010	0.0047	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:19	MJH
Iron	0.073	0.050	0.023	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:19	MJH
Lead	ND	0.010	0.0065	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:19	MJH
Magnesium	18	0.050	0.016	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:19	MJH
Manganese	0.017	0.010	0.0028	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:19	MJH
Mercury	ND	0.00020	0.00014	mg/L	1		SW-846 7470A	12/20/23	12/21/23 12:14	AV
Nickel	ND	0.010	0.0024	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:19	MJH
Potassium	2.8	2.0	0.33	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:19	MJH
Selenium	ND	0.050	0.018	mg/L	1		SW-846 6010D	12/28/23	1/3/24 12:23	HNN
Silver	ND	0.010	0.0027	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:19	MJH
Sodium	61	2.0	0.74	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:19	MJH
Thallium	ND	0.050	0.019	mg/L	1		SW-846 6010D	12/28/23	1/3/24 12:23	HNN
Vanadium	ND	0.010	0.0071	mg/L	1		SW-846 6010D	12/28/23	1/4/24 12:26	HNN
Zinc	ND	0.010	0.0040	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:19	MJH

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-4 | Sampled: 12/15/2023 12:45

Sample ID: 23L2638-11

Sample Matrix: Surface Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	3.3	50	2.0	µg/L	1	J	SW-846 8260D	12/21/23	12/21/23 12:32	EEH
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
1,4-Dioxane	ND	50	18	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
Methyl Acetate	ND	1.0	0.61	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-4 | Sampled: 12/15/2023 12:45

Sample ID: 23L2638-11

Sample Matrix: Surface Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:32	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	110	70-130		12/21/23 12:32
Toluene-d8	101	70-130		12/21/23 12:32
4-Bromofluorobenzene	94.6	70-130		12/21/23 12:32

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-4 | Sampled: 12/15/2023 12:45

Sample ID: 23L2638-11

Sample Matrix: Surface Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	12/21/23	12/21/23 12:32	EEH

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-4 | Sampled: 12/15/2023 12:45

Sample ID: 23L2638-11

Sample Matrix: Surface Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Atrazine	ND	19	1.5	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Benzaldehyde	ND	9.3	0.67	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Biphenyl	ND	19	0.85	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Caprolactam	ND	9.3	0.66	µg/L	1	L-04, MS-09	SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Acenaphthene	ND	4.6	0.73	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Acenaphthylene	ND	4.6	0.59	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Acetophenone	ND	9.3	0.46	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Anthracene	0.84	4.6	0.50	µg/L	1	J	SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Benzo(a)anthracene	2.5	4.6	0.35	µg/L	1	J	SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Benzo(a)pyrene	0.89	4.6	0.40	µg/L	1	J	SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Benzo(b)fluoranthene	1.6	4.6	0.30	µg/L	1	J	SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Benzo(g,h,i)perylene	ND	4.6	0.48	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Benzo(k)fluoranthene	0.73	4.6	0.42	µg/L	1	J	SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Bis(2-chloroethoxy)methane	ND	9.3	0.53	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Bis(2-chloroethyl)ether	ND	9.3	0.42	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Bis(2-chloroisopropyl)ether	ND	9.3	0.69	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Bis(2-Ethylhexyl)phthalate	ND	9.3	0.30	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
4-Bromophenylphenylether	ND	9.3	0.66	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Butylbenzylphthalate	ND	9.3	0.37	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Carbazole	0.53	9.3	0.42	µg/L	1	J	SW-846 8270E	12/20/23	12/22/23 12:24	BGL
4-Chloroaniline	ND	9.3	4.8	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
4-Chloro-3-methylphenol	ND	9.3	0.59	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
2-Chloronaphthalene	ND	9.3	0.75	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
2-Chlorophenol	ND	9.3	0.38	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
4-Chlorophenylphenylether	ND	9.3	0.81	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Chrysene	2.7	4.6	0.42	µg/L	1	J	SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Dibenz(a,h)anthracene	ND	4.6	0.44	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Dibenzofuran	ND	4.6	0.79	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Di-n-butylphthalate	ND	9.3	0.46	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
3,3-Dichlorobenzidine	ND	9.3	0.42	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
2,4-Dichlorophenol	ND	9.3	0.43	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Diethylphthalate	ND	9.3	0.52	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
2,4-Dimethylphenol	ND	9.3	0.38	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Dimethylphthalate	ND	9.3	0.41	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
4,6-Dinitro-2-methylphenol	ND	19	2.1	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
2,4-Dinitrophenol	ND	9.3	1.2	µg/L	1	V-04	SW-846 8270E	12/20/23	12/22/23 12:24	BGL
2,4-Dinitrotoluene	ND	9.3	0.32	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
2,6-Dinitrotoluene	ND	9.3	0.51	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Di-n-octylphthalate	ND	9.3	0.30	µg/L	1	V-04	SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Fluoranthene	9.2	4.6	0.52	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Fluorene	ND	4.6	0.70	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Hexachlorobenzene	ND	9.3	0.67	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Hexachlorobutadiene	ND	9.3	1.1	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Hexachlorocyclopentadiene	ND	9.3	2.6	µg/L	1	V-05	SW-846 8270E	12/20/23	12/22/23 12:24	BGL

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-4 | Sampled: 12/15/2023 12:45

Sample ID: 23L2638-11

Sample Matrix: Surface Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachloroethane	ND	9.3	1.2	µg/L	1	MS-09	SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Indeno(1,2,3-cd)pyrene	0.44	4.6	0.44	µg/L	1	J	SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Isophorone	ND	9.3	0.50	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
2-Methylnaphthalene	ND	4.6	0.86	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
2-Methylphenol	ND	9.3	0.42	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
3/4-Methylphenol	ND	9.3	0.45	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Naphthalene	ND	4.6	0.84	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
2-Nitroaniline	ND	9.3	0.46	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
3-Nitroaniline	ND	9.3	0.48	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
4-Nitroaniline	ND	9.3	0.41	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Nitrobenzene	ND	9.3	0.63	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
2-Nitrophenol	ND	9.3	0.50	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
4-Nitrophenol	ND	9.3	1.2	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	9.3	0.45	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
N-Nitrosodi-n-propylamine	ND	9.3	0.61	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Pentachlorophenol	ND	9.3	0.45	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Phenanthrene	2.5	4.6	0.66	µg/L	1	J	SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Phenol	ND	9.3	0.55	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
Pyrene	6.1	4.6	0.43	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
1,2,4,5-Tetrachlorobenzene	ND	9.3	1.1	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
2,4,5-Trichlorophenol	ND	9.3	0.42	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL
2,4,6-Trichlorophenol	ND	9.3	0.35	µg/L	1		SW-846 8270E	12/20/23	12/22/23 12:24	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	42.4	15-110		12/22/23 12:24
Phenol-d6	30.2	15-110		12/22/23 12:24
Nitrobenzene-d5	66.8	30-130		12/22/23 12:24
2-Fluorobiphenyl	57.8	30-130		12/22/23 12:24
2,4,6-Tribromophenol	77.5	15-110		12/22/23 12:24
p-Terphenyl-d14	65.9	30-130		12/22/23 12:24

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-4 | Sampled: 12/15/2023 12:45

Sample ID: 23L2638-11

Sample Matrix: Surface Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.19	0.031	µg/L	1		SW-846 8270E	12/20/23	12/27/23 22:46	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
1,4-Dioxane-d8	19.9	15-110		12/27/23 22:46	

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-4 | Sampled: 12/15/2023 12:45

Sample ID: 23L2638-11

Sample Matrix: Surface Water

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8270E	12/20/23	12/22/23 12:24	BGL

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-4 | Sampled: 12/15/2023 12:45

Sample ID: 23L2638-11

Sample Matrix: Surface Water

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.19	0.12	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:30	TG
Aroclor-1221 [1]	ND	0.19	0.077	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:30	TG
Aroclor-1232 [1]	ND	0.19	0.070	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:30	TG
Aroclor-1242 [1]	ND	0.19	0.070	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:30	TG
Aroclor-1248 [1]	ND	0.19	0.061	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:30	TG
Aroclor-1254 [1]	ND	0.19	0.071	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:30	TG
Aroclor-1260 [1]	ND	0.19	0.11	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:30	TG
Aroclor-1262 [1]	ND	0.19	0.11	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:30	TG
Aroclor-1268 [1]	ND	0.19	0.065	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:30	TG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	82.4	30-150		12/21/23 16:30
Decachlorobiphenyl [2]	84.4	30-150		12/21/23 16:30
Tetrachloro-m-xylene [1]	73.7	30-150		12/21/23 16:30
Tetrachloro-m-xylene [2]	74.8	30-150		12/21/23 16:30

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-4 | Sampled: 12/15/2023 12:45

Sample ID: 23L2638-11

Sample Matrix: Surface Water

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	0.080	0.050	0.020	mg/L	1		SW-846 6010D	12/28/23	12/29/23 13:13	MJH
Antimony	ND	0.050	0.011	mg/L	1		SW-846 6010D	12/28/23	1/3/24 12:12	HNN
Arsenic	ND	0.010	0.0073	mg/L	1		SW-846 6010D	12/28/23	12/29/23 13:13	HNN
Barium	0.068	0.050	0.0057	mg/L	1		SW-846 6010D	12/28/23	12/29/23 13:13	HNN
Beryllium	ND	0.0040	0.0012	mg/L	1		SW-846 6010D	12/28/23	12/29/23 13:13	HNN
Cadmium	ND	0.0040	0.0013	mg/L	1		SW-846 6010D	12/28/23	12/29/23 13:13	HNN
Calcium	69	0.50	0.091	mg/L	1	MS-19	SW-846 6010D	12/28/23	12/29/23 13:13	MJH
Chromium	ND	0.010	0.0093	mg/L	1		SW-846 6010D	12/28/23	12/29/23 13:13	HNN
Cobalt	ND	0.010	0.0017	mg/L	1		SW-846 6010D	12/28/23	12/29/23 13:13	HNN
Copper	ND	0.010	0.0047	mg/L	1		SW-846 6010D	12/28/23	12/29/23 13:13	HNN
Iron	0.48	0.050	0.023	mg/L	1		SW-846 6010D	12/28/23	12/29/23 13:13	MJH
Lead	ND	0.010	0.0065	mg/L	1		SW-846 6010D	12/28/23	12/29/23 13:13	HNN
Magnesium	4.0	0.050	0.016	mg/L	1		SW-846 6010D	12/28/23	12/29/23 13:13	MJH
Manganese	0.047	0.010	0.0028	mg/L	1		SW-846 6010D	12/28/23	12/29/23 13:13	HNN
Mercury	ND	0.00020	0.00014	mg/L	1		SW-846 7470A	12/20/23	12/21/23 12:16	AV
Nickel	ND	0.010	0.0024	mg/L	1		SW-846 6010D	12/28/23	12/29/23 13:13	HNN
Potassium	4.5	2.0	0.33	mg/L	1		SW-846 6010D	12/28/23	12/29/23 13:13	MJH
Selenium	ND	0.050	0.018	mg/L	1		SW-846 6010D	12/28/23	1/3/24 12:12	HNN
Silver	ND	0.010	0.0027	mg/L	1		SW-846 6010D	12/28/23	12/29/23 13:13	HNN
Sodium	1.4	2.0	0.74	mg/L	1	J	SW-846 6010D	12/28/23	12/29/23 13:13	MJH
Thallium	ND	0.050	0.019	mg/L	1		SW-846 6010D	12/28/23	1/3/24 12:12	HNN
Vanadium	ND	0.010	0.0071	mg/L	1		SW-846 6010D	12/28/23	1/4/24 12:14	HNN
Zinc	0.0050	0.010	0.0040	mg/L	1	J	SW-846 6010D	12/28/23	12/29/23 13:13	HNN

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-5 | Sampled: 12/15/2023 15:10

Sample ID: 23L2638-12

Sample Matrix: Surface Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	3.4	50	2.0	µg/L	1	J	SW-846 8260D	12/21/23	12/21/23 12:58	EEH
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
1,4-Dioxane	ND	50	18	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
Methyl Acetate	ND	1.0	0.61	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-5 | Sampled: 12/15/2023 15:10

Sample ID: 23L2638-12

Sample Matrix: Surface Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	12/21/23	12/21/23 12:58	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	111	70-130		12/21/23 12:58
Toluene-d8	104	70-130		12/21/23 12:58
4-Bromofluorobenzene	93.6	70-130		12/21/23 12:58

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-5 | Sampled: 12/15/2023 15:10

Sample ID: 23L2638-12

Sample Matrix: Surface Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	12/21/23	12/21/23 12:58	EEH

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-5 | Sampled: 12/15/2023 15:10

Sample ID: 23L2638-12

Sample Matrix: Surface Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Atrazine	ND	20	1.7	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Benzaldehyde	ND	10	0.73	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Biphenyl	ND	20	0.93	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Caprolactam	ND	10	0.72	µg/L	1	L-04	SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Acenaphthene	ND	5.1	0.79	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Acenaphthylene	ND	5.1	0.65	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Acetophenone	ND	10	0.51	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Anthracene	ND	5.1	0.55	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Benzo(a)anthracene	ND	5.1	0.38	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Benzo(a)pyrene	ND	5.1	0.44	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Benzo(b)fluoranthene	ND	5.1	0.33	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Benzo(g,h,i)perylene	ND	5.1	0.53	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Benzo(k)fluoranthene	ND	5.1	0.46	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Bis(2-chloroethoxy)methane	ND	10	0.58	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Bis(2-chloroethyl)ether	ND	10	0.46	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Bis(2-chloroisopropyl)ether	ND	10	0.76	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Bis(2-Ethylhexyl)phthalate	ND	10	0.33	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
4-Bromophenylphenylether	ND	10	0.72	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Butylbenzylphthalate	ND	10	0.40	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Carbazole	ND	10	0.46	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
4-Chloroaniline	ND	10	5.3	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
4-Chloro-3-methylphenol	ND	10	0.64	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
2-Chloronaphthalene	ND	10	0.82	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
2-Chlorophenol	ND	10	0.41	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
4-Chlorophenylphenylether	ND	10	0.88	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Chrysene	ND	5.1	0.46	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Dibenz(a,h)anthracene	ND	5.1	0.48	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Dibenzofuran	ND	5.1	0.87	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Di-n-butylphthalate	ND	10	0.51	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
3,3-Dichlorobenzidine	ND	10	0.46	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
2,4-Dichlorophenol	ND	10	0.47	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Diethylphthalate	ND	10	0.56	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
2,4-Dimethylphenol	ND	10	0.41	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Dimethylphthalate	ND	10	0.44	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
4,6-Dinitro-2-methylphenol	ND	20	2.3	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
2,4-Dinitrophenol	ND	10	1.4	µg/L	1	V-04	SW-846 8270E	12/20/23	12/28/23 8:58	BGL
2,4-Dinitrotoluene	ND	10	0.35	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
2,6-Dinitrotoluene	ND	10	0.56	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Di-n-octylphthalate	ND	10	0.33	µg/L	1	V-04	SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Fluoranthene	ND	5.1	0.57	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Fluorene	ND	5.1	0.77	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Hexachlorobenzene	ND	10	0.73	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Hexachlorobutadiene	ND	10	1.2	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Hexachlorocyclopentadiene	ND	10	2.9	µg/L	1	V-05	SW-846 8270E	12/20/23	12/28/23 8:58	BGL

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-5 | Sampled: 12/15/2023 15:10

Sample ID: 23L2638-12

Sample Matrix: Surface Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachloroethane	ND	10	1.3	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Indeno(1,2,3-cd)pyrene	ND	5.1	0.48	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Isophorone	ND	10	0.55	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
2-Methylnaphthalene	ND	5.1	0.94	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
2-Methylphenol	ND	10	0.46	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
3/4-Methylphenol	ND	10	0.49	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Naphthalene	ND	5.1	0.91	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
2-Nitroaniline	ND	10	0.50	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
3-Nitroaniline	ND	10	0.52	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
4-Nitroaniline	ND	10	0.44	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Nitrobenzene	ND	10	0.68	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
2-Nitrophenol	ND	10	0.55	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
4-Nitrophenol	ND	10	1.3	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	10	0.49	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
N-Nitrosodi-n-propylamine	ND	10	0.66	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Pentachlorophenol	ND	10	0.49	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Phenanthrene	ND	5.1	0.72	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Phenol	ND	10	0.60	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
Pyrene	ND	5.1	0.47	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
1,2,4,5-Tetrachlorobenzene	ND	10	1.2	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
2,4,5-Trichlorophenol	ND	10	0.46	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL
2,4,6-Trichlorophenol	ND	10	0.38	µg/L	1		SW-846 8270E	12/20/23	12/28/23 8:58	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	42.4	15-110		12/28/23 8:58
Phenol-d6	32.3	15-110		12/28/23 8:58
Nitrobenzene-d5	69.9	30-130		12/28/23 8:58
2-Fluorobiphenyl	67.8	30-130		12/28/23 8:58
2,4,6-Tribromophenol	69.0	15-110		12/28/23 8:58
p-Terphenyl-d14	87.3	30-130		12/28/23 8:58

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-5 | Sampled: 12/15/2023 15:10

Sample ID: 23L2638-12

Sample Matrix: Surface Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.20	0.032	µg/L	1		SW-846 8270E	12/20/23	12/27/23 23:06	GJB
1,4-Dioxane	ND	0.20	0.032	µg/L	1		SW-846 8270E	12/28/23	1/2/24 13:24	GJB

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
1,4-Dioxane-d8	**14.3**	*	15-110	S-09	1/2/24 13:24
1,4-Dioxane-d8	**12.1**	*	15-110	S-09	12/27/23 23:06

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-5 | Sampled: 12/15/2023 15:10

Sample ID: 23L2638-12

Sample Matrix: Surface Water

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8270E	12/20/23	12/28/23 8:58	BGL

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-5 | Sampled: 12/15/2023 15:10

Sample ID: 23L2638-12

Sample Matrix: Surface Water

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	0.13	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:42	TG
Aroclor-1221 [1]	ND	0.20	0.082	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:42	TG
Aroclor-1232 [1]	ND	0.20	0.075	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:42	TG
Aroclor-1242 [1]	ND	0.20	0.075	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:42	TG
Aroclor-1248 [1]	ND	0.20	0.065	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:42	TG
Aroclor-1254 [1]	ND	0.20	0.076	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:42	TG
Aroclor-1260 [1]	ND	0.20	0.12	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:42	TG
Aroclor-1262 [1]	ND	0.20	0.12	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:42	TG
Aroclor-1268 [1]	ND	0.20	0.070	µg/L	1		SW-846 8082A	12/20/23	12/21/23 16:42	TG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	89.1	30-150		12/21/23 16:42
Decachlorobiphenyl [2]	84.0	30-150		12/21/23 16:42
Tetrachloro-m-xylene [1]	75.6	30-150		12/21/23 16:42
Tetrachloro-m-xylene [2]	70.7	30-150		12/21/23 16:42

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-5 | Sampled: 12/15/2023 15:10

Sample ID: 23L2638-12

Sample Matrix: Surface Water

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	0.020	0.050	0.020	mg/L	1	J	SW-846 6010D	12/28/23	12/29/23 14:25	MJH
Antimony	ND	0.050	0.011	mg/L	1		SW-846 6010D	12/28/23	1/3/24 12:28	HNN
Arsenic	ND	0.010	0.0073	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:25	MJH
Barium	0.21	0.050	0.0057	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:25	MJH
Beryllium	ND	0.0040	0.0012	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:25	MJH
Cadmium	ND	0.0040	0.0013	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:25	MJH
Calcium	87	0.50	0.091	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:25	MJH
Chromium	ND	0.010	0.0093	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:25	MJH
Cobalt	ND	0.010	0.0017	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:25	MJH
Copper	ND	0.010	0.0047	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:25	MJH
Iron	0.33	0.050	0.023	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:25	MJH
Lead	ND	0.010	0.0065	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:25	MJH
Magnesium	20	0.050	0.016	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:25	MJH
Manganese	0.051	0.010	0.0028	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:25	MJH
Mercury	ND	0.00020	0.00014	mg/L	1		SW-846 7470A	12/20/23	12/21/23 12:27	AV
Nickel	ND	0.010	0.0024	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:25	MJH
Potassium	2.8	2.0	0.33	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:25	MJH
Selenium	ND	0.050	0.018	mg/L	1		SW-846 6010D	12/28/23	1/3/24 12:28	HNN
Silver	ND	0.010	0.0027	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:25	MJH
Sodium	72	2.0	0.74	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:25	MJH
Thallium	ND	0.050	0.019	mg/L	1		SW-846 6010D	12/28/23	1/3/24 12:28	HNN
Vanadium	ND	0.010	0.0071	mg/L	1		SW-846 6010D	12/28/23	1/4/24 12:33	HNN
Zinc	ND	0.010	0.0040	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:25	MJH

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-6 | Sampled: 12/15/2023 14:30

Sample ID: 23L2638-13

Sample Matrix: Surface Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	ND	50	2.0	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
1,4-Dioxane	ND	50	18	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
Methyl Acetate	ND	1.0	0.61	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-6 | Sampled: 12/15/2023 14:30

Sample ID: 23L2638-13

Sample Matrix: Surface Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:24	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	110	70-130		12/21/23 13:24
Toluene-d8	102	70-130		12/21/23 13:24
4-Bromofluorobenzene	94.0	70-130		12/21/23 13:24

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-6 | Sampled: 12/15/2023 14:30

Sample ID: 23L2638-13

Sample Matrix: Surface Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	12/21/23	12/21/23 13:24	EEH

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-6 | Sampled: 12/15/2023 14:30

Sample ID: 23L2638-13

Sample Matrix: Surface Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Atrazine	ND	18	1.5	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Benzaldehyde	ND	9.2	0.67	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Biphenyl	ND	18	0.85	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Caprolactam	ND	9.2	0.66	µg/L	1	L-04	SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Acenaphthene	ND	4.6	0.72	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Acenaphthylene	ND	4.6	0.59	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Acetophenone	ND	9.2	0.46	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Anthracene	ND	4.6	0.50	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Benzo(a)anthracene	ND	4.6	0.35	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Benzo(a)pyrene	ND	4.6	0.40	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Benzo(b)fluoranthene	ND	4.6	0.30	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Benzo(g,h,i)perylene	ND	4.6	0.48	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Benzo(k)fluoranthene	ND	4.6	0.42	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Bis(2-chloroethoxy)methane	ND	9.2	0.53	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Bis(2-chloroethyl)ether	ND	9.2	0.42	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Bis(2-chloroisopropyl)ether	ND	9.2	0.69	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Bis(2-Ethylhexyl)phthalate	ND	9.2	0.30	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
4-Bromophenylphenylether	ND	9.2	0.65	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Butylbenzylphthalate	ND	9.2	0.36	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Carbazole	ND	9.2	0.42	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
4-Chloroaniline	ND	9.2	4.8	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
4-Chloro-3-methylphenol	ND	9.2	0.58	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
2-Chloronaphthalene	ND	9.2	0.75	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
2-Chlorophenol	ND	9.2	0.38	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
4-Chlorophenylphenylether	ND	9.2	0.80	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Chrysene	ND	4.6	0.42	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Dibenz(a,h)anthracene	ND	4.6	0.44	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Dibenzofuran	ND	4.6	0.79	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Di-n-butylphthalate	ND	9.2	0.46	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
3,3-Dichlorobenzidine	ND	9.2	0.42	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
2,4-Dichlorophenol	ND	9.2	0.43	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Diethylphthalate	ND	9.2	0.51	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
2,4-Dimethylphenol	ND	9.2	0.38	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Dimethylphthalate	ND	9.2	0.40	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
4,6-Dinitro-2-methylphenol	ND	18	2.1	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
2,4-Dinitrophenol	ND	9.2	1.2	µg/L	1	V-04	SW-846 8270E	12/20/23	12/28/23 9:19	BGL
2,4-Dinitrotoluene	ND	9.2	0.32	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
2,6-Dinitrotoluene	ND	9.2	0.51	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Di-n-octylphthalate	ND	9.2	0.30	µg/L	1	V-04	SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Fluoranthene	ND	4.6	0.52	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Fluorene	ND	4.6	0.70	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Hexachlorobenzene	ND	9.2	0.66	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Hexachlorobutadiene	ND	9.2	1.1	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Hexachlorocyclopentadiene	ND	9.2	2.6	µg/L	1	V-05	SW-846 8270E	12/20/23	12/28/23 9:19	BGL

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-6 | Sampled: 12/15/2023 14:30

Sample ID: 23L2638-13

Sample Matrix: Surface Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachloroethane	ND	9.2	1.1	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Indeno(1,2,3-cd)pyrene	ND	4.6	0.44	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Isophorone	ND	9.2	0.50	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
2-Methylnaphthalene	ND	4.6	0.86	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
2-Methylphenol	ND	9.2	0.42	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
3/4-Methylphenol	ND	9.2	0.44	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Naphthalene	ND	4.6	0.83	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
2-Nitroaniline	ND	9.2	0.46	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
3-Nitroaniline	ND	9.2	0.48	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
4-Nitroaniline	ND	9.2	0.40	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Nitrobenzene	ND	9.2	0.62	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
2-Nitrophenol	ND	9.2	0.50	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
4-Nitrophenol	ND	9.2	1.2	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	9.2	0.44	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
N-Nitrosodi-n-propylamine	ND	9.2	0.60	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Pentachlorophenol	ND	9.2	0.44	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Phenanthrene	ND	4.6	0.66	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Phenol	ND	9.2	0.55	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
Pyrene	ND	4.6	0.42	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
1,2,4,5-Tetrachlorobenzene	ND	9.2	1.1	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
2,4,5-Trichlorophenol	ND	9.2	0.42	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL
2,4,6-Trichlorophenol	ND	9.2	0.35	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:19	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	44.8	15-110		12/28/23 9:19
Phenol-d6	31.9	15-110		12/28/23 9:19
Nitrobenzene-d5	69.3	30-130		12/28/23 9:19
2-Fluorobiphenyl	69.9	30-130		12/28/23 9:19
2,4,6-Tribromophenol	87.5	15-110		12/28/23 9:19
p-Terphenyl-d14	86.5	30-130		12/28/23 9:19

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-6 | Sampled: 12/15/2023 14:30

Sample ID: 23L2638-13

Sample Matrix: Surface Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.19	0.031	µg/L	1		SW-846 8270E	12/20/23	12/27/23 23:25	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
1,4-Dioxane-d8	22.3	15-110		12/27/23 23:25	

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-6 | Sampled: 12/15/2023 14:30

Sample ID: 23L2638-13

Sample Matrix: Surface Water

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8270E	12/20/23	12/28/23 9:19	BGL

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-6 | Sampled: 12/15/2023 14:30

Sample ID: 23L2638-13

Sample Matrix: Surface Water

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.19	0.12	µg/L	1		SW-846 8082A	12/20/23	12/21/23 17:06	TG
Aroclor-1221 [1]	ND	0.19	0.075	µg/L	1		SW-846 8082A	12/20/23	12/21/23 17:06	TG
Aroclor-1232 [1]	ND	0.19	0.068	µg/L	1		SW-846 8082A	12/20/23	12/21/23 17:06	TG
Aroclor-1242 [1]	ND	0.19	0.068	µg/L	1		SW-846 8082A	12/20/23	12/21/23 17:06	TG
Aroclor-1248 [1]	ND	0.19	0.059	µg/L	1		SW-846 8082A	12/20/23	12/21/23 17:06	TG
Aroclor-1254 [1]	ND	0.19	0.069	µg/L	1		SW-846 8082A	12/20/23	12/21/23 17:06	TG
Aroclor-1260 [1]	ND	0.19	0.11	µg/L	1		SW-846 8082A	12/20/23	12/21/23 17:06	TG
Aroclor-1262 [1]	ND	0.19	0.11	µg/L	1		SW-846 8082A	12/20/23	12/21/23 17:06	TG
Aroclor-1268 [1]	ND	0.19	0.064	µg/L	1		SW-846 8082A	12/20/23	12/21/23 17:06	TG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	96.5	30-150		12/21/23 17:06
Decachlorobiphenyl [2]	92.5	30-150		12/21/23 17:06
Tetrachloro-m-xylene [1]	78.2	30-150		12/21/23 17:06
Tetrachloro-m-xylene [2]	73.4	30-150		12/21/23 17:06

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: SW-6 | Sampled: 12/15/2023 14:30

Sample ID: 23L2638-13

Sample Matrix: Surface Water

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	ND	0.050	0.020	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:31	MJH
Antimony	ND	0.050	0.011	mg/L	1		SW-846 6010D	12/28/23	1/3/24 12:34	HNN
Arsenic	ND	0.010	0.0073	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:31	MJH
Barium	0.22	0.050	0.0057	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:31	MJH
Beryllium	ND	0.0040	0.0012	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:31	MJH
Cadmium	ND	0.0040	0.0013	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:31	MJH
Calcium	89	0.50	0.091	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:31	MJH
Chromium	ND	0.010	0.0093	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:31	MJH
Cobalt	ND	0.010	0.0017	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:31	MJH
Copper	ND	0.010	0.0047	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:31	MJH
Iron	0.25	0.050	0.023	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:31	MJH
Lead	ND	0.010	0.0065	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:31	MJH
Magnesium	20	0.050	0.016	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:31	MJH
Manganese	0.033	0.010	0.0028	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:31	MJH
Mercury	ND	0.00020	0.00014	mg/L	1		SW-846 7470A	12/20/23	12/21/23 12:29	AV
Nickel	ND	0.010	0.0024	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:31	MJH
Potassium	2.9	2.0	0.33	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:31	MJH
Selenium	ND	0.050	0.018	mg/L	1		SW-846 6010D	12/28/23	1/3/24 12:34	HNN
Silver	ND	0.010	0.0027	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:31	MJH
Sodium	72	2.0	0.74	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:31	MJH
Thallium	ND	0.050	0.019	mg/L	1		SW-846 6010D	12/28/23	1/3/24 12:34	HNN
Vanadium	ND	0.010	0.0071	mg/L	1		SW-846 6010D	12/28/23	1/4/24 12:38	HNN
Zinc	ND	0.010	0.0040	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:31	MJH

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: Duplicate | Sampled: 12/15/2023 00:00

Sample ID: 23L2638-14

Sample Matrix: Surface Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	3.7	50	2.0	µg/L	1	J	SW-846 8260D	12/21/23	12/21/23 13:50	EEH
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
1,4-Dioxane	ND	50	18	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
Methyl Acetate	ND	1.0	0.61	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: Duplicate | Sampled: 12/15/2023 00:00

Sample ID: 23L2638-14

Sample Matrix: Surface Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	12/21/23	12/21/23 13:50	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	113	70-130		12/21/23 13:50
Toluene-d8	101	70-130		12/21/23 13:50
4-Bromofluorobenzene	96.8	70-130		12/21/23 13:50

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: Duplicate | Sampled: 12/15/2023 00:00

Sample ID: 23L2638-14

Sample Matrix: Surface Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	12/21/23	12/21/23 13:50	EEH

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: Duplicate | Sampled: 12/15/2023 00:00

Sample ID: 23L2638-14

Sample Matrix: Surface Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Atrazine	ND	19	1.6	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Benzaldehyde	ND	9.5	0.69	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Biphenyl	ND	19	0.88	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Caprolactam	ND	9.5	0.68	µg/L	1	L-04	SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Acenaphthene	ND	4.8	0.75	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Acenaphthylene	ND	4.8	0.61	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Acetophenone	ND	9.5	0.48	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Anthracene	ND	4.8	0.52	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Benzo(a)anthracene	ND	4.8	0.36	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Benzo(a)pyrene	ND	4.8	0.41	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Benzo(b)fluoranthene	ND	4.8	0.31	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Benzo(g,h,i)perylene	ND	4.8	0.50	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Benzo(k)fluoranthene	ND	4.8	0.44	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Bis(2-chloroethoxy)methane	ND	9.5	0.55	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Bis(2-chloroethyl)ether	ND	9.5	0.44	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Bis(2-chloroisopropyl)ether	ND	9.5	0.71	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Bis(2-Ethylhexyl)phthalate	ND	9.5	0.31	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
4-Bromophenylphenylether	ND	9.5	0.68	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Butylbenzylphthalate	ND	9.5	0.38	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Carbazole	ND	9.5	0.44	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
4-Chloroaniline	ND	9.5	4.9	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
4-Chloro-3-methylphenol	ND	9.5	0.60	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
2-Chloronaphthalene	ND	9.5	0.77	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
2-Chlorophenol	ND	9.5	0.39	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
4-Chlorophenylphenylether	ND	9.5	0.83	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Chrysene	ND	4.8	0.44	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Dibenz(a,h)anthracene	ND	4.8	0.45	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Dibenzofuran	ND	4.8	0.81	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Di-n-butylphthalate	ND	9.5	0.48	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
3,3-Dichlorobenzidine	ND	9.5	0.44	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
2,4-Dichlorophenol	ND	9.5	0.44	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Diethylphthalate	ND	9.5	0.53	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
2,4-Dimethylphenol	ND	9.5	0.39	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Dimethylphthalate	ND	9.5	0.42	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
4,6-Dinitro-2-methylphenol	ND	19	2.2	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
2,4-Dinitrophenol	ND	9.5	1.3	µg/L	1	V-04	SW-846 8270E	12/20/23	12/28/23 9:40	BGL
2,4-Dinitrotoluene	ND	9.5	0.33	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
2,6-Dinitrotoluene	ND	9.5	0.52	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Di-n-octylphthalate	ND	9.5	0.31	µg/L	1	V-04	SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Fluoranthene	ND	4.8	0.54	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Fluorene	ND	4.8	0.72	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Hexachlorobenzene	ND	9.5	0.69	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Hexachlorobutadiene	ND	9.5	1.2	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Hexachlorocyclopentadiene	ND	9.5	2.7	µg/L	1	V-05	SW-846 8270E	12/20/23	12/28/23 9:40	BGL

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: Duplicate | Sampled: 12/15/2023 00:00

Sample ID: 23L2638-14

Sample Matrix: Surface Water

Semivolatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Hexachloroethane	ND	9.5	1.2	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Indeno(1,2,3-cd)pyrene	ND	4.8	0.45	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Isophorone	ND	9.5	0.52	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
2-Methylnaphthalene	ND	4.8	0.89	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
2-Methylphenol	ND	9.5	0.44	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
3/4-Methylphenol	ND	9.5	0.46	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Naphthalene	ND	4.8	0.86	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
2-Nitroaniline	ND	9.5	0.47	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
3-Nitroaniline	ND	9.5	0.49	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
4-Nitroaniline	ND	9.5	0.42	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Nitrobenzene	ND	9.5	0.64	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
2-Nitrophenol	ND	9.5	0.52	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
4-Nitrophenol	ND	9.5	1.2	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
N-Nitrosodiphenylamine/Diphenylamine	ND	9.5	0.46	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
N-Nitrosodi-n-propylamine	ND	9.5	0.62	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Pentachlorophenol	ND	9.5	0.46	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Phenanthrene	ND	4.8	0.68	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Phenol	ND	9.5	0.56	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
Pyrene	ND	4.8	0.44	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
1,2,4,5-Tetrachlorobenzene	ND	9.5	1.1	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
2,4,5-Trichlorophenol	ND	9.5	0.43	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL
2,4,6-Trichlorophenol	ND	9.5	0.36	µg/L	1		SW-846 8270E	12/20/23	12/28/23 9:40	BGL

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
2-Fluorophenol	44.6	15-110		12/28/23 9:40
Phenol-d6	31.7	15-110		12/28/23 9:40
Nitrobenzene-d5	69.8	30-130		12/28/23 9:40
2-Fluorobiphenyl	68.3	30-130		12/28/23 9:40
2,4,6-Tribromophenol	74.8	15-110		12/28/23 9:40
p-Terphenyl-d14	86.0	30-130		12/28/23 9:40

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: Duplicate | Sampled: 12/15/2023 00:00

Sample ID: 23L2638-14

Sample Matrix: Surface Water

1,4-Dioxane by isotope dilution GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,4-Dioxane	ND	0.20	0.032	µg/L	1		SW-846 8270E	12/20/23	12/27/23 23:45	GJB

Surrogates	% Recovery	Recovery Limits	Flag/Qual		
1,4-Dioxane-d8	21.9	15-110		12/27/23 23:45	

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: Duplicate | Sampled: 12/15/2023 00:00

Sample ID: 23L2638-14

Sample Matrix: Surface Water

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8270E	12/20/23	12/28/23 9:40	BGL

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: Duplicate | Sampled: 12/15/2023 00:00

Sample ID: 23L2638-14

Sample Matrix: Surface Water

Polychlorinated Biphenyls By GC/ECD

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.18	0.12	µg/L	1		SW-846 8082A	12/20/23	12/21/23 17:18	TG
Aroclor-1221 [1]	ND	0.18	0.074	µg/L	1		SW-846 8082A	12/20/23	12/21/23 17:18	TG
Aroclor-1232 [1]	ND	0.18	0.068	µg/L	1		SW-846 8082A	12/20/23	12/21/23 17:18	TG
Aroclor-1242 [1]	ND	0.18	0.068	µg/L	1		SW-846 8082A	12/20/23	12/21/23 17:18	TG
Aroclor-1248 [1]	ND	0.18	0.059	µg/L	1		SW-846 8082A	12/20/23	12/21/23 17:18	TG
Aroclor-1254 [1]	ND	0.18	0.069	µg/L	1		SW-846 8082A	12/20/23	12/21/23 17:18	TG
Aroclor-1260 [1]	ND	0.18	0.11	µg/L	1		SW-846 8082A	12/20/23	12/21/23 17:18	TG
Aroclor-1262 [1]	ND	0.18	0.11	µg/L	1		SW-846 8082A	12/20/23	12/21/23 17:18	TG
Aroclor-1268 [1]	ND	0.18	0.063	µg/L	1		SW-846 8082A	12/20/23	12/21/23 17:18	TG

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
Decachlorobiphenyl [1]	96.2	30-150		12/21/23 17:18
Decachlorobiphenyl [2]	88.6	30-150		12/21/23 17:18
Tetrachloro-m-xylene [1]	82.0	30-150		12/21/23 17:18
Tetrachloro-m-xylene [2]	75.3	30-150		12/21/23 17:18

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: Duplicate | Sampled: 12/15/2023 00:00

Sample ID: 23L2638-14

Sample Matrix: Surface Water

Metals Analyses (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Aluminum	ND	0.050	0.020	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:36	MJH
Antimony	ND	0.050	0.011	mg/L	1		SW-846 6010D	12/28/23	1/3/24 12:51	HNN
Arsenic	ND	0.010	0.0073	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:36	MJH
Barium	0.13	0.050	0.0057	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:36	MJH
Beryllium	ND	0.0040	0.0012	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:36	MJH
Cadmium	ND	0.0040	0.0013	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:36	MJH
Calcium	81	0.50	0.091	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:36	MJH
Chromium	ND	0.010	0.0093	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:36	MJH
Cobalt	ND	0.010	0.0017	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:36	MJH
Copper	ND	0.010	0.0047	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:36	MJH
Iron	0.057	0.050	0.023	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:36	MJH
Lead	ND	0.010	0.0065	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:36	MJH
Magnesium	18	0.050	0.016	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:36	MJH
Manganese	0.016	0.010	0.0028	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:36	MJH
Mercury	ND	0.00020	0.00014	mg/L	1		SW-846 7470A	12/20/23	12/21/23 12:31	AV
Nickel	ND	0.010	0.0024	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:36	MJH
Potassium	2.8	2.0	0.33	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:36	MJH
Selenium	ND	0.050	0.018	mg/L	1		SW-846 6010D	12/28/23	1/3/24 12:51	HNN
Silver	ND	0.010	0.0027	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:36	MJH
Sodium	62	2.0	0.74	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:36	MJH
Thallium	ND	0.050	0.019	mg/L	1		SW-846 6010D	12/28/23	1/3/24 12:51	HNN
Vanadium	ND	0.010	0.0071	mg/L	1		SW-846 6010D	12/28/23	1/4/24 13:01	HNN
Zinc	ND	0.010	0.0040	mg/L	1		SW-846 6010D	12/28/23	12/29/23 14:36	MJH

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: Equip Deconn | Sampled: 12/15/2023 15:30

Sample ID: 23L2638-15

Sample Matrix: Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Acetone	6.3	50	2.0	µg/L	1	J	SW-846 8260D	12/21/23	12/21/23 14:16	EEH
Benzene	ND	1.0	0.18	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
Bromochloromethane	ND	1.0	0.28	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
Bromodichloromethane	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
Bromoform	ND	1.0	0.41	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
Bromomethane	ND	2.0	1.3	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
2-Butanone (MEK)	ND	20	1.7	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
Carbon Disulfide	ND	5.0	1.6	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
Carbon Tetrachloride	ND	5.0	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
Chlorobenzene	ND	1.0	0.12	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
Chlorodibromomethane	ND	0.50	0.20	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
Chloroethane	ND	2.0	0.34	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
Chloroform	ND	2.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
Chloromethane	ND	2.0	0.50	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
Cyclohexane	ND	5.0	1.8	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	0.85	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
1,2-Dibromoethane (EDB)	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
1,2-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
1,3-Dichlorobenzene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
1,4-Dichlorobenzene	ND	1.0	0.13	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
Dichlorodifluoromethane (Freon 12)	ND	2.0	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
1,1-Dichloroethane	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
1,2-Dichloroethane	ND	1.0	0.30	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
1,1-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
cis-1,2-Dichloroethylene	ND	1.0	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
trans-1,2-Dichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
1,2-Dichloropropane	ND	1.0	0.19	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
cis-1,3-Dichloropropene	ND	0.50	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
trans-1,3-Dichloropropene	ND	0.50	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
1,4-Dioxane	ND	50	18	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
Ethylbenzene	ND	1.0	0.22	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
2-Hexanone (MBK)	ND	10	1.2	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
Isopropylbenzene (Cumene)	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
Methyl Acetate	ND	1.0	0.61	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
Methyl tert-Butyl Ether (MTBE)	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
Methyl Cyclohexane	ND	1.0	0.16	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
Methylene Chloride	ND	5.0	0.18	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
4-Methyl-2-pentanone (MIBK)	ND	10	1.3	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
Styrene	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
1,1,2,2-Tetrachloroethane	ND	0.50	0.14	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
Tetrachloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
Toluene	ND	1.0	0.22	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
1,2,3-Trichlorobenzene	ND	5.0	0.34	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
1,2,4-Trichlorobenzene	ND	1.0	0.30	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: Equip Deconn | Sampled: 12/15/2023 15:30

Sample ID: 23L2638-15

Sample Matrix: Water

Volatile Organic Compounds by GC/MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
1,1,1-Trichloroethane	ND	1.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
1,1,2-Trichloroethane	ND	1.0	0.19	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
Trichloroethylene	ND	1.0	0.17	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
Trichlorofluoromethane (Freon 11)	ND	2.0	0.15	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	0.21	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
Vinyl Chloride	ND	2.0	0.24	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH
Xylenes (total)	ND	1.0	1.0	µg/L	1		SW-846 8260D	12/21/23	12/21/23 14:16	EEH

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
1,2-Dichloroethane-d4	113	70-130		12/21/23 14:16
Toluene-d8	104	70-130		12/21/23 14:16
4-Bromofluorobenzene	96.4	70-130		12/21/23 14:16

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Project Location: Alpha Portland site | Sample Description: | Work Order: 23L2638

Date Received: 12/19/2023

Field Sample #: Equip Deconn | Sampled: 12/15/2023 15:30

Sample ID: 23L2638-15

Sample Matrix: Water

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED)

Analyte	Results	Units	Response	RT	DF	CAS #	Q#	Method	Date Prepared	Date/Time Analyzed	Analyst
No TICs Found	0.0	µg/L			1			SW-846 8260D	12/21/23	12/21/23 14:16	EEH

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Sample Extraction Data

Prep Method:% Solids **Analytical Method:SM 2540G**

Lab Number [Field ID]	Batch	Date
23L2638-01 [SS-1]	B361285	12/20/23
23L2638-02 [SS-2]	B361285	12/20/23
23L2638-03 [SS-3]	B361285	12/20/23
23L2638-04 [SS-4]	B361285	12/20/23
23L2638-05 [SS-5]	B361285	12/20/23
23L2638-06 [SS-6]	B361285	12/20/23
23L2638-07 [Duplicate]	B361285	12/20/23

Prep Method:SW-846 3050B **Analytical Method:SW-846 6010D**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L2638-01 [SS-1]	B361688	1.60	50.0	12/26/23
23L2638-02 [SS-2]	B361688	1.54	50.0	12/26/23
23L2638-03 [SS-3]	B361688	1.60	50.0	12/26/23
23L2638-04 [SS-4]	B361688	1.54	50.0	12/26/23
23L2638-05 [SS-5]	B361688	1.57	50.0	12/26/23
23L2638-06 [SS-6]	B361688	1.58	50.0	12/26/23
23L2638-07 [Duplicate]	B361688	1.59	50.0	12/26/23

Prep Method:SW-846 3005A **Analytical Method:SW-846 6010D**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23L2638-09 [SW-2]	B361499	50.0	50.0	12/21/23

Prep Method:SW-846 3005A **Analytical Method:SW-846 6010D**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23L2638-08 [SW-1]	B362023	25.0	25.0	12/28/23
23L2638-10 [SW-3]	B362023	25.0	25.0	12/28/23
23L2638-11 [SW-4]	B362023	25.0	25.0	12/28/23
23L2638-12 [SW-5]	B362023	25.0	25.0	12/28/23
23L2638-13 [SW-6]	B362023	25.0	25.0	12/28/23
23L2638-14 [Duplicate]	B362023	25.0	25.0	12/28/23

Prep Method:SW-846 3060A **Analytical Method:SW-846 7196A**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L2638-01 [SS-1]	B364445	2.52	100	01/29/24
23L2638-02 [SS-2]	B364445	2.52	100	01/29/24
23L2638-03 [SS-3]	B364445	2.56	100	01/29/24
23L2638-04 [SS-4]	B364445	2.50	100	01/29/24
23L2638-05 [SS-5]	B364445	2.55	100	01/29/24
23L2638-06 [SS-6]	B364445	2.50	100	01/29/24
23L2638-07 [Duplicate]	B364445	2.52	100	01/29/24

Prep Method:SW-846 7470A Prep **Analytical Method:SW-846 7470A**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23L2638-08 [SW-1]	B361299	10.0	10.0	12/20/23

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Sample Extraction Data

Prep Method:SW-846 7470A Prep **Analytical Method:SW-846 7470A**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23L2638-09 [SW-2]	B361299	10.0	10.0	12/20/23
23L2638-10 [SW-3]	B361299	10.0	10.0	12/20/23
23L2638-11 [SW-4]	B361299	10.0	10.0	12/20/23
23L2638-12 [SW-5]	B361299	10.0	10.0	12/20/23
23L2638-13 [SW-6]	B361299	10.0	10.0	12/20/23
23L2638-14 [Duplicate]	B361299	10.0	10.0	12/20/23

Prep Method:SW-846 7471 **Analytical Method:SW-846 7471B**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L2638-05 [SS-5]	B361707	0.676	50.0	12/26/23
23L2638-06 [SS-6]	B361707	0.659	50.0	12/26/23
23L2638-07 [Duplicate]	B361707	0.650	50.0	12/26/23

Prep Method:SW-846 7471 **Analytical Method:SW-846 7471B**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L2638-01 [SS-1]	B361709	0.624	50.0	12/26/23
23L2638-02 [SS-2]	B361709	0.621	50.0	12/26/23
23L2638-03 [SS-3]	B361709	0.601	50.0	12/26/23
23L2638-04 [SS-4]	B361709	0.662	50.0	12/26/23

Prep Method:SW-846 3546 **Analytical Method:SW-846 8082A**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L2638-01 [SS-1]	B361331	10.0	10.0	12/20/23
23L2638-06 [SS-6]	B361331	10.0	10.0	12/20/23

Prep Method:SW-846 3546 **Analytical Method:SW-846 8082A**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L2638-02RE1 [SS-2]	B361689	5.80	10.0	12/26/23
23L2638-03RE1 [SS-3]	B361689	5.50	10.0	12/26/23
23L2638-04RE1 [SS-4]	B361689	5.30	10.0	12/26/23
23L2638-05RE1 [SS-5]	B361689	5.00	10.0	12/26/23

Prep Method:SW-846 3546 **Analytical Method:SW-846 8082A**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L2638-07 [Duplicate]	B361810	10.5	10.0	12/27/23

Prep Method:SW-846 3510C **Analytical Method:SW-846 8082A**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23L2638-08 [SW-1]	B361357	102	2.00	12/20/23
23L2638-09 [SW-2]	B361357	107	2.00	12/20/23
23L2638-10 [SW-3]	B361357	108	2.00	12/20/23

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Sample Extraction Data

Prep Method:SW-846 3510C **Analytical Method:SW-846 8082A**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23L2638-11 [SW-4]	B361357	105	2.00	12/20/23
23L2638-12 [SW-5]	B361357	98.6	2.00	12/20/23
23L2638-13 [SW-6]	B361357	108	2.00	12/20/23
23L2638-14 [Duplicate]	B361357	108	2.00	12/20/23

Prep Method:SW-846 5035 **Analytical Method:SW-846 8260D**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L2638-02 [SS-2]	B361293	5.00	10.0	12/20/23
23L2638-03 [SS-3]	B361293	10.0	10.0	12/20/23
23L2638-04 [SS-4]	B361293	5.70	10.0	12/20/23
23L2638-05 [SS-5]	B361293	5.31	10.0	12/20/23
23L2638-06 [SS-6]	B361293	6.87	10.0	12/20/23
23L2638-07 [Duplicate]	B361293	6.99	10.0	12/20/23

Prep Method:SW-846 5030B **Analytical Method:SW-846 8260D**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23L2638-08 [SW-1]	B361401	5	5.00	12/21/23
23L2638-09 [SW-2]	B361401	5	5.00	12/21/23
23L2638-10 [SW-3]	B361401	5	5.00	12/21/23
23L2638-11 [SW-4]	B361401	5	5.00	12/21/23
23L2638-12 [SW-5]	B361401	5	5.00	12/21/23
23L2638-13 [SW-6]	B361401	5	5.00	12/21/23
23L2638-14 [Duplicate]	B361401	5	5.00	12/21/23
23L2638-15 [Equip Deconn]	B361401	5	5.00	12/21/23

Prep Method:SW-846 3546 **Analytical Method:SW-846 8270E**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L2638-01 [SS-1]	B361310	15.6	1.00	12/20/23
23L2638-02 [SS-2]	B361310	15.4	1.00	12/20/23
23L2638-03 [SS-3]	B361310	15.3	1.00	12/20/23
23L2638-04 [SS-4]	B361310	15.0	1.00	12/20/23
23L2638-05 [SS-5]	B361310	15.9	1.00	12/20/23
23L2638-06 [SS-6]	B361310	30.6	1.00	12/20/23

Prep Method:SW-846 3546 **Analytical Method:SW-846 8270E**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L2638-07 [Duplicate]	B361490	15.6	1.00	12/21/23

Prep Method:SW-846 3546 **Analytical Method:SW-846 8270E**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L2638-01RE1 [SS-1]	B361863	20.4	1.00	12/27/23
23L2638-02RE1 [SS-2]	B361863	10.1	1.00	12/27/23
23L2638-03RE1 [SS-3]	B361863	10.4	1.00	12/27/23
23L2638-04RE1 [SS-4]	B361863	10.2	1.00	12/27/23

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Sample Extraction Data

Prep Method:SW-846 3546 **Analytical Method:SW-846 8270E**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L2638-05RE1 [SS-5]	B361863	20.4	1.00	12/27/23

Prep Method:SW-846 3546 **Analytical Method:SW-846 8270E**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L2638-06RE1 [SS-6]	B362017	20.0	1.00	12/28/23

Prep Method:SW-846 3546 **Analytical Method:SW-846 8270E**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L2638-07RE1 [Duplicate]	B362153	10.0	1.00	12/29/23

Prep Method:SW-846 3510C **Analytical Method:SW-846 8270E**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23L2638-08 [SW-1]	B361356	108	1.00	12/20/23
23L2638-09 [SW-2]	B361356	107	1.00	12/20/23
23L2638-10 [SW-3]	B361356	108	1.00	12/20/23
23L2638-11 [SW-4]	B361356	108	1.00	12/20/23
23L2638-12 [SW-5]	B361356	98.9	1.00	12/20/23
23L2638-13 [SW-6]	B361356	109	1.00	12/20/23
23L2638-14 [Duplicate]	B361356	105	1.00	12/20/23

Prep Method:SW-846 3510C **Analytical Method:SW-846 8270E**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23L2638-08 [SW-1]	B361358	1020	1.00	12/20/23
23L2638-09 [SW-2]	B361358	1020	1.00	12/20/23
23L2638-10 [SW-3]	B361358	1040	1.00	12/20/23
23L2638-11 [SW-4]	B361358	1040	1.00	12/20/23
23L2638-12 [SW-5]	B361358	1020	1.00	12/20/23
23L2638-13 [SW-6]	B361358	1040	1.00	12/20/23
23L2638-14 [Duplicate]	B361358	1020	1.00	12/20/23

Prep Method:SW-846 3510C **Analytical Method:SW-846 8270E**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23L2638-12RE1 [SW-5]	B361999	1020	1.00	12/28/23

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361293 - SW-846 5035										
Blank (B361293-BLK1)				Prepared & Analyzed: 12/20/23						
Acetone	ND	0.10	mg/Kg wet							
Benzene	ND	0.0020	mg/Kg wet							
Bromochloromethane	ND	0.0020	mg/Kg wet							
Bromodichloromethane	ND	0.0020	mg/Kg wet							
Bromoform	ND	0.0020	mg/Kg wet							
Bromomethane	ND	0.010	mg/Kg wet							
2-Butanone (MEK)	ND	0.040	mg/Kg wet							
Carbon Disulfide	ND	0.010	mg/Kg wet							
Carbon Tetrachloride	ND	0.0020	mg/Kg wet							
Chlorobenzene	ND	0.0020	mg/Kg wet							
Chlorodibromomethane	ND	0.0010	mg/Kg wet							
Chloroethane	ND	0.020	mg/Kg wet							
Chloroform	ND	0.0040	mg/Kg wet							
Chloromethane	ND	0.010	mg/Kg wet							
Cyclohexane	ND	0.010	mg/Kg wet							
1,2-Dibromo-3-chloropropane (DBCP)	ND	0.0020	mg/Kg wet							
1,2-Dibromoethane (EDB)	ND	0.0010	mg/Kg wet							
1,2-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,3-Dichlorobenzene	ND	0.0020	mg/Kg wet							
1,4-Dichlorobenzene	ND	0.0020	mg/Kg wet							
Dichlorodifluoromethane (Freon 12)	ND	0.020	mg/Kg wet							
1,1-Dichloroethane	ND	0.0020	mg/Kg wet							
1,2-Dichloroethane	ND	0.0020	mg/Kg wet							
1,1-Dichloroethylene	ND	0.0040	mg/Kg wet							
cis-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
trans-1,2-Dichloroethylene	ND	0.0020	mg/Kg wet							
1,2-Dichloropropane	ND	0.0020	mg/Kg wet							
cis-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
trans-1,3-Dichloropropene	ND	0.0010	mg/Kg wet							
1,4-Dioxane	ND	0.10	mg/Kg wet							
Ethylbenzene	ND	0.0020	mg/Kg wet							
2-Hexanone (MBK)	ND	0.020	mg/Kg wet							
Isopropylbenzene (Cumene)	ND	0.0020	mg/Kg wet							
Methyl Acetate	ND	0.0020	mg/Kg wet							
Methyl tert-Butyl Ether (MTBE)	ND	0.0040	mg/Kg wet							
Methyl Cyclohexane	ND	0.0040	mg/Kg wet							
Methylene Chloride	ND	0.020	mg/Kg wet							
4-Methyl-2-pentanone (MIBK)	ND	0.020	mg/Kg wet							
Styrene	ND	0.0020	mg/Kg wet							
1,1,2,2-Tetrachloroethane	ND	0.0010	mg/Kg wet							
Tetrachloroethylene	ND	0.0020	mg/Kg wet							
Toluene	ND	0.0020	mg/Kg wet							
1,2,3-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,2,4-Trichlorobenzene	ND	0.0020	mg/Kg wet							
1,1,1-Trichloroethane	ND	0.0020	mg/Kg wet							
1,1,2-Trichloroethane	ND	0.0020	mg/Kg wet							
Trichloroethylene	ND	0.0020	mg/Kg wet							
Trichlorofluoromethane (Freon 11)	ND	0.010	mg/Kg wet							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.010	mg/Kg wet							
Vinyl Chloride	ND	0.010	mg/Kg wet							
m+p Xylene	ND	0.0040	mg/Kg wet							

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B361293 - SW-846 5035												
Blank (B361293-BLK1)				Prepared & Analyzed: 12/20/23								
o-Xylene	ND	0.0020	mg/Kg wet									
Xylenes (total)	ND	0.0020	mg/Kg wet									
Surrogate: 1,2-Dichloroethane-d4	*0.0424*		mg/Kg wet	0.0500		84.7		70-130				
Surrogate: Toluene-d8	*0.0498*		mg/Kg wet	0.0500		99.6		70-130				
Surrogate: 4-Bromofluorobenzene	*0.0480*		mg/Kg wet	0.0500		96.0		70-130				
LCS (B361293-BS1)				Prepared & Analyzed: 12/20/23								
Acetone	0.168	0.10	mg/Kg wet	0.200		83.9		70-160			V-36	†
Benzene	0.0176	0.0020	mg/Kg wet	0.0200		88.0		70-130				
Bromochloromethane	0.0186	0.0020	mg/Kg wet	0.0200		92.8		70-130				
Bromodichloromethane	0.0179	0.0020	mg/Kg wet	0.0200		89.6		70-130				
Bromoform	0.0195	0.0020	mg/Kg wet	0.0200		97.5		70-130				
Bromomethane	0.0292	0.010	mg/Kg wet	0.0200		**146**	*	40-130			L-02, V-20	†
2-Butanone (MEK)	0.165	0.040	mg/Kg wet	0.200		82.5		70-160				†
Carbon Disulfide	0.166	0.010	mg/Kg wet	0.200		82.9		70-130				
Carbon Tetrachloride	0.0159	0.0020	mg/Kg wet	0.0200		79.5		70-130				
Chlorobenzene	0.0193	0.0020	mg/Kg wet	0.0200		96.3		70-130				
Chlorodibromomethane	0.0196	0.0010	mg/Kg wet	0.0200		98.1		70-130				
Chloroethane	0.0213	0.020	mg/Kg wet	0.0200		106		70-130				
Chloroform	0.0173	0.0040	mg/Kg wet	0.0200		86.6		70-130				
Chloromethane	0.0193	0.010	mg/Kg wet	0.0200		96.7		70-130				
Cyclohexane	0.0156	0.010	mg/Kg wet	0.0200		77.9		70-130				
1,2-Dibromo-3-chloropropane (DBCP)	0.0153	0.0020	mg/Kg wet	0.0200		76.6		70-130				
1,2-Dibromoethane (EDB)	0.0203	0.0010	mg/Kg wet	0.0200		102		70-130				
1,2-Dichlorobenzene	0.0195	0.0020	mg/Kg wet	0.0200		97.7		70-130				
1,3-Dichlorobenzene	0.0190	0.0020	mg/Kg wet	0.0200		95.1		70-130				
1,4-Dichlorobenzene	0.0189	0.0020	mg/Kg wet	0.0200		94.5		70-130				
Dichlorodifluoromethane (Freon 12)	0.0190	0.020	mg/Kg wet	0.0200		95.1		40-160			J	†
1,1-Dichloroethane	0.0172	0.0020	mg/Kg wet	0.0200		85.9		70-130				
1,2-Dichloroethane	0.0183	0.0020	mg/Kg wet	0.0200		91.4		70-130				
1,1-Dichloroethylene	0.0188	0.0040	mg/Kg wet	0.0200		94.1		70-130				
cis-1,2-Dichloroethylene	0.0176	0.0020	mg/Kg wet	0.0200		88.2		70-130				
trans-1,2-Dichloroethylene	0.0173	0.0020	mg/Kg wet	0.0200		86.6		70-130				
1,2-Dichloropropane	0.0189	0.0020	mg/Kg wet	0.0200		94.4		70-130				
cis-1,3-Dichloropropene	0.0176	0.0010	mg/Kg wet	0.0200		88.1		70-130				
trans-1,3-Dichloropropene	0.0173	0.0010	mg/Kg wet	0.0200		86.6		70-130				
1,4-Dioxane	0.209	0.10	mg/Kg wet	0.200		104		40-160				†
Ethylbenzene	0.0200	0.0020	mg/Kg wet	0.0200		99.9		70-130				
2-Hexanone (MBK)	0.184	0.020	mg/Kg wet	0.200		91.8		70-160				†
Isopropylbenzene (Cumene)	0.0213	0.0020	mg/Kg wet	0.0200		106		70-130				
Methyl Acetate	0.0169	0.0020	mg/Kg wet	0.0200		84.6		70-130				
Methyl tert-Butyl Ether (MTBE)	0.0160	0.0040	mg/Kg wet	0.0200		80.1		70-130				
Methyl Cyclohexane	0.0183	0.0040	mg/Kg wet	0.0200		91.4		70-130				
Methylene Chloride	0.0166	0.020	mg/Kg wet	0.0200		83.2		40-160			J	†
4-Methyl-2-pentanone (MIBK)	0.188	0.020	mg/Kg wet	0.200		94.0		70-160				†
Styrene	0.0208	0.0020	mg/Kg wet	0.0200		104		70-130				
1,1,2,2-Tetrachloroethane	0.0201	0.0010	mg/Kg wet	0.0200		101		70-130				
Tetrachloroethylene	0.0218	0.0020	mg/Kg wet	0.0200		109		70-130				
Toluene	0.0211	0.0020	mg/Kg wet	0.0200		106		70-130				
1,2,3-Trichlorobenzene	0.0190	0.0020	mg/Kg wet	0.0200		95.1		70-130				
1,2,4-Trichlorobenzene	0.0185	0.0020	mg/Kg wet	0.0200		92.6		70-130				
1,1,1-Trichloroethane	0.0176	0.0020	mg/Kg wet	0.0200		88.2		70-130				

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B361293 - SW-846 5035												
LCS (B361293-BS1)				Prepared & Analyzed: 12/20/23								
1,1,2-Trichloroethane	0.0199	0.0020	mg/Kg wet	0.0200		99.3		70-130				
Trichloroethylene	0.0190	0.0020	mg/Kg wet	0.0200		95.1		70-130				
Trichlorofluoromethane (Freon 11)	0.0204	0.010	mg/Kg wet	0.0200		102		70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0201	0.010	mg/Kg wet	0.0200		100		70-130				
Vinyl Chloride	0.0183	0.010	mg/Kg wet	0.0200		91.5		40-130				†
m+p Xylene	0.0420	0.0040	mg/Kg wet	0.0400		105		70-130				
o-Xylene	0.0200	0.0020	mg/Kg wet	0.0200		100		70-130				
Surrogate: 1,2-Dichloroethane-d4	*0.0410*		mg/Kg wet	0.0500		82.0		70-130				
Surrogate: Toluene-d8	*0.0489*		mg/Kg wet	0.0500		97.8		70-130				
Surrogate: 4-Bromofluorobenzene	*0.0481*		mg/Kg wet	0.0500		96.3		70-130				
LCS Dup (B361293-BSD1)				Prepared & Analyzed: 12/20/23								
Acetone	0.155	0.10	mg/Kg wet	0.200		77.4		70-160	8.07	25	V-36	†
Benzene	0.0163	0.0020	mg/Kg wet	0.0200		81.6		70-130	7.55	25		
Bromochloromethane	0.0180	0.0020	mg/Kg wet	0.0200		89.8		70-130	3.29	25		
Bromodichloromethane	0.0169	0.0020	mg/Kg wet	0.0200		84.5		70-130	5.86	25		
Bromoform	0.0189	0.0020	mg/Kg wet	0.0200		94.4		70-130	3.23	25		
Bromomethane	0.0285	0.010	mg/Kg wet	0.0200		**142**	*	40-130	2.64	25	L-02, V-20	†
2-Butanone (MEK)	0.154	0.040	mg/Kg wet	0.200		76.9		70-160	7.08	25		†
Carbon Disulfide	0.151	0.010	mg/Kg wet	0.200		75.7		70-130	9.03	25		
Carbon Tetrachloride	0.0143	0.0020	mg/Kg wet	0.0200		71.6		70-130	10.5	25		
Chlorobenzene	0.0189	0.0020	mg/Kg wet	0.0200		94.6		70-130	1.78	25		
Chlorodibromomethane	0.0190	0.0010	mg/Kg wet	0.0200		95.2		70-130	3.00	25		
Chloroethane	0.0195	0.020	mg/Kg wet	0.0200		97.7		70-130	8.62	25	J	
Chloroform	0.0161	0.0040	mg/Kg wet	0.0200		80.4		70-130	7.43	25		
Chloromethane	0.0175	0.010	mg/Kg wet	0.0200		87.6		70-130	9.88	25		
Cyclohexane	0.0140	0.010	mg/Kg wet	0.0200		70.1		70-130	10.5	25		
1,2-Dibromo-3-chloropropane (DBCP)	0.0144	0.0020	mg/Kg wet	0.0200		72.1		70-130	6.05	25		
1,2-Dibromoethane (EDB)	0.0195	0.0010	mg/Kg wet	0.0200		97.7		70-130	4.01	25		
1,2-Dichlorobenzene	0.0184	0.0020	mg/Kg wet	0.0200		92.1		70-130	5.90	25		
1,3-Dichlorobenzene	0.0179	0.0020	mg/Kg wet	0.0200		89.6		70-130	5.96	25		
1,4-Dichlorobenzene	0.0178	0.0020	mg/Kg wet	0.0200		89.1		70-130	5.88	25		
Dichlorodifluoromethane (Freon 12)	0.0170	0.020	mg/Kg wet	0.0200		85.1		40-160	11.1	25	J	†
1,1-Dichloroethane	0.0160	0.0020	mg/Kg wet	0.0200		79.9		70-130	7.24	25		
1,2-Dichloroethane	0.0175	0.0020	mg/Kg wet	0.0200		87.7		70-130	4.13	25		
1,1-Dichloroethylene	0.0171	0.0040	mg/Kg wet	0.0200		85.6		70-130	9.46	25		
cis-1,2-Dichloroethylene	0.0165	0.0020	mg/Kg wet	0.0200		82.4		70-130	6.80	25		
trans-1,2-Dichloroethylene	0.0159	0.0020	mg/Kg wet	0.0200		79.6		70-130	8.42	25		
1,2-Dichloropropane	0.0182	0.0020	mg/Kg wet	0.0200		91.1		70-130	3.56	25		
cis-1,3-Dichloropropene	0.0171	0.0010	mg/Kg wet	0.0200		85.3		70-130	3.23	25		
trans-1,3-Dichloropropene	0.0164	0.0010	mg/Kg wet	0.0200		82.1		70-130	5.33	25		
1,4-Dioxane	0.194	0.10	mg/Kg wet	0.200		96.8		40-160	7.55	50		† ‡
Ethylbenzene	0.0189	0.0020	mg/Kg wet	0.0200		94.7		70-130	5.34	25		
2-Hexanone (MBK)	0.175	0.020	mg/Kg wet	0.200		87.3		70-160	5.05	25		†
Isopropylbenzene (Cumene)	0.0201	0.0020	mg/Kg wet	0.0200		100		70-130	5.80	25		
Methyl Acetate	0.0165	0.0020	mg/Kg wet	0.0200		82.4		70-130	2.63	25		
Methyl tert-Butyl Ether (MTBE)	0.0152	0.0040	mg/Kg wet	0.0200		75.9		70-130	5.38	25		
Methyl Cyclohexane	0.0166	0.0040	mg/Kg wet	0.0200		83.1		70-130	9.51	25		
Methylene Chloride	0.0163	0.020	mg/Kg wet	0.0200		81.5		40-160	2.06	25	J	†
4-Methyl-2-pentanone (MIBK)	0.180	0.020	mg/Kg wet	0.200		89.9		70-160	4.41	25		†
Styrene	0.0199	0.0020	mg/Kg wet	0.0200		99.3		70-130	4.43	25		
1,1,2,2-Tetrachloroethane	0.0195	0.0010	mg/Kg wet	0.0200		97.7		70-130	3.02	25		

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B361293 - SW-846 5035											
LCS Dup (B361293-BSD1)				Prepared & Analyzed: 12/20/23							
Tetrachloroethylene	0.0200	0.0020	mg/Kg wet	0.0200		100		70-130	8.42	25	
Toluene	0.0186	0.0020	mg/Kg wet	0.0200		93.1		70-130	12.5	25	
1,2,3-Trichlorobenzene	0.0181	0.0020	mg/Kg wet	0.0200		90.4		70-130	5.07	25	
1,2,4-Trichlorobenzene	0.0173	0.0020	mg/Kg wet	0.0200		86.7		70-130	6.58	25	
1,1,1-Trichloroethane	0.0160	0.0020	mg/Kg wet	0.0200		80.1		70-130	9.63	25	
1,1,2-Trichloroethane	0.0191	0.0020	mg/Kg wet	0.0200		95.4		70-130	4.01	25	
Trichloroethylene	0.0174	0.0020	mg/Kg wet	0.0200		86.9		70-130	9.01	25	
Trichlorofluoromethane (Freon 11)	0.0186	0.010	mg/Kg wet	0.0200		92.9		70-130	9.44	25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0182	0.010	mg/Kg wet	0.0200		91.0		70-130	9.72	25	
Vinyl Chloride	0.0162	0.010	mg/Kg wet	0.0200		80.8		40-130	12.4	25	†
m+p Xylene	0.0399	0.0040	mg/Kg wet	0.0400		99.7		70-130	5.18	25	
o-Xylene	0.0192	0.0020	mg/Kg wet	0.0200		95.9		70-130	4.39	25	
Surrogate: 1,2-Dichloroethane-d4	*0.0408*		mg/Kg wet	0.0500		81.6		70-130			
Surrogate: Toluene-d8	*0.0494*		mg/Kg wet	0.0500		98.8		70-130			
Surrogate: 4-Bromofluorobenzene	*0.0490*		mg/Kg wet	0.0500		97.9		70-130			
Matrix Spike (B361293-MS1)	**Source: 23L2638-04**			Prepared & Analyzed: 12/20/23							
Acetone	0.229	0.11	mg/Kg dry	0.223	0.0114	97.6		70-130			V-36
Benzene	0.0192	0.0022	mg/Kg dry	0.0223	ND	86.3		70-130			
Bromochloromethane	0.0201	0.0022	mg/Kg dry	0.0223	ND	90.2		70-130			
Bromodichloromethane	0.0196	0.0022	mg/Kg dry	0.0223	ND	88.1		70-130			
Bromoform	0.0198	0.0022	mg/Kg dry	0.0223	ND	88.8		70-130			
Bromomethane	0.0125	0.011	mg/Kg dry	0.0223	ND	**56.0**	*	70-130			MS-23, R-06, V-20
2-Butanone (MEK)	0.159	0.045	mg/Kg dry	0.223	ND	71.6		70-130			
Carbon Disulfide	0.0182	0.011	mg/Kg dry	0.0223	ND	81.8		70-130			
Carbon Tetrachloride	0.0179	0.0022	mg/Kg dry	0.0223	ND	80.6		70-130			
Chlorobenzene	0.0213	0.0022	mg/Kg dry	0.0223	ND	95.9		70-130			
Chlorodibromomethane	0.0201	0.0011	mg/Kg dry	0.0223	ND	90.4		70-130			
Chloroethane	0.0120	0.022	mg/Kg dry	0.0223	ND	**53.9**	*	70-130			J, MS-23, R-06
Chloroform	0.0196	0.0045	mg/Kg dry	0.0223	ND	88.1		70-130			
Chloromethane	0.0156	0.011	mg/Kg dry	0.0223	ND	**69.9**	*	70-130			MS-07A
Cyclohexane	0.0166	0.011	mg/Kg dry	0.0223	ND	74.6		70-130			
1,2-Dibromo-3-chloropropane (DBCP)	0.0137	0.0022	mg/Kg dry	0.0223	ND	**61.5**	*	70-130			MS-07A
1,2-Dibromoethane (EDB)	0.0203	0.0011	mg/Kg dry	0.0223	ND	91.1		70-130			
1,2-Dichlorobenzene	0.0213	0.0022	mg/Kg dry	0.0223	ND	95.9		70-130			
1,3-Dichlorobenzene	0.0213	0.0022	mg/Kg dry	0.0223	ND	95.6		70-130			
1,4-Dichlorobenzene	0.0211	0.0022	mg/Kg dry	0.0223	ND	94.7		70-130			
Dichlorodifluoromethane (Freon 12)	0.0204	0.022	mg/Kg dry	0.0223	ND	91.7		70-130			J
1,1-Dichloroethane	0.0201	0.0022	mg/Kg dry	0.0223	ND	90.2		70-130			
1,2-Dichloroethane	0.0201	0.0022	mg/Kg dry	0.0223	ND	90.4		70-130			
1,1-Dichloroethylene	0.0210	0.0045	mg/Kg dry	0.0223	ND	94.6		70-130			
cis-1,2-Dichloroethylene	0.0202	0.0022	mg/Kg dry	0.0223	ND	90.7		70-130			
trans-1,2-Dichloroethylene	0.0187	0.0022	mg/Kg dry	0.0223	ND	84.0		70-130			
1,2-Dichloropropane	0.0212	0.0022	mg/Kg dry	0.0223	ND	95.3		70-130			
cis-1,3-Dichloropropene	0.0178	0.0011	mg/Kg dry	0.0223	ND	79.8		70-130			
trans-1,3-Dichloropropene	0.0176	0.0011	mg/Kg dry	0.0223	ND	79.0		70-130			
1,4-Dioxane	0.150	0.11	mg/Kg dry	0.223	ND	**67.4**	*	70-130			MS-07A
Ethylbenzene	0.0231	0.0022	mg/Kg dry	0.0223	ND	104		70-130			
2-Hexanone (MBK)	0.171	0.022	mg/Kg dry	0.223	ND	76.7		70-130			
Isopropylbenzene (Cumene)	0.0241	0.0022	mg/Kg dry	0.0223	ND	108		70-130			
Methyl Acetate	0.0204	0.0022	mg/Kg dry	0.0223	ND	91.8		70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD		RPD Limit	Notes
Batch B361293 - SW-846 5035												
Matrix Spike (B361293-MS1)		**Source: 23L2638-04**		Prepared & Analyzed: 12/20/23								
Methyl tert-Butyl Ether (MTBE)	0.0156	0.0045	mg/Kg dry	0.0223	ND	**69.9**	*	70-130				MS-24
Methyl Cyclohexane	0.0198	0.0045	mg/Kg dry	0.0223	ND	89.2		70-130				
Methylene Chloride	0.0174	0.022	mg/Kg dry	0.0223	ND	78.2		70-130				J
4-Methyl-2-pentanone (MIBK)	0.177	0.022	mg/Kg dry	0.223	ND	79.5		70-130				
Styrene	0.0230	0.0022	mg/Kg dry	0.0223	ND	103		70-130				
1,1,2,2-Tetrachloroethane	0.0211	0.0011	mg/Kg dry	0.0223	ND	94.9		70-130				
Tetrachloroethylene	0.0247	0.0022	mg/Kg dry	0.0223	ND	111		70-130				
Toluene	0.0223	0.0022	mg/Kg dry	0.0223	ND	100		70-130				
1,2,3-Trichlorobenzene	0.0186	0.0022	mg/Kg dry	0.0223	ND	83.4		70-130				
1,2,4-Trichlorobenzene	0.0187	0.0022	mg/Kg dry	0.0223	ND	83.9		70-130				
1,1,1-Trichloroethane	0.0201	0.0022	mg/Kg dry	0.0223	ND	90.3		70-130				
1,1,2-Trichloroethane	0.0221	0.0022	mg/Kg dry	0.0223	ND	99.3		70-130				
Trichloroethylene	0.0219	0.0022	mg/Kg dry	0.0223	ND	98.3		70-130				
Trichlorofluoromethane (Freon 11)	0.0216	0.011	mg/Kg dry	0.0223	ND	97.2		70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0244	0.011	mg/Kg dry	0.0223	ND	110		70-130				
Vinyl Chloride	0.0161	0.011	mg/Kg dry	0.0223	ND	72.2		70-130				
m+p Xylene	0.0468	0.0045	mg/Kg dry	0.0445	ND	105		70-130				
o-Xylene	0.0231	0.0022	mg/Kg dry	0.0223	ND	104		70-130				
Surrogate: 1,2-Dichloroethane-d4	*0.0453*		mg/Kg dry	0.0556		81.4		70-130				
Surrogate: Toluene-d8	*0.0565*		mg/Kg dry	0.0556		101		70-130				
Surrogate: 4-Bromofluorobenzene	*0.0527*		mg/Kg dry	0.0556		94.8		70-130				
Matrix Spike Dup (B361293-MSD1)		**Source: 23L2638-04**		Prepared & Analyzed: 12/20/23								
Acetone	0.283	0.13	mg/Kg dry	0.266	ND	106		70-130	21.4		30	V-36
Benzene	0.0236	0.0027	mg/Kg dry	0.0266	ND	88.7		70-130	20.7		30	
Bromochloromethane	0.0248	0.0027	mg/Kg dry	0.0266	ND	93.1		70-130	21.1		30	
Bromodichloromethane	0.0239	0.0027	mg/Kg dry	0.0266	ND	89.7		70-130	19.7		30	
Bromoform	0.0259	0.0027	mg/Kg dry	0.0266	ND	97.3		70-130	27.0		30	
Bromomethane	0.0226	0.013	mg/Kg dry	0.0266	ND	85.0		70-130	**58.0**	*	30	R-06, V-20
2-Butanone (MEK)	0.213	0.053	mg/Kg dry	0.266	ND	80.0		70-130	28.9		30	
Carbon Disulfide	0.0197	0.013	mg/Kg dry	0.0266	ND	73.9		70-130	7.84		30	
Carbon Tetrachloride	0.0223	0.0027	mg/Kg dry	0.0266	ND	83.7		70-130	21.7		30	
Chlorobenzene	0.0273	0.0027	mg/Kg dry	0.0266	ND	103		70-130	24.6		30	
Chlorodibromomethane	0.0256	0.0013	mg/Kg dry	0.0266	ND	96.1		70-130	24.0		30	
Chloroethane	0.0230	0.027	mg/Kg dry	0.0266	ND	86.5		70-130	**63.1**	*	30	J, R-06
Chloroform	0.0239	0.0053	mg/Kg dry	0.0266	ND	89.9		70-130	20.0		30	
Chloromethane	0.0181	0.013	mg/Kg dry	0.0266	ND	**68.1**	*	70-130	15.4		30	MS-07A
Cyclohexane	0.0206	0.013	mg/Kg dry	0.0266	ND	77.4		70-130	21.6		30	
1,2-Dibromo-3-chloropropane (DBCP)	0.0183	0.0027	mg/Kg dry	0.0266	ND	**68.6**	*	70-130	28.7		30	MS-07A
1,2-Dibromoethane (EDB)	0.0263	0.0013	mg/Kg dry	0.0266	ND	98.9		70-130	26.1		30	
1,2-Dichlorobenzene	0.0268	0.0027	mg/Kg dry	0.0266	ND	101		70-130	22.8		30	
1,3-Dichlorobenzene	0.0266	0.0027	mg/Kg dry	0.0266	ND	99.9		70-130	22.3		30	
1,4-Dichlorobenzene	0.0262	0.0027	mg/Kg dry	0.0266	ND	98.5		70-130	21.8		30	
Dichlorodifluoromethane (Freon 12)	0.0241	0.027	mg/Kg dry	0.0266	ND	90.4		70-130	16.5		30	J
1,1-Dichloroethane	0.0245	0.0027	mg/Kg dry	0.0266	ND	92.0		70-130	19.9		30	
1,2-Dichloroethane	0.0246	0.0027	mg/Kg dry	0.0266	ND	92.3		70-130	20.0		30	
1,1-Dichloroethylene	0.0259	0.0053	mg/Kg dry	0.0266	ND	97.2		70-130	20.6		30	
cis-1,2-Dichloroethylene	0.0249	0.0027	mg/Kg dry	0.0266	ND	93.4		70-130	20.9		30	
trans-1,2-Dichloroethylene	0.0230	0.0027	mg/Kg dry	0.0266	ND	86.4		70-130	20.7		30	
1,2-Dichloropropane	0.0265	0.0027	mg/Kg dry	0.0266	ND	99.4		70-130	22.1		30	
cis-1,3-Dichloropropene	0.0220	0.0013	mg/Kg dry	0.0266	ND	82.7		70-130	21.5		30	
trans-1,3-Dichloropropene	0.0224	0.0013	mg/Kg dry	0.0266	ND	84.1		70-130	24.1		30	

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B361293 - SW-846 5035											
Matrix Spike Dup (B361293-MSD1)	**Source: 23L2638-04**			Prepared & Analyzed: 12/20/23							
1,4-Dioxane	0.170	0.13	mg/Kg dry	0.266	ND	**63.8**	*	70-130	12.5	30	MS-07A
Ethylbenzene	0.0289	0.0027	mg/Kg dry	0.0266	ND	108		70-130	22.5	30	
2-Hexanone (MBK)	0.226	0.027	mg/Kg dry	0.266	ND	85.0		70-130	28.0	30	
Isopropylbenzene (Cumene)	0.0305	0.0027	mg/Kg dry	0.0266	ND	115		70-130	23.6	30	
Methyl Acetate	0.0255	0.0027	mg/Kg dry	0.0266	ND	95.8		70-130	22.2	30	
Methyl tert-Butyl Ether (MTBE)	0.0194	0.0053	mg/Kg dry	0.0266	ND	73.0		70-130	22.2	30	
Methyl Cyclohexane	0.0251	0.0053	mg/Kg dry	0.0266	ND	94.4		70-130	23.6	30	
Methylene Chloride	0.0228	0.027	mg/Kg dry	0.0266	ND	85.7		70-130	27.0	30	J
4-Methyl-2-pentanone (MIBK)	0.233	0.027	mg/Kg dry	0.266	ND	87.5		70-130	27.3	30	
Styrene	0.0291	0.0027	mg/Kg dry	0.0266	ND	109		70-130	23.3	30	
1,1,2,2-Tetrachloroethane	0.0279	0.0013	mg/Kg dry	0.0266	ND	105		70-130	27.6	30	
Tetrachloroethylene	0.0310	0.0027	mg/Kg dry	0.0266	ND	116		70-130	22.5	30	
Toluene	0.0278	0.0027	mg/Kg dry	0.0266	ND	104		70-130	21.6	30	
1,2,3-Trichlorobenzene	0.0244	0.0027	mg/Kg dry	0.0266	ND	91.7		70-130	27.3	30	
1,2,4-Trichlorobenzene	0.0247	0.0027	mg/Kg dry	0.0266	ND	92.6		70-130	27.7	30	
1,1,1-Trichloroethane	0.0249	0.0027	mg/Kg dry	0.0266	ND	93.3		70-130	21.2	30	
1,1,2-Trichloroethane	0.0280	0.0027	mg/Kg dry	0.0266	ND	105		70-130	23.5	30	
Trichloroethylene	0.0273	0.0027	mg/Kg dry	0.0266	ND	102		70-130	21.9	30	
Trichlorofluoromethane (Freon 11)	0.0275	0.013	mg/Kg dry	0.0266	ND	103		70-130	23.9	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.0294	0.013	mg/Kg dry	0.0266	ND	110		70-130	18.6	30	
Vinyl Chloride	0.0195	0.013	mg/Kg dry	0.0266	ND	73.3		70-130	19.4	30	
m+p Xylene	0.0588	0.0053	mg/Kg dry	0.0533	ND	110		70-130	22.7	30	
o-Xylene	0.0287	0.0027	mg/Kg dry	0.0266	ND	108		70-130	21.8	30	
Surrogate: 1,2-Dichloroethane-d4	*0.0550*		mg/Kg dry	0.0666		82.5		70-130			
Surrogate: Toluene-d8	*0.0646*		mg/Kg dry	0.0666		97.0		70-130			
Surrogate: 4-Bromofluorobenzene	*0.0642*		mg/Kg dry	0.0666		96.4		70-130			
Batch B361401 - SW-846 5030B											
Blank (B361401-BLK1)				Prepared & Analyzed: 12/21/23							
Acetone	ND	50	µg/L								
Benzene	ND	1.0	µg/L								
Bromochloromethane	ND	1.0	µg/L								
Bromodichloromethane	ND	0.50	µg/L								
Bromoform	ND	1.0	µg/L								
Bromomethane	ND	2.0	µg/L								
2-Butanone (MEK)	ND	20	µg/L								
Carbon Disulfide	ND	5.0	µg/L								
Carbon Tetrachloride	ND	5.0	µg/L								
Chlorobenzene	ND	1.0	µg/L								
Chlorodibromomethane	ND	0.50	µg/L								
Chloroethane	ND	2.0	µg/L								
Chloroform	ND	2.0	µg/L								
Chloromethane	ND	2.0	µg/L								
Cyclohexane	ND	5.0	µg/L								
1,2-Dibromo-3-chloropropane (DBCP)	ND	5.0	µg/L								
1,2-Dibromoethane (EDB)	ND	0.50	µg/L								
1,2-Dichlorobenzene	ND	1.0	µg/L								
1,3-Dichlorobenzene	ND	1.0	µg/L								
1,4-Dichlorobenzene	ND	1.0	µg/L								
Dichlorodifluoromethane (Freon 12)	ND	2.0	µg/L								
1,1-Dichloroethane	ND	1.0	µg/L								

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361401 - SW-846 5030B										
Blank (B361401-BLK1)				Prepared & Analyzed: 12/21/23						
1,2-Dichloroethane	ND	1.0	µg/L							
1,1-Dichloroethylene	ND	1.0	µg/L							
cis-1,2-Dichloroethylene	ND	1.0	µg/L							
trans-1,2-Dichloroethylene	ND	1.0	µg/L							
1,2-Dichloropropane	ND	1.0	µg/L							
cis-1,3-Dichloropropene	ND	0.50	µg/L							
trans-1,3-Dichloropropene	ND	0.50	µg/L							
1,4-Dioxane	ND	50	µg/L							
Ethylbenzene	ND	1.0	µg/L							
2-Hexanone (MBK)	ND	10	µg/L							
Isopropylbenzene (Cumene)	ND	1.0	µg/L							
Methyl Acetate	ND	1.0	µg/L							
Methyl tert-Butyl Ether (MTBE)	ND	1.0	µg/L							
Methyl Cyclohexane	ND	1.0	µg/L							
Methylene Chloride	ND	5.0	µg/L							
4-Methyl-2-pentanone (MIBK)	ND	10	µg/L							
Styrene	ND	1.0	µg/L							
1,1,2,2-Tetrachloroethane	ND	0.50	µg/L							
Tetrachloroethylene	ND	1.0	µg/L							
Toluene	ND	1.0	µg/L							
1,2,3-Trichlorobenzene	ND	5.0	µg/L							
1,2,4-Trichlorobenzene	ND	1.0	µg/L							
1,1,1-Trichloroethane	ND	1.0	µg/L							
1,1,2-Trichloroethane	ND	1.0	µg/L							
Trichloroethylene	ND	1.0	µg/L							
Trichlorofluoromethane (Freon 11)	ND	2.0	µg/L							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	1.0	µg/L							
Vinyl Chloride	ND	2.0	µg/L							
m+p Xylene	ND	2.0	µg/L							
o-Xylene	ND	1.0	µg/L							
Xylenes (total)	ND	1.0	µg/L							
Surrogate: 1,2-Dichloroethane-d4	*28.0*		µg/L	25.0		112	70-130			
Surrogate: Toluene-d8	*25.2*		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	*24.0*		µg/L	25.0		96.0	70-130			
LCS (B361401-BS1)				Prepared & Analyzed: 12/21/23						
Acetone	108	50	µg/L	100		108	70-160			†
Benzene	8.70	1.0	µg/L	10.0		87.0	70-130			
Bromochloromethane	8.93	1.0	µg/L	10.0		89.3	70-130			
Bromodichloromethane	11.8	0.50	µg/L	10.0		118	70-130			
Bromoform	10.6	1.0	µg/L	10.0		106	70-130			
Bromomethane	10.3	2.0	µg/L	10.0		103	40-160			†
2-Butanone (MEK)	108	20	µg/L	100		108	40-160			†
Carbon Disulfide	90.3	5.0	µg/L	100		90.3	70-130			
Carbon Tetrachloride	10.8	5.0	µg/L	10.0		108	70-130			
Chlorobenzene	9.86	1.0	µg/L	10.0		98.6	70-130			
Chlorodibromomethane	11.0	0.50	µg/L	10.0		110	70-130			
Chloroethane	8.47	2.0	µg/L	10.0		84.7	70-130			
Chloroform	10.4	2.0	µg/L	10.0		104	70-130			
Chloromethane	8.66	2.0	µg/L	10.0		86.6	40-160			†
Cyclohexane	8.87	5.0	µg/L	10.0		88.7	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	13.1	5.0	µg/L	10.0		**131**	* 70-130			L-07

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B361401 - SW-846 5030B												
LCS (B361401-BS1)				Prepared & Analyzed: 12/21/23								
1,2-Dibromoethane (EDB)	10.7	0.50	µg/L	10.0		107		70-130				
1,2-Dichlorobenzene	10.0	1.0	µg/L	10.0		100		70-130				
1,3-Dichlorobenzene	10.4	1.0	µg/L	10.0		104		70-130				
1,4-Dichlorobenzene	10.1	1.0	µg/L	10.0		101		70-130				
Dichlorodifluoromethane (Freon 12)	10.3	2.0	µg/L	10.0		103		40-160				†
1,1-Dichloroethane	9.36	1.0	µg/L	10.0		93.6		70-130				
1,2-Dichloroethane	13.1	1.0	µg/L	10.0		**131**	*	70-130			L-07, V-20	
1,1-Dichloroethylene	10.1	1.0	µg/L	10.0		101		70-130				
cis-1,2-Dichloroethylene	9.83	1.0	µg/L	10.0		98.3		70-130				
trans-1,2-Dichloroethylene	9.65	1.0	µg/L	10.0		96.5		70-130				
1,2-Dichloropropane	10.3	1.0	µg/L	10.0		103		70-130				
cis-1,3-Dichloropropene	10.7	0.50	µg/L	10.0		107		70-130				
trans-1,3-Dichloropropene	11.6	0.50	µg/L	10.0		116		70-130				
1,4-Dioxane	108	50	µg/L	100		108		40-130				†
Ethylbenzene	10.6	1.0	µg/L	10.0		106		70-130				
2-Hexanone (MBK)	133	10	µg/L	100		133		70-160			V-20	†
Isopropylbenzene (Cumene)	10.3	1.0	µg/L	10.0		103		70-130				
Methyl Acetate	9.89	1.0	µg/L	10.0		98.9		70-130				
Methyl tert-Butyl Ether (MTBE)	9.83	1.0	µg/L	10.0		98.3		70-130				
Methyl Cyclohexane	10.6	1.0	µg/L	10.0		106		70-130				
Methylene Chloride	8.58	5.0	µg/L	10.0		85.8		70-130				
4-Methyl-2-pentanone (MIBK)	130	10	µg/L	100		130		70-160			V-20	†
Styrene	10.0	1.0	µg/L	10.0		100		70-130				
1,1,2,2-Tetrachloroethane	10.7	0.50	µg/L	10.0		107		70-130				
Tetrachloroethylene	12.1	1.0	µg/L	10.0		121		70-130				
Toluene	10.4	1.0	µg/L	10.0		104		70-130				
1,2,3-Trichlorobenzene	11.9	5.0	µg/L	10.0		119		70-130				
1,2,4-Trichlorobenzene	11.5	1.0	µg/L	10.0		115		70-130				
1,1,1-Trichloroethane	10.7	1.0	µg/L	10.0		107		70-130				
1,1,2-Trichloroethane	10.8	1.0	µg/L	10.0		108		70-130				
Trichloroethylene	10.8	1.0	µg/L	10.0		108		70-130				
Trichlorofluoromethane (Freon 11)	11.3	2.0	µg/L	10.0		113		70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.3	1.0	µg/L	10.0		103		70-130				
Vinyl Chloride	9.36	2.0	µg/L	10.0		93.6		40-160				†
m+p Xylene	21.0	2.0	µg/L	20.0		105		70-130				
o-Xylene	10.6	1.0	µg/L	10.0		106		70-130				
Xylenes (total)	31.7	1.0	µg/L	30.0		106		0-200				
Surrogate: 1,2-Dichloroethane-d4	*28.6*		µg/L	25.0		114		70-130				
Surrogate: Toluene-d8	*25.8*		µg/L	25.0		103		70-130				
Surrogate: 4-Bromofluorobenzene	*24.3*		µg/L	25.0		97.2		70-130				
LCS Dup (B361401-BSD1)				Prepared & Analyzed: 12/21/23								
Acetone	103	50	µg/L	100		103		70-160	4.21	25		†
Benzene	9.03	1.0	µg/L	10.0		90.3		70-130	3.72	25		
Bromochloromethane	8.77	1.0	µg/L	10.0		87.7		70-130	1.81	25		
Bromodichloromethane	11.7	0.50	µg/L	10.0		117		70-130	0.852	25		
Bromoform	10.2	1.0	µg/L	10.0		102		70-130	3.76	25		
Bromomethane	8.54	2.0	µg/L	10.0		85.4		40-160	18.8	25		†
2-Butanone (MEK)	103	20	µg/L	100		103		40-160	4.62	25		†
Carbon Disulfide	91.7	5.0	µg/L	100		91.7		70-130	1.49	25		
Carbon Tetrachloride	10.2	5.0	µg/L	10.0		102		70-130	5.14	25		
Chlorobenzene	9.70	1.0	µg/L	10.0		97.0		70-130	1.64	25		

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B361401 - SW-846 5030B											
LCS Dup (B361401-BSD1)				Prepared & Analyzed: 12/21/23							
Chlorodibromomethane	11.1	0.50	µg/L	10.0		111	70-130	0.725	25		
Chloroethane	8.45	2.0	µg/L	10.0		84.5	70-130	0.236	25		
Chloroform	10.8	2.0	µg/L	10.0		108	70-130	3.87	25		
Chloromethane	9.07	2.0	µg/L	10.0		90.7	40-160	4.62	25		†
Cyclohexane	9.13	5.0	µg/L	10.0		91.3	70-130	2.89	25		
1,2-Dibromo-3-chloropropane (DBCP)	11.9	5.0	µg/L	10.0		119	70-130	9.35	25		
1,2-Dibromoethane (EDB)	11.3	0.50	µg/L	10.0		113	70-130	5.44	25		
1,2-Dichlorobenzene	10.2	1.0	µg/L	10.0		102	70-130	1.19	25		
1,3-Dichlorobenzene	10.5	1.0	µg/L	10.0		105	70-130	0.573	25		
1,4-Dichlorobenzene	10.1	1.0	µg/L	10.0		101	70-130	0.198	25		
Dichlorodifluoromethane (Freon 12)	10.3	2.0	µg/L	10.0		103	40-160	0.582	25		†
1,1-Dichloroethane	9.55	1.0	µg/L	10.0		95.5	70-130	2.01	25		
1,2-Dichloroethane	12.2	1.0	µg/L	10.0		122	70-130	7.36	25	V-20	
1,1-Dichloroethylene	10.3	1.0	µg/L	10.0		103	70-130	1.67	25		
cis-1,2-Dichloroethylene	10.0	1.0	µg/L	10.0		100	70-130	1.71	25		
trans-1,2-Dichloroethylene	9.66	1.0	µg/L	10.0		96.6	70-130	0.104	25		
1,2-Dichloropropane	10.9	1.0	µg/L	10.0		109	70-130	5.19	25		
cis-1,3-Dichloropropene	10.6	0.50	µg/L	10.0		106	70-130	1.03	25		
trans-1,3-Dichloropropene	11.3	0.50	µg/L	10.0		113	70-130	2.01	25		
1,4-Dioxane	99.8	50	µg/L	100		99.8	40-130	7.60	50		† ‡
Ethylbenzene	10.3	1.0	µg/L	10.0		103	70-130	2.69	25		
2-Hexanone (MBK)	127	10	µg/L	100		127	70-160	4.57	25	V-20	†
Isopropylbenzene (Cumene)	9.98	1.0	µg/L	10.0		99.8	70-130	3.06	25		
Methyl Acetate	10.6	1.0	µg/L	10.0		106	70-130	7.02	25		
Methyl tert-Butyl Ether (MTBE)	9.75	1.0	µg/L	10.0		97.5	70-130	0.817	25		
Methyl Cyclohexane	11.0	1.0	µg/L	10.0		110	70-130	3.33	25		
Methylene Chloride	9.31	5.0	µg/L	10.0		93.1	70-130	8.16	25		
4-Methyl-2-pentanone (MIBK)	126	10	µg/L	100		126	70-160	3.38	25	V-20	†
Styrene	9.91	1.0	µg/L	10.0		99.1	70-130	1.10	25		
1,1,2,2-Tetrachloroethane	10.4	0.50	µg/L	10.0		104	70-130	2.93	25		
Tetrachloroethylene	11.9	1.0	µg/L	10.0		119	70-130	1.50	25		
Toluene	10.6	1.0	µg/L	10.0		106	70-130	1.52	25		
1,2,3-Trichlorobenzene	10.7	5.0	µg/L	10.0		107	70-130	10.4	25		
1,2,4-Trichlorobenzene	11.1	1.0	µg/L	10.0		111	70-130	3.98	25		
1,1,1-Trichloroethane	11.0	1.0	µg/L	10.0		110	70-130	3.31	25		
1,1,2-Trichloroethane	10.9	1.0	µg/L	10.0		109	70-130	1.38	25		
Trichloroethylene	10.9	1.0	µg/L	10.0		109	70-130	1.01	25		
Trichlorofluoromethane (Freon 11)	11.6	2.0	µg/L	10.0		116	70-130	2.79	25		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.5	1.0	µg/L	10.0		105	70-130	1.35	25		
Vinyl Chloride	9.27	2.0	µg/L	10.0		92.7	40-160	0.966	25		†
m+p Xylene	20.7	2.0	µg/L	20.0		104	70-130	1.63	25		
o-Xylene	10.4	1.0	µg/L	10.0		104	70-130	1.81	25		
Xylenes (total)	31.1	1.0	µg/L	30.0		104	0-200	1.69			
Surrogate: 1,2-Dichloroethane-d4	*27.6*		µg/L	25.0		111	70-130				
Surrogate: Toluene-d8	*25.4*		µg/L	25.0		102	70-130				
Surrogate: 4-Bromofluorobenzene	*24.2*		µg/L	25.0		96.9	70-130				

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361401 - SW-846 5030B										
Matrix Spike (B361401-MS1)	**Source: 23L2638-11**			Prepared & Analyzed: 12/21/23						
Acetone	106	50	µg/L	100	3.33	102	70-130			
Benzene	8.68	1.0	µg/L	10.0	ND	86.8	70-130			
Bromochloromethane	9.06	1.0	µg/L	10.0	ND	90.6	70-130			
Bromodichloromethane	11.5	0.50	µg/L	10.0	ND	115	70-130			
Bromoform	9.80	1.0	µg/L	10.0	ND	98.0	70-130			
Bromomethane	8.96	2.0	µg/L	10.0	ND	89.6	70-130			
2-Butanone (MEK)	103	20	µg/L	100	ND	103	70-130			
Carbon Disulfide	91.2	5.0	µg/L	100	ND	91.2	70-130			
Carbon Tetrachloride	9.98	5.0	µg/L	10.0	ND	99.8	70-130			
Chlorobenzene	9.46	1.0	µg/L	10.0	ND	94.6	70-130			
Chlorodibromomethane	10.5	0.50	µg/L	10.0	ND	105	70-130			
Chloroethane	8.74	2.0	µg/L	10.0	ND	87.4	70-130			
Chloroform	10.2	2.0	µg/L	10.0	ND	102	70-130			
Chloromethane	8.64	2.0	µg/L	10.0	ND	86.4	70-130			
Cyclohexane	9.05	5.0	µg/L	10.0	ND	90.5	70-130			
1,2-Dibromo-3-chloropropane (DBCP)	11.8	5.0	µg/L	10.0	ND	118	70-130			
1,2-Dibromoethane (EDB)	10.6	0.50	µg/L	10.0	ND	106	70-130			
1,2-Dichlorobenzene	9.52	1.0	µg/L	10.0	ND	95.2	70-130			
1,3-Dichlorobenzene	9.76	1.0	µg/L	10.0	ND	97.6	70-130			
1,4-Dichlorobenzene	9.35	1.0	µg/L	10.0	ND	93.5	70-130			
Dichlorodifluoromethane (Freon 12)	10.9	2.0	µg/L	10.0	ND	109	70-130			
1,1-Dichloroethane	9.41	1.0	µg/L	10.0	ND	94.1	70-130			
1,2-Dichloroethane	12.9	1.0	µg/L	10.0	ND	129	70-130			V-20
1,1-Dichloroethylene	10.1	1.0	µg/L	10.0	ND	101	70-130			
cis-1,2-Dichloroethylene	9.62	1.0	µg/L	10.0	ND	96.2	70-130			
trans-1,2-Dichloroethylene	9.52	1.0	µg/L	10.0	ND	95.2	70-130			
1,2-Dichloropropane	10.2	1.0	µg/L	10.0	ND	102	70-130			
cis-1,3-Dichloropropene	10.3	0.50	µg/L	10.0	ND	103	70-130			
trans-1,3-Dichloropropene	10.9	0.50	µg/L	10.0	ND	109	70-130			
1,4-Dioxane	93.4	50	µg/L	100	ND	93.4	70-130			
Ethylbenzene	9.92	1.0	µg/L	10.0	ND	99.2	70-130			
2-Hexanone (MBK)	128	10	µg/L	100	ND	128	70-130			V-20
Isopropylbenzene (Cumene)	9.68	1.0	µg/L	10.0	ND	96.8	70-130			
Methyl Acetate	8.64	1.0	µg/L	10.0	ND	86.4	70-130			
Methyl tert-Butyl Ether (MTBE)	9.51	1.0	µg/L	10.0	ND	95.1	70-130			
Methyl Cyclohexane	10.4	1.0	µg/L	10.0	ND	104	70-130			
Methylene Chloride	9.07	5.0	µg/L	10.0	ND	90.7	70-130			
4-Methyl-2-pentanone (MIBK)	127	10	µg/L	100	ND	127	70-130			V-20
Styrene	9.50	1.0	µg/L	10.0	ND	95.0	70-130			
1,1,2,2-Tetrachloroethane	10.1	0.50	µg/L	10.0	ND	101	70-130			
Tetrachloroethylene	11.9	1.0	µg/L	10.0	ND	119	70-130			
Toluene	10.4	1.0	µg/L	10.0	ND	104	70-130			
1,2,3-Trichlorobenzene	10.1	5.0	µg/L	10.0	ND	101	70-130			
1,2,4-Trichlorobenzene	10.2	1.0	µg/L	10.0	ND	102	70-130			
1,1,1-Trichloroethane	11.0	1.0	µg/L	10.0	ND	110	70-130			
1,1,2-Trichloroethane	10.6	1.0	µg/L	10.0	ND	106	70-130			
Trichloroethylene	10.9	1.0	µg/L	10.0	ND	109	70-130			
Trichlorofluoromethane (Freon 11)	11.3	2.0	µg/L	10.0	ND	113	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.76	1.0	µg/L	10.0	ND	97.6	70-130			
Vinyl Chloride	9.40	2.0	µg/L	10.0	ND	94.0	70-130			
m+p Xylene	20.2	2.0	µg/L	20.0	ND	101	70-130			

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361401 - SW-846 5030B										
Matrix Spike (B361401-MS1)	**Source: 23L2638-11**			Prepared & Analyzed: 12/21/23						
o-Xylene	10.2	1.0	µg/L	10.0	ND	102	70-130			
Xylenes (total)	30.4	1.0	µg/L	30.0	ND	101	0-200			
Surrogate: 1,2-Dichloroethane-d4	*28.0*		µg/L	25.0		112	70-130			
Surrogate: Toluene-d8	*25.5*		µg/L	25.0		102	70-130			
Surrogate: 4-Bromofluorobenzene	*24.3*		µg/L	25.0		97.2	70-130			
Matrix Spike Dup (B361401-MSD1)	**Source: 23L2638-11**			Prepared & Analyzed: 12/21/23						
Acetone	101	50	µg/L	100	3.33	97.4	70-130	4.76	30	
Benzene	9.07	1.0	µg/L	10.0	ND	90.7	70-130	4.39	30	
Bromochloromethane	8.98	1.0	µg/L	10.0	ND	89.8	70-130	0.887	30	
Bromodichloromethane	11.4	0.50	µg/L	10.0	ND	114	70-130	1.23	30	
Bromoform	9.92	1.0	µg/L	10.0	ND	99.2	70-130	1.22	30	
Bromomethane	8.48	2.0	µg/L	10.0	ND	84.8	70-130	5.50	30	
2-Butanone (MEK)	98.3	20	µg/L	100	ND	98.3	70-130	4.21	30	
Carbon Disulfide	93.8	5.0	µg/L	100	ND	93.8	70-130	2.76	30	
Carbon Tetrachloride	10.0	5.0	µg/L	10.0	ND	100	70-130	0.500	30	
Chlorobenzene	9.57	1.0	µg/L	10.0	ND	95.7	70-130	1.16	30	
Chlorodibromomethane	10.7	0.50	µg/L	10.0	ND	107	70-130	1.79	30	
Chloroethane	9.44	2.0	µg/L	10.0	ND	94.4	70-130	7.70	30	
Chloroform	10.4	2.0	µg/L	10.0	ND	104	70-130	1.85	30	
Chloromethane	9.01	2.0	µg/L	10.0	ND	90.1	70-130	4.19	30	
Cyclohexane	9.34	5.0	µg/L	10.0	ND	93.4	70-130	3.15	30	
1,2-Dibromo-3-chloropropane (DBCP)	11.2	5.0	µg/L	10.0	ND	112	70-130	4.97	30	
1,2-Dibromoethane (EDB)	10.4	0.50	µg/L	10.0	ND	104	70-130	2.38	30	
1,2-Dichlorobenzene	9.61	1.0	µg/L	10.0	ND	96.1	70-130	0.941	30	
1,3-Dichlorobenzene	9.74	1.0	µg/L	10.0	ND	97.4	70-130	0.205	30	
1,4-Dichlorobenzene	9.46	1.0	µg/L	10.0	ND	94.6	70-130	1.17	30	
Dichlorodifluoromethane (Freon 12)	11.4	2.0	µg/L	10.0	ND	114	70-130	4.12	30	
1,1-Dichloroethane	9.90	1.0	µg/L	10.0	ND	99.0	70-130	5.08	30	
1,2-Dichloroethane	12.7	1.0	µg/L	10.0	ND	127	70-130	1.64	30	V-20
1,1-Dichloroethylene	10.6	1.0	µg/L	10.0	ND	106	70-130	5.11	30	
cis-1,2-Dichloroethylene	9.75	1.0	µg/L	10.0	ND	97.5	70-130	1.34	30	
trans-1,2-Dichloroethylene	9.87	1.0	µg/L	10.0	ND	98.7	70-130	3.61	30	
1,2-Dichloropropane	10.7	1.0	µg/L	10.0	ND	107	70-130	4.41	30	
cis-1,3-Dichloropropene	10.4	0.50	µg/L	10.0	ND	104	70-130	1.26	30	
trans-1,3-Dichloropropene	10.6	0.50	µg/L	10.0	ND	106	70-130	2.61	30	
1,4-Dioxane	101	50	µg/L	100	ND	101	70-130	7.43	30	
Ethylbenzene	10.0	1.0	µg/L	10.0	ND	100	70-130	0.903	30	
2-Hexanone (MBK)	121	10	µg/L	100	ND	121	70-130	5.53	30	V-20
Isopropylbenzene (Cumene)	9.95	1.0	µg/L	10.0	ND	99.5	70-130	2.75	30	
Methyl Acetate	7.93	1.0	µg/L	10.0	ND	79.3	70-130	8.57	30	
Methyl tert-Butyl Ether (MTBE)	9.63	1.0	µg/L	10.0	ND	96.3	70-130	1.25	30	
Methyl Cyclohexane	10.5	1.0	µg/L	10.0	ND	105	70-130	1.05	30	
Methylene Chloride	9.25	5.0	µg/L	10.0	ND	92.5	70-130	1.97	30	
4-Methyl-2-pentanone (MIBK)	121	10	µg/L	100	ND	121	70-130	5.11	30	V-20
Styrene	9.44	1.0	µg/L	10.0	ND	94.4	70-130	0.634	30	
1,1,2,2-Tetrachloroethane	9.97	0.50	µg/L	10.0	ND	99.7	70-130	1.20	30	
Tetrachloroethylene	12.1	1.0	µg/L	10.0	ND	121	70-130	2.00	30	
Toluene	10.8	1.0	µg/L	10.0	ND	108	70-130	3.76	30	
1,2,3-Trichlorobenzene	10.6	5.0	µg/L	10.0	ND	106	70-130	5.40	30	
1,2,4-Trichlorobenzene	10.1	1.0	µg/L	10.0	ND	101	70-130	0.493	30	
1,1,1-Trichloroethane	11.2	1.0	µg/L	10.0	ND	112	70-130	1.45	30	

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QUALITY CONTROL

Volatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361401 - SW-846 5030B										
Matrix Spike Dup (B361401-MSD1)	**Source: 23L2638-11**			Prepared & Analyzed: 12/21/23						
1,1,2-Trichloroethane	10.9	1.0	µg/L	10.0	ND	109	70-130	2.42	30	
Trichloroethylene	11.4	1.0	µg/L	10.0	ND	114	70-130	3.94	30	
Trichlorofluoromethane (Freon 11)	11.6	2.0	µg/L	10.0	ND	116	70-130	2.45	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.96	1.0	µg/L	10.0	ND	99.6	70-130	2.03	30	
Vinyl Chloride	9.92	2.0	µg/L	10.0	ND	99.2	70-130	5.38	30	
m+p Xylene	20.4	2.0	µg/L	20.0	ND	102	70-130	1.04	20	
o-Xylene	10.2	1.0	µg/L	10.0	ND	102	70-130	0.392	30	
Xylenes (total)	30.6	1.0	µg/L	30.0	ND	102	0-200	0.558		
Surrogate: 1,2-Dichloroethane-d4	*28.4*		µg/L	25.0		113	70-130			
Surrogate: Toluene-d8	*25.4*		µg/L	25.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	*24.2*		µg/L	25.0		96.8	70-130			

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QUALITY CONTROL

Tentatively Identified Compounds - Volatile Compounds (ESTIMATED VALUES REPORTED) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361293 - SW-846 5035										
Blank (B361293-BLK1)				Prepared & Analyzed: 12/20/23						
No TICs Found	0.0		mg/Kg wet							
Batch B361401 - SW-846 5030B										
Blank (B361401-BLK1)				Prepared & Analyzed: 12/21/23						
Tentatively Identified Compounds	0.0		µg/L							
No TICs Found	0.0		µg/L							

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361310 - SW-846 3546										
Blank (B361310-BLK1)				Prepared: 12/20/23 Analyzed: 12/22/23						
Atrazine	ND	0.66	mg/Kg wet							V-06
Benzaldehyde	ND	0.34	mg/Kg wet							V-34
Biphenyl	ND	0.66	mg/Kg wet							
Caprolactam	ND	0.34	mg/Kg wet							V-06
Acenaphthene	ND	0.17	mg/Kg wet							
Acenaphthylene	ND	0.17	mg/Kg wet							
Acetophenone	ND	0.34	mg/Kg wet							
Anthracene	ND	0.17	mg/Kg wet							
Benzo(a)anthracene	ND	0.17	mg/Kg wet							
Benzo(a)pyrene	ND	0.17	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.17	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.17	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.17	mg/Kg wet							
Bis(2-chloroethoxy)methane	ND	0.34	mg/Kg wet							
Bis(2-chloroethyl)ether	ND	0.34	mg/Kg wet							
Bis(2-chloroisopropyl)ether	ND	0.34	mg/Kg wet							
Bis(2-Ethylhexyl)phthalate	ND	0.34	mg/Kg wet							
4-Bromophenylphenylether	ND	0.34	mg/Kg wet							
Butylbenzylphthalate	ND	0.34	mg/Kg wet							
Carbazole	ND	0.17	mg/Kg wet							
4-Chloroaniline	ND	0.65	mg/Kg wet							
4-Chloro-3-methylphenol	ND	0.65	mg/Kg wet							
2-Chloronaphthalene	ND	0.34	mg/Kg wet							
2-Chlorophenol	ND	0.34	mg/Kg wet							
4-Chlorophenylphenylether	ND	0.34	mg/Kg wet							
Chrysene	ND	0.17	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.17	mg/Kg wet							
Dibenzofuran	ND	0.34	mg/Kg wet							
Di-n-butylphthalate	ND	0.34	mg/Kg wet							
3,3-Dichlorobenzidine	ND	0.17	mg/Kg wet							
2,4-Dichlorophenol	ND	0.34	mg/Kg wet							
Diethylphthalate	ND	0.34	mg/Kg wet							
2,4-Dimethylphenol	ND	0.34	mg/Kg wet							
Dimethylphthalate	ND	0.34	mg/Kg wet							
4,6-Dinitro-2-methylphenol	ND	0.34	mg/Kg wet							
2,4-Dinitrophenol	ND	0.65	mg/Kg wet							
2,4-Dinitrotoluene	ND	0.34	mg/Kg wet							
2,6-Dinitrotoluene	ND	0.34	mg/Kg wet							
Di-n-octylphthalate	ND	0.34	mg/Kg wet							
Fluoranthene	ND	0.17	mg/Kg wet							
Fluorene	ND	0.17	mg/Kg wet							
Hexachlorobenzene	ND	0.34	mg/Kg wet							
Hexachlorobutadiene	ND	0.34	mg/Kg wet							
Hexachlorocyclopentadiene	ND	0.34	mg/Kg wet							
Hexachloroethane	ND	0.34	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.17	mg/Kg wet							
Isophorone	ND	0.34	mg/Kg wet							
2-Methylnaphthalene	ND	0.17	mg/Kg wet							
2-Methylphenol	ND	0.34	mg/Kg wet							
3/4-Methylphenol	ND	0.34	mg/Kg wet							
Naphthalene	ND	0.17	mg/Kg wet							
2-Nitroaniline	ND	0.34	mg/Kg wet							

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361310 - SW-846 3546										
Blank (B361310-BLK1)				Prepared: 12/20/23 Analyzed: 12/22/23						
3-Nitroaniline	ND	0.34	mg/Kg wet							
4-Nitroaniline	ND	0.34	mg/Kg wet							
Nitrobenzene	ND	0.34	mg/Kg wet							
2-Nitrophenol	ND	0.34	mg/Kg wet							
4-Nitrophenol	ND	0.65	mg/Kg wet							V-06
N-Nitrosodiphenylamine/Diphenylamine	ND	0.34	mg/Kg wet							
N-Nitrosodi-n-propylamine	ND	0.34	mg/Kg wet							
Pentachlorophenol	ND	0.34	mg/Kg wet							
Phenanthrene	ND	0.17	mg/Kg wet							
Phenol	ND	0.34	mg/Kg wet							
Pyrene	ND	0.17	mg/Kg wet							
1,2,4,5-Tetrachlorobenzene	ND	0.34	mg/Kg wet							
2,4,5-Trichlorophenol	ND	0.34	mg/Kg wet							
2,4,6-Trichlorophenol	ND	0.34	mg/Kg wet							
Surrogate: 2-Fluorophenol	*4.85*		mg/Kg wet	6.60		73.5	30-130			
Surrogate: Phenol-d6	*5.04*		mg/Kg wet	6.60		76.4	30-130			
Surrogate: Nitrobenzene-d5	*2.96*		mg/Kg wet	3.30		89.7	30-130			
Surrogate: 2-Fluorobiphenyl	*3.05*		mg/Kg wet	3.30		92.3	30-130			
Surrogate: 2,4,6-Tribromophenol	*5.77*		mg/Kg wet	6.60		87.4	30-130			
Surrogate: p-Terphenyl-d14	*3.01*		mg/Kg wet	3.30		91.1	30-130			
LCS (B361310-BS1)				Prepared: 12/20/23 Analyzed: 12/22/23						
Atrazine	1.61	0.65	mg/Kg wet	1.62		99.5	40-140			V-06
Benzaldehyde	0.737	0.33	mg/Kg wet	1.62		45.5	40-140			V-34
Biphenyl	1.23	0.65	mg/Kg wet	1.62		76.2	40-140			
Caprolactam	1.55	0.33	mg/Kg wet	1.62		96.1	40-140			V-06
Acenaphthene	1.26	0.17	mg/Kg wet	1.62		78.1	40-140			
Acenaphthylene	1.28	0.17	mg/Kg wet	1.62		79.3	40-140			
Acetophenone	1.23	0.33	mg/Kg wet	1.62		75.8	40-140			
Anthracene	1.22	0.17	mg/Kg wet	1.62		75.3	40-140			
Benzo(a)anthracene	1.31	0.17	mg/Kg wet	1.62		80.7	40-140			
Benzo(a)pyrene	1.33	0.17	mg/Kg wet	1.62		82.0	40-140			
Benzo(b)fluoranthene	1.23	0.17	mg/Kg wet	1.62		76.0	40-140			
Benzo(g,h,i)perylene	1.59	0.17	mg/Kg wet	1.62		98.1	40-140			
Benzo(k)fluoranthene	1.32	0.17	mg/Kg wet	1.62		81.6	40-140			
Bis(2-chloroethoxy)methane	1.38	0.33	mg/Kg wet	1.62		85.0	40-140			
Bis(2-chloroethyl)ether	1.30	0.33	mg/Kg wet	1.62		80.1	40-140			
Bis(2-chloroisopropyl)ether	1.66	0.33	mg/Kg wet	1.62		102	40-140			
Bis(2-Ethylhexyl)phthalate	1.40	0.33	mg/Kg wet	1.62		86.6	40-140			
4-Bromophenylphenylether	1.23	0.33	mg/Kg wet	1.62		76.0	40-140			
Butylbenzylphthalate	1.16	0.33	mg/Kg wet	1.62		71.9	40-140			
Carbazole	1.23	0.17	mg/Kg wet	1.62		76.2	40-140			
4-Chloroaniline	0.764	0.64	mg/Kg wet	1.62		47.2	10-140			†
4-Chloro-3-methylphenol	1.29	0.64	mg/Kg wet	1.62		80.0	30-130			
2-Chloronaphthalene	1.11	0.33	mg/Kg wet	1.62		68.8	40-140			
2-Chlorophenol	1.18	0.33	mg/Kg wet	1.62		72.9	30-130			
4-Chlorophenylphenylether	1.29	0.33	mg/Kg wet	1.62		79.9	40-140			
Chrysene	1.36	0.17	mg/Kg wet	1.62		84.1	40-140			
Dibenz(a,h)anthracene	1.45	0.17	mg/Kg wet	1.62		89.6	40-140			
Dibenzofuran	1.33	0.33	mg/Kg wet	1.62		82.3	40-140			
Di-n-butylphthalate	1.26	0.33	mg/Kg wet	1.62		77.7	40-140			
3,3-Dichlorobenzidine	0.962	0.17	mg/Kg wet	1.62		59.5	20-140			†

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B361310 - SW-846 3546											
LCS (B361310-BS1)				Prepared: 12/20/23 Analyzed: 12/22/23							
2,4-Dichlorophenol	1.26	0.33	mg/Kg wet	1.62		77.6	30-130				
Diethylphthalate	1.34	0.33	mg/Kg wet	1.62		82.6	40-140				
2,4-Dimethylphenol	1.08	0.33	mg/Kg wet	1.62		66.8	30-130				
Dimethylphthalate	1.25	0.33	mg/Kg wet	1.62		77.2	40-140				
4,6-Dinitro-2-methylphenol	1.49	0.33	mg/Kg wet	1.62		92.2	30-130				
2,4-Dinitrophenol	1.14	0.64	mg/Kg wet	1.62		70.3	30-130				
2,4-Dinitrotoluene	1.35	0.33	mg/Kg wet	1.62		83.3	40-140				
2,6-Dinitrotoluene	1.30	0.33	mg/Kg wet	1.62		80.1	40-140				
Di-n-octylphthalate	1.22	0.33	mg/Kg wet	1.62		75.4	40-140				
Fluoranthene	1.22	0.17	mg/Kg wet	1.62		75.7	40-140				
Fluorene	1.31	0.17	mg/Kg wet	1.62		80.9	40-140				
Hexachlorobenzene	1.26	0.33	mg/Kg wet	1.62		77.6	40-140				
Hexachlorobutadiene	1.22	0.33	mg/Kg wet	1.62		75.4	40-140				
Hexachlorocyclopentadiene	0.832	0.33	mg/Kg wet	1.62		51.4	40-140				
Hexachloroethane	1.12	0.33	mg/Kg wet	1.62		69.2	40-140				
Indeno(1,2,3-cd)pyrene	1.47	0.17	mg/Kg wet	1.62		90.6	40-140				
Isophorone	1.44	0.33	mg/Kg wet	1.62		89.0	40-140				
2-Methylnaphthalene	1.18	0.17	mg/Kg wet	1.62		72.8	40-140				
2-Methylphenol	1.23	0.33	mg/Kg wet	1.62		75.9	30-130				
3/4-Methylphenol	1.21	0.33	mg/Kg wet	1.62		74.9	30-130				
Naphthalene	1.24	0.17	mg/Kg wet	1.62		76.4	40-140				
2-Nitroaniline	1.39	0.33	mg/Kg wet	1.62		85.6	40-140				
3-Nitroaniline	0.998	0.33	mg/Kg wet	1.62		61.7	30-140				†
4-Nitroaniline	1.21	0.33	mg/Kg wet	1.62		74.6	40-140				
Nitrobenzene	1.38	0.33	mg/Kg wet	1.62		85.5	40-140				
2-Nitrophenol	1.34	0.33	mg/Kg wet	1.62		82.8	30-130				
4-Nitrophenol	1.63	0.64	mg/Kg wet	1.62		101	30-130			V-06	
N-Nitrosodiphenylamine/Diphenylamine	1.44	0.33	mg/Kg wet	1.62		88.8	40-140				
N-Nitrosodi-n-propylamine	1.32	0.33	mg/Kg wet	1.62		81.5	40-140				
Pentachlorophenol	1.06	0.33	mg/Kg wet	1.62		65.6	30-130				
Phenanthrene	1.34	0.17	mg/Kg wet	1.62		83.1	40-140				
Phenol	1.17	0.33	mg/Kg wet	1.62		72.5	30-130				
Pyrene	1.14	0.17	mg/Kg wet	1.62		70.3	40-140				
1,2,4,5-Tetrachlorobenzene	1.20	0.33	mg/Kg wet	1.62		74.2	40-140				
2,4,5-Trichlorophenol	1.26	0.33	mg/Kg wet	1.62		77.8	30-130				
2,4,6-Trichlorophenol	1.23	0.33	mg/Kg wet	1.62		76.0	30-130				
Surrogate: 2-Fluorophenol	*4.40*		mg/Kg wet	6.47		68.0	30-130				
Surrogate: Phenol-d6	*4.49*		mg/Kg wet	6.47		69.4	30-130				
Surrogate: Nitrobenzene-d5	*2.86*		mg/Kg wet	3.24		88.5	30-130				
Surrogate: 2-Fluorobiphenyl	*2.67*		mg/Kg wet	3.24		82.4	30-130				
Surrogate: 2,4,6-Tribromophenol	*5.04*		mg/Kg wet	6.47		77.9	30-130				
Surrogate: p-Terphenyl-d14	*2.49*		mg/Kg wet	3.24		76.9	30-130				

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361310 - SW-846 3546										
LCS Dup (B361310-BSD1)				Prepared: 12/20/23 Analyzed: 12/22/23						
Atrazine	1.63	0.66	mg/Kg wet	1.65		98.9	40-140	1.40	30	V-06
Benzaldehyde	0.750	0.34	mg/Kg wet	1.65		45.4	40-140	1.78	20	V-34
Biphenyl	1.33	0.66	mg/Kg wet	1.65		80.3	40-140	7.22	20	
Caprolactam	1.62	0.34	mg/Kg wet	1.65		98.0	40-140	3.92	20	V-06
Acenaphthene	1.30	0.17	mg/Kg wet	1.65		78.8	40-140	2.83	30	
Acenaphthylene	1.35	0.17	mg/Kg wet	1.65		81.5	40-140	4.75	30	
Acetophenone	1.33	0.34	mg/Kg wet	1.65		80.8	40-140	8.39	30	
Anthracene	1.39	0.17	mg/Kg wet	1.65		84.0	40-140	12.9	30	
Benzo(a)anthracene	1.40	0.17	mg/Kg wet	1.65		85.1	40-140	7.32	30	
Benzo(a)pyrene	1.40	0.17	mg/Kg wet	1.65		84.8	40-140	5.36	30	
Benzo(b)fluoranthene	1.35	0.17	mg/Kg wet	1.65		81.8	40-140	9.28	30	
Benzo(g,h,i)perylene	1.46	0.17	mg/Kg wet	1.65		88.5	40-140	8.40	30	
Benzo(k)fluoranthene	1.42	0.17	mg/Kg wet	1.65		86.0	40-140	7.14	30	
Bis(2-chloroethoxy)methane	1.37	0.34	mg/Kg wet	1.65		83.1	40-140	0.276	30	
Bis(2-chloroethyl)ether	1.36	0.34	mg/Kg wet	1.65		82.7	40-140	5.13	30	
Bis(2-chloroisopropyl)ether	1.78	0.34	mg/Kg wet	1.65		108	40-140	7.23	30	
Bis(2-Ethylhexyl)phthalate	1.54	0.34	mg/Kg wet	1.65		93.2	40-140	9.30	30	
4-Bromophenylphenylether	1.31	0.34	mg/Kg wet	1.65		79.4	40-140	6.34	30	
Butylbenzylphthalate	1.36	0.34	mg/Kg wet	1.65		82.4	40-140	15.6	30	
Carbazole	1.42	0.17	mg/Kg wet	1.65		85.8	40-140	13.9	30	
4-Chloroaniline	0.778	0.65	mg/Kg wet	1.65		47.1	10-140	1.75	30	†
4-Chloro-3-methylphenol	1.35	0.65	mg/Kg wet	1.65		81.8	30-130	4.16	30	
2-Chloronaphthalene	1.26	0.34	mg/Kg wet	1.65		76.3	40-140	12.3	30	
2-Chlorophenol	1.23	0.34	mg/Kg wet	1.65		74.8	30-130	4.53	30	
4-Chlorophenylphenylether	1.36	0.34	mg/Kg wet	1.65		82.7	40-140	5.38	30	
Chrysene	1.39	0.17	mg/Kg wet	1.65		84.2	40-140	2.08	30	
Dibenz(a,h)anthracene	1.41	0.17	mg/Kg wet	1.65		85.2	40-140	3.12	30	
Dibenzofuran	1.36	0.34	mg/Kg wet	1.65		82.3	40-140	1.99	30	
Di-n-butylphthalate	1.48	0.34	mg/Kg wet	1.65		89.5	40-140	16.1	30	
3,3-Dichlorobenzidine	1.06	0.17	mg/Kg wet	1.65		64.3	20-140	9.78	50	† ‡
2,4-Dichlorophenol	1.33	0.34	mg/Kg wet	1.65		80.7	30-130	5.90	30	
Diethylphthalate	1.38	0.34	mg/Kg wet	1.65		83.4	40-140	2.97	30	
2,4-Dimethylphenol	1.10	0.34	mg/Kg wet	1.65		66.6	30-130	1.63	30	
Dimethylphthalate	1.34	0.34	mg/Kg wet	1.65		81.3	40-140	7.08	30	
4,6-Dinitro-2-methylphenol	1.58	0.34	mg/Kg wet	1.65		95.7	30-130	5.71	30	
2,4-Dinitrophenol	1.18	0.65	mg/Kg wet	1.65		71.4	30-130	3.54	30	
2,4-Dinitrotoluene	1.37	0.34	mg/Kg wet	1.65		83.1	40-140	1.74	30	
2,6-Dinitrotoluene	1.37	0.34	mg/Kg wet	1.65		83.1	40-140	5.66	30	
Di-n-octylphthalate	1.15	0.34	mg/Kg wet	1.65		69.4	40-140	6.25	30	
Fluoranthene	1.41	0.17	mg/Kg wet	1.65		85.6	40-140	14.3	30	
Fluorene	1.34	0.17	mg/Kg wet	1.65		81.0	40-140	2.13	30	
Hexachlorobenzene	1.37	0.34	mg/Kg wet	1.65		83.2	40-140	8.95	30	
Hexachlorobutadiene	1.25	0.34	mg/Kg wet	1.65		75.7	40-140	2.41	30	
Hexachlorocyclopentadiene	0.897	0.34	mg/Kg wet	1.65		54.3	40-140	7.48	30	
Hexachloroethane	1.19	0.34	mg/Kg wet	1.65		72.1	40-140	5.95	30	
Indeno(1,2,3-cd)pyrene	1.47	0.17	mg/Kg wet	1.65		89.0	40-140	0.224	30	
Isophorone	1.42	0.34	mg/Kg wet	1.65		86.0	40-140	1.40	30	
2-Methylnaphthalene	1.24	0.17	mg/Kg wet	1.65		75.4	40-140	5.44	30	
2-Methylphenol	1.29	0.34	mg/Kg wet	1.65		78.2	30-130	4.89	30	
3/4-Methylphenol	1.32	0.34	mg/Kg wet	1.65		80.0	30-130	8.52	30	
Naphthalene	1.29	0.17	mg/Kg wet	1.65		78.2	40-140	4.29	30	
2-Nitroaniline	1.49	0.34	mg/Kg wet	1.65		90.1	40-140	7.06	30	

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B361310 - SW-846 3546												
LCS Dup (B361310-BSD1)				Prepared: 12/20/23 Analyzed: 12/22/23								
3-Nitroaniline	0.996	0.34	mg/Kg wet	1.65		60.4		30-140	0.235	30		†
4-Nitroaniline	1.23	0.34	mg/Kg wet	1.65		74.8		40-140	2.17	30		
Nitrobenzene	1.38	0.34	mg/Kg wet	1.65		83.9		40-140	0.0488	30		
2-Nitrophenol	1.31	0.34	mg/Kg wet	1.65		79.2		30-130	2.48	30		
4-Nitrophenol	1.69	0.65	mg/Kg wet	1.65		103		30-130	3.75	50	V-06	‡
N-Nitrosodiphenylamine/Diphenylamine	1.57	0.34	mg/Kg wet	1.65		95.4		40-140	9.10	30		
N-Nitrosodi-n-propylamine	1.41	0.34	mg/Kg wet	1.65		85.2		40-140	6.47	30		
Pentachlorophenol	1.16	0.34	mg/Kg wet	1.65		70.4		30-130	8.90	30		
Phenanthrene	1.37	0.17	mg/Kg wet	1.65		83.0		40-140	1.84	30		
Phenol	1.24	0.34	mg/Kg wet	1.65		75.3		30-130	5.80	30		
Pyrene	1.26	0.17	mg/Kg wet	1.65		76.1		40-140	9.88	30		
1,2,4,5-Tetrachlorobenzene	1.31	0.34	mg/Kg wet	1.65		79.2		40-140	8.48	30		
2,4,5-Trichlorophenol	1.34	0.34	mg/Kg wet	1.65		80.9		30-130	5.84	30		
2,4,6-Trichlorophenol	1.32	0.34	mg/Kg wet	1.65		79.8		30-130	6.94	30		
Surrogate: 2-Fluorophenol	*4.50*		mg/Kg wet	6.60		68.1		30-130				
Surrogate: Phenol-d6	*4.63*		mg/Kg wet	6.60		70.2		30-130				
Surrogate: Nitrobenzene-d5	*2.81*		mg/Kg wet	3.30		85.2		30-130				
Surrogate: 2-Fluorobiphenyl	*2.85*		mg/Kg wet	3.30		86.4		30-130				
Surrogate: 2,4,6-Tribromophenol	*5.06*		mg/Kg wet	6.60		76.7		30-130				
Surrogate: p-Terphenyl-d14	*2.74*		mg/Kg wet	3.30		82.9		30-130				
Matrix Spike (B361310-MS1)	**Source: 23L2638-04**			Prepared: 12/20/23 Analyzed: 12/26/23								
Atrazine	3.60	2.0	mg/Kg dry	5.04	ND	71.3		40-140				
Benzaldehyde	2.00	1.0	mg/Kg dry	5.04	ND	**39.6**	*	40-140			MS-09, V-34	
Biphenyl	3.30	2.0	mg/Kg dry	5.04	ND	65.4		40-140				
Caprolactam	3.88	1.0	mg/Kg dry	5.04	ND	76.8		40-140			V-06	
Acenaphthene	3.19	0.51	mg/Kg dry	5.04	ND	63.2		40-140				
Acenaphthylene	3.31	0.51	mg/Kg dry	5.04	ND	65.6		40-140				
Acetophenone	3.23	1.0	mg/Kg dry	5.04	ND	64.1		40-140				
Anthracene	3.44	0.51	mg/Kg dry	5.04	ND	68.2		40-140				
Benzo(a)anthracene	3.40	0.51	mg/Kg dry	5.04	ND	67.4		40-140				
Benzo(a)pyrene	3.33	0.51	mg/Kg dry	5.04	ND	66.1		40-140				
Benzo(b)fluoranthene	3.24	0.51	mg/Kg dry	5.04	ND	64.2		40-140				
Benzo(g,h,i)perylene	3.98	0.51	mg/Kg dry	5.04	ND	78.9		40-140				
Benzo(k)fluoranthene	3.56	0.51	mg/Kg dry	5.04	ND	70.7		40-140				
Bis(2-chloroethoxy)methane	3.39	1.0	mg/Kg dry	5.04	ND	67.2		40-140				
Bis(2-chloroethyl)ether	3.38	1.0	mg/Kg dry	5.04	ND	67.0		40-140				
Bis(2-chloroisopropyl)ether	4.58	1.0	mg/Kg dry	5.04	ND	90.9		40-140				
Bis(2-Ethylhexyl)phthalate	3.79	1.0	mg/Kg dry	5.04	ND	75.2		40-140				
4-Bromophenylphenylether	3.22	1.0	mg/Kg dry	5.04	ND	63.8		40-140				
Butylbenzylphthalate	3.50	1.0	mg/Kg dry	5.04	ND	69.4		40-140				
Carbazole	3.56	0.51	mg/Kg dry	5.04	ND	70.6		40-140				
4-Chloroaniline	1.27	2.0	mg/Kg dry	5.04	ND	**25.2**	*	40-140			J, MS-09	
4-Chloro-3-methylphenol	3.23	2.0	mg/Kg dry	5.04	ND	64.0		30-130				
2-Chloronaphthalene	3.03	1.0	mg/Kg dry	5.04	ND	60.0		40-140				
2-Chlorophenol	2.96	1.0	mg/Kg dry	5.04	ND	58.6		30-130				
4-Chlorophenylphenylether	3.22	1.0	mg/Kg dry	5.04	ND	63.9		40-140				
Chrysene	3.38	0.51	mg/Kg dry	5.04	ND	67.0		40-140				
Dibenz(a,h)anthracene	3.56	0.51	mg/Kg dry	5.04	ND	70.7		40-140				
Dibenzofuran	3.38	1.0	mg/Kg dry	5.04	ND	67.0		40-140				
Di-n-butylphthalate	3.55	1.0	mg/Kg dry	5.04	ND	70.4		40-140				
3,3-Dichlorobenzidine	0.143	0.51	mg/Kg dry	5.04	ND	**2.84**	*	40-140			J, MS-09, R-06	

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B361310 - SW-846 3546											
Matrix Spike (B361310-MS1)		**Source: 23L2638-04**		Prepared: 12/20/23 Analyzed: 12/26/23							
2,4-Dichlorophenol	3.29	1.0	mg/Kg dry	5.04	ND	65.2		30-130			
Diethylphthalate	3.33	1.0	mg/Kg dry	5.04	ND	66.0		40-140			
2,4-Dimethylphenol	2.69	1.0	mg/Kg dry	5.04	ND	53.3		30-130			
Dimethylphthalate	3.32	1.0	mg/Kg dry	5.04	ND	65.9		40-140			
4,6-Dinitro-2-methylphenol	3.68	1.0	mg/Kg dry	5.04	ND	73.0		30-130			
2,4-Dinitrophenol	2.61	2.0	mg/Kg dry	5.04	ND	51.7		30-130			
2,4-Dinitrotoluene	3.38	1.0	mg/Kg dry	5.04	ND	67.0		40-140			
2,6-Dinitrotoluene	3.35	1.0	mg/Kg dry	5.04	ND	66.4		40-140			
Di-n-octylphthalate	3.46	1.0	mg/Kg dry	5.04	ND	68.6		40-140			
Fluoranthene	3.68	0.51	mg/Kg dry	5.04	ND	73.0		40-140			
Fluorene	3.25	0.51	mg/Kg dry	5.04	ND	64.4		40-140			
Hexachlorobenzene	3.37	1.0	mg/Kg dry	5.04	ND	66.8		40-140			
Hexachlorobutadiene	3.15	1.0	mg/Kg dry	5.04	ND	62.5		40-140			
Hexachlorocyclopentadiene	ND	1.0	mg/Kg dry	5.04	ND		*	30-130			MS-09
Hexachloroethane	2.49	1.0	mg/Kg dry	5.04	ND	49.3		40-140			
Indeno(1,2,3-cd)pyrene	3.53	0.51	mg/Kg dry	5.04	ND	70.0		40-140			
Isophorone	3.53	1.0	mg/Kg dry	5.04	ND	69.9		40-140			
2-Methylnaphthalene	3.15	0.51	mg/Kg dry	5.04	ND	62.4		40-140			
2-Methylphenol	3.14	1.0	mg/Kg dry	5.04	ND	62.3		30-130			
3/4-Methylphenol	3.25	1.0	mg/Kg dry	5.04	ND	64.5		30-130			
Naphthalene	3.31	0.51	mg/Kg dry	5.04	ND	65.7		40-140			
2-Nitroaniline	3.89	1.0	mg/Kg dry	5.04	ND	77.2		40-140			
3-Nitroaniline	1.86	1.0	mg/Kg dry	5.04	ND	**37.0**	*	40-140			MS-22
4-Nitroaniline	2.37	1.0	mg/Kg dry	5.04	ND	47.0		40-140			R-06
Nitrobenzene	3.46	1.0	mg/Kg dry	5.04	ND	68.5		40-140			
2-Nitrophenol	3.18	1.0	mg/Kg dry	5.04	ND	63.1		30-130			
4-Nitrophenol	4.34	2.0	mg/Kg dry	5.04	ND	86.1		30-130			
N-Nitrosodiphenylamine/Diphenylamine	4.05	1.0	mg/Kg dry	5.04	ND	80.4		40-140			
N-Nitrosodi-n-propylamine	3.48	1.0	mg/Kg dry	5.04	ND	69.1		40-140			
Pentachlorophenol	1.56	1.0	mg/Kg dry	5.04	ND	30.9		30-130			V-05
Phenanthrene	3.56	0.51	mg/Kg dry	5.04	ND	70.6		40-140			
Phenol	3.12	1.0	mg/Kg dry	5.04	ND	61.9		30-130			
Pyrene	3.28	0.51	mg/Kg dry	5.04	ND	65.1		40-140			
1,2,4,5-Tetrachlorobenzene	3.23	1.0	mg/Kg dry	5.04	ND	64.1		40-140			
2,4,5-Trichlorophenol	3.29	1.0	mg/Kg dry	5.04	ND	65.3		30-130			
2,4,6-Trichlorophenol	3.15	1.0	mg/Kg dry	5.04	ND	62.4		30-130			
Surrogate: 2-Fluorophenol	*22.0*		mg/Kg dry	40.3		54.5		30-130			
Surrogate: Phenol-d6	*23.3*		mg/Kg dry	40.3		57.6		30-130			
Surrogate: Nitrobenzene-d5	*14.3*		mg/Kg dry	20.2		70.7		30-130			
Surrogate: 2-Fluorobiphenyl	*14.8*		mg/Kg dry	20.2		73.4		30-130			
Surrogate: 2,4,6-Tribromophenol	*23.2*		mg/Kg dry	40.3		57.5		30-130			
Surrogate: p-Terphenyl-d14	*14.5*		mg/Kg dry	20.2		71.8		30-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B361310 - SW-846 3546											
Matrix Spike Dup (B361310-MSD1)	**Source: 23L2638-04**			Prepared: 12/20/23 Analyzed: 12/26/23							
Atrazine	3.62	2.0	mg/Kg dry	5.04	ND	71.7		40-140	0.504	30	
Benzaldehyde	1.93	1.0	mg/Kg dry	5.04	ND	**38.2**	*	40-140	3.50	30	V-34, MS-09
Biphenyl	3.38	2.0	mg/Kg dry	5.04	ND	67.0		40-140	2.48	30	
Caprolactam	3.91	1.0	mg/Kg dry	5.04	ND	77.6		40-140	0.933	30	V-06
Acenaphthene	3.12	0.51	mg/Kg dry	5.04	ND	61.9		40-140	2.08	30	
Acenaphthylene	3.21	0.51	mg/Kg dry	5.04	ND	63.7		40-140	2.82	30	
Acetophenone	3.26	1.0	mg/Kg dry	5.04	ND	64.6		40-140	0.715	30	
Anthracene	3.31	0.51	mg/Kg dry	5.04	ND	65.6		40-140	3.86	30	
Benzo(a)anthracene	3.36	0.51	mg/Kg dry	5.04	ND	66.6		40-140	1.10	30	
Benzo(a)pyrene	3.28	0.51	mg/Kg dry	5.04	ND	65.1		40-140	1.52	30	
Benzo(b)fluoranthene	3.07	0.51	mg/Kg dry	5.04	ND	60.8		40-140	5.41	30	
Benzo(g,h,i)perylene	3.64	0.51	mg/Kg dry	5.04	ND	72.1		40-140	9.08	30	
Benzo(k)fluoranthene	3.38	0.51	mg/Kg dry	5.04	ND	67.0		40-140	5.32	30	
Bis(2-chloroethoxy)methane	3.33	1.0	mg/Kg dry	5.04	ND	66.1		40-140	1.65	30	
Bis(2-chloroethyl)ether	3.36	1.0	mg/Kg dry	5.04	ND	66.5		40-140	0.719	30	
Bis(2-chloroisopropyl)ether	4.55	1.0	mg/Kg dry	5.04	ND	90.2		40-140	0.751	30	
Bis(2-Ethylhexyl)phthalate	3.81	1.0	mg/Kg dry	5.04	ND	75.6		40-140	0.504	30	
4-Bromophenylphenylether	3.18	1.0	mg/Kg dry	5.04	ND	63.0		40-140	1.26	30	
Butylbenzylphthalate	3.65	1.0	mg/Kg dry	5.04	ND	72.3		40-140	4.09	30	
Carbazole	3.49	0.51	mg/Kg dry	5.04	ND	69.3		40-140	1.94	30	
4-Chloroaniline	1.38	2.0	mg/Kg dry	5.04	ND	**27.4**	*	40-140	8.13	30	J, MS-09
4-Chloro-3-methylphenol	3.27	2.0	mg/Kg dry	5.04	ND	64.8		30-130	1.24	30	
2-Chloronaphthalene	3.09	1.0	mg/Kg dry	5.04	ND	61.2		40-140	1.98	30	
2-Chlorophenol	2.96	1.0	mg/Kg dry	5.04	ND	58.6		30-130	0.0341	30	
4-Chlorophenylphenylether	3.23	1.0	mg/Kg dry	5.04	ND	64.0		40-140	0.0625	30	
Chrysene	3.36	0.51	mg/Kg dry	5.04	ND	66.7		40-140	0.479	30	
Dibenz(a,h)anthracene	3.22	0.51	mg/Kg dry	5.04	ND	63.8		40-140	10.2	30	
Dibenzofuran	3.35	1.0	mg/Kg dry	5.04	ND	66.5		40-140	0.659	30	
Di-n-butylphthalate	3.47	1.0	mg/Kg dry	5.04	ND	68.7		40-140	2.36	30	
3,3-Dichlorobenzidine	0.778	0.51	mg/Kg dry	5.04	ND	**15.4**	*	40-140	**138**	* 30	MS-09, R-06
2,4-Dichlorophenol	3.19	1.0	mg/Kg dry	5.04	ND	63.2		30-130	3.05	30	
Diethylphthalate	3.36	1.0	mg/Kg dry	5.04	ND	66.6		40-140	0.965	30	
2,4-Dimethylphenol	2.61	1.0	mg/Kg dry	5.04	ND	51.8		30-130	2.78	30	
Dimethylphthalate	3.31	1.0	mg/Kg dry	5.04	ND	65.7		40-140	0.365	30	
4,6-Dinitro-2-methylphenol	3.33	1.0	mg/Kg dry	5.04	ND	65.9		30-130	10.1	30	
2,4-Dinitrophenol	2.46	2.0	mg/Kg dry	5.04	ND	48.8		30-130	5.77	30	
2,4-Dinitrotoluene	3.27	1.0	mg/Kg dry	5.04	ND	64.8		40-140	3.40	30	
2,6-Dinitrotoluene	3.24	1.0	mg/Kg dry	5.04	ND	64.2		40-140	3.49	30	
Di-n-octylphthalate	3.25	1.0	mg/Kg dry	5.04	ND	64.5		40-140	6.16	30	
Fluoranthene	3.62	0.51	mg/Kg dry	5.04	ND	71.8		40-140	1.71	30	
Fluorene	3.25	0.51	mg/Kg dry	5.04	ND	64.5		40-140	0.0621	30	
Hexachlorobenzene	3.21	1.0	mg/Kg dry	5.04	ND	63.6		40-140	4.97	30	
Hexachlorobutadiene	3.02	1.0	mg/Kg dry	5.04	ND	60.0		40-140	4.15	30	
Hexachlorocyclopentadiene	ND	1.0	mg/Kg dry	5.04	ND		*	30-130	NC	30	MS-09
Hexachloroethane	2.19	1.0	mg/Kg dry	5.04	ND	43.4		40-140	12.8	30	
Indeno(1,2,3-cd)pyrene	3.49	0.51	mg/Kg dry	5.04	ND	69.2		40-140	1.06	30	
Isophorone	3.44	1.0	mg/Kg dry	5.04	ND	68.2		40-140	2.55	30	
2-Methylnaphthalene	3.31	0.51	mg/Kg dry	5.04	ND	65.7		40-140	5.18	30	
2-Methylphenol	3.08	1.0	mg/Kg dry	5.04	ND	61.0		30-130	2.14	30	
3/4-Methylphenol	3.20	1.0	mg/Kg dry	5.04	ND	63.4		30-130	1.72	30	
Naphthalene	3.23	0.51	mg/Kg dry	5.04	ND	64.1		40-140	2.34	30	
2-Nitroaniline	4.05	1.0	mg/Kg dry	5.04	ND	80.2		40-140	3.89	30	

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD		RPD Limit	Notes
Batch B361310 - SW-846 3546												
Matrix Spike Dup (B361310-MSD1)	**Source: 23L2638-04**			Prepared: 12/20/23 Analyzed: 12/26/23								
3-Nitroaniline	2.13	1.0	mg/Kg dry	5.04	ND	42.3		40-140	13.5		30	
4-Nitroaniline	3.41	1.0	mg/Kg dry	5.04	ND	67.7		40-140	**36.1**	*	30	R-06
Nitrobenzene	3.30	1.0	mg/Kg dry	5.04	ND	65.5		40-140	4.51		30	
2-Nitrophenol	3.01	1.0	mg/Kg dry	5.04	ND	59.8		30-130	5.50		30	
4-Nitrophenol	4.23	2.0	mg/Kg dry	5.04	ND	84.0		30-130	2.52		30	
N-Nitrosodiphenylamine/Diphenylamine	3.82	1.0	mg/Kg dry	5.04	ND	75.7		40-140	6.07		30	
N-Nitrosodi-n-propylamine	3.49	1.0	mg/Kg dry	5.04	ND	69.2		40-140	0.203		30	
Pentachlorophenol	1.47	1.0	mg/Kg dry	5.04	ND	**29.1**	*	30-130	5.99		30	MS-22, V-05
Phenanthrene	3.47	0.51	mg/Kg dry	5.04	ND	68.8		40-140	2.61		30	
Phenol	3.10	1.0	mg/Kg dry	5.04	ND	61.5		30-130	0.583		30	
Pyrene	3.21	0.51	mg/Kg dry	5.04	ND	63.7		40-140	2.05		30	
1,2,4,5-Tetrachlorobenzene	3.20	1.0	mg/Kg dry	5.04	ND	63.4		40-140	1.04		30	
2,4,5-Trichlorophenol	3.32	1.0	mg/Kg dry	5.04	ND	65.8		30-130	0.763		30	
2,4,6-Trichlorophenol	3.24	1.0	mg/Kg dry	5.04	ND	64.2		30-130	2.81		30	
Surrogate: 2-Fluorophenol	*21.8*		mg/Kg dry	40.3		54.1		30-130				
Surrogate: Phenol-d6	*23.1*		mg/Kg dry	40.3		57.2		30-130				
Surrogate: Nitrobenzene-d5	*13.7*		mg/Kg dry	20.2		67.9		30-130				
Surrogate: 2-Fluorobiphenyl	*15.3*		mg/Kg dry	20.2		75.6		30-130				
Surrogate: 2,4,6-Tribromophenol	*22.9*		mg/Kg dry	40.3		56.7		30-130				
Surrogate: p-Terphenyl-d14	*13.7*		mg/Kg dry	20.2		68.1		30-130				
Batch B361356 - SW-846 3510C												
Blank (B361356-BLK1)				Prepared: 12/20/23 Analyzed: 12/22/23								
Atrazine	ND	20	µg/L									
Benzaldehyde	ND	10	µg/L									
Biphenyl	ND	20	µg/L									
Caprolactam	ND	10	µg/L									L-04
Acenaphthene	ND	5.0	µg/L									
Acenaphthylene	ND	5.0	µg/L									
Acetophenone	ND	10	µg/L									
Anthracene	ND	5.0	µg/L									
Benzo(a)anthracene	ND	5.0	µg/L									
Benzo(a)pyrene	ND	5.0	µg/L									
Benzo(b)fluoranthene	ND	5.0	µg/L									
Benzo(g,h,i)perylene	ND	5.0	µg/L									
Benzo(k)fluoranthene	ND	5.0	µg/L									
Bis(2-chloroethoxy)methane	ND	10	µg/L									
Bis(2-chloroethyl)ether	ND	10	µg/L									
Bis(2-chloroisopropyl)ether	ND	10	µg/L									
Bis(2-Ethylhexyl)phthalate	ND	10	µg/L									
4-Bromophenylphenylether	ND	10	µg/L									
Butylbenzylphthalate	ND	10	µg/L									
Carbazole	ND	10	µg/L									
4-Chloroaniline	ND	10	µg/L									
4-Chloro-3-methylphenol	ND	10	µg/L									
2-Chloronaphthalene	ND	10	µg/L									
2-Chlorophenol	ND	10	µg/L									
4-Chlorophenylphenylether	ND	10	µg/L									
Chrysene	ND	5.0	µg/L									
Dibenz(a,h)anthracene	ND	5.0	µg/L									
Dibenzofuran	ND	5.0	µg/L									
Di-n-butylphthalate	ND	10	µg/L									

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361356 - SW-846 3510C										
Blank (B361356-BLK1)				Prepared: 12/20/23 Analyzed: 12/22/23						
3,3-Dichlorobenzidine	ND	10	µg/L							
2,4-Dichlorophenol	ND	10	µg/L							
Diethylphthalate	ND	10	µg/L							
2,4-Dimethylphenol	ND	10	µg/L							
Dimethylphthalate	ND	10	µg/L							
4,6-Dinitro-2-methylphenol	ND	20	µg/L							
2,4-Dinitrophenol	ND	10	µg/L							V-04
2,4-Dinitrotoluene	ND	10	µg/L							
2,6-Dinitrotoluene	ND	10	µg/L							
Di-n-octylphthalate	ND	10	µg/L							V-04
Fluoranthene	ND	5.0	µg/L							
Fluorene	ND	5.0	µg/L							
Hexachlorobenzene	ND	10	µg/L							
Hexachlorobutadiene	ND	10	µg/L							
Hexachlorocyclopentadiene	ND	10	µg/L							V-05
Hexachloroethane	ND	10	µg/L							
Indeno(1,2,3-cd)pyrene	ND	5.0	µg/L							
Isophorone	ND	10	µg/L							
2-Methylnaphthalene	ND	5.0	µg/L							
2-Methylphenol	ND	10	µg/L							
3/4-Methylphenol	ND	10	µg/L							
Naphthalene	ND	5.0	µg/L							
2-Nitroaniline	ND	10	µg/L							
3-Nitroaniline	ND	10	µg/L							
4-Nitroaniline	ND	10	µg/L							
Nitrobenzene	ND	10	µg/L							
2-Nitrophenol	ND	10	µg/L							
4-Nitrophenol	ND	10	µg/L							
N-Nitrosodiphenylamine/Diphenylamine	ND	10	µg/L							
N-Nitrosodi-n-propylamine	ND	10	µg/L							
Pentachlorophenol	ND	10	µg/L							
Phenanthrene	ND	5.0	µg/L							
Phenol	ND	10	µg/L							
Pyrene	ND	5.0	µg/L							
1,2,4,5-Tetrachlorobenzene	ND	10	µg/L							
2,4,5-Trichlorophenol	ND	10	µg/L							
2,4,6-Trichlorophenol	ND	10	µg/L							
Surrogate: 2-Fluorophenol	*209*		µg/L	400		52.2	15-110			
Surrogate: Phenol-d6	*152*		µg/L	400		38.0	15-110			
Surrogate: Nitrobenzene-d5	*153*		µg/L	200		76.4	30-130			
Surrogate: 2-Fluorobiphenyl	*150*		µg/L	200		75.0	30-130			
Surrogate: 2,4,6-Tribromophenol	*361*		µg/L	400		90.2	15-110			
Surrogate: p-Terphenyl-d14	*172*		µg/L	200		85.9	30-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B361356 - SW-846 3510C												
LCS (B361356-BS1)				Prepared: 12/20/23 Analyzed: 12/22/23								
Atrazine	101	20	µg/L	100		101		40-140				
Benzaldehyde	55.8	10	µg/L	100		55.8		40-140				
Biphenyl	81.8	20	µg/L	100		81.8		40-140				
Caprolactam	28.1	10	µg/L	100		**28.1**	*	40-140			L-04	
Acenaphthene	80.9	5.0	µg/L	100		80.9		40-140				
Acenaphthylene	86.2	5.0	µg/L	100		86.2		40-140				
Acetophenone	90.8	10	µg/L	100		90.8		40-140				
Anthracene	86.9	5.0	µg/L	100		86.9		40-140				
Benzo(a)anthracene	85.5	5.0	µg/L	100		85.5		40-140				
Benzo(a)pyrene	86.1	5.0	µg/L	100		86.1		40-140				
Benzo(b)fluoranthene	84.5	5.0	µg/L	100		84.5		40-140				
Benzo(g,h,i)perylene	90.4	5.0	µg/L	100		90.4		40-140				
Benzo(k)fluoranthene	90.0	5.0	µg/L	100		90.0		40-140				
Bis(2-chloroethoxy)methane	91.0	10	µg/L	100		91.0		40-140				
Bis(2-chloroethyl)ether	88.7	10	µg/L	100		88.7		40-140				
Bis(2-chloroisopropyl)ether	98.8	10	µg/L	100		98.8		40-140				
Bis(2-Ethylhexyl)phthalate	92.2	10	µg/L	100		92.2		40-140				
4-Bromophenylphenylether	85.4	10	µg/L	100		85.4		40-140				
Butylbenzylphthalate	95.0	10	µg/L	100		95.0		40-140				
Carbazole	91.0	10	µg/L	100		91.0		40-140				
4-Chloroaniline	88.6	10	µg/L	100		88.6		40-140				
4-Chloro-3-methylphenol	95.2	10	µg/L	100		95.2		30-130				
2-Chloronaphthalene	69.4	10	µg/L	100		69.4		40-140				
2-Chlorophenol	81.2	10	µg/L	100		81.2		30-130				
4-Chlorophenylphenylether	88.7	10	µg/L	100		88.7		40-140				
Chrysene	82.6	5.0	µg/L	100		82.6		40-140				
Dibenz(a,h)anthracene	89.0	5.0	µg/L	100		89.0		40-140				
Dibenzofuran	87.5	5.0	µg/L	100		87.5		40-140				
Di-n-butylphthalate	95.6	10	µg/L	100		95.6		40-140				
3,3-Dichlorobenzidine	112	10	µg/L	100		112		40-140				
2,4-Dichlorophenol	87.0	10	µg/L	100		87.0		30-130				
Diethylphthalate	94.2	10	µg/L	100		94.2		40-140				
2,4-Dimethylphenol	75.7	10	µg/L	100		75.7		30-130				
Dimethylphthalate	92.3	10	µg/L	100		92.3		40-140				
4,6-Dinitro-2-methylphenol	93.4	20	µg/L	100		93.4		30-130				
2,4-Dinitrophenol	87.7	10	µg/L	100		87.7		30-130			V-04	
2,4-Dinitrotoluene	93.6	10	µg/L	100		93.6		40-140				
2,6-Dinitrotoluene	96.3	10	µg/L	100		96.3		40-140				
Di-n-octylphthalate	85.3	10	µg/L	100		85.3		40-140			V-04	
Fluoranthene	89.4	5.0	µg/L	100		89.4		40-140				
Fluorene	88.4	5.0	µg/L	100		88.4		40-140				
Hexachlorobenzene	84.1	10	µg/L	100		84.1		40-140				
Hexachlorobutadiene	46.2	10	µg/L	100		46.2		40-140				
Hexachlorocyclopentadiene	45.2	10	µg/L	100		45.2		30-140			V-05	†
Hexachloroethane	43.1	10	µg/L	100		43.1		40-140				
Indeno(1,2,3-cd)pyrene	89.9	5.0	µg/L	100		89.9		40-140				
Isophorone	92.9	10	µg/L	100		92.9		40-140				
2-Methylnaphthalene	76.7	5.0	µg/L	100		76.7		40-140				
2-Methylphenol	82.7	10	µg/L	100		82.7		30-130				
3/4-Methylphenol	83.6	10	µg/L	100		83.6		30-130				
Naphthalene	64.1	5.0	µg/L	100		64.1		40-140				
2-Nitroaniline	89.2	10	µg/L	100		89.2		40-140				

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B361356 - SW-846 3510C											
LCS (B361356-BS1)				Prepared: 12/20/23 Analyzed: 12/22/23							
3-Nitroaniline	97.1	10	µg/L	100		97.1		40-140			
4-Nitroaniline	89.7	10	µg/L	100		89.7		40-140			
Nitrobenzene	77.6	10	µg/L	100		77.6		40-140			
2-Nitrophenol	76.3	10	µg/L	100		76.3		30-130			
4-Nitrophenol	63.4	10	µg/L	100		63.4		10-130			†
N-Nitrosodiphenylamine/Diphenylamine	99.7	10	µg/L	100		99.7		40-140			
N-Nitrosodi-n-propylamine	96.6	10	µg/L	100		96.6		40-140			
Pentachlorophenol	90.2	10	µg/L	100		90.2		30-130			
Phenanthrene	86.1	5.0	µg/L	100		86.1		40-140			
Phenol	45.2	10	µg/L	100		45.2		20-130			†
Pyrene	82.8	5.0	µg/L	100		82.8		40-140			
1,2,4,5-Tetrachlorobenzene	68.6	10	µg/L	100		68.6		40-140			
2,4,5-Trichlorophenol	86.6	10	µg/L	100		86.6		30-130			
2,4,6-Trichlorophenol	85.0	10	µg/L	100		85.0		30-130			
Surrogate: 2-Fluorophenol	*241*		µg/L	400		60.3		15-110			
Surrogate: Phenol-d6	*195*		µg/L	400		48.6		15-110			
Surrogate: Nitrobenzene-d5	*179*		µg/L	200		89.7		30-130			
Surrogate: 2-Fluorobiphenyl	*175*		µg/L	200		87.6		30-130			
Surrogate: 2,4,6-Tribromophenol	*426*		µg/L	400		106		15-110			
Surrogate: p-Terphenyl-d14	*192*		µg/L	200		96.1		30-130			
LCS Dup (B361356-BSD1)				Prepared: 12/20/23 Analyzed: 12/22/23							
Atrazine	98.1	20	µg/L	100		98.1		40-140	2.98	20	
Benzaldehyde	52.8	10	µg/L	100		52.8		40-140	5.34	20	
Biphenyl	80.4	20	µg/L	100		80.4		40-140	1.84	20	
Caprolactam	26.8	10	µg/L	100		**26.8**	*	40-140	4.85	20	L-04
Acenaphthene	81.2	5.0	µg/L	100		81.2		40-140	0.284	20	
Acenaphthylene	84.8	5.0	µg/L	100		84.8		40-140	1.72	20	
Acetophenone	82.6	10	µg/L	100		82.6		40-140	9.54	20	
Anthracene	86.4	5.0	µg/L	100		86.4		40-140	0.612	20	
Benzo(a)anthracene	85.6	5.0	µg/L	100		85.6		40-140	0.140	20	
Benzo(a)pyrene	85.7	5.0	µg/L	100		85.7		40-140	0.431	20	
Benzo(b)fluoranthene	84.8	5.0	µg/L	100		84.8		40-140	0.260	20	
Benzo(g,h,i)perylene	87.4	5.0	µg/L	100		87.4		40-140	3.40	20	
Benzo(k)fluoranthene	90.1	5.0	µg/L	100		90.1		40-140	0.0333	20	
Bis(2-chloroethoxy)methane	86.6	10	µg/L	100		86.6		40-140	4.92	20	
Bis(2-chloroethyl)ether	84.2	10	µg/L	100		84.2		40-140	5.25	20	
Bis(2-chloroisopropyl)ether	92.5	10	µg/L	100		92.5		40-140	6.53	20	
Bis(2-Ethylhexyl)phthalate	93.7	10	µg/L	100		93.7		40-140	1.53	20	
4-Bromophenylphenylether	84.4	10	µg/L	100		84.4		40-140	1.18	20	
Butylbenzylphthalate	95.7	10	µg/L	100		95.7		40-140	0.808	20	
Carbazole	90.1	10	µg/L	100		90.1		40-140	1.05	20	
4-Chloroaniline	83.0	10	µg/L	100		83.0		40-140	6.56	20	
4-Chloro-3-methylphenol	91.3	10	µg/L	100		91.3		30-130	4.19	20	
2-Chloronaphthalene	65.8	10	µg/L	100		65.8		40-140	5.28	20	
2-Chlorophenol	78.1	10	µg/L	100		78.1		30-130	3.93	20	
4-Chlorophenylphenylether	86.5	10	µg/L	100		86.5		40-140	2.49	20	
Chrysene	82.8	5.0	µg/L	100		82.8		40-140	0.206	20	
Dibenz(a,h)anthracene	85.5	5.0	µg/L	100		85.5		40-140	4.03	20	
Dibenzofuran	83.5	5.0	µg/L	100		83.5		40-140	4.69	20	
Di-n-butylphthalate	95.3	10	µg/L	100		95.3		40-140	0.283	20	
3,3-Dichlorobenzidine	110	10	µg/L	100		110		40-140	1.36	20	

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B361356 - SW-846 3510C											
LCS Dup (B361356-BSD1)				Prepared: 12/20/23 Analyzed: 12/22/23							
2,4-Dichlorophenol	83.7	10	µg/L	100		83.7	30-130	3.93	20		
Diethylphthalate	90.9	10	µg/L	100		90.9	40-140	3.59	20		
2,4-Dimethylphenol	72.1	10	µg/L	100		72.1	30-130	4.91	20		
Dimethylphthalate	87.6	10	µg/L	100		87.6	40-140	5.26	50		‡
4,6-Dinitro-2-methylphenol	91.6	20	µg/L	100		91.6	30-130	1.92	50		‡
2,4-Dinitrophenol	83.6	10	µg/L	100		83.6	30-130	4.75	50	V-04	‡
2,4-Dinitrotoluene	92.3	10	µg/L	100		92.3	40-140	1.41	20		
2,6-Dinitrotoluene	91.2	10	µg/L	100		91.2	40-140	5.49	20		
Di-n-octylphthalate	89.8	10	µg/L	100		89.8	40-140	5.12	20	V-04	
Fluoranthene	89.4	5.0	µg/L	100		89.4	40-140	0.0112	20		
Fluorene	85.6	5.0	µg/L	100		85.6	40-140	3.27	20		
Hexachlorobenzene	82.4	10	µg/L	100		82.4	40-140	1.98	20		
Hexachlorobutadiene	44.7	10	µg/L	100		44.7	40-140	3.28	20		
Hexachlorocyclopentadiene	45.7	10	µg/L	100		45.7	30-140	1.14	50	V-05	† ‡
Hexachloroethane	43.2	10	µg/L	100		43.2	40-140	0.301	50		‡
Indeno(1,2,3-cd)pyrene	87.1	5.0	µg/L	100		87.1	40-140	3.18	50		‡
Isophorone	87.9	10	µg/L	100		87.9	40-140	5.49	20		
2-Methylnaphthalene	75.0	5.0	µg/L	100		75.0	40-140	2.15	20		
2-Methylphenol	76.4	10	µg/L	100		76.4	30-130	7.96	20		
3/4-Methylphenol	77.7	10	µg/L	100		77.7	30-130	7.29	20		
Naphthalene	62.9	5.0	µg/L	100		62.9	40-140	1.80	20		
2-Nitroaniline	87.0	10	µg/L	100		87.0	40-140	2.46	20		
3-Nitroaniline	94.1	10	µg/L	100		94.1	40-140	3.13	20		
4-Nitroaniline	85.7	10	µg/L	100		85.7	40-140	4.52	20		
Nitrobenzene	75.8	10	µg/L	100		75.8	40-140	2.26	20		
2-Nitrophenol	78.0	10	µg/L	100		78.0	30-130	2.16	20		
4-Nitrophenol	60.9	10	µg/L	100		60.9	10-130	4.04	50		† ‡
N-Nitrosodiphenylamine/Diphenylamine	99.6	10	µg/L	100		99.6	40-140	0.120	20		
N-Nitrosodi-n-propylamine	89.4	10	µg/L	100		89.4	40-140	7.79	20		
Pentachlorophenol	88.4	10	µg/L	100		88.4	30-130	2.06	50		‡
Phenanthrene	84.5	5.0	µg/L	100		84.5	40-140	1.86	20		
Phenol	44.1	10	µg/L	100		44.1	20-130	2.62	20		†
Pyrene	83.8	5.0	µg/L	100		83.8	40-140	1.31	20		
1,2,4,5-Tetrachlorobenzene	68.1	10	µg/L	100		68.1	40-140	0.717	20		
2,4,5-Trichlorophenol	86.8	10	µg/L	100		86.8	30-130	0.288	20		
2,4,6-Trichlorophenol	85.4	10	µg/L	100		85.4	30-130	0.493	50		‡
Surrogate: 2-Fluorophenol	*223*		µg/L	400		55.8	15-110				
Surrogate: Phenol-d6	*177*		µg/L	400		44.2	15-110				
Surrogate: Nitrobenzene-d5	*162*		µg/L	200		80.9	30-130				
Surrogate: 2-Fluorobiphenyl	*163*		µg/L	200		81.4	30-130				
Surrogate: 2,4,6-Tribromophenol	*385*		µg/L	400		96.2	15-110				
Surrogate: p-Terphenyl-d14	*184*		µg/L	200		91.8	30-130				

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B361356 - SW-846 3510C											
Matrix Spike (B361356-MS1)	**Source: 23L2638-11**			Prepared: 12/20/23 Analyzed: 12/22/23							
Atrazine	87.9	19	µg/L	94.5	ND	93.0		40-140			
Benzaldehyde	48.8	9.5	µg/L	94.5	ND	51.6		40-140			
Biphenyl	69.9	19	µg/L	94.5	ND	73.9		40-140			
Caprolactam	23.4	9.5	µg/L	94.5	ND	**24.8**	*	40-140			MS-09
Acenaphthene	70.6	4.7	µg/L	94.5	ND	74.7		40-140			
Acenaphthylene	74.0	4.7	µg/L	94.5	ND	78.3		40-140			
Acetophenone	74.8	9.5	µg/L	94.5	ND	79.2		40-140			
Anthracene	74.4	4.7	µg/L	94.5	0.843	77.8		40-140			
Benzo(a)anthracene	73.1	4.7	µg/L	94.5	2.54	74.7		40-140			
Benzo(a)pyrene	72.2	4.7	µg/L	94.5	0.890	75.4		40-140			
Benzo(b)fluoranthene	72.4	4.7	µg/L	94.5	1.58	74.9		40-140			
Benzo(g,h,i)perylene	70.3	4.7	µg/L	94.5	ND	74.3		40-140			
Benzo(k)fluoranthene	77.5	4.7	µg/L	94.5	0.732	81.2		40-140			
Bis(2-chloroethoxy)methane	79.9	9.5	µg/L	94.5	ND	84.6		40-140			
Bis(2-chloroethyl)ether	75.7	9.5	µg/L	94.5	ND	80.0		40-140			
Bis(2-chloroisopropyl)ether	83.4	9.5	µg/L	94.5	ND	88.3		40-140			
Bis(2-Ethylhexyl)phthalate	81.4	9.5	µg/L	94.5	ND	86.1		40-140			
4-Bromophenylphenylether	74.2	9.5	µg/L	94.5	ND	78.5		40-140			
Butylbenzylphthalate	82.6	9.5	µg/L	94.5	ND	87.4		40-140			
Carbazole	80.8	9.5	µg/L	94.5	0.528	85.0		40-140			
4-Chloroaniline	70.3	9.5	µg/L	94.5	ND	74.4		40-140			
4-Chloro-3-methylphenol	82.1	9.5	µg/L	94.5	ND	86.9		30-130			
2-Chloronaphthalene	57.5	9.5	µg/L	94.5	ND	60.8		40-140			
2-Chlorophenol	70.0	9.5	µg/L	94.5	ND	74.1		30-130			
4-Chlorophenylphenylether	74.3	9.5	µg/L	94.5	ND	78.6		40-140			
Chrysene	70.9	4.7	µg/L	94.5	2.70	72.2		40-140			
Dibenz(a,h)anthracene	68.7	4.7	µg/L	94.5	ND	72.7		40-140			
Dibenzofuran	73.2	4.7	µg/L	94.5	ND	77.5		40-140			
Di-n-butylphthalate	81.6	9.5	µg/L	94.5	ND	86.4		40-140			
3,3-Dichlorobenzidine	97.3	9.5	µg/L	94.5	ND	103		40-140			
2,4-Dichlorophenol	79.0	9.5	µg/L	94.5	ND	83.6		30-130			
Diethylphthalate	81.0	9.5	µg/L	94.5	ND	85.7		40-140			
2,4-Dimethylphenol	66.2	9.5	µg/L	94.5	ND	70.1		30-130			
Dimethylphthalate	81.4	9.5	µg/L	94.5	ND	86.1		40-140			
4,6-Dinitro-2-methylphenol	85.0	19	µg/L	94.5	ND	89.9		30-130			
2,4-Dinitrophenol	80.7	9.5	µg/L	94.5	ND	85.3		30-130			V-04
2,4-Dinitrotoluene	82.9	9.5	µg/L	94.5	ND	87.7		40-140			
2,6-Dinitrotoluene	82.4	9.5	µg/L	94.5	ND	87.2		40-140			
Di-n-octylphthalate	80.0	9.5	µg/L	94.5	ND	84.6		40-140			V-04
Fluoranthene	76.1	4.7	µg/L	94.5	9.17	70.8		40-140			
Fluorene	73.2	4.7	µg/L	94.5	ND	77.5		40-140			
Hexachlorobenzene	70.1	9.5	µg/L	94.5	ND	74.2		40-140			
Hexachlorobutadiene	37.8	9.5	µg/L	94.5	ND	40.0		40-140			
Hexachlorocyclopentadiene	41.7	9.5	µg/L	94.5	ND	44.2		30-130			V-05
Hexachloroethane	35.3	9.5	µg/L	94.5	ND	**37.4**	*	40-140			MS-09
Indeno(1,2,3-cd)pyrene	70.9	4.7	µg/L	94.5	ND	75.0		40-140			
Isophorone	80.6	9.5	µg/L	94.5	ND	85.3		40-140			
2-Methylnaphthalene	63.9	4.7	µg/L	94.5	ND	67.6		40-140			
2-Methylphenol	67.9	9.5	µg/L	94.5	ND	71.9		30-130			
3/4-Methylphenol	66.5	9.5	µg/L	94.5	ND	70.3		30-130			
Naphthalene	55.5	4.7	µg/L	94.5	ND	58.7		40-140			
2-Nitroaniline	80.6	9.5	µg/L	94.5	ND	85.2		40-140			

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B361356 - SW-846 3510C											
Matrix Spike (B361356-MS1)	**Source: 23L2638-11**			Prepared: 12/20/23 Analyzed: 12/22/23							
3-Nitroaniline	84.5	9.5	µg/L	94.5	ND	89.4		40-140			
4-Nitroaniline	76.2	9.5	µg/L	94.5	ND	80.6		40-140			
Nitrobenzene	69.7	9.5	µg/L	94.5	ND	73.8		40-140			
2-Nitrophenol	70.7	9.5	µg/L	94.5	ND	74.8		30-130			
4-Nitrophenol	55.1	9.5	µg/L	94.5	ND	58.3		30-130			
N-Nitrosodiphenylamine/Diphenylamine	88.0	9.5	µg/L	94.5	ND	93.1		40-140			
N-Nitrosodi-n-propylamine	79.0	9.5	µg/L	94.5	ND	83.6		40-140			
Pentachlorophenol	81.7	9.5	µg/L	94.5	ND	86.5		30-130			
Phenanthrene	73.2	4.7	µg/L	94.5	2.53	74.7		40-140			
Phenol	37.2	9.5	µg/L	94.5	ND	39.4		30-130			
Pyrene	72.4	4.7	µg/L	94.5	6.09	70.2		40-140			
1,2,4,5-Tetrachlorobenzene	59.6	9.5	µg/L	94.5	ND	63.1		40-140			
2,4,5-Trichlorophenol	79.6	9.5	µg/L	94.5	ND	84.2		30-130			
2,4,6-Trichlorophenol	77.8	9.5	µg/L	94.5	ND	82.3		30-130			
Surrogate: 2-Fluorophenol	*212*		µg/L	378		56.0		15-110			
Surrogate: Phenol-d6	*159*		µg/L	378		42.0		15-110			
Surrogate: Nitrobenzene-d5	*158*		µg/L	189		83.4		30-130			
Surrogate: 2-Fluorobiphenyl	*149*		µg/L	189		78.8		30-130			
Surrogate: 2,4,6-Tribromophenol	*361*		µg/L	378		95.5		15-110			
Surrogate: p-Terphenyl-d14	*168*		µg/L	189		89.1		30-130			
Matrix Spike Dup (B361356-MSD1)	**Source: 23L2638-11**			Prepared: 12/20/23 Analyzed: 12/22/23							
Atrazine	82.4	19	µg/L	96.8	ND	85.1		40-140	6.46	30	
Benzaldehyde	47.4	9.7	µg/L	96.8	ND	49.0		40-140	2.76	30	
Biphenyl	63.2	19	µg/L	96.8	ND	65.3		40-140	10.0	30	
Caprolactam	21.6	9.7	µg/L	96.8	ND	**22.3**	*	40-140	8.01	30	MS-09
Acenaphthene	63.1	4.8	µg/L	96.8	ND	65.2		40-140	11.1	30	
Acenaphthylene	66.2	4.8	µg/L	96.8	ND	68.3		40-140	11.2	30	
Acetophenone	72.8	9.7	µg/L	96.8	ND	75.2		40-140	2.79	30	
Anthracene	65.5	4.8	µg/L	96.8	0.843	66.8		40-140	12.7	30	
Benzo(a)anthracene	63.6	4.8	µg/L	96.8	2.54	63.0		40-140	14.0	30	
Benzo(a)pyrene	64.2	4.8	µg/L	96.8	0.890	65.4		40-140	11.6	30	
Benzo(b)fluoranthene	64.2	4.8	µg/L	96.8	1.58	64.7		40-140	11.9	30	
Benzo(g,h,i)perylene	63.7	4.8	µg/L	96.8	ND	65.8		40-140	9.85	30	
Benzo(k)fluoranthene	66.4	4.8	µg/L	96.8	0.732	67.8		40-140	15.5	30	
Bis(2-chloroethoxy)methane	78.6	9.7	µg/L	96.8	ND	81.2		40-140	1.69	30	
Bis(2-chloroethyl)ether	75.1	9.7	µg/L	96.8	ND	77.5		40-140	0.807	30	
Bis(2-chloroisopropyl)ether	80.2	9.7	µg/L	96.8	ND	82.8		40-140	4.00	30	
Bis(2-Ethylhexyl)phthalate	69.1	9.7	µg/L	96.8	ND	71.4		40-140	16.4	30	
4-Bromophenylphenylether	63.5	9.7	µg/L	96.8	ND	65.6		40-140	15.5	30	
Butylbenzylphthalate	71.3	9.7	µg/L	96.8	ND	73.7		40-140	14.7	30	
Carbazole	72.7	9.7	µg/L	96.8	0.528	74.5		40-140	10.6	30	
4-Chloroaniline	71.7	9.7	µg/L	96.8	ND	74.1		40-140	1.97	30	
4-Chloro-3-methylphenol	77.5	9.7	µg/L	96.8	ND	80.1		30-130	5.74	30	
2-Chloronaphthalene	54.0	9.7	µg/L	96.8	ND	55.8		40-140	6.23	30	
2-Chlorophenol	68.6	9.7	µg/L	96.8	ND	70.9		30-130	2.00	30	
4-Chlorophenylphenylether	66.3	9.7	µg/L	96.8	ND	68.4		40-140	11.5	30	
Chrysene	61.9	4.8	µg/L	96.8	2.70	61.2		40-140	13.5	30	
Dibenz(a,h)anthracene	63.6	4.8	µg/L	96.8	ND	65.7		40-140	7.70	30	
Dibenzofuran	65.5	4.8	µg/L	96.8	ND	67.6		40-140	11.2	30	
Di-n-butylphthalate	69.7	9.7	µg/L	96.8	ND	72.0		40-140	15.7	30	
3,3-Dichlorobenzidine	88.2	9.7	µg/L	96.8	ND	91.2		40-140	9.77	30	

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B361356 - SW-846 3510C											
Matrix Spike Dup (B361356-MSD1)	**Source: 23L2638-11**			Prepared: 12/20/23 Analyzed: 12/22/23							
2,4-Dichlorophenol	73.2	9.7	µg/L	96.8	ND	75.6		30-130	7.70	30	
Diethylphthalate	73.6	9.7	µg/L	96.8	ND	76.0		40-140	9.61	30	
2,4-Dimethylphenol	63.3	9.7	µg/L	96.8	ND	65.4		30-130	4.51	30	
Dimethylphthalate	74.9	9.7	µg/L	96.8	ND	77.4		40-140	8.33	30	
4,6-Dinitro-2-methylphenol	77.4	19	µg/L	96.8	ND	79.9		30-130	9.36	30	
2,4-Dinitrophenol	72.3	9.7	µg/L	96.8	ND	74.7		30-130	10.9	30	V-04
2,4-Dinitrotoluene	77.7	9.7	µg/L	96.8	ND	80.2		40-140	6.52	30	
2,6-Dinitrotoluene	78.6	9.7	µg/L	96.8	ND	81.2		40-140	4.75	30	
Di-n-octylphthalate	66.7	9.7	µg/L	96.8	ND	68.8		40-140	18.2	30	V-04
Fluoranthene	67.1	4.8	µg/L	96.8	9.17	59.8		40-140	12.6	30	
Fluorene	65.8	4.8	µg/L	96.8	ND	68.0		40-140	10.6	30	
Hexachlorobenzene	60.6	9.7	µg/L	96.8	ND	62.6		40-140	14.6	30	
Hexachlorobutadiene	37.9	9.7	µg/L	96.8	ND	**39.1**	*	40-140	0.0406	30	MS-22
Hexachlorocyclopentadiene	37.1	9.7	µg/L	96.8	ND	38.3		30-130	11.8	30	V-05
Hexachloroethane	36.5	9.7	µg/L	96.8	ND	**37.7**	*	40-140	3.11	30	MS-09
Indeno(1,2,3-cd)pyrene	63.6	4.8	µg/L	96.8	ND	65.7		40-140	10.8	30	
Isophorone	78.8	9.7	µg/L	96.8	ND	81.4		40-140	2.30	30	
2-Methylnaphthalene	61.1	4.8	µg/L	96.8	ND	63.1		40-140	4.62	30	
2-Methylphenol	66.2	9.7	µg/L	96.8	ND	68.4		30-130	2.62	30	
3/4-Methylphenol	63.6	9.7	µg/L	96.8	ND	65.7		30-130	4.36	30	
Naphthalene	54.4	4.8	µg/L	96.8	ND	56.2		40-140	1.91	30	
2-Nitroaniline	74.9	9.7	µg/L	96.8	ND	77.4		40-140	7.32	30	
3-Nitroaniline	76.8	9.7	µg/L	96.8	ND	79.3		40-140	9.59	30	
4-Nitroaniline	71.7	9.7	µg/L	96.8	ND	74.1		40-140	6.11	30	
Nitrobenzene	67.5	9.7	µg/L	96.8	ND	69.8		40-140	3.18	30	
2-Nitrophenol	69.5	9.7	µg/L	96.8	ND	71.8		30-130	1.81	30	
4-Nitrophenol	51.8	9.7	µg/L	96.8	ND	53.6		30-130	6.04	30	
N-Nitrosodiphenylamine/Diphenylamine	78.6	9.7	µg/L	96.8	ND	81.2		40-140	11.3	30	
N-Nitrosodi-n-propylamine	76.3	9.7	µg/L	96.8	ND	78.8		40-140	3.57	30	
Pentachlorophenol	73.2	9.7	µg/L	96.8	ND	75.6		30-130	11.0	30	
Phenanthrene	63.7	4.8	µg/L	96.8	2.53	63.2		40-140	13.8	30	
Phenol	36.6	9.7	µg/L	96.8	ND	37.8		30-130	1.52	30	
Pyrene	62.5	4.8	µg/L	96.8	6.09	58.3		40-140	14.7	30	
1,2,4,5-Tetrachlorobenzene	54.7	9.7	µg/L	96.8	ND	56.5		40-140	8.59	30	
2,4,5-Trichlorophenol	73.7	9.7	µg/L	96.8	ND	76.2		30-130	7.58	30	
2,4,6-Trichlorophenol	73.7	9.7	µg/L	96.8	ND	76.1		30-130	5.46	30	
Surrogate: 2-Fluorophenol	*200*		µg/L	387		51.7		15-110			
Surrogate: Phenol-d6	*151*		µg/L	387		39.1		15-110			
Surrogate: Nitrobenzene-d5	*153*		µg/L	194		78.8		30-130			
Surrogate: 2-Fluorobiphenyl	*132*		µg/L	194		68.4		30-130			
Surrogate: 2,4,6-Tribromophenol	*330*		µg/L	387		85.2		15-110			
Surrogate: p-Terphenyl-d14	*144*		µg/L	194		74.3		30-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361490 - SW-846 3546										
Blank (B361490-BLK1)				Prepared: 12/21/23 Analyzed: 12/26/23						
Atrazine	ND	0.66	mg/Kg wet							
Benzaldehyde	ND	0.34	mg/Kg wet							V-34
Biphenyl	ND	0.66	mg/Kg wet							
Caprolactam	ND	0.34	mg/Kg wet							V-06
Acenaphthene	ND	0.17	mg/Kg wet							
Acenaphthylene	ND	0.17	mg/Kg wet							
Acetophenone	ND	0.34	mg/Kg wet							
Anthracene	ND	0.17	mg/Kg wet							
Benzo(a)anthracene	ND	0.17	mg/Kg wet							
Benzo(a)pyrene	ND	0.17	mg/Kg wet							
Benzo(b)fluoranthene	ND	0.17	mg/Kg wet							
Benzo(g,h,i)perylene	ND	0.17	mg/Kg wet							
Benzo(k)fluoranthene	ND	0.17	mg/Kg wet							
Bis(2-chloroethoxy)methane	ND	0.34	mg/Kg wet							
Bis(2-chloroethyl)ether	ND	0.34	mg/Kg wet							
Bis(2-chloroisopropyl)ether	ND	0.34	mg/Kg wet							
Bis(2-Ethylhexyl)phthalate	ND	0.34	mg/Kg wet							
4-Bromophenylphenylether	ND	0.34	mg/Kg wet							
Butylbenzylphthalate	ND	0.34	mg/Kg wet							
Carbazole	ND	0.17	mg/Kg wet							
4-Chloroaniline	ND	0.65	mg/Kg wet							
4-Chloro-3-methylphenol	ND	0.65	mg/Kg wet							
2-Chloronaphthalene	ND	0.34	mg/Kg wet							
2-Chlorophenol	ND	0.34	mg/Kg wet							
4-Chlorophenylphenylether	ND	0.34	mg/Kg wet							
Chrysene	ND	0.17	mg/Kg wet							
Dibenz(a,h)anthracene	ND	0.17	mg/Kg wet							
Dibenzofuran	ND	0.34	mg/Kg wet							
Di-n-butylphthalate	ND	0.34	mg/Kg wet							
3,3-Dichlorobenzidine	ND	0.17	mg/Kg wet							
2,4-Dichlorophenol	ND	0.34	mg/Kg wet							
Diethylphthalate	ND	0.34	mg/Kg wet							
2,4-Dimethylphenol	ND	0.34	mg/Kg wet							
Dimethylphthalate	ND	0.34	mg/Kg wet							
4,6-Dinitro-2-methylphenol	ND	0.34	mg/Kg wet							
2,4-Dinitrophenol	ND	0.65	mg/Kg wet							
2,4-Dinitrotoluene	ND	0.34	mg/Kg wet							
2,6-Dinitrotoluene	ND	0.34	mg/Kg wet							
Di-n-octylphthalate	ND	0.34	mg/Kg wet							
Fluoranthene	ND	0.17	mg/Kg wet							
Fluorene	ND	0.17	mg/Kg wet							
Hexachlorobenzene	ND	0.34	mg/Kg wet							
Hexachlorobutadiene	ND	0.34	mg/Kg wet							
Hexachlorocyclopentadiene	ND	0.34	mg/Kg wet							
Hexachloroethane	ND	0.34	mg/Kg wet							
Indeno(1,2,3-cd)pyrene	ND	0.17	mg/Kg wet							
Isophorone	ND	0.34	mg/Kg wet							
2-Methylnaphthalene	ND	0.17	mg/Kg wet							
2-Methylphenol	ND	0.34	mg/Kg wet							
3/4-Methylphenol	ND	0.34	mg/Kg wet							
Naphthalene	ND	0.17	mg/Kg wet							
2-Nitroaniline	ND	0.34	mg/Kg wet							

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B361490 - SW-846 3546											
Blank (B361490-BLK1)				Prepared: 12/21/23 Analyzed: 12/26/23							
3-Nitroaniline	ND	0.34	mg/Kg wet								
4-Nitroaniline	ND	0.34	mg/Kg wet								
Nitrobenzene	ND	0.34	mg/Kg wet								
2-Nitrophenol	ND	0.34	mg/Kg wet								
4-Nitrophenol	ND	0.65	mg/Kg wet								
N-Nitrosodiphenylamine/Diphenylamine	ND	0.34	mg/Kg wet								
N-Nitrosodi-n-propylamine	ND	0.34	mg/Kg wet								
Pentachlorophenol	ND	0.34	mg/Kg wet							V-05	
Phenanthrene	ND	0.17	mg/Kg wet								
Phenol	ND	0.34	mg/Kg wet								
Pyrene	ND	0.17	mg/Kg wet								
1,2,4,5-Tetrachlorobenzene	ND	0.34	mg/Kg wet								
2,4,5-Trichlorophenol	ND	0.34	mg/Kg wet								
2,4,6-Trichlorophenol	ND	0.34	mg/Kg wet								
Surrogate: 2-Fluorophenol	*3.63*		mg/Kg wet	6.58		55.1	30-130				
Surrogate: Phenol-d6	*3.94*		mg/Kg wet	6.58		59.9	30-130				
Surrogate: Nitrobenzene-d5	*2.30*		mg/Kg wet	3.29		70.0	30-130				
Surrogate: 2-Fluorobiphenyl	*2.29*		mg/Kg wet	3.29		69.8	30-130				
Surrogate: 2,4,6-Tribromophenol	*4.17*		mg/Kg wet	6.58		63.4	30-130				
Surrogate: p-Terphenyl-d14	*2.76*		mg/Kg wet	3.29		83.8	30-130				
LCS (B361490-BS1)				Prepared: 12/21/23 Analyzed: 12/26/23							
Atrazine	1.40	0.65	mg/Kg wet	1.62		86.4	40-140				
Benzaldehyde	0.681	0.33	mg/Kg wet	1.62		41.9	40-140			V-34	
Biphenyl	1.05	0.65	mg/Kg wet	1.62		64.7	40-140				
Caprolactam	1.24	0.33	mg/Kg wet	1.62		76.3	40-140			V-06	
Acenaphthene	1.08	0.17	mg/Kg wet	1.62		66.8	40-140				
Acenaphthylene	1.16	0.17	mg/Kg wet	1.62		71.4	40-140				
Acetophenone	1.12	0.33	mg/Kg wet	1.62		69.3	40-140				
Anthracene	1.19	0.17	mg/Kg wet	1.62		73.5	40-140				
Benzo(a)anthracene	1.22	0.17	mg/Kg wet	1.62		75.0	40-140				
Benzo(a)pyrene	1.27	0.17	mg/Kg wet	1.62		78.5	40-140				
Benzo(b)fluoranthene	1.23	0.17	mg/Kg wet	1.62		76.0	40-140				
Benzo(g,h,i)perylene	1.31	0.17	mg/Kg wet	1.62		80.4	40-140				
Benzo(k)fluoranthene	1.34	0.17	mg/Kg wet	1.62		82.4	40-140				
Bis(2-chloroethoxy)methane	1.05	0.33	mg/Kg wet	1.62		64.6	40-140				
Bis(2-chloroethyl)ether	1.19	0.33	mg/Kg wet	1.62		73.4	40-140				
Bis(2-chloroisopropyl)ether	1.53	0.33	mg/Kg wet	1.62		94.4	40-140				
Bis(2-Ethylhexyl)phthalate	1.15	0.33	mg/Kg wet	1.62		70.8	40-140				
4-Bromophenylphenylether	1.09	0.33	mg/Kg wet	1.62		67.3	40-140				
Butylbenzylphthalate	1.06	0.33	mg/Kg wet	1.62		65.4	40-140				
Carbazole	1.25	0.17	mg/Kg wet	1.62		76.8	40-140				
4-Chloroaniline	0.617	0.64	mg/Kg wet	1.62		38.0	10-140			J	†
4-Chloro-3-methylphenol	1.05	0.64	mg/Kg wet	1.62		64.6	30-130				
2-Chloronaphthalene	0.960	0.33	mg/Kg wet	1.62		59.2	40-140				
2-Chlorophenol	1.06	0.33	mg/Kg wet	1.62		65.5	30-130				
4-Chlorophenylphenylether	1.12	0.33	mg/Kg wet	1.62		69.2	40-140				
Chrysene	1.28	0.17	mg/Kg wet	1.62		78.6	40-140				
Dibenz(a,h)anthracene	1.31	0.17	mg/Kg wet	1.62		80.5	40-140				
Dibenzofuran	1.16	0.33	mg/Kg wet	1.62		71.5	40-140				
Di-n-butylphthalate	1.12	0.33	mg/Kg wet	1.62		69.1	40-140				
3,3-Dichlorobenzidine	0.934	0.17	mg/Kg wet	1.62		57.6	20-140				†

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B361490 - SW-846 3546											
LCS (B361490-BS1)				Prepared: 12/21/23 Analyzed: 12/26/23							
2,4-Dichlorophenol	1.08	0.33	mg/Kg wet	1.62		66.7	30-130				
Diethylphthalate	1.11	0.33	mg/Kg wet	1.62		68.7	40-140				
2,4-Dimethylphenol	0.903	0.33	mg/Kg wet	1.62		55.6	30-130				
Dimethylphthalate	1.12	0.33	mg/Kg wet	1.62		68.8	40-140				
4,6-Dinitro-2-methylphenol	1.38	0.33	mg/Kg wet	1.62		84.7	30-130				
2,4-Dinitrophenol	1.01	0.64	mg/Kg wet	1.62		62.2	30-130				
2,4-Dinitrotoluene	1.20	0.33	mg/Kg wet	1.62		74.2	40-140				
2,6-Dinitrotoluene	1.20	0.33	mg/Kg wet	1.62		73.9	40-140				
Di-n-octylphthalate	0.975	0.33	mg/Kg wet	1.62		60.1	40-140				
Fluoranthene	1.13	0.17	mg/Kg wet	1.62		69.9	40-140				
Fluorene	1.13	0.17	mg/Kg wet	1.62		69.9	40-140				
Hexachlorobenzene	1.17	0.33	mg/Kg wet	1.62		71.8	40-140				
Hexachlorobutadiene	1.04	0.33	mg/Kg wet	1.62		64.2	40-140				
Hexachlorocyclopentadiene	0.661	0.33	mg/Kg wet	1.62		40.7	40-140				
Hexachloroethane	1.02	0.33	mg/Kg wet	1.62		62.7	40-140				
Indeno(1,2,3-cd)pyrene	1.32	0.17	mg/Kg wet	1.62		81.1	40-140				
Isophorone	1.15	0.33	mg/Kg wet	1.62		70.8	40-140				
2-Methylnaphthalene	0.947	0.17	mg/Kg wet	1.62		58.3	40-140				
2-Methylphenol	1.08	0.33	mg/Kg wet	1.62		66.7	30-130				
3/4-Methylphenol	1.11	0.33	mg/Kg wet	1.62		68.2	30-130				
Naphthalene	1.04	0.17	mg/Kg wet	1.62		64.3	40-140				
2-Nitroaniline	1.23	0.33	mg/Kg wet	1.62		75.8	40-140				
3-Nitroaniline	0.963	0.33	mg/Kg wet	1.62		59.3	30-140				†
4-Nitroaniline	1.12	0.33	mg/Kg wet	1.62		69.0	40-140				
Nitrobenzene	1.15	0.33	mg/Kg wet	1.62		71.1	40-140				
2-Nitrophenol	1.11	0.33	mg/Kg wet	1.62		68.5	30-130				
4-Nitrophenol	1.47	0.64	mg/Kg wet	1.62		90.3	30-130				
N-Nitrosodiphenylamine/Diphenylamine	1.33	0.33	mg/Kg wet	1.62		81.9	40-140				
N-Nitrosodi-n-propylamine	1.14	0.33	mg/Kg wet	1.62		70.4	40-140				
Pentachlorophenol	1.02	0.33	mg/Kg wet	1.62		62.9	30-130			V-05	
Phenanthrene	1.20	0.17	mg/Kg wet	1.62		73.8	40-140				
Phenol	1.11	0.33	mg/Kg wet	1.62		68.6	30-130				
Pyrene	1.11	0.17	mg/Kg wet	1.62		68.4	40-140				
1,2,4,5-Tetrachlorobenzene	1.01	0.33	mg/Kg wet	1.62		62.1	40-140				
2,4,5-Trichlorophenol	1.06	0.33	mg/Kg wet	1.62		65.2	30-130				
2,4,6-Trichlorophenol	1.02	0.33	mg/Kg wet	1.62		62.8	30-130				
Surrogate: 2-Fluorophenol	*4.00*		mg/Kg wet	6.49		61.7	30-130				
Surrogate: Phenol-d6	*4.16*		mg/Kg wet	6.49		64.0	30-130				
Surrogate: Nitrobenzene-d5	*2.36*		mg/Kg wet	3.25		72.6	30-130				
Surrogate: 2-Fluorobiphenyl	*2.14*		mg/Kg wet	3.25		65.9	30-130				
Surrogate: 2,4,6-Tribromophenol	*4.34*		mg/Kg wet	6.49		66.8	30-130				
Surrogate: p-Terphenyl-d14	*2.32*		mg/Kg wet	3.25		71.3	30-130				

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes	
Batch B361490 - SW-846 3546												
LCS Dup (B361490-BSD1)				Prepared: 12/21/23 Analyzed: 12/26/23								
Atrazine	1.41	0.66	mg/Kg wet	1.64		85.8		40-140	0.258	30		
Benzaldehyde	0.643	0.33	mg/Kg wet	1.64		**39.2**	*	40-140	5.68	20	V-34, L-07	
Biphenyl	1.14	0.66	mg/Kg wet	1.64		69.8		40-140	8.56	20		
Caprolactam	1.35	0.33	mg/Kg wet	1.64		82.4		40-140	8.64	20	V-06	
Acenaphthene	1.14	0.17	mg/Kg wet	1.64		69.6		40-140	5.17	30		
Acenaphthylene	1.22	0.17	mg/Kg wet	1.64		74.3		40-140	5.02	30		
Acetophenone	1.14	0.33	mg/Kg wet	1.64		69.5		40-140	1.32	30		
Anthracene	1.24	0.17	mg/Kg wet	1.64		75.8		40-140	4.09	30		
Benzo(a)anthracene	1.27	0.17	mg/Kg wet	1.64		77.3		40-140	4.00	30		
Benzo(a)pyrene	1.25	0.17	mg/Kg wet	1.64		76.4		40-140	1.73	30		
Benzo(b)fluoranthene	1.44	0.17	mg/Kg wet	1.64		87.6		40-140	15.2	30		
Benzo(g,h,i)perylene	1.46	0.17	mg/Kg wet	1.64		89.0		40-140	11.2	30		
Benzo(k)fluoranthene	1.59	0.17	mg/Kg wet	1.64		97.2		40-140	17.4	30		
Bis(2-chloroethoxy)methane	1.12	0.33	mg/Kg wet	1.64		68.4		40-140	6.72	30		
Bis(2-chloroethyl)ether	1.19	0.33	mg/Kg wet	1.64		72.5		40-140	0.173	30		
Bis(2-chloroisopropyl)ether	1.61	0.33	mg/Kg wet	1.64		98.1		40-140	4.80	30		
Bis(2-Ethylhexyl)phthalate	1.21	0.33	mg/Kg wet	1.64		73.5		40-140	4.72	30		
4-Bromophenylphenylether	1.14	0.33	mg/Kg wet	1.64		69.3		40-140	3.94	30		
Butylbenzylphthalate	1.16	0.33	mg/Kg wet	1.64		70.5		40-140	8.48	30		
Carbazole	1.27	0.17	mg/Kg wet	1.64		77.4		40-140	1.76	30		
4-Chloroaniline	0.606	0.65	mg/Kg wet	1.64		37.0		10-140	1.74	30	J	†
4-Chloro-3-methylphenol	1.15	0.65	mg/Kg wet	1.64		70.3		30-130	9.31	30		
2-Chloronaphthalene	1.08	0.33	mg/Kg wet	1.64		66.0		40-140	11.9	30		
2-Chlorophenol	1.09	0.33	mg/Kg wet	1.64		66.7		30-130	2.85	30		
4-Chlorophenylphenylether	1.17	0.33	mg/Kg wet	1.64		71.3		40-140	4.00	30		
Chrysene	1.28	0.17	mg/Kg wet	1.64		78.2		40-140	0.519	30		
Dibenz(a,h)anthracene	1.50	0.17	mg/Kg wet	1.64		91.6		40-140	13.8	30		
Dibenzofuran	1.22	0.33	mg/Kg wet	1.64		74.7		40-140	5.27	30		
Di-n-butylphthalate	1.22	0.33	mg/Kg wet	1.64		74.4		40-140	8.36	30		
3,3-Dichlorobenzidine	0.970	0.17	mg/Kg wet	1.64		59.2		20-140	3.79	50		† ‡
2,4-Dichlorophenol	1.15	0.33	mg/Kg wet	1.64		70.0		30-130	5.80	30		
Diethylphthalate	1.16	0.33	mg/Kg wet	1.64		71.0		40-140	4.36	30		
2,4-Dimethylphenol	0.914	0.33	mg/Kg wet	1.64		55.8		30-130	1.27	30		
Dimethylphthalate	1.17	0.33	mg/Kg wet	1.64		71.1		40-140	4.26	30		
4,6-Dinitro-2-methylphenol	1.38	0.33	mg/Kg wet	1.64		84.3		30-130	0.434	30		
2,4-Dinitrophenol	1.02	0.65	mg/Kg wet	1.64		62.4		30-130	1.36	30		
2,4-Dinitrotoluene	1.23	0.33	mg/Kg wet	1.64		75.2		40-140	2.32	30		
2,6-Dinitrotoluene	1.20	0.33	mg/Kg wet	1.64		73.4		40-140	0.327	30		
Di-n-octylphthalate	1.15	0.33	mg/Kg wet	1.64		70.3		40-140	16.7	30		
Fluoranthene	1.25	0.17	mg/Kg wet	1.64		76.4		40-140	9.84	30		
Fluorene	1.20	0.17	mg/Kg wet	1.64		73.4		40-140	5.97	30		
Hexachlorobenzene	1.20	0.33	mg/Kg wet	1.64		73.1		40-140	2.74	30		
Hexachlorobutadiene	1.06	0.33	mg/Kg wet	1.64		64.6		40-140	1.60	30		
Hexachlorocyclopentadiene	0.742	0.33	mg/Kg wet	1.64		45.3		40-140	11.6	30		
Hexachloroethane	1.02	0.33	mg/Kg wet	1.64		62.3		40-140	0.339	30		
Indeno(1,2,3-cd)pyrene	1.51	0.17	mg/Kg wet	1.64		91.8		40-140	13.4	30		
Isophorone	1.22	0.33	mg/Kg wet	1.64		74.2		40-140	5.69	30		
2-Methylnaphthalene	1.09	0.17	mg/Kg wet	1.64		66.4		40-140	14.0	30		
2-Methylphenol	1.15	0.33	mg/Kg wet	1.64		70.1		30-130	5.92	30		
3/4-Methylphenol	1.15	0.33	mg/Kg wet	1.64		70.2		30-130	3.93	30		
Naphthalene	1.13	0.17	mg/Kg wet	1.64		69.0		40-140	8.03	30		
2-Nitroaniline	1.42	0.33	mg/Kg wet	1.64		86.5		40-140	14.2	30		

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QUALITY CONTROL

Semivolatile Organic Compounds by GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes	
Batch B361490 - SW-846 3546											
LCS Dup (B361490-BSD1)				Prepared: 12/21/23 Analyzed: 12/26/23							
3-Nitroaniline	0.934	0.33	mg/Kg wet	1.64		57.0	30-140	3.08	30		†
4-Nitroaniline	1.16	0.33	mg/Kg wet	1.64		70.9	40-140	3.58	30		
Nitrobenzene	1.20	0.33	mg/Kg wet	1.64		73.4	40-140	4.14	30		
2-Nitrophenol	1.10	0.33	mg/Kg wet	1.64		66.9	30-130	1.27	30		
4-Nitrophenol	1.48	0.65	mg/Kg wet	1.64		90.4	30-130	1.11	50		‡
N-Nitrosodiphenylamine/Diphenylamine	1.36	0.33	mg/Kg wet	1.64		82.9	40-140	2.17	30		
N-Nitrosodi-n-propylamine	1.20	0.33	mg/Kg wet	1.64		73.2	40-140	4.88	30		
Pentachlorophenol	1.04	0.33	mg/Kg wet	1.64		63.6	30-130	2.15	30	V-05	
Phenanthrene	1.24	0.17	mg/Kg wet	1.64		75.5	40-140	3.20	30		
Phenol	1.09	0.33	mg/Kg wet	1.64		66.6	30-130	1.92	30		
Pyrene	1.07	0.17	mg/Kg wet	1.64		65.2	40-140	3.78	30		
1,2,4,5-Tetrachlorobenzene	1.14	0.33	mg/Kg wet	1.64		69.8	40-140	12.6	30		
2,4,5-Trichlorophenol	1.25	0.33	mg/Kg wet	1.64		76.2	30-130	16.5	30		
2,4,6-Trichlorophenol	1.21	0.33	mg/Kg wet	1.64		73.8	30-130	17.1	30		
Surrogate: 2-Fluorophenol	*4.07*		mg/Kg wet	6.56		62.1	30-130				
Surrogate: Phenol-d6	*4.05*		mg/Kg wet	6.56		61.8	30-130				
Surrogate: Nitrobenzene-d5	*2.45*		mg/Kg wet	3.28		74.6	30-130				
Surrogate: 2-Fluorobiphenyl	*2.58*		mg/Kg wet	3.28		78.6	30-130				
Surrogate: 2,4,6-Tribromophenol	*4.48*		mg/Kg wet	6.56		68.4	30-130				
Surrogate: p-Terphenyl-d14	*2.27*		mg/Kg wet	3.28		69.2	30-130				

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QUALITY CONTROL

1,4-Dioxane by isotope dilution GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361358 - SW-846 3510C										
Blank (B361358-BLK1)				Prepared: 12/20/23 Analyzed: 12/28/23						
1,4-Dioxane	ND	0.20	µg/L							
Surrogate: 1,4-Dioxane-d8	*2.25*		µg/L	10.0		22.5	15-110			
LCS (B361358-BS1)				Prepared: 12/20/23 Analyzed: 12/28/23						
1,4-Dioxane	11.2	0.20	µg/L	10.0		112	40-140			
Surrogate: 1,4-Dioxane-d8	*2.21*		µg/L	10.0		22.1	15-110			
LCS Dup (B361358-BSD1)				Prepared: 12/20/23 Analyzed: 12/28/23						
1,4-Dioxane	11.6	0.20	µg/L	10.0		116	40-140	3.32	30	
Surrogate: 1,4-Dioxane-d8	*2.17*		µg/L	10.0		21.7	15-110			
Matrix Spike (B361358-MS1)		**Source: 23L2638-11**		Prepared: 12/20/23 Analyzed: 12/28/23						
1,4-Dioxane	11.5	0.20	µg/L	9.80	ND	118	30-140			
Surrogate: 1,4-Dioxane-d8	*1.93*		µg/L	9.80		19.7	15-110			
Matrix Spike Dup (B361358-MSD1)		**Source: 23L2638-11**		Prepared: 12/20/23 Analyzed: 12/28/23						
1,4-Dioxane	11.2	0.20	µg/L	9.80	ND	115	30-140	2.63	30	
Surrogate: 1,4-Dioxane-d8	*2.00*		µg/L	9.80		20.4	15-110			
Batch B361863 - SW-846 3546										
Blank (B361863-BLK1)				Prepared: 12/27/23 Analyzed: 12/28/23						
1,4-Dioxane	ND	0.048	mg/Kg wet							
Surrogate: 1,4-Dioxane-d8	*0.199*		mg/Kg wet	0.481		41.4	15-110			
LCS (B361863-BS1)				Prepared: 12/27/23 Analyzed: 12/28/23						
1,4-Dioxane	0.314	0.049	mg/Kg wet	0.485		64.6	40-140			
Surrogate: 1,4-Dioxane-d8	*0.189*		mg/Kg wet	0.485		38.9	15-110			
LCS Dup (B361863-BSD1)				Prepared: 12/27/23 Analyzed: 12/28/23						
1,4-Dioxane	0.310	0.048	mg/Kg wet	0.478		64.7	40-140	1.31	30	
Surrogate: 1,4-Dioxane-d8	*0.183*		mg/Kg wet	0.478		38.2	15-110			
Matrix Spike (B361863-MS2)		**Source: 23L2638-04RE1**		Prepared: 12/27/23 Analyzed: 12/28/23						
1,4-Dioxane	0.929	0.14	mg/Kg dry	1.44	0.0949	57.9	30-140			
Surrogate: 1,4-Dioxane-d8	*0.496*		mg/Kg dry	1.44		34.4	15-110			
Matrix Spike Dup (B361863-MSD2)		**Source: 23L2638-04RE1**		Prepared: 12/27/23 Analyzed: 12/28/23						
1,4-Dioxane	0.804	0.14	mg/Kg dry	1.43	0.0949	49.6	30-140	14.4	30	
Surrogate: 1,4-Dioxane-d8	*0.413*		mg/Kg dry	1.43		29.0	15-110			

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QUALITY CONTROL

1,4-Dioxane by isotope dilution GC/MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361999 - SW-846 3510C										
Blank (B361999-BLK1)				Prepared: 12/28/23 Analyzed: 12/29/23						
1,4-Dioxane	ND	0.20	µg/L							
Surrogate: 1,4-Dioxane-d8	*2.37*		µg/L	10.0		23.7	15-110			
LCS (B361999-BS1)				Prepared: 12/28/23 Analyzed: 12/29/23						
1,4-Dioxane	10.3	0.20	µg/L	10.0		103	40-140			
Surrogate: 1,4-Dioxane-d8	*2.86*		µg/L	10.0		28.6	15-110			
LCS Dup (B361999-BSD1)				Prepared: 12/28/23 Analyzed: 12/29/23						
1,4-Dioxane	11.9	0.20	µg/L	10.0		119	40-140	14.9	30	
Surrogate: 1,4-Dioxane-d8	*2.44*		µg/L	10.0		24.4	15-110			
Batch B362017 - SW-846 3546										
Blank (B362017-BLK1)				Prepared: 12/28/23 Analyzed: 01/02/24						
1,4-Dioxane	ND	0.050	mg/Kg wet							
Surrogate: 1,4-Dioxane-d8	*0.208*		mg/Kg wet	0.500		41.6	15-110			
LCS (B362017-BS1)				Prepared: 12/28/23 Analyzed: 01/02/24						
1,4-Dioxane	0.541	0.050	mg/Kg wet	0.500		108	40-140			
Surrogate: 1,4-Dioxane-d8	*0.0994*		mg/Kg wet	0.500		19.9	15-110			
LCS Dup (B362017-BSD1)				Prepared: 12/28/23 Analyzed: 01/02/24						
1,4-Dioxane	0.520	0.050	mg/Kg wet	0.500		104	40-140	3.93	30	
Surrogate: 1,4-Dioxane-d8	*0.204*		mg/Kg wet	0.500		40.9	15-110			
Batch B362153 - SW-846 3546										
Blank (B362153-BLK1)				Prepared: 12/29/23 Analyzed: 01/03/24						
1,4-Dioxane	ND	0.050	mg/Kg wet							
Surrogate: 1,4-Dioxane-d8	*0.224*		mg/Kg wet	0.500		44.9	15-110			
LCS (B362153-BS1)				Prepared: 12/29/23 Analyzed: 01/03/24						
1,4-Dioxane	0.529	0.050	mg/Kg wet	0.500		106	40-140			
Surrogate: 1,4-Dioxane-d8	*0.234*		mg/Kg wet	0.500		46.8	15-110			
LCS Dup (B362153-BSD1)				Prepared: 12/29/23 Analyzed: 01/03/24						
1,4-Dioxane	0.490	0.050	mg/Kg wet	0.500		98.0	40-140	7.69	30	
Surrogate: 1,4-Dioxane-d8	*0.226*		mg/Kg wet	0.500		45.3	15-110			

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QUALITY CONTROL

Tentatively Identified Compounds - SV Compounds (ESTIMATED VALUES REPORTED) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361310 - SW-846 3546										
Blank (B361310-BLK1)				Prepared: 12/20/23 Analyzed: 12/22/23						
No TICs Found	0.0		mg/Kg wet							
Batch B361356 - SW-846 3510C										
Blank (B361356-BLK1)				Prepared: 12/20/23 Analyzed: 12/22/23						
No TICs Found	0.0		µg/L							
Batch B361490 - SW-846 3546										
Blank (B361490-BLK1)				Prepared: 12/21/23 Analyzed: 12/26/23						
Heptane, 2,3-dimethyl-	0.96		mg/Kg wet							B
Heptane, 2,5-dimethyl-	0.88		mg/Kg wet							B
Tentatively Identified Compounds	0.0		mg/Kg wet							

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361331 - SW-846 3546										
Blank (B361331-BLK1)				Prepared: 12/20/23 Analyzed: 12/23/23						
Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	*0.203*		mg/Kg wet	0.200		101	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.210*		mg/Kg wet	0.200		105	30-150			
Surrogate: Tetrachloro-m-xylene	*0.203*		mg/Kg wet	0.200		101	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.188*		mg/Kg wet	0.200		94.1	30-150			
LCS (B361331-BS1)				Prepared: 12/20/23 Analyzed: 12/23/23						
Aroclor-1016	0.17	0.020	mg/Kg wet	0.200		85.7	40-140			
Aroclor-1016 [2C]	0.18	0.020	mg/Kg wet	0.200		89.3	40-140			
Aroclor-1260	0.18	0.020	mg/Kg wet	0.200		88.7	40-140			
Aroclor-1260 [2C]	0.16	0.020	mg/Kg wet	0.200		82.0	40-140			
Surrogate: Decachlorobiphenyl	*0.203*		mg/Kg wet	0.200		102	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.212*		mg/Kg wet	0.200		106	30-150			
Surrogate: Tetrachloro-m-xylene	*0.201*		mg/Kg wet	0.200		101	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.189*		mg/Kg wet	0.200		94.6	30-150			
LCS Dup (B361331-BSD1)				Prepared: 12/20/23 Analyzed: 12/23/23						
Aroclor-1016	0.18	0.020	mg/Kg wet	0.200		88.7	40-140	3.47	30	
Aroclor-1016 [2C]	0.18	0.020	mg/Kg wet	0.200		92.1	40-140	3.15	30	
Aroclor-1260	0.18	0.020	mg/Kg wet	0.200		89.5	40-140	0.987	30	
Aroclor-1260 [2C]	0.17	0.020	mg/Kg wet	0.200		83.1	40-140	1.33	30	
Surrogate: Decachlorobiphenyl	*0.196*		mg/Kg wet	0.200		97.9	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.206*		mg/Kg wet	0.200		103	30-150			
Surrogate: Tetrachloro-m-xylene	*0.200*		mg/Kg wet	0.200		100	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.189*		mg/Kg wet	0.200		94.6	30-150			

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361357 - SW-846 3510C										
Blank (B361357-BLK1)				Prepared: 12/20/23 Analyzed: 12/21/23						
Aroclor-1016	ND	0.20	µg/L							
Aroclor-1016 [2C]	ND	0.20	µg/L							
Aroclor-1221	ND	0.20	µg/L							
Aroclor-1221 [2C]	ND	0.20	µg/L							
Aroclor-1232	ND	0.20	µg/L							
Aroclor-1232 [2C]	ND	0.20	µg/L							
Aroclor-1242	ND	0.20	µg/L							
Aroclor-1242 [2C]	ND	0.20	µg/L							
Aroclor-1248	ND	0.20	µg/L							
Aroclor-1248 [2C]	ND	0.20	µg/L							
Aroclor-1254	ND	0.20	µg/L							
Aroclor-1254 [2C]	ND	0.20	µg/L							
Aroclor-1260	ND	0.20	µg/L							
Aroclor-1260 [2C]	ND	0.20	µg/L							
Aroclor-1262	ND	0.20	µg/L							
Aroclor-1262 [2C]	ND	0.20	µg/L							
Aroclor-1268	ND	0.20	µg/L							
Aroclor-1268 [2C]	ND	0.20	µg/L							
Surrogate: Decachlorobiphenyl	*3.72*		µg/L	4.00		93.0	30-150			
Surrogate: Decachlorobiphenyl [2C]	*3.42*		µg/L	4.00		85.6	30-150			
Surrogate: Tetrachloro-m-xylene	*3.13*		µg/L	4.00		78.3	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*2.86*		µg/L	4.00		71.5	30-150			
LCS (B361357-BS1)				Prepared: 12/20/23 Analyzed: 12/21/23						
Aroclor-1016	0.82	0.20	µg/L	1.00		82.2	40-140			
Aroclor-1016 [2C]	0.80	0.20	µg/L	1.00		79.8	40-140			
Aroclor-1260	0.74	0.20	µg/L	1.00		74.3	40-140			
Aroclor-1260 [2C]	0.76	0.20	µg/L	1.00		76.1	40-140			
Surrogate: Decachlorobiphenyl	*3.75*		µg/L	4.00		93.7	30-150			
Surrogate: Decachlorobiphenyl [2C]	*3.87*		µg/L	4.00		96.8	30-150			
Surrogate: Tetrachloro-m-xylene	*3.23*		µg/L	4.00		80.7	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*3.27*		µg/L	4.00		81.8	30-150			
LCS Dup (B361357-BSD1)				Prepared: 12/20/23 Analyzed: 12/21/23						
Aroclor-1016	0.89	0.20	µg/L	1.00		89.3	40-140	8.31	20	
Aroclor-1016 [2C]	0.89	0.20	µg/L	1.00		88.7	40-140	10.6	20	
Aroclor-1260	0.81	0.20	µg/L	1.00		81.2	40-140	8.92	20	
Aroclor-1260 [2C]	0.85	0.20	µg/L	1.00		85.5	40-140	11.6	20	
Surrogate: Decachlorobiphenyl	*3.80*		µg/L	4.00		94.9	30-150			
Surrogate: Decachlorobiphenyl [2C]	*4.08*		µg/L	4.00		102	30-150			
Surrogate: Tetrachloro-m-xylene	*3.31*		µg/L	4.00		82.7	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*3.47*		µg/L	4.00		86.7	30-150			

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361357 - SW-846 3510C										
Matrix Spike (B361357-MS1)		**Source: 23L2638-11**		Prepared: 12/20/23 Analyzed: 12/21/23						
Aroclor-1016	0.74	0.19	µg/L	0.951	ND	77.7	40-140			
Aroclor-1016 [2C]	0.75	0.19	µg/L	0.951	ND	78.7	40-140			
Aroclor-1260	0.68	0.19	µg/L	0.951	ND	71.6	40-140			
Aroclor-1260 [2C]	0.69	0.19	µg/L	0.951	ND	72.9	40-140			
Surrogate: Decachlorobiphenyl	*3.16*		µg/L	3.81		82.9	30-150			
Surrogate: Decachlorobiphenyl [2C]	*3.22*		µg/L	3.81		84.7	30-150			
Surrogate: Tetrachloro-m-xylene	*2.84*		µg/L	3.81		74.5	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*2.87*		µg/L	3.81		75.4	30-150			
Matrix Spike Dup (B361357-MSD1)		**Source: 23L2638-11**		Prepared: 12/20/23 Analyzed: 12/21/23						
Aroclor-1016	0.69	0.20	µg/L	0.981	ND	70.7	40-140	6.32	50	
Aroclor-1016 [2C]	0.70	0.20	µg/L	0.981	ND	71.0	40-140	7.11	50	
Aroclor-1260	0.63	0.20	µg/L	0.981	ND	64.1	40-140	7.89	50	
Aroclor-1260 [2C]	0.65	0.20	µg/L	0.981	ND	66.2	40-140	6.61	50	
Surrogate: Decachlorobiphenyl	*3.00*		µg/L	3.93		76.5	30-150			
Surrogate: Decachlorobiphenyl [2C]	*3.07*		µg/L	3.93		78.3	30-150			
Surrogate: Tetrachloro-m-xylene	*2.58*		µg/L	3.93		65.8	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*2.63*		µg/L	3.93		67.1	30-150			
Batch B361689 - SW-846 3546										
Blank (B361689-BLK1)				Prepared & Analyzed: 12/26/23						
Aroclor-1016	ND	0.019	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.019	mg/Kg wet							
Aroclor-1221	ND	0.019	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.019	mg/Kg wet							
Aroclor-1232	ND	0.019	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.019	mg/Kg wet							
Aroclor-1242	ND	0.019	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.019	mg/Kg wet							
Aroclor-1248	ND	0.019	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.019	mg/Kg wet							
Aroclor-1254	ND	0.019	mg/Kg wet							
Aroclor-1254 [2C]	ND	0.019	mg/Kg wet							
Aroclor-1260	ND	0.019	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.019	mg/Kg wet							
Aroclor-1262	ND	0.019	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.019	mg/Kg wet							
Aroclor-1268	ND	0.019	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.019	mg/Kg wet							
Surrogate: Decachlorobiphenyl	*0.224*		mg/Kg wet	0.190		118	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.220*		mg/Kg wet	0.190		115	30-150			
Surrogate: Tetrachloro-m-xylene	*0.179*		mg/Kg wet	0.190		93.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.186*		mg/Kg wet	0.190		97.6	30-150			

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361689 - SW-846 3546										
LCS (B361689-BS1)				Prepared & Analyzed: 12/26/23						
Aroclor-1016	0.16	0.019	mg/Kg wet	0.189		87.1	40-140			
Aroclor-1016 [2C]	0.17	0.019	mg/Kg wet	0.189		87.9	40-140			
Aroclor-1260	0.18	0.019	mg/Kg wet	0.189		95.2	40-140			
Aroclor-1260 [2C]	0.16	0.019	mg/Kg wet	0.189		86.9	40-140			
Surrogate: Decachlorobiphenyl	*0.220*		mg/Kg wet	0.189		116	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.218*		mg/Kg wet	0.189		116	30-150			
Surrogate: Tetrachloro-m-xylene	*0.175*		mg/Kg wet	0.189		92.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.182*		mg/Kg wet	0.189		96.3	30-150			
LCS Dup (B361689-BSD1)				Prepared & Analyzed: 12/26/23						
Aroclor-1016	0.16	0.019	mg/Kg wet	0.192		83.7	40-140	4.02	30	
Aroclor-1016 [2C]	0.16	0.019	mg/Kg wet	0.192		83.6	40-140	4.99	30	
Aroclor-1260	0.17	0.019	mg/Kg wet	0.192		89.1	40-140	6.67	30	
Aroclor-1260 [2C]	0.16	0.019	mg/Kg wet	0.192		82.4	40-140	5.37	30	
Surrogate: Decachlorobiphenyl	*0.216*		mg/Kg wet	0.192		112	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.215*		mg/Kg wet	0.192		112	30-150			
Surrogate: Tetrachloro-m-xylene	*0.166*		mg/Kg wet	0.192		86.3	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.171*		mg/Kg wet	0.192		89.0	30-150			
Matrix Spike (B361689-MS1)		**Source: 23L2638-04RE1**		Prepared & Analyzed: 12/26/23						
Aroclor-1016	0.55	0.24	mg/Kg dry	0.605	ND	90.7	40-140			
Aroclor-1016 [2C]	0.58	0.24	mg/Kg dry	0.605	ND	95.6	40-140			
Aroclor-1260	0.60	0.24	mg/Kg dry	0.605	ND	99.7	40-140			
Aroclor-1260 [2C]	0.55	0.24	mg/Kg dry	0.605	ND	90.3	40-140			
Surrogate: Decachlorobiphenyl	*0.628*		mg/Kg dry	0.605		104	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.599*		mg/Kg dry	0.605		98.9	30-150			
Surrogate: Tetrachloro-m-xylene	*0.541*		mg/Kg dry	0.605		89.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.554*		mg/Kg dry	0.605		91.6	30-150			
Matrix Spike Dup (B361689-MSD1)		**Source: 23L2638-04RE1**		Prepared & Analyzed: 12/26/23						
Aroclor-1016	0.57	0.24	mg/Kg dry	0.593	ND	96.1	40-140	5.79	30	
Aroclor-1016 [2C]	0.59	0.24	mg/Kg dry	0.593	ND	99.4	40-140	3.96	30	
Aroclor-1260	0.61	0.24	mg/Kg dry	0.593	ND	103	40-140	3.65	30	
Aroclor-1260 [2C]	0.55	0.24	mg/Kg dry	0.593	ND	93.5	40-140	3.38	30	
Surrogate: Decachlorobiphenyl	*0.650*		mg/Kg dry	0.593		109	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.618*		mg/Kg dry	0.593		104	30-150			
Surrogate: Tetrachloro-m-xylene	*0.555*		mg/Kg dry	0.593		93.6	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.568*		mg/Kg dry	0.593		95.8	30-150			
Batch B361810 - SW-846 3546										
Blank (B361810-BLK1)				Prepared: 12/27/23 Analyzed: 12/28/23						
Aroclor-1016	ND	0.020	mg/Kg wet							
Aroclor-1016 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1221	ND	0.020	mg/Kg wet							
Aroclor-1221 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1232	ND	0.020	mg/Kg wet							
Aroclor-1232 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1242	ND	0.020	mg/Kg wet							
Aroclor-1242 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1248	ND	0.020	mg/Kg wet							
Aroclor-1248 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1254	ND	0.020	mg/Kg wet							

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QUALITY CONTROL

Polychlorinated Biphenyls By GC/ECD - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361810 - SW-846 3546										
Blank (B361810-BLK1)				Prepared: 12/27/23 Analyzed: 12/28/23						
Aroclor-1254 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1260	ND	0.020	mg/Kg wet							
Aroclor-1260 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1262	ND	0.020	mg/Kg wet							
Aroclor-1262 [2C]	ND	0.020	mg/Kg wet							
Aroclor-1268	ND	0.020	mg/Kg wet							
Aroclor-1268 [2C]	ND	0.020	mg/Kg wet							
Surrogate: Decachlorobiphenyl	*0.212*		mg/Kg wet	0.196		108	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.223*		mg/Kg wet	0.196		114	30-150			
Surrogate: Tetrachloro-m-xylene	*0.190*		mg/Kg wet	0.196		96.9	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.185*		mg/Kg wet	0.196		94.5	30-150			
LCS (B361810-BS1)				Prepared: 12/27/23 Analyzed: 12/28/23						
Aroclor-1016	0.16	0.019	mg/Kg wet	0.194		80.2	40-140			
Aroclor-1016 [2C]	0.16	0.019	mg/Kg wet	0.194		84.4	40-140			
Aroclor-1260	0.16	0.019	mg/Kg wet	0.194		82.1	40-140			
Aroclor-1260 [2C]	0.16	0.019	mg/Kg wet	0.194		82.5	40-140			
Surrogate: Decachlorobiphenyl	*0.211*		mg/Kg wet	0.194		109	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.223*		mg/Kg wet	0.194		115	30-150			
Surrogate: Tetrachloro-m-xylene	*0.188*		mg/Kg wet	0.194		97.0	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.187*		mg/Kg wet	0.194		96.2	30-150			
LCS Dup (B361810-BSD1)				Prepared: 12/27/23 Analyzed: 12/28/23						
Aroclor-1016	0.16	0.019	mg/Kg wet	0.192		83.3	40-140	3.79	30	
Aroclor-1016 [2C]	0.17	0.019	mg/Kg wet	0.192		88.3	40-140	4.52	30	
Aroclor-1260	0.16	0.019	mg/Kg wet	0.192		84.3	40-140	2.69	30	
Aroclor-1260 [2C]	0.17	0.019	mg/Kg wet	0.192		87.0	40-140	5.30	30	
Surrogate: Decachlorobiphenyl	*0.207*		mg/Kg wet	0.192		108	30-150			
Surrogate: Decachlorobiphenyl [2C]	*0.222*		mg/Kg wet	0.192		115	30-150			
Surrogate: Tetrachloro-m-xylene	*0.191*		mg/Kg wet	0.192		99.2	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	*0.189*		mg/Kg wet	0.192		98.3	30-150			

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361299 - SW-846 7470A Prep										
Blank (B361299-BLK1)				Prepared: 12/20/23 Analyzed: 12/21/23						
Mercury	ND	0.00020	mg/L							
LCS (B361299-BS1)				Prepared: 12/20/23 Analyzed: 12/21/23						
Mercury	0.00449	0.00020	mg/L	0.00402		112	80-120			
LCS Dup (B361299-BSD1)				Prepared: 12/20/23 Analyzed: 12/21/23						
Mercury	0.00450	0.00020	mg/L	0.00402		112	80-120	0.216	20	
Matrix Spike (B361299-MS2)		**Source: 23L2638-11**		Prepared: 12/20/23 Analyzed: 12/21/23						
Mercury	0.00438	0.00020	mg/L	0.00402	ND	109	75-125			
Matrix Spike Dup (B361299-MSD2)		**Source: 23L2638-11**		Prepared: 12/20/23 Analyzed: 12/21/23						
Mercury	0.00437	0.00020	mg/L	0.00402	ND	109	75-125	0.128	20	
Batch B361499 - SW-846 3005A										
Blank (B361499-BLK1)				Prepared: 12/21/23 Analyzed: 12/26/23						
Antimony	ND	0.050	mg/L							
Arsenic	ND	0.010	mg/L							
Barium	ND	0.050	mg/L							
Beryllium	ND	0.0040	mg/L							
Cadmium	ND	0.0040	mg/L							
Calcium	ND	0.50	mg/L							
Chromium	ND	0.010	mg/L							
Cobalt	ND	0.010	mg/L							
Copper	ND	0.010	mg/L							
Iron	ND	0.050	mg/L							
Lead	ND	0.010	mg/L							
Magnesium	ND	0.050	mg/L							
Manganese	ND	0.010	mg/L							
Nickel	ND	0.010	mg/L							
Potassium	ND	2.0	mg/L							
Selenium	ND	0.050	mg/L							
Silver	ND	0.010	mg/L							
Sodium	ND	2.0	mg/L							
Thallium	ND	0.050	mg/L							
Vanadium	ND	0.010	mg/L							
Zinc	ND	0.010	mg/L							
Blank (B361499-BLK2)				Prepared: 12/21/23 Analyzed: 12/28/23						
Aluminum	ND	0.050	mg/L							

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361499 - SW-846 3005A										
LCS (B361499-BS1)				Prepared: 12/21/23 Analyzed: 12/26/23						
Antimony	0.512	0.050	mg/L	0.500		102	80-120			
Arsenic	0.481	0.010	mg/L	0.500		96.2	80-120			
Barium	0.514	0.050	mg/L	0.500		103	80-120			
Beryllium	0.513	0.0040	mg/L	0.500		103	80-120			
Cadmium	0.510	0.0040	mg/L	0.500		102	80-120			
Calcium	3.96	0.50	mg/L	4.00		99.1	80-120			
Chromium	0.508	0.010	mg/L	0.500		102	80-120			
Cobalt	0.505	0.010	mg/L	0.500		101	80-120			
Copper	1.02	0.010	mg/L	1.00		102	80-120			
Iron	3.90	0.050	mg/L	4.00		97.4	80-120			
Lead	0.520	0.010	mg/L	0.500		104	80-120			
Magnesium	4.01	0.050	mg/L	4.00		100	80-120			
Manganese	0.489	0.010	mg/L	0.500		97.8	80-120			
Nickel	0.516	0.010	mg/L	0.500		103	80-120			
Potassium	4.16	2.0	mg/L	4.00		104	80-120			
Selenium	0.517	0.050	mg/L	0.500		103	80-120			
Silver	0.492	0.010	mg/L	0.500		98.3	80-120			
Sodium	4.62	2.0	mg/L	4.00		116	80-120			
Thallium	0.543	0.050	mg/L	0.500		109	80-120			
Vanadium	0.505	0.010	mg/L	0.500		101	80-120			
Zinc	0.992	0.010	mg/L	1.00		99.2	80-120			
LCS (B361499-BS2)				Prepared: 12/21/23 Analyzed: 12/28/23						
Aluminum	0.516	0.050	mg/L	0.500		103	45.3-154.7			
LCS Dup (B361499-BSD1)				Prepared: 12/21/23 Analyzed: 12/26/23						
Antimony	0.517	0.050	mg/L	0.500		103	80-120	0.909	20	
Arsenic	0.484	0.010	mg/L	0.500		96.7	80-120	0.513	20	
Barium	0.518	0.050	mg/L	0.500		104	80-120	0.661	20	
Beryllium	0.515	0.0040	mg/L	0.500		103	80-120	0.335	20	
Cadmium	0.514	0.0040	mg/L	0.500		103	80-120	0.919	20	
Calcium	3.91	0.50	mg/L	4.00		97.8	80-120	1.25	20	
Chromium	0.509	0.010	mg/L	0.500		102	80-120	0.334	20	
Cobalt	0.511	0.010	mg/L	0.500		102	80-120	1.18	20	
Copper	1.02	0.010	mg/L	1.00		102	80-120	0.209	20	
Iron	3.87	0.050	mg/L	4.00		96.9	80-120	0.562	20	
Lead	0.519	0.010	mg/L	0.500		104	80-120	0.181	20	
Magnesium	3.98	0.050	mg/L	4.00		99.5	80-120	0.702	20	
Manganese	0.487	0.010	mg/L	0.500		97.3	80-120	0.487	20	
Nickel	0.516	0.010	mg/L	0.500		103	80-120	0.00938	30	
Potassium	4.16	2.0	mg/L	4.00		104	80-120	0.0591	20	
Selenium	0.518	0.050	mg/L	0.500		104	80-120	0.257	20	
Silver	0.484	0.010	mg/L	0.500		96.8	80-120	1.56	20	
Sodium	4.55	2.0	mg/L	4.00		114	80-120	1.50	20	
Thallium	0.549	0.050	mg/L	0.500		110	80-120	1.24	20	
Vanadium	0.507	0.010	mg/L	0.500		101	80-120	0.310	20	
Zinc	0.997	0.010	mg/L	1.00		99.7	80-120	0.499	20	

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B361499 - SW-846 3005A											
LCS Dup (B361499-BSD2)				Prepared: 12/21/23 Analyzed: 12/28/23							
Aluminum	0.512	0.050	mg/L	0.500		102		45.3-154.7	0.756	30	
Duplicate (B361499-DUP1)		**Source: 23L2638-09**		Prepared: 12/21/23 Analyzed: 12/26/23							
Calcium	78.2	0.50	mg/L		78.6				0.436	20	
Iron	0.0743	0.050	mg/L		0.0740				0.381	20	
Magnesium	18.2	0.050	mg/L		18.1				0.428	20	
Potassium	3.03	2.0	mg/L		2.93				3.11	20	
Sodium	66.0	2.0	mg/L		64.9				1.67	20	
Thallium	ND	0.050	mg/L		ND				NC	20	
Vanadium	0.00749	0.010	mg/L		ND				NC	20	J
Duplicate (B361499-DUP2)		**Source: 23L2638-09**		Prepared: 12/21/23 Analyzed: 12/28/23							
Aluminum	0.0455	0.050	mg/L		0.0421				7.90	20	J
Matrix Spike (B361499-MS1)		**Source: 23L2638-09**		Prepared: 12/21/23 Analyzed: 12/26/23							
Calcium	80.4	0.50	mg/L	4.00	78.6	**45.6**	*	75-125			MS-19
Iron	3.84	0.050	mg/L	4.00	0.0740	94.2		75-125			
Magnesium	21.7	0.050	mg/L	4.00	18.1	90.0		75-125			
Potassium	7.18	2.0	mg/L	4.00	2.93	106		75-125			
Sodium	68.9	2.0	mg/L	4.00	64.9	100		75-125			
Thallium	0.534	0.050	mg/L	0.500	ND	107		75-125			
Vanadium	0.514	0.010	mg/L	0.500	ND	103		75-125			
Matrix Spike (B361499-MS2)		**Source: 23L2638-09**		Prepared: 12/21/23 Analyzed: 12/28/23							
Aluminum	0.539	0.050	mg/L	0.500	0.0421	99.4		75-125			
Post Spike (B361499-PS1)		**Source: 23L2638-09**		Prepared: 12/21/23 Analyzed: 12/26/23							
Calcium	92.1		mg/L	16.0	77.0	94.4		75-125			
Iron	15.3		mg/L	16.0	0.0725	95.2		75-125			
Magnesium	33.1		mg/L	16.0	17.7	96.1		75-125			
Potassium	20.1		mg/L	16.0	2.88	108		75-125			
Sodium	80.3		mg/L	16.0	63.6	104		75-125			
Thallium	2.25		mg/L	2.00	-0.00716	112		75-125			
Vanadium	2.06		mg/L	2.00	0.00615	102		75-125			
Post Spike (B361499-PS2)		**Source: 23L2638-09**		Prepared: 12/21/23 Analyzed: 12/28/23							
Aluminum	3.26		mg/L	2.00	0.0412	**161**	*	75-125			MS-12
Dilution Check (B361499-SRL1)		**Source: 23L2638-09**		Prepared: 12/21/23 Analyzed: 12/26/23							
Calcium	79.8	2.5	mg/L		78.6				1.57	20	
Iron	ND	0.25	mg/L		ND					20	
Magnesium	18.4	0.25	mg/L		18.1				1.57	20	
Potassium	2.88	10	mg/L		2.93				1.81	20	J
Sodium	67.0	10	mg/L		64.9				3.22	20	
Thallium	ND	0.25	mg/L		ND					20	
Vanadium	ND	0.050	mg/L		ND					20	

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361499 - SW-846 3005A										
Dilution Check (B361499-SRL2)		**Source: 23L2638-09**		Prepared: 12/21/23 Analyzed: 12/28/23						
Aluminum	ND	0.050	mg/L		0.0421				20	
Batch B361688 - SW-846 3050B										
Blank (B361688-BLK1)				Prepared: 12/26/23 Analyzed: 12/27/23						
Aluminum	ND	17	mg/Kg wet							
Antimony	ND	1.7	mg/Kg wet							
Arsenic	ND	3.3	mg/Kg wet							
Barium	ND	1.7	mg/Kg wet							
Beryllium	ND	0.17	mg/Kg wet							
Cadmium	ND	0.33	mg/Kg wet							
Calcium	ND	17	mg/Kg wet							
Chromium	ND	0.66	mg/Kg wet							
Cobalt	ND	1.7	mg/Kg wet							
Copper	0.17	0.66	mg/Kg wet							J
Iron	ND	17	mg/Kg wet							
Lead	ND	0.50	mg/Kg wet							
Magnesium	ND	17	mg/Kg wet							
Manganese	ND	0.33	mg/Kg wet							
Nickel	ND	0.66	mg/Kg wet							
Potassium	ND	170	mg/Kg wet							
Selenium	ND	3.3	mg/Kg wet							
Silver	ND	0.33	mg/Kg wet							
Sodium	ND	170	mg/Kg wet							
Thallium	ND	1.7	mg/Kg wet							
Vanadium	ND	0.66	mg/Kg wet							
Zinc	ND	0.66	mg/Kg wet							
LCS (B361688-BS1)				Prepared: 12/26/23 Analyzed: 12/27/23						
Aluminum	7190	50	mg/Kg wet	8260		87.1	52.2-147.7			
Antimony	111	5.0	mg/Kg wet	132		84.4	5.6-193.9			
Arsenic	126	10	mg/Kg wet	138		91.0	81.2-118.8			
Barium	303	5.0	mg/Kg wet	316		95.8	83.2-116.8			
Beryllium	119	0.50	mg/Kg wet	111		107	83.2-117.1			
Cadmium	115	1.0	mg/Kg wet	118		97.2	82.8-116.9			
Calcium	4640	50	mg/Kg wet	4880		95.1	82.6-117.2			
Chromium	147	2.0	mg/Kg wet	145		101	82.1-117.9			
Cobalt	139	5.0	mg/Kg wet	144		96.3	84-116.7			
Copper	231	2.0	mg/Kg wet	234		98.7	84.2-116.2			
Iron	6910	50	mg/Kg wet	8080		85.5	65.1-134.9			
Lead	198	1.5	mg/Kg wet	213		93.1	82.6-117.4			
Magnesium	1930	50	mg/Kg wet	2130		90.6	79.8-120.2			
Manganese	393	1.0	mg/Kg wet	417		94.2	82.3-118			
Nickel	160	2.0	mg/Kg wet	162		98.8	82.7-117.3			
Potassium	1530	500	mg/Kg wet	1670		91.3	76-123.4			
Selenium	148	10	mg/Kg wet	156		95.2	80.8-118.6			
Silver	76.6	1.0	mg/Kg wet	79.4		96.5	80.1-119.8			
Sodium	421	500	mg/Kg wet	434		96.9	75.3-124.9			J
Thallium	90.8	5.0	mg/Kg wet	92.7		97.9	81.2-118.7			
Vanadium	158	2.0	mg/Kg wet	161		97.9	79.5-120.5			
Zinc	181	2.0	mg/Kg wet	196		92.1	81.6-118.9			

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B361688 - SW-846 3050B											
LCS Dup (B361688-BSD1)				Prepared: 12/26/23 Analyzed: 12/27/23							
Aluminum	7120	50	mg/Kg wet	8260		86.2		52.2-147.7	0.995	30	
Antimony	115	5.0	mg/Kg wet	132		87.3		5.6-193.9	3.28	30	
Arsenic	124	10	mg/Kg wet	138		90.2		81.2-118.8	0.905	30	
Barium	330	5.0	mg/Kg wet	316		104		83.2-116.8	8.63	20	
Beryllium	131	0.50	mg/Kg wet	111		**118**	*	83.2-117.1	9.90	30	L-07
Cadmium	120	1.0	mg/Kg wet	118		101		82.8-116.9	4.23	20	
Calcium	4640	50	mg/Kg wet	4880		95.1		82.6-117.2	0.0481	30	
Chromium	152	2.0	mg/Kg wet	145		105		82.1-117.9	3.58	30	
Cobalt	143	5.0	mg/Kg wet	144		99.2		84-116.7	3.00	20	
Copper	235	2.0	mg/Kg wet	234		100		84.2-116.2	1.55	30	
Iron	6700	50	mg/Kg wet	8080		82.9		65.1-134.9	3.04	30	
Lead	194	1.5	mg/Kg wet	213		91.1		82.6-117.4	2.18	30	
Magnesium	1880	50	mg/Kg wet	2130		88.4		79.8-120.2	2.44	30	
Manganese	387	1.0	mg/Kg wet	417		92.7		82.3-118	1.57	30	
Nickel	165	2.0	mg/Kg wet	162		102		82.7-117.3	3.29	30	
Potassium	1470	500	mg/Kg wet	1670		87.9		76-123.4	3.88	30	
Selenium	152	10	mg/Kg wet	156		97.7		80.8-118.6	2.65	30	
Silver	75.2	1.0	mg/Kg wet	79.4		94.8		80.1-119.8	1.79	30	
Sodium	417	500	mg/Kg wet	434		96.1		75.3-124.9	0.838	30	J
Thallium	93.5	5.0	mg/Kg wet	92.7		101		81.2-118.7	2.99	30	
Vanadium	159	2.0	mg/Kg wet	161		99.0		79.5-120.5	1.09	30	
Zinc	182	2.0	mg/Kg wet	196		92.7		81.6-118.9	0.559	30	
Matrix Spike (B361688-MS1)	**Source: 23L2638-04**			Prepared: 12/26/23 Analyzed: 12/27/23							
Aluminum	3600	25	mg/Kg dry	25.2	3160	**1750**	*	75-125			MS-19
Antimony	17.6	2.5	mg/Kg dry	25.2	ND	**69.9**	*	75-125			Z-01a
Arsenic	29.9	5.0	mg/Kg dry	25.2	3.17	106		75-125			
Barium	53.2	2.5	mg/Kg dry	25.2	31.3	86.9		75-125			
Beryllium	24.6	0.25	mg/Kg dry	25.2	0.266	96.6		75-125			
Cadmium	26.4	0.50	mg/Kg dry	25.2	ND	105		75-125			
Chromium	35.7	1.0	mg/Kg dry	25.2	10.3	101		75-125			
Cobalt	24.5	2.5	mg/Kg dry	25.2	3.45	83.5		75-125			
Copper	67.8	1.0	mg/Kg dry	50.4	9.99	115		75-125			
Lead	29.3	0.76	mg/Kg dry	25.2	8.02	84.2		75-125			
Manganese	320	0.50	mg/Kg dry	25.2	262	**229**	*	75-125			MS-19
Nickel	44.0	1.0	mg/Kg dry	25.2	18.0	103		75-125			
Potassium	1280	250	mg/Kg dry	202	976	**149**	*	75-125			MS-19
Selenium	3.00	5.0	mg/Kg dry	25.2	ND	**11.9**	*	75-125			J, Z-01
Silver	29.0	0.50	mg/Kg dry	25.2	ND	115		75-125			
Sodium	360	250	mg/Kg dry	202	129	114		75-125			
Thallium	29.7	2.5	mg/Kg dry	25.2	ND	118		75-125			
Vanadium	32.5	1.0	mg/Kg dry	25.2	6.60	103		75-125			
Zinc	64.6	1.0	mg/Kg dry	50.4	22.7	83.0		75-125			

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD		RPD Limit	Notes
Batch B361688 - SW-846 3050B												
Matrix Spike (B361688-MS2)	**Source: 23L2638-04**			Prepared: 12/26/23 Analyzed: 12/29/23								
Calcium	431000	1300	mg/Kg dry	202	313000	**58400**	*	75-125				MS-19
Matrix Spike (B361688-MS3)	**Source: 23L2638-04**			Prepared: 12/26/23 Analyzed: 12/29/23								
Iron	10600	250	mg/Kg dry	202	9190	**720**	*	75-125				MS-19
Magnesium	14900	250	mg/Kg dry	202	13300	**773**	*	75-125				MS-19
Matrix Spike Dup (B361688-MSD1)	**Source: 23L2638-04**			Prepared: 12/26/23 Analyzed: 12/27/23								
Aluminum	3470	24	mg/Kg dry	24.1	3160	**1300**	*	75-125	3.67		35	MS-19
Antimony	17.1	2.4	mg/Kg dry	24.1	ND	**70.7**	*	75-125	3.21		35	Z-01a
Arsenic	28.6	4.8	mg/Kg dry	24.1	3.17	106		75-125	4.40		35	
Barium	55.0	2.4	mg/Kg dry	24.1	31.3	98.3		75-125	3.33		35	
Beryllium	23.5	0.24	mg/Kg dry	24.1	0.266	96.2		75-125	4.79		35	
Cadmium	25.1	0.48	mg/Kg dry	24.1	ND	104		75-125	4.90		35	
Chromium	32.7	0.96	mg/Kg dry	24.1	10.3	92.7		75-125	8.75		35	
Cobalt	23.2	2.4	mg/Kg dry	24.1	3.45	81.7		75-125	5.64		35	
Copper	63.3	0.96	mg/Kg dry	48.2	9.99	110		75-125	6.90		35	
Lead	28.3	0.72	mg/Kg dry	24.1	8.02	83.9		75-125	3.44		35	
Manganese	294	0.48	mg/Kg dry	24.1	262	**135**	*	75-125	8.23		35	MS-19
Nickel	37.2	0.96	mg/Kg dry	24.1	18.0	79.3		75-125	16.9		35	
Potassium	1160	240	mg/Kg dry	193	976	95.9		75-125	9.49		35	
Selenium	1.48	4.8	mg/Kg dry	24.1	ND	**6.12**	*	75-125	**68.3**	*	35	J, Z-01
Silver	27.3	0.48	mg/Kg dry	24.1	ND	113		75-125	6.15		35	
Sodium	342	240	mg/Kg dry	193	129	110		75-125	5.01		35	
Thallium	28.5	2.4	mg/Kg dry	24.1	ND	118		75-125	4.08		35	
Vanadium	30.6	0.96	mg/Kg dry	24.1	6.60	99.5		75-125	5.88		35	
Zinc	78.0	0.96	mg/Kg dry	48.2	22.7	114		75-125	18.8		35	
Matrix Spike Dup (B361688-MSD2)	**Source: 23L2638-04**			Prepared: 12/26/23 Analyzed: 12/29/23								
Calcium	325000	1200	mg/Kg dry	193	313000	**6340**	*	75-125	28.0		35	MS-19
Matrix Spike Dup (B361688-MSD3)	**Source: 23L2638-04**			Prepared: 12/26/23 Analyzed: 12/29/23								
Iron	8290	240	mg/Kg dry	193	9190	**-469**	*	75-125	24.9		35	MS-19
Magnesium	11800	240	mg/Kg dry	193	13300	**-763**	*	75-125	22.7		35	MS-19
Post Spike (B361688-PS1)	**Source: 23L2638-04**			Prepared: 12/26/23 Analyzed: 12/27/23								
Aluminum	65.2		mg/L	2.00	64.4	**41.3**	*	75-125				MS-19
Antimony	1.38		mg/L	2.00	0.00	**69.2**	*	75-125				Z-01a
Arsenic	1.41		mg/L	2.00	0.0646	**67.4**	*	75-125				Z-02
Barium	1.73		mg/L	2.00	0.637	**54.8**	*	75-125				Z-02
Beryllium	0.907		mg/L	2.00	0.00542	**45.1**	*	75-125				Z-02
Cadmium	1.26		mg/L	2.00	0.00157	**62.9**	*	75-125				Z-02
Chromium	1.33		mg/L	2.00	0.210	**55.8**	*	75-125				Z-02
Cobalt	1.07		mg/L	2.00	0.0703	**50.0**	*	75-125				Z-02
Manganese	6.14		mg/L	2.00	5.33	**40.2**	*	75-125				MS-19
Nickel	1.43		mg/L	2.00	0.368	**53.1**	*	75-125				Z-02
Selenium	0.955		mg/L	2.00	-0.467	**47.8**	*	75-125				Z-01
Silver	1.40		mg/L	2.00	-0.0281	**70.2**	*	75-125				Z-02
Sodium	11.2		mg/L	16.0	2.64	**53.3**	*	75-125				Z-02
Thallium	1.52		mg/L	2.00	0.00	75.9		75-125				
Vanadium	1.32		mg/L	2.00	0.134	**59.4**	*	75-125				Z-02
Zinc	2.44		mg/L	4.00	0.463	**49.5**	*	75-125				Z-02

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B361688 - SW-846 3050B											
Post Spike (B361688-PS2)	**Source: 23L2638-04**			Prepared: 12/26/23 Analyzed: 12/29/23							
Calcium	9630		mg/L	16.0	6370	**20400**	*	75-125			MS-19
Post Spike (B361688-PS3)	**Source: 23L2638-04**			Prepared: 12/26/23 Analyzed: 12/29/23							
Iron	303		mg/L	16.0	187	**726**	*	75-125			MS-19
Magnesium	380		mg/L	16.0	271	**680**	*	75-125			MS-19
Dilution Check (B361688-SRL1)	**Source: 23L2638-04**			Prepared: 12/26/23 Analyzed: 12/27/23							
Aluminum	3180	120	mg/Kg dry		3160				0.489	20	
Arsenic	ND	25	mg/Kg dry		ND					20	
Barium	33.5	12	mg/Kg dry		31.3				6.75	20	
Beryllium	ND	1.2	mg/Kg dry		ND					20	
Cadmium	ND	2.5	mg/Kg dry		ND					20	
Chromium	11.3	4.9	mg/Kg dry		10.3				9.02	20	
Cobalt	4.15	12	mg/Kg dry		3.45				18.4	20	J
Manganese	285	2.5	mg/Kg dry		262				8.53	20	
Nickel	21.1	4.9	mg/Kg dry		18.0				15.8	20	
Selenium	ND	25	mg/Kg dry		ND					20	
Silver	ND	2.5	mg/Kg dry		ND					20	
Sodium	ND	1200	mg/Kg dry		ND					20	
Thallium	ND	12	mg/Kg dry		ND					20	
Vanadium	5.98	4.9	mg/Kg dry		6.60				9.76	20	
Zinc	25.8	4.9	mg/Kg dry		22.7				12.7	20	
Dilution Check (B361688-SRL2)	**Source: 23L2638-04**			Prepared: 12/26/23 Analyzed: 12/29/23							
Calcium	338000	6100	mg/Kg dry		313000				7.79	20	
Dilution Check (B361688-SRL3)	**Source: 23L2638-04**			Prepared: 12/26/23 Analyzed: 12/29/23							
Iron	7980	1200	mg/Kg dry		9190				14.1	20	
Magnesium	11400	1200	mg/Kg dry		13300				15.5	20	
Batch B361707 - SW-846 7471											
Blank (B361707-BLK1)				Prepared: 12/26/23 Analyzed: 12/27/23							
Mercury	ND	0.025	mg/Kg wet								
LCS (B361707-BS1)				Prepared: 12/26/23 Analyzed: 12/27/23							
Mercury	10.4	1.8	mg/Kg wet	10.3		101		55-143.7			
LCS Dup (B361707-BSD1)				Prepared: 12/26/23 Analyzed: 12/27/23							
Mercury	9.14	1.8	mg/Kg wet	10.3		88.8		55-143.7	13.0	20	

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD		RPD Limit	Notes
Batch B361709 - SW-846 7471											
Blank (B361709-BLK1)				Prepared: 12/26/23 Analyzed: 12/28/23							
Mercury	ND	0.024	mg/Kg wet								
LCS (B361709-BS1)				Prepared: 12/26/23 Analyzed: 12/28/23							
Mercury	11.8	1.8	mg/Kg wet	10.3		115	72.8-127.2				R-05
LCS Dup (B361709-BSD1)				Prepared: 12/26/23 Analyzed: 12/28/23							
Mercury	9.18	1.8	mg/Kg wet	10.3		89.1	72.8-127.2	**25.2**	*	20	R-05
Matrix Spike (B361709-MS2)		**Source: 23L2638-04**		Prepared: 12/26/23 Analyzed: 12/28/23							
Mercury	0.513	0.035	mg/Kg dry	0.463	ND	111	80-120				
Matrix Spike Dup (B361709-MSD2)		**Source: 23L2638-04**		Prepared: 12/26/23 Analyzed: 12/28/23							
Mercury	0.553	0.036	mg/Kg dry	0.486	ND	114	80-120	7.43		20	
Batch B362023 - SW-846 3005A											
Blank (B362023-BLK1)				Prepared: 12/28/23 Analyzed: 12/29/23							
Aluminum	ND	0.050	mg/L								
Arsenic	ND	0.010	mg/L								
Barium	ND	0.050	mg/L								
Beryllium	ND	0.0040	mg/L								
Cadmium	0.0016	0.0040	mg/L								J
Calcium	ND	0.50	mg/L								
Chromium	ND	0.010	mg/L								
Cobalt	ND	0.010	mg/L								
Copper	ND	0.010	mg/L								
Iron	ND	0.050	mg/L								
Lead	ND	0.010	mg/L								
Magnesium	ND	0.050	mg/L								
Manganese	ND	0.010	mg/L								
Nickel	ND	0.010	mg/L								
Potassium	ND	2.0	mg/L								
Silver	ND	0.010	mg/L								
Sodium	ND	2.0	mg/L								
Zinc	ND	0.010	mg/L								
Blank (B362023-BLK2)				Prepared: 12/28/23 Analyzed: 01/03/24							
Antimony	ND	0.050	mg/L								
Selenium	ND	0.050	mg/L								
Thallium	ND	0.050	mg/L								
Blank (B362023-BLK3)				Prepared: 12/28/23 Analyzed: 01/04/24							
Vanadium	ND	0.010	mg/L								

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B362023 - SW-846 3005A										
LCS (B362023-BS1)				Prepared: 12/28/23 Analyzed: 12/29/23						
Aluminum	0.496	0.050	mg/L	0.500		99.2	45.3-154.7			
Arsenic	0.457	0.010	mg/L	0.500		91.5	80-120			
Barium	0.500	0.050	mg/L	0.500		100	80-120			
Beryllium	0.521	0.0040	mg/L	0.500		104	80-120			
Cadmium	0.483	0.0040	mg/L	0.500		96.6	80-120			
Calcium	4.01	0.50	mg/L	4.00		100	80-120			
Chromium	0.497	0.010	mg/L	0.500		99.4	80-120			
Cobalt	0.494	0.010	mg/L	0.500		98.7	80-120			
Copper	0.963	0.010	mg/L	1.00		96.3	80-120			
Iron	4.01	0.050	mg/L	4.00		100	80-120			
Lead	0.493	0.010	mg/L	0.500		98.6	80-120			
Magnesium	4.02	0.050	mg/L	4.00		101	80-120			
Manganese	0.498	0.010	mg/L	0.500		99.5	80-120			
Nickel	0.497	0.010	mg/L	0.500		99.5	80-120			
Potassium	4.01	2.0	mg/L	4.00		100	80-120			
Silver	0.504	0.010	mg/L	0.500		101	80-120			
Sodium	4.05	2.0	mg/L	4.00		101	80-120			
Zinc	0.965	0.010	mg/L	1.00		96.5	80-120			
LCS (B362023-BS2)				Prepared: 12/28/23 Analyzed: 01/03/24						
Antimony	0.487	0.050	mg/L	0.500		97.4	80-120			
Selenium	0.489	0.050	mg/L	0.500		97.8	80-120			
Thallium	0.477	0.050	mg/L	0.500		95.3	80-120			
LCS (B362023-BS3)				Prepared: 12/28/23 Analyzed: 01/04/24						
Vanadium	0.473	0.010	mg/L	0.500		94.5	80-120			
LCS Dup (B362023-BSD1)				Prepared: 12/28/23 Analyzed: 12/29/23						
Aluminum	0.491	0.050	mg/L	0.500		98.2	45.3-154.7	0.983	30	
Arsenic	0.456	0.010	mg/L	0.500		91.2	80-120	0.280	20	
Barium	0.497	0.050	mg/L	0.500		99.4	80-120	0.698	20	
Beryllium	0.522	0.0040	mg/L	0.500		104	80-120	0.274	20	
Cadmium	0.480	0.0040	mg/L	0.500		96.0	80-120	0.646	20	
Calcium	3.98	0.50	mg/L	4.00		99.6	80-120	0.622	20	
Chromium	0.494	0.010	mg/L	0.500		98.7	80-120	0.645	20	
Cobalt	0.491	0.010	mg/L	0.500		98.2	80-120	0.559	20	
Copper	0.955	0.010	mg/L	1.00		95.5	80-120	0.780	20	
Iron	4.03	0.050	mg/L	4.00		101	80-120	0.699	20	
Lead	0.491	0.010	mg/L	0.500		98.2	80-120	0.415	20	
Magnesium	3.96	0.050	mg/L	4.00		98.9	80-120	1.70	20	
Manganese	0.498	0.010	mg/L	0.500		99.6	80-120	0.0971	20	
Nickel	0.494	0.010	mg/L	0.500		98.8	80-120	0.692	30	
Potassium	3.92	2.0	mg/L	4.00		97.9	80-120	2.37	20	
Silver	0.501	0.010	mg/L	0.500		100	80-120	0.610	20	
Sodium	4.00	2.0	mg/L	4.00		100	80-120	1.20	20	
Zinc	0.957	0.010	mg/L	1.00		95.7	80-120	0.874	20	

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B362023 - SW-846 3005A											
LCS Dup (B362023-BSD2)				Prepared: 12/28/23 Analyzed: 01/03/24							
Antimony	0.473	0.050	mg/L	0.500		94.6		80-120	2.87	20	
Selenium	0.475	0.050	mg/L	0.500		94.9		80-120	2.94	20	
Thallium	0.474	0.050	mg/L	0.500		94.7		80-120	0.615	20	
LCS Dup (B362023-BSD3)				Prepared: 12/28/23 Analyzed: 01/04/24							
Vanadium	0.486	0.010	mg/L	0.500		97.3		80-120	2.85	20	
Matrix Spike (B362023-MS1)		**Source: 23L2638-11**		Prepared: 12/28/23 Analyzed: 12/29/23							
Aluminum	0.605	0.050	mg/L	0.500	0.0801	105		75-125			
Arsenic	0.468	0.010	mg/L	0.500	ND	93.7		75-125			
Barium	0.563	0.050	mg/L	0.500	0.0680	99.0		75-125			
Beryllium	0.536	0.0040	mg/L	0.500	ND	107		75-125			
Cadmium	0.486	0.0040	mg/L	0.500	ND	97.3		75-125			
Calcium	74.7	0.50	mg/L	4.00	69.2	**137**	*	75-125			MS-19
Chromium	0.499	0.010	mg/L	0.500	ND	99.8		75-125			
Cobalt	0.488	0.010	mg/L	0.500	ND	97.6		75-125			
Copper	0.969	0.010	mg/L	1.00	ND	96.9		75-125			
Iron	4.53	0.050	mg/L	4.00	0.481	101		75-125			
Lead	0.491	0.010	mg/L	0.500	ND	98.3		75-125			
Magnesium	8.08	0.050	mg/L	4.00	4.00	102		75-125			
Manganese	0.549	0.010	mg/L	0.500	0.0472	100		75-125			
Nickel	0.490	0.010	mg/L	0.500	ND	97.9		75-125			
Potassium	8.61	2.0	mg/L	4.00	4.50	103		75-125			
Silver	0.495	0.010	mg/L	0.500	ND	99.0		75-125			
Sodium	5.46	2.0	mg/L	4.00	1.37	102		75-125			
Zinc	0.963	0.010	mg/L	1.00	0.00501	95.8		75-125			
Matrix Spike (B362023-MS2)		**Source: 23L2638-11**		Prepared: 12/28/23 Analyzed: 01/03/24							
Antimony	0.497	0.050	mg/L	0.500	ND	99.4		75-125			
Selenium	0.482	0.050	mg/L	0.500	ND	96.3		75-125			
Thallium	0.492	0.050	mg/L	0.500	ND	98.3		75-125			
Matrix Spike (B362023-MS3)		**Source: 23L2638-11**		Prepared: 12/28/23 Analyzed: 01/04/24							
Vanadium	0.480	0.010	mg/L	0.500	ND	96.1		75-125			
Matrix Spike Dup (B362023-MSD1)		**Source: 23L2638-11**		Prepared: 12/28/23 Analyzed: 12/29/23							
Aluminum	0.523	0.050	mg/L	0.500	0.0801	88.5		75-125	14.5	20	
Arsenic	0.393	0.010	mg/L	0.500	ND	78.7		75-125	17.4	20	
Barium	0.486	0.050	mg/L	0.500	0.0680	83.6		75-125	14.7	20	
Beryllium	0.457	0.0040	mg/L	0.500	ND	91.3		75-125	16.0	20	
Cadmium	0.410	0.0040	mg/L	0.500	ND	82.1		75-125	16.9	20	
Calcium	72.2	0.50	mg/L	4.00	69.2	75.4		75-125	3.35	20	
Chromium	0.422	0.010	mg/L	0.500	ND	84.4		75-125	16.7	20	
Cobalt	0.414	0.010	mg/L	0.500	ND	82.8		75-125	16.4	20	
Copper	0.821	0.010	mg/L	1.00	ND	82.1		75-125	16.5	20	
Iron	3.92	0.050	mg/L	4.00	0.481	85.9		75-125	14.4	20	
Lead	0.417	0.010	mg/L	0.500	ND	83.5		75-125	16.3	20	
Magnesium	7.35	0.050	mg/L	4.00	4.00	83.6		75-125	9.50	20	
Manganese	0.472	0.010	mg/L	0.500	0.0472	85.0		75-125	15.1	20	
Nickel	0.414	0.010	mg/L	0.500	ND	82.8		75-125	16.7	20	
Potassium	7.78	2.0	mg/L	4.00	4.50	82.0		75-125	10.1	20	
Silver	0.416	0.010	mg/L	0.500	ND	83.3		75-125	17.2	20	
Sodium	4.82	2.0	mg/L	4.00	1.37	86.3		75-125	12.4	20	
Zinc	0.815	0.010	mg/L	1.00	0.00501	81.0		75-125	16.6	20	

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QUALITY CONTROL

Metals Analyses (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B362023 - SW-846 3005A										
Matrix Spike Dup (B362023-MSD2)	**Source: 23L2638-11**			Prepared: 12/28/23 Analyzed: 01/03/24						
Antimony	0.425	0.050	mg/L	0.500	ND	84.9	75-125	15.7	20	
Selenium	0.411	0.050	mg/L	0.500	ND	82.2	75-125	15.8	20	
Thallium	0.424	0.050	mg/L	0.500	ND	84.7	75-125	14.9	20	
Matrix Spike Dup (B362023-MSD3)	**Source: 23L2638-11**			Prepared: 12/28/23 Analyzed: 01/04/24						
Vanadium	0.415	0.010	mg/L	0.500	ND	83.1	75-125	14.5	20	
Post Spike (B362023-PS1)	**Source: 23L2638-11**			Prepared: 12/28/23 Analyzed: 12/29/23						
Aluminum	2.18		mg/L	2.00	0.0785	105	75-125			
Arsenic	1.99		mg/L	2.00	-0.00387	99.4	75-125			
Barium	2.13		mg/L	2.00	0.0667	103	75-125			
Beryllium	2.24		mg/L	2.00	0.000188	112	75-125			
Cadmium	2.03		mg/L	2.00	0.00105	101	75-125			
Calcium	83.8		mg/L	16.0	67.8	100	75-125			
Chromium	2.08		mg/L	2.00	0.00192	104	75-125			
Cobalt	2.02		mg/L	2.00	0.000753	101	75-125			
Copper	4.05		mg/L	4.00	-0.000118	101	75-125			
Iron	17.4		mg/L	16.0	0.472	106	75-125			
Lead	2.02		mg/L	2.00	0.00367	101	75-125			
Magnesium	20.3		mg/L	16.0	3.92	103	75-125			
Manganese	2.13		mg/L	2.00	0.0462	104	75-125			
Nickel	2.02		mg/L	2.00	0.00213	101	75-125			
Potassium	21.0		mg/L	16.0	4.41	104	75-125			
Silver	2.08		mg/L	2.00	-0.000736	104	75-125			
Sodium	18.1		mg/L	16.0	1.34	105	75-125			
Zinc	4.00		mg/L	4.00	0.00491	99.8	75-125			
Dilution Check (B362023-SRL1)	**Source: 23L2638-11**			Prepared: 12/28/23 Analyzed: 12/29/23						
Aluminum	ND	0.25	mg/L		ND				20	
Arsenic	ND	0.050	mg/L		ND				20	
Barium	0.0638	0.25	mg/L		0.0680			6.47	20	J
Beryllium	ND	0.020	mg/L		ND				20	
Cadmium	0.00672	0.020	mg/L		ND				20	J
Calcium	69.7	2.5	mg/L		69.2			0.685	20	
Chromium	ND	0.050	mg/L		ND				20	
Cobalt	ND	0.050	mg/L		ND				20	
Copper	ND	0.050	mg/L		ND				20	
Lead	ND	0.050	mg/L		ND				20	
Magnesium	4.10	0.25	mg/L		4.00			2.52	20	
Manganese	0.0490	0.050	mg/L		0.0472			3.70	20	J
Nickel	ND	0.050	mg/L		ND				20	
Potassium	4.83	10	mg/L		4.50			6.95	20	J
Silver	ND	0.050	mg/L		ND				20	
Sodium	ND	10	mg/L		ND				20	
Zinc	ND	0.050	mg/L		ND				20	

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QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B361285 - % Solids											
Duplicate (B361285-DUP3)	**Source: 23L2638-04**			Prepared & Analyzed: 12/20/23							
% Solids	64.6		% Wt		66.1				2.24	10	
Batch B364445 - SW-846 3060A											
Blank (B364445-BLK1)				Prepared: 01/29/24 Analyzed: 01/30/24							
Hexavalent Chromium	ND	0.16	mg/Kg wet								
LCS (B364445-BS1)				Prepared: 01/29/24 Analyzed: 01/30/24							
Hexavalent Chromium	150	3.8	mg/Kg wet	168		88.9		80-120			
LCS Dup (B364445-BSD1)				Prepared: 01/29/24 Analyzed: 01/30/24							
Hexavalent Chromium	150	3.7	mg/Kg wet	164		91.1		80-120	0.368	20	
Matrix Spike (B364445-MS3) Soluble MS	**Source: 23L2638-04**			Prepared: 01/29/24 Analyzed: 01/30/24							
Hexavalent Chromium	6.9	1.2	mg/Kg dry	60.5	ND	**11.4**	*	85-115			MS-16
Matrix Spike (B364445-MS4) PDMS	**Source: 23L2638-04**			Prepared: 01/29/24 Analyzed: 01/30/24							
Hexavalent Chromium	19	1.2	mg/Kg dry	59.4	ND	**32.7**	*	85-115			MS-16
Matrix Spike (B364445-MS5) Insoluble MS	**Source: 23L2638-04**			Prepared: 01/29/24 Analyzed: 01/30/24							
Hexavalent Chromium	560	24	mg/Kg dry	957	ND	**58.9**	*	85-115			MS-16
Matrix Spike Dup (B364445-MSD3) Soluble MS Dup	**Source: 23L2638-04**			Prepared: 01/29/24 Analyzed: 01/30/24							
Hexavalent Chromium	7.8	1.2	mg/Kg dry	58.6	ND	**13.3**	*	85-115	12.0	35	MS-16

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

SS-2

Lab Sample ID: 23L2638-02RE1 Date(s) Analyzed: 12/26/2023 12/26/2023

Instrument ID (1): ECD10 Instrument ID (2): ECD10

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1260	1	0.000	0.000	0.000	0.092	
	2	0.000	0.000	0.000	0.080	14.0

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

SS-3

Lab Sample ID: 23L2638-03RE1 Date(s) Analyzed: 12/26/2023 12/26/2023

Instrument ID (1): ECD10 Instrument ID (2): ECD10

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1260	1	0.000	0.000	0.000	0.26	
	2	0.000	0.000	0.000	0.28	7.4

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

SS-6

Lab Sample ID: 23L2638-06

Date(s) Analyzed: 12/24/2023 12/24/2023

Instrument ID (1): ECD4

Instrument ID (2): ECD4

GC Column (1): ID: (mm)

GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1254	1	0.000	0.000	0.000	0.039	
	2	0.000	0.000	0.000	0.049	22.7

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Duplicate

Lab Sample ID: 23L2638-07

Date(s) Analyzed: 12/28/2023 12/28/2023

Instrument ID (1): ECD5

Instrument ID (2): ECD5

GC Column (1): ID: (mm)

GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1260	1	0.000	0.000	0.000	0.24	
	2	0.000	0.000	0.000	0.23	4.3

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS

Lab Sample ID: B361331-BS1 Date(s) Analyzed: 12/23/2023 12/23/2023

Instrument ID (1): ECD1 Instrument ID (2): ECD1

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.17	
	2	0.000	0.000	0.000	0.18	5.7
Aroclor-1260	1	0.000	0.000	0.000	0.18	
	2	0.000	0.000	0.000	0.16	11.8

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS Dup

Lab Sample ID: B361331-BSD1 Date(s) Analyzed: 12/23/2023 12/23/2023

Instrument ID (1): ECD1 Instrument ID (2): ECD1

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.18	
	2	0.000	0.000	0.000	0.18	0.0
Aroclor-1260	1	0.000	0.000	0.000	0.18	
	2	0.000	0.000	0.000	0.17	5.7

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS

Lab Sample ID: B361357-BS1 Date(s) Analyzed: 12/21/2023 12/21/2023

Instrument ID (1): ECD4 Instrument ID (2): ECD4

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.82	
	2	0.000	0.000	0.000	0.80	2.5
Aroclor-1260	1	0.000	0.000	0.000	0.74	
	2	0.000	0.000	0.000	0.76	2.7

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS Dup

Lab Sample ID: B361357-BSD1 Date(s) Analyzed: 12/21/2023 12/21/2023

Instrument ID (1): ECD4 Instrument ID (2): ECD4

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.89	
	2	0.000	0.000	0.000	0.89	0.0
Aroclor-1260	1	0.000	0.000	0.000	0.81	
	2	0.000	0.000	0.000	0.85	4.8

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Matrix Spike

Lab Sample ID: B361357-MS1

Date(s) Analyzed: 12/21/2023 12/21/2023

Instrument ID (1): ECD4

Instrument ID (2): ECD4

GC Column (1): ID: (mm)

GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.74	
	2	0.000	0.000	0.000	0.75	1.3
Aroclor-1260	1	0.000	0.000	0.000	0.68	
	2	0.000	0.000	0.000	0.69	1.5

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Matrix Spike Dup

Lab Sample ID: B361357-MSD1 Date(s) Analyzed: 12/21/2023 12/21/2023

Instrument ID (1): ECD4 Instrument ID (2): ECD4

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.69	
	2	0.000	0.000	0.000	0.70	1.4
Aroclor-1260	1	0.000	0.000	0.000	0.63	
	2	0.000	0.000	0.000	0.65	3.1

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS

Lab Sample ID: B361689-BS1 Date(s) Analyzed: 12/26/2023 12/26/2023

Instrument ID (1): ECD10 Instrument ID (2): ECD10

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.16	
	2	0.000	0.000	0.000	0.17	6.1
Aroclor-1260	1	0.000	0.000	0.000	0.18	
	2	0.000	0.000	0.000	0.16	11.8

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS Dup

Lab Sample ID: B361689-BSD1 Date(s) Analyzed: 12/26/2023 12/26/2023

Instrument ID (1): ECD10 Instrument ID (2): ECD10

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.16	
	2	0.000	0.000	0.000	0.16	0.0
Aroclor-1260	1	0.000	0.000	0.000	0.17	
	2	0.000	0.000	0.000	0.16	6.1

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Matrix Spike

Lab Sample ID: B361689-MS1 Date(s) Analyzed: 12/26/2023 12/26/2023

Instrument ID (1): ECD10 Instrument ID (2): ECD10

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.55	
	2	0.000	0.000	0.000	0.58	5.3
Aroclor-1260	1	0.000	0.000	0.000	0.60	
	2	0.000	0.000	0.000	0.55	8.7

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

Matrix Spike Dup

Lab Sample ID: B361689-MSD1 Date(s) Analyzed: 12/26/2023 12/26/2023

Instrument ID (1): ECD10 Instrument ID (2): ECD10

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.57	
	2	0.000	0.000	0.000	0.59	3.5
Aroclor-1260	1	0.000	0.000	0.000	0.61	
	2	0.000	0.000	0.000	0.55	10.3

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS

Lab Sample ID: B361810-BS1 Date(s) Analyzed: 12/28/2023 12/28/2023

Instrument ID (1): ECD5 Instrument ID (2): ECD5

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.16	
	2	0.000	0.000	0.000	0.16	0.0
Aroclor-1260	1	0.000	0.000	0.000	0.16	
	2	0.000	0.000	0.000	0.16	0.0

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IDENTIFICATION SUMMARY FOR SINGLE COMPONENT ANALYTES

SW-846 8082A

LCS Dup

Lab Sample ID: B361810-BSD1 Date(s) Analyzed: 12/28/2023 12/28/2023

Instrument ID (1): ECD5 Instrument ID (2): ECD5

GC Column (1): ID: (mm) GC Column (2): ID: (mm)

ANALYTE	COL	RT	RT WINDOW		CONCENTRATION	%RPD
			FROM	TO		
Aroclor-1016	1	0.000	0.000	0.000	0.16	
	2	0.000	0.000	0.000	0.17	6.1
Aroclor-1260	1	0.000	0.000	0.000	0.16	
	2	0.000	0.000	0.000	0.17	6.1

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
B	Analyte is found in the associated laboratory blank as well as in the sample.
H-06	Sample was extracted past the recommended holding time.
H-10	Analysis was requested after the recommended holding time had passed.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
L-02	Laboratory fortified blank/laboratory control sample recovery and duplicate recoveries outside of control limits. Data validation is not affected since all results are "not detected" for associated samples in this batch and bias is on the high side.
L-04	Laboratory fortified blank/laboratory control sample recovery and duplicate recovery are outside of control limits. Reported value for this compound is likely to be biased on the low side.
L-07	Either laboratory fortified blank/laboratory control sample or duplicate recovery is outside of control limits, but the other is within limits. RPD between the two LFB/LCS results is within method specified criteria.
MS-07A	Matrix spike and spike duplicate recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated.
MS-09	Matrix spike recovery and/or matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.
MS-12	Matrix spike recovery and matrix spike duplicate recovery outside of control limits. Possibility of sample matrix effects that lead to a high bias for reported result or non-homogeneous sample aliquots cannot be eliminated.
MS-16	For solid method SW846-7196A, the matrix spike is outside of control limits. pH and ORP results were indicative of reducing conditions. Reanalysis is not required. Analysis is in control based on LCS recoveries.
MS-19	Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representative of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.
MS-22	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.
MS-23	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is outside of the method specified criteria. Reduced precision anticipated for any reported result for this compound.
MS-24	Either matrix spike or matrix spike duplicate is outside of control limits, but the other is within limits. Analysis is in control based on laboratory fortified blank recovery.
R-05	Laboratory fortified blank duplicate RPD is outside of control limits. Reduced precision is anticipated for any reported value for this compound.
R-06	Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.
RL-12	Elevated reporting limit due to matrix interference.
S-07	One associated surrogate standard recovery is outside of control limits but the other(s) is/are within limits. All recoveries are > 10%.
S-09	Sample was re-extracted outside of holding time since surrogate standard recovery was outside of control limits in initial analysis. Initial data is reported since confirmation analysis also had unacceptable surrogate, confirming matrix interference.
V-04	Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria. Reported result is estimated.
V-05	Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.
V-06	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side for this compound.
V-20	Continuing calibration verification (CCV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
V-34	Initial calibration verification (ICV) did not meet method specifications and was biased on the low side for this compound. Reported result is estimated.
V-36	Initial calibration verification (ICV) did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.
W-06	Elevated method reporting limit due to intense color of sample
Z-01	Matrix spike, spike duplicate and post spike recovery is outside of control limits . Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated. BS/BSD is within criteria.
Z-01a	Matrix spike, spike duplicate and post spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of matrix effects that lead to low bias cannot be eliminated.
Z-02	Post spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank and dilution check recovery. Possibility of sample matrix effects that lead to low bias for reported result cannot be eliminated.

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 6010D in Soil	
Aluminum	CT,NH,NY,ME,VA,NC
Antimony	CT,NH,NY,ME,VA,NC
Arsenic	CT,NH,NY,ME,VA,NC
Barium	CT,NH,NY,ME,VA,NC
Beryllium	CT,NH,NY,ME,VA,NC
Cadmium	CT,NH,NY,ME,VA,NC
Calcium	CT,NH,NY,ME,VA,NC
Chromium	CT,NH,NY,ME,VA,NC
Cobalt	CT,NH,NY,ME,VA,NC
Copper	CT,NH,NY,ME,VA,NC
Iron	CT,NH,NY,ME,VA,NC
Lead	CT,NH,NY,ME,VA,NC
Magnesium	CT,NH,NY,ME,VA,NC
Manganese	CT,NH,NY,ME,VA,NC
Nickel	CT,NH,NY,ME,VA,NC
Potassium	CT,NH,NY,ME,VA,NC
Selenium	CT,NH,NY,ME,VA,NC
Silver	CT,NH,NY,ME,VA,NC
Sodium	CT,NH,NY,ME,VA,NC
Thallium	CT,NH,NY,ME,VA,NC
Vanadium	CT,NH,NY,ME,VA,NC
Zinc	CT,NH,NY,ME,VA,NC
SW-846 6010D in Water	
Aluminum	CT,NH,NY,ME,VA,NC
Antimony	CT,NH,NY,ME,VA,NC
Arsenic	CT,NH,NY,ME,VA,RI,NC
Barium	CT,NH,NY,ME,VA,NC
Beryllium	CT,NH,NY,ME,VA,NC
Cadmium	CT,NH,NY,ME,VA,NC
Calcium	CT,NH,NY,ME,VA,NC
Chromium	CT,NH,NY,ME,VA,NC
Cobalt	CT,NH,NY,ME,VA,NC
Copper	CT,NH,NY,ME,VA,NC
Iron	CT,NH,NY,ME,VA,NC
Lead	CT,NH,NY,ME,VA,NC
Magnesium	CT,NH,NY,ME,VA,NC
Manganese	CT,NH,NY,ME,VA,NC
Nickel	CT,NH,NY,ME,VA,NC
Potassium	CT,NH,NY,ME,VA,NC
Selenium	CT,NH,NY,ME,VA,NC
Silver	CT,NH,NY,ME,VA,NC
Sodium	CT,NH,NY,ME,VA,NC
Thallium	CT,NH,NY,VA,NC
Vanadium	CT,NH,NY,ME,VA,NC
Zinc	CT,NH,NY,ME,VA,NC
SW-846 7196A in Soil	

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 7196A in Soil	
Hexavalent Chromium	NY,CT,NH,NC,ME,VA
SW-846 7470A in Water	
Mercury	CT,NH,NY,NC,ME,VA
SW-846 7471B in Soil	
Mercury	CT,NH,NY,NC,ME,VA
SW-846 8082A in Soil	
Aroclor-1016	CT,NH,NY,NC,ME,VA,PA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1262	NH,NY,NC,ME,VA,PA
Aroclor-1262 [2C]	NH,NY,NC,ME,VA,PA
Aroclor-1268	NH,NY,NC,ME,VA,PA
Aroclor-1268 [2C]	NH,NY,NC,ME,VA,PA
SW-846 8082A in Water	
Aroclor-1016	CT,NH,NY,NC,ME,VA,PA
Aroclor-1016	CT,NH,NY,NC,ME,VA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1016 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1221	CT,NH,NY,NC,ME,VA
Aroclor-1221	CT,NH,NY,NC,ME,VA,PA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1221 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232	CT,NH,NY,NC,ME,VA,PA
Aroclor-1232	CT,NH,NY,NC,ME,VA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1232 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242	CT,NH,NY,NC,ME,VA
Aroclor-1242	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1242 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1248	CT,NH,NY,NC,ME,VA
Aroclor-1248	CT,NH,NY,NC,ME,VA,PA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1248 [2C]	CT,NH,NY,NC,ME,VA,PA

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8082A in Water	
Aroclor-1254	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254	CT,NH,NY,NC,ME,VA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1254 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1260	CT,NH,NY,NC,ME,VA
Aroclor-1260	CT,NH,NY,NC,ME,VA,PA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA
Aroclor-1260 [2C]	CT,NH,NY,NC,ME,VA,PA
Aroclor-1262	NH,NY,NC,ME,VA
Aroclor-1262	NH,NY,NC,ME,VA,PA
Aroclor-1262 [2C]	NH,NY,NC,ME,VA,PA
Aroclor-1262 [2C]	NH,NY,NC,ME,VA
Aroclor-1268	NH,NY,NC,ME,VA,PA
Aroclor-1268	NH,NY,NC,ME,VA
Aroclor-1268 [2C]	NH,NY,NC,ME,VA,PA
Aroclor-1268 [2C]	NH,NY,NC,ME,VA
SW-846 8260D in Soil	
Acetone	CT,NH,NY,ME,VA
Benzene	CT,NH,NY,ME,VA
Bromochloromethane	NH,NY,ME,VA
Bromodichloromethane	CT,NH,NY,ME,VA
Bromoform	CT,NH,NY,ME,VA
Bromomethane	CT,NH,NY,ME,VA
2-Butanone (MEK)	CT,NH,NY,ME,VA
Carbon Disulfide	CT,NH,NY,ME,VA
Carbon Tetrachloride	CT,NH,NY,ME,VA
Chlorobenzene	CT,NH,NY,ME,VA
Chlorodibromomethane	CT,NH,NY,ME,VA
Chloroethane	CT,NH,NY,ME,VA
Chloroform	CT,NH,NY,ME,VA
Chloromethane	CT,NH,NY,ME,VA
Cyclohexane	NY,ME
1,2-Dibromo-3-chloropropane (DBCP)	NY,ME
1,2-Dibromoethane (EDB)	NH,NY
1,2-Dichlorobenzene	CT,NH,NY,ME,VA
1,3-Dichlorobenzene	CT,NH,NY,ME,VA
1,4-Dichlorobenzene	CT,NH,NY,ME,VA
Dichlorodifluoromethane (Freon 12)	NH,NY,ME,VA
1,1-Dichloroethane	CT,NH,NY,ME,VA
1,2-Dichloroethane	CT,NH,NY,ME,VA
1,1-Dichloroethylene	CT,NH,NY,ME,VA
cis-1,2-Dichloroethylene	CT,NH,NY,ME,VA
trans-1,2-Dichloroethylene	CT,NH,NY,ME,VA
1,2-Dichloropropane	CT,NH,NY,ME,VA
cis-1,3-Dichloropropene	CT,NH,NY,ME,VA
trans-1,3-Dichloropropene	CT,NH,NY,ME,VA

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260D in Soil	
1,4-Dioxane	NY,ME
Ethylbenzene	CT,NH,NY,ME,VA
Hexachlorobutadiene	NH,NY,ME,VA
2-Hexanone (MBK)	CT,NH,NY,ME,VA
Isopropylbenzene (Cumene)	CT,NH,NY,ME,VA
Methyl Acetate	NY,ME
Methyl tert-Butyl Ether (MTBE)	NY,ME,VA
Methyl Cyclohexane	NY
Methylene Chloride	CT,NH,NY,ME,VA
4-Methyl-2-pentanone (MIBK)	CT,NH,NY,ME,VA
Naphthalene	NH,NY,ME,VA
Styrene	CT,NH,NY,ME,VA
1,1,2,2-Tetrachloroethane	CT,NH,NY,ME,VA
Tetrachloroethylene	CT,NH,NY,ME,VA
Toluene	CT,NH,NY,ME,VA
1,2,3-Trichlorobenzene	NY,ME
1,2,4-Trichlorobenzene	NH,NY,ME,VA
1,1,1-Trichloroethane	CT,NH,NY,ME,VA
1,1,2-Trichloroethane	CT,NH,NY,ME,VA
Trichloroethylene	CT,NH,NY,ME,VA
Trichlorofluoromethane (Freon 11)	CT,NH,NY,ME,VA
Vinyl Chloride	CT,NH,NY,ME,VA
Xylenes (total)	NH,NY,ME
SW-846 8260D in Water	
Acetone	CT,ME,NH,VA,NY
Benzene	CT,ME,NH,VA,NY
Bromochloromethane	ME,NH,VA,NY
Bromodichloromethane	CT,ME,NH,VA,NY
Bromoform	CT,ME,NH,VA,NY
Bromomethane	CT,ME,NH,VA,NY
2-Butanone (MEK)	CT,ME,NH,VA,NY
Carbon Disulfide	CT,ME,NH,VA,NY
Carbon Tetrachloride	CT,ME,NH,VA,NY
Chlorobenzene	CT,ME,NH,VA,NY
Chlorodibromomethane	CT,ME,NH,VA,NY
Chloroethane	CT,ME,NH,VA,NY
Chloroform	CT,ME,NH,VA,NY
Chloromethane	CT,ME,NH,VA,NY
Cyclohexane	ME,NY
1,2-Dibromo-3-chloropropane (DBCP)	ME,NY
1,2-Dibromoethane (EDB)	ME,NY
1,2-Dichlorobenzene	CT,ME,NH,VA,NY
1,3-Dichlorobenzene	CT,ME,NH,VA,NY
1,4-Dichlorobenzene	CT,ME,NH,VA,NY
Dichlorodifluoromethane (Freon 12)	ME,NH,VA,NY
1,1-Dichloroethane	CT,ME,NH,VA,NY

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8260D in Water	
1,2-Dichloroethane	CT,ME,NH,VA,NY
1,1-Dichloroethylene	CT,ME,NH,VA,NY
cis-1,2-Dichloroethylene	ME,NY
trans-1,2-Dichloroethylene	CT,ME,NH,VA,NY
1,2-Dichloropropane	CT,ME,NH,VA,NY
cis-1,3-Dichloropropene	CT,ME,NH,VA,NY
trans-1,3-Dichloropropene	CT,ME,NH,VA,NY
1,4-Dioxane	ME,NY
Ethylbenzene	CT,ME,NH,VA,NY
Hexachlorobutadiene	CT,ME,NH,VA,NY
2-Hexanone (MBK)	CT,ME,NH,VA,NY
Isopropylbenzene (Cumene)	ME,VA,NY
Methyl Acetate	ME,NY
Methyl tert-Butyl Ether (MTBE)	CT,ME,NH,VA,NY
Methyl Cyclohexane	NY
Methylene Chloride	CT,ME,NH,VA,NY
4-Methyl-2-pentanone (MIBK)	CT,ME,NH,VA,NY
Naphthalene	ME,NH,VA,NY
Styrene	CT,ME,NH,VA,NY
1,1,2,2-Tetrachloroethane	CT,ME,NH,VA,NY
Tetrachloroethylene	CT,ME,NH,VA,NY
Toluene	CT,ME,NH,VA,NY
1,2,3-Trichlorobenzene	ME,NH,VA,NY
1,2,4-Trichlorobenzene	CT,ME,NH,VA,NY
1,1,1-Trichloroethane	CT,ME,NH,VA,NY
1,1,2-Trichloroethane	CT,ME,NH,VA,NY
Trichloroethylene	CT,ME,NH,VA,NY
Trichlorofluoromethane (Freon 11)	CT,ME,NH,VA,NY
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	VA,NY
Vinyl Chloride	CT,ME,NH,VA,NY
Xylenes (total)	ME,NY
SW-846 8270E in Soil	
1,4-Dioxane	NY,NH
Atrazine	ME,NC
Acenaphthene	CT,NY,NH,ME,NC,VA
Acenaphthylene	CT,NY,NH,ME,NC,VA
Acetophenone	NY,NH,ME,NC,VA
Anthracene	CT,NY,NH,ME,NC,VA
Benzo(a)anthracene	CT,NY,NH,ME,NC,VA
Benzo(a)pyrene	CT,NY,NH,ME,NC,VA
Benzo(b)fluoranthene	CT,NY,NH,ME,NC,VA
Benzo(g,h,i)perylene	CT,NY,NH,ME,NC,VA
Benzo(k)fluoranthene	CT,NY,NH,ME,NC,VA
Bis(2-chloroethoxy)methane	CT,NY,NH,ME,NC,VA
Bis(2-chloroethyl)ether	CT,NY,NH,ME,NC,VA
Bis(2-chloroisopropyl)ether	CT,NY,NH,ME,NC,VA

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8270E in Soil	
Bis(2-Ethylhexyl)phthalate	CT,NY,NH,ME,NC,VA
4-Bromophenylphenylether	CT,NY,NH,ME,NC,VA
Butylbenzylphthalate	CT,NY,NH,ME,NC,VA
Carbazole	NC
4-Chloroaniline	CT,NY,NH,ME,NC,VA
4-Chloro-3-methylphenol	CT,NY,NH,ME,NC,VA
2-Chloronaphthalene	CT,NY,NH,NC,VA
2-Chlorophenol	CT,NY,NH,ME,NC,VA
4-Chlorophenylphenylether	CT,NY,NH,ME,NC,VA
Chrysene	CT,NY,NH,ME,NC,VA
Dibenz(a,h)anthracene	CT,NY,NH,ME,NC,VA
Dibenzofuran	CT,NY,NH,ME,NC,VA
Di-n-butylphthalate	CT,NY,NH,ME,NC,VA
1,2-Dichlorobenzene	NY,NH,ME,NC,VA
1,3-Dichlorobenzene	NY,NH,ME,NC,VA
1,4-Dichlorobenzene	NY,NH,ME,NC,VA
3,3-Dichlorobenzidine	CT,NY,NH,ME,NC,VA
2,4-Dichlorophenol	CT,NY,NH,ME,NC,VA
Diethylphthalate	CT,NY,NH,ME,NC,VA
2,4-Dimethylphenol	CT,NY,NH,ME,NC,VA
Dimethylphthalate	CT,NY,NH,ME,NC,VA
4,6-Dinitro-2-methylphenol	CT,NY,NH,ME,NC,VA
2,4-Dinitrophenol	CT,NY,NH,ME,NC,VA
2,4-Dinitrotoluene	CT,NY,NH,ME,NC,VA
2,6-Dinitrotoluene	CT,NY,NH,ME,NC,VA
Di-n-octylphthalate	CT,NY,NH,ME,NC,VA
Fluoranthene	CT,NY,NH,ME,NC,VA
Fluorene	NY,NH,ME,NC,VA
Hexachlorobenzene	CT,NY,NH,ME,NC,VA
Hexachlorobutadiene	CT,NY,NH,ME,NC,VA
Hexachlorocyclopentadiene	CT,NY,NH,ME,NC,VA
Hexachloroethane	CT,NY,NH,ME,NC,VA
Indeno(1,2,3-cd)pyrene	CT,NY,NH,ME,NC,VA
Isophorone	CT,NY,NH,ME,NC,VA
2-Methylnaphthalene	CT,NY,NH,ME,NC,VA
2-Methylphenol	CT,NY,NH,ME,NC,VA
3/4-Methylphenol	CT,NY,NH,ME,NC,VA
Naphthalene	CT,NY,NH,ME,NC,VA
2-Nitroaniline	CT,NY,NH,ME,NC,VA
3-Nitroaniline	CT,NY,NH,ME,NC,VA
4-Nitroaniline	CT,NY,NH,ME,NC,VA
Nitrobenzene	CT,NY,NH,ME,NC,VA
2-Nitrophenol	CT,NY,NH,ME,NC,VA
4-Nitrophenol	CT,NY,NH,ME,NC,VA
N-Nitrosodi-n-propylamine	CT,NY,NH,ME,NC,VA
Pentachlorophenol	CT,NY,NH,ME,NC,VA
Phenanthrene	CT,NY,NH,ME,NC,VA

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8270E in Soil	
Phenol	CT,NY,NH,ME,NC,VA
Pyrene	CT,NY,NH,ME,NC,VA
1,2,4,5-Tetrachlorobenzene	NY,NC
1,2,4-Trichlorobenzene	CT,NY,NH,ME,NC,VA
2,4,5-Trichlorophenol	CT,NY,NH,ME,NC,VA
2,4,6-Trichlorophenol	CT,NY,NH,ME,NC,VA
2-Fluorophenol	NC
SW-846 8270E in Water	
1,4-Dioxane	NY,NH
Acenaphthene	CT,NY,NC,ME,NH,VA
Acenaphthene	CT,NY,NC,ME,NH,VA
Acenaphthylene	CT,NY,NC,ME,NH,VA
Acenaphthylene	CT,NY,NC,ME,NH,VA
Acetophenone	NY,NC
Acetophenone	NY,NC
Anthracene	CT,NY,NC,ME,NH,VA
Anthracene	CT,NY,NC,ME,NH,VA
Benzo(a)anthracene	CT,NY,NC,ME,NH,VA
Benzo(a)anthracene	CT,NY,NC,ME,NH,VA
Benzo(a)pyrene	CT,NY,NC,ME,NH,VA
Benzo(a)pyrene	CT,NY,NC,ME,NH,VA
Benzo(b)fluoranthene	CT,NY,NC,ME,NH,VA
Benzo(b)fluoranthene	CT,NY,NC,ME,NH,VA
Benzo(g,h,i)perylene	CT,NY,NC,ME,NH,VA
Benzo(g,h,i)perylene	CT,NY,NC,ME,NH,VA
Benzo(k)fluoranthene	CT,NY,NC,ME,NH,VA
Benzo(k)fluoranthene	CT,NY,NC,ME,NH,VA
Bis(2-chloroethoxy)methane	CT,NY,NC,ME,NH,VA
Bis(2-chloroethoxy)methane	CT,NY,NC,ME,NH,VA
Bis(2-chloroethyl)ether	CT,NY,NC,ME,NH,VA
Bis(2-chloroethyl)ether	CT,NY,NC,ME,NH,VA
Bis(2-chloroisopropyl)ether	CT,NY,NC,ME,NH,VA
Bis(2-chloroisopropyl)ether	CT,NY,NC,ME,NH,VA
Bis(2-Ethylhexyl)phthalate	CT,NY,NC,ME,NH,VA
Bis(2-Ethylhexyl)phthalate	CT,NY,NC,ME,NH,VA
4-Bromophenylphenylether	CT,NY,NC,ME,NH,VA
4-Bromophenylphenylether	CT,NY,NC,ME,NH,VA
Butylbenzylphthalate	CT,NY,NC,ME,NH,VA
Butylbenzylphthalate	CT,NY,NC,ME,NH,VA
Carbazole	NC
Carbazole	NC
4-Chloroaniline	CT,NY,NC,ME,NH,VA
4-Chloroaniline	CT,NY,NC,ME,NH,VA
4-Chloro-3-methylphenol	CT,NY,NC,ME,NH,VA
4-Chloro-3-methylphenol	CT,NY,NC,ME,NH,VA
2-Chloronaphthalene	CT,NY,NC,ME,NH,VA

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8270E in Water	
2-Chloronaphthalene	CT,NY,NC,ME,NH,VA
2-Chlorophenol	CT,NY,NC,ME,NH,VA
2-Chlorophenol	CT,NY,NC,ME,NH,VA
4-Chlorophenylphenylether	CT,NY,NC,ME,NH,VA
4-Chlorophenylphenylether	CT,NY,NC,ME,NH,VA
Chrysene	CT,NY,NC,ME,NH,VA
Chrysene	CT,NY,NC,ME,NH,VA
Dibenz(a,h)anthracene	CT,NY,NC,ME,NH,VA
Dibenz(a,h)anthracene	CT,NY,NC,ME,NH,VA
Dibenzofuran	CT,NY,NC,ME,NH,VA
Dibenzofuran	CT,NY,NC,ME,NH,VA
Di-n-butylphthalate	CT,NY,NC,ME,NH,VA
Di-n-butylphthalate	CT,NY,NC,ME,NH,VA
1,2-Dichlorobenzene	CT,NY,NC,ME,NH,VA
1,2-Dichlorobenzene	CT,NY,NC,ME,NH,VA
1,3-Dichlorobenzene	CT,NY,NC,ME,NH,VA
1,3-Dichlorobenzene	CT,NY,NC,ME,NH,VA
1,4-Dichlorobenzene	CT,NY,NC,ME,NH,VA
1,4-Dichlorobenzene	CT,NY,NC,ME,NH,VA
3,3-Dichlorobenzidine	CT,NY,NC,ME,NH,VA
3,3-Dichlorobenzidine	CT,NY,NC,ME,NH,VA
2,4-Dichlorophenol	CT,NY,NC,ME,NH,VA
2,4-Dichlorophenol	CT,NY,NC,ME,NH,VA
Diethylphthalate	CT,NY,NC,ME,NH,VA
Diethylphthalate	CT,NY,NC,ME,NH,VA
2,4-Dimethylphenol	CT,NY,NC,ME,NH,VA
2,4-Dimethylphenol	CT,NY,NC,ME,NH,VA
Dimethylphthalate	CT,NY,NC,ME,NH,VA
Dimethylphthalate	CT,NY,NC,ME,NH,VA
4,6-Dinitro-2-methylphenol	CT,NY,NC,ME,NH,VA
4,6-Dinitro-2-methylphenol	CT,NY,NC,ME,NH,VA
2,4-Dinitrophenol	CT,NY,NC,ME,NH,VA
2,4-Dinitrophenol	CT,NY,NC,ME,NH,VA
2,4-Dinitrotoluene	CT,NY,NC,ME,NH,VA
2,4-Dinitrotoluene	CT,NY,NC,ME,NH,VA
2,6-Dinitrotoluene	CT,NY,NC,ME,NH,VA
2,6-Dinitrotoluene	CT,NY,NC,ME,NH,VA
Di-n-octylphthalate	CT,NY,NC,ME,NH,VA
Di-n-octylphthalate	CT,NY,NC,ME,NH,VA
Fluoranthene	CT,NY,NC,ME,NH,VA
Fluoranthene	CT,NY,NC,ME,NH,VA
Fluorene	NY,NC,ME,NH,VA
Fluorene	NY,NC,ME,NH,VA
Hexachlorobenzene	CT,NY,NC,ME,NH,VA
Hexachlorobenzene	CT,NY,NC,ME,NH,VA
Hexachlorobutadiene	CT,NY,NC,ME,NH,VA
Hexachlorobutadiene	CT,NY,NC,ME,NH,VA

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8270E in Water	
Hexachlorocyclopentadiene	CT,NY,NC,ME,NH,VA
Hexachlorocyclopentadiene	CT,NY,NC,ME,NH,VA
Hexachloroethane	CT,NY,NC,ME,NH,VA
Hexachloroethane	CT,NY,NC,ME,NH,VA
Indeno(1,2,3-cd)pyrene	CT,NY,NC,ME,NH,VA
Indeno(1,2,3-cd)pyrene	CT,NY,NC,ME,NH,VA
Isophorone	CT,NY,NC,ME,NH,VA
Isophorone	CT,NY,NC,ME,NH,VA
2-Methylnaphthalene	CT,NY,NC,ME,NH,VA
2-Methylnaphthalene	CT,NY,NC,ME,NH,VA
2-Methylphenol	CT,NY,NC,NH,VA
2-Methylphenol	CT,NY,NC,NH,VA
3/4-Methylphenol	CT,NY,NC,NH,VA
3/4-Methylphenol	CT,NY,NC,NH,VA
Naphthalene	CT,NY,NC,ME,NH,VA
Naphthalene	CT,NY,NC,ME,NH,VA
2-Nitroaniline	CT,NY,NC,ME,NH,VA
2-Nitroaniline	CT,NY,NC,ME,NH,VA
3-Nitroaniline	CT,NY,NC,ME,NH,VA
3-Nitroaniline	CT,NY,NC,ME,NH,VA
4-Nitroaniline	CT,NY,NC,ME,NH,VA
4-Nitroaniline	CT,NY,NC,ME,NH,VA
Nitrobenzene	CT,NY,NC,ME,NH,VA
Nitrobenzene	CT,NY,NC,ME,NH,VA
2-Nitrophenol	CT,NY,NC,ME,NH,VA
2-Nitrophenol	CT,NY,NC,ME,NH,VA
4-Nitrophenol	CT,NY,NC,ME,NH,VA
4-Nitrophenol	CT,NY,NC,ME,NH,VA
N-Nitrosodi-n-propylamine	CT,NY,NC,ME,NH,VA
N-Nitrosodi-n-propylamine	CT,NY,NC,ME,NH,VA
Pentachlorophenol	CT,NY,NC,ME,NH,VA
Pentachlorophenol	CT,NY,NC,ME,NH,VA
Phenanthrene	CT,NY,NC,ME,NH,VA
Phenanthrene	CT,NY,NC,ME,NH,VA
Phenol	CT,NY,NC,ME,NH,VA
Phenol	CT,NY,NC,ME,NH,VA
Pyrene	CT,NY,NC,ME,NH,VA
Pyrene	CT,NY,NC,ME,NH,VA
1,2,4,5-Tetrachlorobenzene	NY,NC
1,2,4,5-Tetrachlorobenzene	NY,NC
1,2,4-Trichlorobenzene	CT,NY,NC,ME,NH,VA
1,2,4-Trichlorobenzene	CT,NY,NC,ME,NH,VA
2,4,5-Trichlorophenol	CT,NY,NC,ME,NH,VA
2,4,5-Trichlorophenol	CT,NY,NC,ME,NH,VA
2,4,6-Trichlorophenol	CT,NY,NC,ME,NH,VA
2,4,6-Trichlorophenol	CT,NY,NC,ME,NH,VA
2-Fluorophenol	NC

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
SW-846 8270E in Water	
2-Fluorophenol	NC

Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
RI	Rhode Island Department of Health	LAO00373	12/30/2024
NC	North Carolina Div. of Water Quality	652	12/31/2024
ME	State of Maine	MA00100	06/9/2025
VA	Commonwealth of Virginia	460217	12/14/2024
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2024

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Fax: 612-607-6344

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https://www.pacelabs.com/

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

1800 Elm Street SE
Minneapolis, MN 55414

CLIENT: SYRACUSE SAND AND GRAVEL (ALPHA - OMEGA)

ntact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

any Name:

ess: P.O. Box 6418, Syracuse, NY 13217

e:

ect Name:

ect Location: ALPHA PORTLAND SITE: DEC # 734006

ect Number: TDK PROJECT NO. 2021063

ect Manager: JOHN HERRMANN, TDK ENGINEERING

Analytical Quote Name/Number TDK ALPHA PORTLAND 00143967

ice Recipient:

pled By: JCH, TDK ENGINEERING

Regulatory Requirements: 7-Day ☐ 10-Day ☑ Due Date:

Rush Approval Required: 1-Day ☐ 3-Day ☐ 2-Day ☐ 4-Day ☐

Data Delivery: Format: PDF ☐ EXCEL ☐ Other: CLP Like Data Pkg Required: ☐ Email To: Fax To #: CONT

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	~~Conc~~ Code
1	SS-1	12.15.23 9:05 AM			✓	S*	A
	"	"			✓	"	A
	"	"			✓	"	P
	"	"					V
2	SS-2	12.15.23 10:15 AM			✓	S*	A
	"	"			✓	"	A
	"	"			✓	"	P
	"	"			✓	"	V
3	SS-3	12.15.23 11:00 AM			✓	"	A
	"	"			✓	"	A

ANALYSIS REQUESTED

# of Containers	VOCs-TCL+TICs	SVOCs-TCL+TICs	METALS-TAL	PFAS	1,4-Dioxane	PCBs	VOCs-% Solids	TSS for PFAS
		✓	✓		✓	✓		
							✓	
				✓				
	✓							
		✓	✓		✓	✓		
							✓	
				✓				
	✓							
		✓	✓		✓	✓		
							✓	

[2] Preservation Code

[3] Container Code

Dissolved Metals Samples: ☐ Field Filtered ☐ Lab to Filter

Orthophosphate Samples: ☐ Field Filtered ☐ Lab to Filter

Comments: PLEASE FORWARD RESULTS TO: JHERRMANN@TDKENGINEERING.COM

CAT B DELIVERABLES

*SEDIMENT

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] **Container Codes:**
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

	Relinquished by: (signature)	Date/Time:	Received by: (signature)	Date/Time:
1		12/18/23; 13:50 PM		
2		12/18/23 12:5		
3		12/18 1700		
4	40, 3.8, 29, 3.1	12/19/23 1005		
5				

Project Information: ☐ AWQ STDS ☐ NY TOGS ☐ NYC Sewer Discharge ☐ NY CP-51 ☐ Part 360 GW (Landfill) ☐ NY Restricted Use ☐ NY Unrestricted Use ☐ NY Part 375

Deliverables: ☐ Enhanced Data Package ☐ NYSDEC EQuIS EDD ☐ EQuIS (Standard) EDD ☐ NY Regulatory EDD ☐ NY Regs Hits-Only EDD

Project: NELAC and AIHA-LAP, LLC Accredited

Project Entity: ☐ Government ☐ Municipality ☐ MWRA ☐ WRTA ☐ Federal ☐ 21 J ☐ School ☐ City ☐ Brownfield ☐ MBTA

Other: ☐ Chromatogram ☐ AIHA-LAP,LLC

PCB ONLY: ☐ Soxhlet ☐ Non Soxhlet

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Fax: 612-607-6444
https://www.pacelabs.com/
1800 Elm Street SE
Minneapolis, MN 55414

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

CLIENT: SYRACUSE SAND AND GRAVEL (ALPHA-OMEGA)

ntact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

pany Name:

ess: P.O. Box 6418, Syracuse, NY 13217

e:

ect Name:

ect Location: ALPHA PORTLAND SITE: DEC # 734006

ect Number: TDK PROJECT No. 2021063

ect Manager: JOHN HERRMANN, TDK ENGINEERING

Analytical Quote Name/Number TDK ALPHA PORTLAND

ice Recipient: 00143967

pled By: JCH, TDK ENGINEERING

Turn-Around-Time (TAT)
7-Day ☐ 10-Day ☑
Due Date:

TAT - Approval Required
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #:

ANALYSIS REQUESTED

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	~~Conc~~ Code	VOCs-TCL+TICs	SVOCs-TCL+TICs	METALS-TAL	PFAS	1,4-Dioxane	PCBs	VOCs-% Solids	TSS for PFAS	# of Containers	[2] Preservation Code	[3] Container Code
	SS-3	12-15-23 11:20 am			✓	S*	P				✓							
	"	"			✓	"	V	✓										
4	SS-4	12-15-23 1:39 pm			✓	"	A		✓	✓		✓	✓					
	"	"			✓	"	A							✓				
	"	"			✓	"	P				✓							
	"	"			✓	"	V	✓										
5	SS-5	12-15-23 3:25 pm			✓	"	A		✓	✓		✓	✓					
	"	"			✓	"	A							✓				
	"	"			✓	"	P				✓							
5	"	"			✓	"	V	✓										

Unfiltered Metals Samples
☐ Field Filtered
☐ Lab to Filter

Orthophosphate Samples
☐ Field Filtered
☐ Lab to Filter

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] **Container Codes:**
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Comments: PLEASE FORWARD RESULTS TO: JHERRMANN@TDKENGINEERING.COM

CAT B DELIVERABLES *SEDIMENT

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

inquished by: (signature)	Date/Time: 12:50 12/18/23; pm	
eived by: (signature)	Date/Time: 12/18/23 12:5	
inquished by: (signature)	Date/Time: 12/18 1700	
eived by: (signature) 4.0, 3.8, 2.9, 3.1	Date/Time: 12/19/23 1005	
inquished by: (signature)	Date/Time:	
eived by: (signature)	Date/Time:	

Program & Regulatory Information
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375

Deliverables
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Other
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

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Minneapolis, MN 55414

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

CLIENT: SYRACUSE SAND AND GRAVEL (ALPHA-OMEGA)

ntact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

pany Name:

ess: P.O. Box 6418, Syracuse, NY 13217

e:

ect Name:

ect Location: ALPHA PORTLAND SITE: DEC # 734006

ect Number: TDK PROJECT NO. 2021063

ect Manager: JOHN HERRMANN, TDK ENGINEERING

Analytical Quote Name/Number TDK ALPHA PORTLAND 00143967

ice Recipient:

pled By: JCH, TDK ENGINEERING

Regulatory Requirements

7-Day ☐ 10-Day ☑

Due Date:

Rush Approval Required

1-Day ☐ 3-Day ☐

2-Day ☐ 4-Day ☐

Data Delivery

Format: PDF ☐ EXCEL ☐

Other:

CLP Like Data Pkg Required: ☐

Email To:

Fax To #:

ANALYSIS REQUESTED

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	Conc Code	VOCs-TCL+TICs	SVOCs-TCL+TICs	METALS-TAL	PFAS	1,4-Dioxane	PCBs	VOCs-% Solids	TSS for PFAS	# of Containers	[2] Preservation Code	[3] Container Code
6	SS-6	12.15.23 2:45PM				S*	A		✓	✓		✓	✓					
6	"	"				"	A							✓				
	"	"				"	P				✓							
6	"	"				"	V	✓										
7	DUPLICATE	12.15.23				"	A		✓	✓		✓	✓					
	"	"				"	A							✓				
	"	"				"	P				✓							
7	"	"				"	V	✓										
4	SS-4 MS	12.15.23 1:35PM				"	A		✓	✓		✓	✓					
	" "	"				"	A							✓				

Filtered Metals Samples
☐ Field Filtered
☐ Lab to Filter

Orthophosphate Samples
☐ Field Filtered
☐ Lab to Filter

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DW = Drinking Water
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S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

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I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

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G = Glass
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ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

nments: PLEASE FORWARD RESULTS TO: JHERRMANN@TDKENGINEERING.COM

CAT B DELIVERABLES

*SEDIMENT

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

	Date/Time
inquished by: (signature)	12/18/23 11:50
eived by: (signature)	12/18/23 12:5
inquished by: (signature)	12/18 1700
eived by: (signature) 4.0, 3.8, 2.9, 3.1	12/19/23 1005
inquished by: (signature)	
eived by: (signature)	

Program & Regulatory Information
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375

Deliverables
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Comments

NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Pace Analytical®
Phone: 612-607-6400
Fax: 612-607-6444
https://www.pacelabs.com/
1800 Elm Street SE
Minneapolis, MN 55414

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

CLIENT: SYRACUSE SAND AND GRAVEL (ALPHA-OMEGA)
ontact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/
Company Name:
ess: P.O. Box 6418, Syracuse, NY 13217
e:
ect Name:
ect Location: ALPHA PORTLAND SITE: DEC # 734006
ect Number: TDK PROJECT NO. 2021063
ect Manager: JOHN HERRMANN, TDK ENGINEERING
Analytical Quote Name/Number TDK ALPHA PORTLAND
ice Recipient: 00143967
pled By: JCH, TDK ENGINEERING

Report Turnaround Information
7-Day ☐ 10-Day ☑
Due Date:

Rush - Approval Required
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #: COMM

ANALYSIS REQUESTED

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	~~Conc~~ Code	VOCs - TCL + TICs	SVOCs - TCL + TICs	METALS - TAL	PFAS	1,4-Dioxane	PCBs	VOCs - % Solids	TSS for PFAS	# of Containers
	SS-4	12.15.23 1:35 PM			✓	S*	P				✓					
4	" "	"			✓	"	V	✓								
4	SS-4 MSD	12.15.23 1:35 PM			✓	"	A		✓	✓		✓	✓			
4	" "	"			✓	"	A							✓		
	" "	"			✓	"	P				✓					
4	" "	"			✓	"	V	✓								

Dissolved Metals Samples
☐ Field Filtered
☐ Lab to Filter

Orthophosphate Samples
☐ Field Filtered
☐ Lab to Filter

[1] Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] Container Codes:
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Comments: PLEASE FORWARD RESULTS TO: JHERRMANN@TDKENGINEERING.COM
CAT B DELIVERABLES
*SEDIMENT

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time: 12/18/23 12:50 PM	
Received by: (signature)	Date/Time: 12/18/23 1250	
Relinquished by: (signature)	Date/Time: 12/18 1700	
Received by: (signature) 4.0, 3.8, 2.9, 3.1	Date/Time: 12/19/23 1005	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Program / Regulatory Information
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375
Other:

Deliverables
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD
Other:
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

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Fax: 612-607-6344
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1800 Elm Street SE
Minneapolis, MN 55414

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

CLIENT: SYRACUSE SAND AND GRAVEL (ALPHA-OMEGA)
Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/
Company Name:
Address: P.O. Box 6418, Syracuse, NY 13217
Phone:
Project Name:
Project Location: ALPHA PORTLAND SITE: DEC # 734006
Project Number: TDK PROJECT NO. 2021063
Project Manager: JOHN HERRMANN, TDK ENGINEERING
Pace Analytical Quote Name/Number TDK ALPHA PORTLAND
Invoice Recipient: 00143967
Sampled By: JCH, TDK ENGINEERING

Turnaround Time Requested
7-Day ☐ 10-Day ☑
Due Date:

Rush Approval Required
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #: Count

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	~~Conc~~ Code	VOCs-TCL+TICs	SVOCs-TCL+TICs	METALS-TAL	PFAS	1,4-Dioxane	PCBs	VOCs-% Solids	TSS for PFAS	# of Containers	[2] Preservation Code	[3] Container Code
9	SW-1	12.15.23 9:05 AM			✓	O**	A		✓									
	"	"			✓	"	P			✓								
	"	"			✓	"	P				✓							
8	"	"			✓	"	A					✓						
	"	"			✓	"	P								✓			
	"	"			✓	"	A						✓					
	"	"			✓	"	V	✓										
9	SW-2	12.15.23 10:15 AM			✓	"	A		✓									
	"	"			✓	"	P			✓								
	"	"			✓	"	P				✓							

ANALYSIS REQUESTED

Dissolved Metals Samples
☐ Field Filtered
☐ Lab to Filter

Orthophosphate Samples
☐ Field Filtered
☐ Lab to Filter

Comments: PLEASE FORWARD RESULTS TO: JHERRMANN@TDKENGINEERING.COM
CAT B DELIVERABLES
** SURFACE WATER

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

[1] Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] Container Codes:
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Relinquished by: (signature)	Date/Time: 12:50 12/18/23; PM	
Received by: (signature)	Date/Time: 12/18/23 12:50	
Relinquished by: (signature)	Date/Time: 12/18 1700	
Received by: (signature)	Date/Time:	
9.0, 3.8, 2.9, 3.1	12/19/23 1005	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Program/Regulatory Information
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375

Deliverables
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Other:

NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

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Minneapolis, MN 55414

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

CLIENT: SYRACUSE SAND AND GRAVEL
Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/
Company Name: (ALPHA-OMEGA)
Address: P.O. BOX 6418, SYRACUSE, NY 13217
Phone:
Project Name:
Project Location: ALPHA PORTLAND SITE: DEC # 734006
Project Number: TDK PROJECT NO. 2021063
Project Manager: JOHN HERRMANN, TDK ENGINEERING
Pace Analytical Quote Name/Number TDK ALPHA PORTLAND
Invoice Recipient: 00143967
Sampled By: JCH, TDK ENGINEERING

Turnaround Time Requested:
7-Day ☐ 10-Day ☑
Due Date:

Rush - Approval Required:
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery:
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #: CONT

ANALYSIS REQUESTED

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	~~Conc~~ Code	VOCs-TCL+TICs	SVOCs-TCL+TICs	METALS-TAL	PFAS	1,4-Dioxane	PCBs	VOCs-% Solids	TSS for PFAS	# of Containers	[2] Preservation Code	[3] Container Code
9	SW-2	12.15.23 10:15 AM			✓	DW**	A					✓						
	"	"			✓	"	P								✓			
	"	"			✓	"	A						✓					
	"	"			✓	"	V	✓										
10	SW-3	12.15.23 11:00 AM			✓	"	A		✓									
	"	"			✓	"	P			✓								
	"	"			✓	"	P				✓							
	"	"			✓	"	A					✓						
10	"	"			✓	"	P								✓			
	"	"			✓	"	A						✓					

Dissolved Metals Samples: ☐ Field Filtered ☐ Lab to Filter
Orthophosphate Samples: ☐ Field Filtered ☐ Lab to Filter

[1] Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
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[3] Container Codes:
A = Amber Glass
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ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Comments: PLEASE FORWARD RESULTS TO: JHERRMANN@TDKENGINEERING.COM
CAT B DELIVERABLES **SURFACE WATER

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time:	Received by: (signature)	Date/Time:
	12:30 12/18/23; PM		
Relinquished by: (signature)	12/19/23 12:50	Received by: (signature)	
Relinquished by: (signature)	12/19 1420	Received by: (signature)	
Received by: (signature) 4.0, 3.8, 2.9, 5.1	12/19/23 1005	Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:		

Preservative/Regulatory Information:
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375

Deliverables:
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Other:
NELAC and AIHA-LAP, LLC Accredited

Project Entity:
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other:
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY:
☐ Soxhlet
☐ Non Soxhlet

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Fax: 612-607-6344
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Minneapolis, MN 55414

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

CLIENT: SYRACUSE SAND AND GRAVEL
Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/
Company Name: (ALPHA-OMEGA)
Address: P.O. BOX 6418, SYRACUSE, NY 13217
Phone:
Project Name:
Project Location: ALPHA PORTLAND SITE: DEC # 734006
Project Number: TDK PROJECT NO. 2021063
Project Manager: JOHN HERRMANN, TDK ENGINEERING
Pace Analytical Quote Name/Number TDK ALPHA PORTLAND
Invoice Recipient: 00143967
Sampled By: JCH, TDK ENGINEERING

Turnaround Time Requested:
7-Day ☐ 10-Day ☑
Due Date:

Rush - Approval Required:
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery:
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #: COURT

ANALYSIS REQUESTED

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	~~Conc~~ Code	VOCs-TCL+TICs	SVOCs-TCL+TICs	METALS-TAL	PFAS	1,4-Dioxane	PCBs	VOCs-% Solids	TSS for PFAS	# of Containers	[2] Preservation Code	[3] Container Code
10	SW-3	12.15.23 11:00am			✓	O**	V	✓										
11	SW-4	12.15.23 12:45pm			✓	"	A		✓									
	"	"			✓	"	P			✓								
	"	"			✓	"	P				✓							
	"	"			✓	"	A					✓						
	"	"			✓	"	P								✓			
	"	"			✓	"	A						✓					
	"	"			✓	"	V	✓										
12	SW-5	12.15.23 3:10pm			✓	"	A		✓									
	"	"			✓	"	P			✓								

Dissolved Metals Samples: ☐ Field Filtered ☐ Lab to Filter
Orthophosphate Samples: ☐ Field Filtered ☐ Lab to Filter

[1] Matrix Codes: GW = Ground Water; WW = Waste Water; DW = Drinking Water; A = Air; S = Soil; SL = Sludge; SOL = Solid; O = Other (please define)

[2] Preservation Codes: I = Iced; H = HCL; M = Methanol; N = Nitric Acid; S = Sulfuric Acid; B = Sodium Bisulfate; X = Sodium Hydroxide; T = Sodium Thiosulfate; O = Other (please define)

[3] Container Codes: A = Amber Glass; G = Glass; P = Plastic; ST = Sterile; V = Vial; S = Summa Canister; T = Tedlar Bag; O = Other (please define)

Comments: PLEASE FORWARD RESULTS TO: JHERRMANN@TDKENGINEERING.COM
CAT B DELIVERABLES
**SURFACE WATER

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time:	Received by: (signature)	Date/Time:
	12/18/23 12:50 pm		
			12/18/23 1250
			12/18 1700
	12/19/23 1005	4.0, 3.8, 2.9, 3.1	

Program & Regulatory Information:
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375

Deliverables:
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Other:
NELAC and AIHA-LAP, LLC Accredited

Project Entity:
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other:
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY:
☐ Soxhlet
☐ Non Soxhlet

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Minneapolis, MN 55414

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

CLIENT: SYRACUSE SAND AND GRAVEL (ALPHA - OMEGA)
Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/
Company Name:
Address: P.O. Box 6418, Syracuse, NY 13217
Phone:
Project Name:
Project Location: ALPHA PORTLAND SITE: DEC # 734006
Project Number: TDK PROJECT No. 2021063
Project Manager: JOHN HERRMANN, TDK ENGINEERING
Pace Analytical Quote Name/Number TDK ALPHA PORTLAND 00143967
Invoice Recipient:
Sampled By: JCH, TDK ENGINEERING

Regulatory Requirement
7-Day ☐ 10-Day ☑
Due Date:

Rush Approval Required
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #:

ANALYSIS REQUESTED

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1] Matrix Code	~~Conc~~ Code	VOCs - TCL + TICs	SVOCs - TCL + TICs	METALS - TAL	PFAS	1,4-Dioxane	PCBs	VOCs - % Solids	TSS for PFAS	# of Containers
	SW-5	12.15.23 3:10PM			✓	O**	P				✓					
12	"	"			✓	"	A					✓				
	"	"			✓	"	P								✓	
	"	"			✓	"	A						✓			
12	"	"			✓	"	V	✓								
	SW-6	12.15.23 2:30PM			✓	"	A		✓							
13	"	"			✓	"	P			✓						
	"	"			✓	"	P				✓					
	"	"			✓	"	A					✓				
13	"	"			✓	"	P								✓	

Comments: PLEASE FORWARD RESULTS TO: JHERRMANN@TDKENGINEERING.COM
CAT B DELIVERABLES **SURFACE WATER

Dissolved Metals Samples: ☐ Field Filtered ☐ Lab to Filter
Orthophosphate Samples: ☐ Field Filtered ☐ Lab to Filter

[1] Matrix Codes: GW = Ground Water; WW = Waste Water; DW = Drinking Water; A = Air; S = Soil; SL = Sludge; SOL = Solid; O = Other (please define)

[2] Preservation Codes: I = Iced; H = HCL; M = Methanol; N = Nitric Acid; S = Sulfuric Acid; B = Sodium Bisulfate; X = Sodium Hydroxide; T = Sodium Thiosulfate; O = Other (please define)

[3] Container Codes: A = Amber Glass; G = Glass; P = Plastic; ST = Sterile; V = Vial; S = Summa Canister; T = Tedlar Bag; O = Other (please define)

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
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Relinquished by: (signature)	Date/Time:	Received by: (signature)	Date/Time:
	12/18/23; 12:50 pm		
	12/18/23 12:50		
	12/18 1700		
4.0, 3.8, 2.9, 3.1	12/19/23 1005		

Preservative / Regulatory Information
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
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Deliverables
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
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Client Terms
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
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☐ City ☐ Brownfield ☐ MBTA

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Minneapolis, MN 55414

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

Client: Syracuse Sand and Gravel (Alpha-Omega)
Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/
Company Name:
Address: P.O. Box 6418, Syracuse, NY 13217
Phone:
Project Name:
Project Location: Alpha Portland Site: DEC # 734006
Project Number: TDK Project No. 2021063
Project Manager: John Herrmann, TDK Engineering
Pace Analytical Quote Name/Number TDK Alpha Portland
Invoice Recipient: 00143967
Sampled By: JCH, TDK Engineering

Requested Turnaround Time:
7-Day ☐ 10-Day ☑
Due Date:

Prior Approval Required:
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery:
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #: Cont.

ANALYSIS REQUESTED

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1] Matrix Code	~~Conc~~ Code	VOCs-TCL+TICs	SVOCs-TCL+TICs	Metals-TAL	PFAS	1,4-Dioxane	PCBs	VOCs-% Solids	TSS for PFAS	# of Containers	[2] Preservation Code	[3] Container Code
13	SW-6	12.15.23 1:30 pm			✓	O**	A						✓					
	"				✓	"	V	✓										
14	Duplicate	12.15.23			✓	"	A		✓									
	"	"			✓	"	P			✓								
	"	"			✓	"	P				✓							
	"	"			✓	"	A					✓						
14	"	"			✓	"	P								✓			
	"	"			✓	"	A						✓					
	"	"			✓	"	V	✓										
11	SW-4 MS	"			✓	"	A		✓									

Comments: Please forward results to: JHerrmann@TDKEngineering.com
CAT B Deliverables
**Surface water

Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

Container Codes:
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
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T = Tedlar Bag
O = Other (please define)

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Dissolved Metals Samples
☐ Field Filtered
☐ Lab to Filter

Orthophosphate Samples
☐ Field Filtered
☐ Lab to Filter

	Relinquished by: (signature)	Date/Time:	Received by: (signature)	Date/Time:
1		12/18/23; 12:50 pm		
2				12/18/23 12:50
3				12/18 17:00
4			4.0, 3.8, 2.9, 5.1	12/19/23 10:05
5				

Regulatory Requirements/Report Information
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375

Deliverables
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

NELAC and AIHA-LAP, LLC Accredited

Pace Analytical®
Phone: 612-607-6400
Fax: 612-607-6344
https://www.pacelabs.com/
1800 Elm Street SE
Minneapolis, MN 55414

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

CLIENT: SYRACUSE SAND AND GRAVEL (ALPHA-OMEGA)
Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name:
Address: P.O. Box 6418, Syracuse, NY 13217
Phone:
Project Name:
Project Location: ALPHA PORTLAND SITE: DEC # 734006
Project Number: TDK PROJECT NO. 2021063
Project Manager: JOHN HERRMANN, TDK ENGINEERING
Pace Analytical Quote Name/Number TDK ALPHA PORTLAND
Invoice Recipient: 00143967
Sampled By: JCH, TDK ENGINEERING

Required Turnaround Time:
7-Day ☐ 10-Day ☑
Due Date:

Rush - Approval Required:
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery:
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #: CONT

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	~~Conc~~ Code	VOCs-TCL+TICs	SVOCs-TCL+TICs	METALS-TAL	PFAS	1,4-Dioxane	PCBs	VOCs-% Solids	TSS for PFAS	# of Containers	[2] Preservation Code	[3] Container Code
11	SW-4MS	12/15/23 11:45AM			✓	O**	P			✓								
	" "	"			✓	"	P				✓							
	" "	"			✓	"	A					✓						
	" "	"			✓	"	P								✓			
	" "	"			✓	"	A						✓					
	" "	"			✓	"	V	✓										
	SW-4 MSD	12/15/23 12:45PM			✓	"	A		✓									
	" "	"			✓	"	P			✓								
	" "	"			✓	"	P				✓							
11	" "	"			✓	"	A					✓						

ANALYSIS REQUESTED

Dissolved Metals Samples
☐ Field Filtered
☐ Lab to Filter

Orthophosphate Samples
☐ Field Filtered
☐ Lab to Filter

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] **Container Codes:**
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Comments: PLEASE FORWARD RESULTS TO: JHERRMANN@TDKENGINEERING.COM
CAT B DELIVERABLES *SURFACE WATER

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time:
	12:50 12/18/23 PM
Received by: (signature)	Date/Time:
	12/18/23 12:50
Relinquished by: (signature)	Date/Time:
	12/18 1700
Received by: (signature)	Date/Time:
Cat VIII 4.0, 3.8, 2.9, 5.1	12/19/23 1005
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Program / Regulatory Reporting Limits:
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375
Other:

Deliverables:
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

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Minneapolis, MN 55414

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

CLIENT: SYRACUSE SAND AND GRAVEL
Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: (ALPHA-OMEGA)
Address: P.O. Box 6418, SYRACUSE, NY 13217
Phone:
Project Name:
Project Location: ALPHA PORTLAND SITE: DEC # 734006
Project Number: TDK PROJECT No. 2021063
Project Manager: JOHN HERRMANN, TDK ENGINEERING
Pace Analytical Quote Name/Number TDK ALPHA PORTLAND
Invoice Recipient: 00143967
Sampled By: JCH, TDK ENGINEERING

Turnaround Information
7-Day ☐ 10-Day ☑
Due Date:

Rush Approval Required
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Deliverables
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #: CONT.

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1] Matrix Code	Conc Code	VOCs - TCL + TICs	SVOCs - TCL + TICs	METALS - TAL	PFAS	1,4-Dioxane	PCBs	VOCs - % Solids	TSS for PFAS	# of Containers	[2] Preservation Code	[3] Container Code
11	SW-4 MSD	12-15-23 12:45 PM				O**	P								✓			
11	SW-4 "	"				"	A						✓					
	" "	"				"	V	✓										
15	EQUIP. DECONN	12-15-23 3:30 PM				O***	V	✓										

ANALYSIS REQUESTED

Dissolved Metals Samples
☐ Field Filtered
☐ Lab to Filter

Orthophosphate Samples
☐ Field Filtered
☐ Lab to Filter

[1] **Matrix Codes:**
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V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Comments: PLEASE FORWARD RESULTS TO: JHERRMANN@TDKENGINEERING.COM
CAT B DELIVERABLES
** SURFACE WATER
*** EQUIP. DECONN WATER

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time:
	12/18/23; 12:50 PM
Received by: (signature)	Date/Time:
RM Ryan Murphy	12/18/23 12:50
Relinquished by: (signature)	Date/Time:
Ryan Murphy	12/18 1700
Received by: (signature)	Date/Time:
4.0, 3.8, 2.9, 5.1	12/19/23 1005
Relinquished by: (signature)	Date/Time:
Received by: (signature)	Date/Time:

Program / Regulatory Information
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375
Other:

Deliverables
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD
Other:

NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-ELON-0001 v07_Sample Receiving Checklist
	Effective Date: 07/13/2023

Log In Back-Sheet

Client Syracuse Sand and Gravel

Project Alpha Portland Site

MCP/RCP Required MA MA

Deliverable Package Requirement

Location Alpha Portland Site

PWSID# (When Applicable) MA

Arrival Method:

Courier ☑ Fed Ex ☐ Walk In ☐ Other ☐

Received By / Date / Time ER 12/19/23 1005

Back-Sheet By / Date / Time LA 12/19/23 1420

Temperature Method Gun # 5

Temp ≤6° C Actual Temperature 4.0/3.8/2.9/3.1

Rush Samples: Yes / ~~No~~ Notify

Short Hold: Yes / ~~No~~ Notify

Notes regarding Samples/COC outside of SOP:

Login Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy) Any False statement will be brought to the attention of the Client – True or False

	True	False
Received on Ice	☑	☐
Received in Cooler	☑	☐
Custody Seal: DATE TIME	☐	☑
COC Relinquished	☑	☐
COC/Samples Labels Agree	☑	☐
All Samples in Good Condition	☑	☐
Samples Received within Holding Time	☑	☐
Is there enough Volume	☑	☐
Proper Media/Container Used	☑	☐
Splitting Samples Required	☐	☑
MS/MSD	☐	☑
Trip Blanks	☐	☑
Lab to Filters	☐	☑
COC Legible	☑	☐

COC Included: (Check all included)

Client ☑ Analysis ☑ Sampler Name ☐

Project ☑ IDs ☑ Collection Date/Time ☐

All Samples Proper pH: N/A ☐ ☐

Additional Container Notes

Note: West Virginia requires all samples to have their temperature taken. Note any outliers.

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-ELON-0001 v07_Sample Receiving Checklist

Effective Date: 07/13/2023

Sample		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
16oz Amb/Clear	Soils Jars (Circle Amb/Clear)			1	1																
8oz Amb/Clear			1	1	3	1	1														
4oz Amb/Clear			1	1	3	1	1	1													
2oz Amb/Clear				1	3	1	1	1	2		1	6	2	1	1						
Unpreserved	Ambers 1 Liter								4		1	1	4	1	1						
HCL																					
Sulfuric																					
Sulfuric	250mL																				
Phosphoric																					
HCl																					
Unpreserved	100mL								4		1	12	4	1	1						
Unpreserved	Plastics 1 Liter																				
Sulfuric																					
Unpreserved	500mL																				
Sulfuric																					
Unpreserved	250mL																				
Trizma																					
Sulfuric																					
Nitric									1		1	3	1	1	1						
NaOH																					
Ammonium Acetate																					
NaOH/Zinc																					
Unpreserved	VOA Vials									2	1	1	6	2	1	2					
HCl				1	1	2	1	1													
MeOH			1						1												
D.I. Water																					
BiSulfate			1	1	1	1	1	1	2												
Col/Bact	Other / Fill in																				

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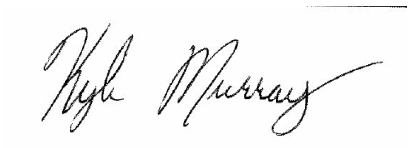
January 11, 2024

Richard Riccelli
Syracuse Sand & Gravel, LLC
6131 E Taft Road
North Syracuse, NY 13212

Project Location: Alpha Portland Site
Client Job Number:
Project Number: 00143967 - TDK_Alpha Portland - CAT B
Laboratory Work Order Number: 23L2655

Enclosed are results of analyses for samples as received by the laboratory on December 19, 2023. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Kyle A. Murray
Project Manager

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Syracuse Sand & Gravel, LLC
6131 E Taft Road
North Syracuse, NY 13212
ATTN: Richard Riccelli

REPORT DATE: 1/11/2024

PURCHASE ORDER NUMBER:

PROJECT NUMBER: 00143967 - TDK_Alpha Portland - CAT B

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 23L2655

The results of analyses performed on the following samples submitted to CON-TEST, a Pace Analytical Laboratory, are found in this report.

PROJECT LOCATION: Alpha Portland Site

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
SS-1	23L2655-01	Sediment		Draft Method 1633	
				SM 2540G	
SS-2	23L2655-02	Sediment		Draft Method 1633	
				SM 2540G	
SS-3	23L2655-03	Sediment		Draft Method 1633	
				SM 2540G	
SS-4	23L2655-04	Sediment		Draft Method 1633	
				SM 2540G	
SS-5	23L2655-05	Sediment		Draft Method 1633	
				SM 2540G	
SS-6	23L2655-06	Sediment		Draft Method 1633	
				SM 2540G	
Duplicate	23L2655-07	Sediment		Draft Method 1633	
				SM 2540G	
SW-1	23L2655-08	Surface Water		Draft Method 1633	
SW-2	23L2655-09	Surface Water		Draft Method 1633	
SW-3	23L2655-10	Surface Water		Draft Method 1633	
SW-4	23L2655-11	Surface Water		Draft Method 1633	
SW-5	23L2655-12	Surface Water		Draft Method 1633	
SW-6	23L2655-13	Surface Water		Draft Method 1633	
Duplicate	23L2655-14	Surface Water		Draft Method 1633	

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CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Draft Method 1633

Qualifications:

D-01

Sample extracted/prepared at a dilution due to sample matrix.

Analyte & Samples(s) Qualified:

23L2655-01RE1[SS-1], 23L2655-03RE1[SS-3], 23L2655-07RE1[Duplicate]

MS-22

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.

Analyte & Samples(s) Qualified:

3-Perfluoropropyl propanoic acid (FPrPA)(3:3FTCA
B361588-MSD1

N-ethyl perfluorooctanesulfonamide (NEtFOSA)
B361588-MSD1

Perfluorododecanesulfonic acid (PFDoS)
B361588-MS1

MS-23

Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is outside of the method specified criteria. Reduced precision anticipated for any reported result for this compound.

Analyte & Samples(s) Qualified:

11Cl-PF3OUdS (F53B Major)
B361588-MS1

N-EtFOSAA (NEtFOSAA)
B361588-MSD1

N-MeFOSAA (NMeFOSAA)
B361588-MSD1

PF-06

Opening calibration verification was within control criteria. Closing calibration verification was outside of criteria and biased on the high side. Re-analysis yielded similar non-conformance.

Analyte & Samples(s) Qualified:

13C2-PFTeDA
S098922-CCV3

D3-NMeFOSAA
S098922-CCV3

D5-NEtFOSA
S098922-CCV3

D5-NEtFOSAA
S098922-CCV3

D7-NMeFOSE
S098922-CCV3

D9-NEtFOSE
S098922-CCV3

N-EtFOSAA (NEtFOSAA)
S098922-CCV3

N-ethyl perfluorooctanesulfonamide (NEtFOSA)
S098922-CCV3

N-ethylperfluorooctanesulfonamidoethanol (NEtFO
S098922-CCV3

N-MeFOSAA (NMeFOSAA)
S098922-CCV3

N-methylperfluorooctanesulfonamidoethanol(NMeF
S098922-CCV3

Perfluorotetradecanoic acid (PFTeDA)
S098922-CCV3

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PF-17

Extracted Internal Standard recovery is outside of control limits. Data is not significantly affected since associated analyte is not detected and bias is on the high side.

Analyte & Samples(s) Qualified:

13C2-PFTeDA
S098922-CCB3

Perfluorotetradecanoic acid (PFTeDA)
S098922-CCB3

PF-17C

Extracted internal standard is outside of control limits. Analyte is a known difficult compound.

Analyte & Samples(s) Qualified:

13C2-4:2FTS
23L2655-08[SW-1], 23L2655-09[SW-2], 23L2655-10[SW-3], B361588-BLK1, B361588-BS1, B361588-MRL1

13C2-6:2FTS
23L2655-08[SW-1], 23L2655-09[SW-2], 23L2655-10[SW-3], 23L2655-13[SW-6], B361588-BLK1, B361588-BS1, B361588-MRL1

13C2-8:2FTS
23L2655-08[SW-1], 23L2655-09[SW-2], 23L2655-10[SW-3]

1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FT
23L2655-08[SW-1], 23L2655-09[SW-2], 23L2655-10[SW-3]

1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FT
23L2655-08[SW-1], 23L2655-09[SW-2], 23L2655-10[SW-3], B361588-BLK1, B361588-BS1, B361588-MRL1

1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS
23L2655-08[SW-1], 23L2655-09[SW-2], 23L2655-10[SW-3], 23L2655-13[SW-6], B361588-BLK1, B361588-BS1, B361588-MRL1

PF-18

Re-analysis confirmed Extracted Internal Standard failure due to matrix effects.

Analyte & Samples(s) Qualified:

13C2-6:2FTS
23L2655-11[SW-4], 23L2655-12RE1[SW-5], B361588-MS1, B361588-MSD1

13C2-8:2FTS
23L2655-11[SW-4], B361588-MS1, B361588-MSD1

1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FT
23L2655-11[SW-4], B361588-MS1, B361588-MSD1

1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS
23L2655-11[SW-4], 23L2655-12RE1[SW-5], B361588-MS1, B361588-MSD1

D7-NMeFOSE
B361588-MS1, B361588-MSD1

D9-NEtFOSE
23L2655-11[SW-4], B361588-MS1, B361588-MSD1

N-ethylperfluorooctanesulfonamidoethanol (NEtFO
23L2655-11[SW-4], B361588-MS1, B361588-MSD1

N-methylperfluorooctanesulfonamidoethanol(NMeF
B361588-MS1, B361588-MSD1

PF-22

Qualifier ion ratio >150% of associated calibration. Detection is suspect.

Analyte & Samples(s) Qualified:

Perfluorooctanesulfonic acid (PFOS)
23L2655-04[SS-4]

PF-23

Qualifier ion ratio <50% of associated calibration. Detection is suspect.

Analyte & Samples(s) Qualified:

Perfluorodecanoic acid (PFDA)
23L2655-07RE1[Duplicate]

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

R-06

Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.

Analyte & Samples(s) Qualified:

11Cl-PF3OUdS (F53B Major)
B361588-MSD1

4,8-Dioxa-3H-perfluorononanoic acid (ADONA)
B361588-MSD1

9Cl-PF3ONS (F53B Minor)
B361588-MSD1

N-methyl perfluoroocatnesulfonamide (NMeFOSA)
B361588-MSD1

Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)
B361583-MSD2

Perfluoro-3-methoxypropanoic acid (PFMPA)
B361583-MSD2

Perfluoro-4-methoxybutanoic acid (PFMBA)
B361583-MSD2

Perfluorobutanesulfonic acid (PFBS)
23L2655-11[SW-4], B361588-MSD1

Perfluorobutanoic acid (PFBA)
23L2655-11[SW-4], B361588-MSD1

Perfluorodecanesulfonic acid (PFDS)
B361588-MSD1

Perfluorononanesulfonic acid (PFNS)
B361588-MSD1

Perfluorooctanesulfonamide (PFOSA)
23L2655-11[SW-4], B361588-MSD1

Perfluorooctanesulfonic acid (PFOS)
23L2655-11[SW-4], B361588-MSD1

Perfluoropentanoic acid (PFPeA)
23L2655-11[SW-4], B361588-MSD1

Perfluorotetradecanoic acid (PFTeDA)
B361588-MSD1

Perfluoroundecanoic acid (PFUnA)
B361588-MSD1

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

S-29

Extracted Internal Standard is outside of control limits.

Analyte & Samples(s) Qualified:

13C2-PFTeDA
S098871-CCV2, S099071-CCB4

13C3-PFBS
B361588-MSD1

13C3-PFHxS
B361588-MSD1

13C4-PFHpA
B361588-MSD1

13C5-PFHxA
B361588-MSD1

13C8-PFOA
B361588-MSD1

13C9-PFNA
B361588-MSD1

2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FT
B361588-MSD1

3-Perfluoroheptyl propanoic acid (FHpPA)(7:3FTC
B361588-MSD1

D3-NMeFOSAA
23L2655-08[SW-1], 23L2655-09[SW-2], 23L2655-10[SW-3], B361588-MSD1

D7-NMeFOSE
S098871-CCV2

N-MeFOSAA (NMeFOSAA)
23L2655-08[SW-1], 23L2655-09[SW-2], 23L2655-10[SW-3], B361588-MSD1

Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)
B361588-MSD1

Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)
B361588-MSD1

Perfluorobutanesulfonic acid (PFBS)
B361588-MSD1

Perfluoroheptanoic acid (PFHpA)
B361588-MSD1

Perfluorohexanesulfonic acid (PFHxS)
B361588-MSD1

Perfluorohexanoic acid (PFHxA)
B361588-MSD1

Perfluorononanoic acid (PFNA)
B361588-MSD1

Perfluorooctanoic acid (PFOA)
B361588-MSD1

Perfluoropentanesulfonic acid (PFPeS)
B361588-MSD1

Perfluorotetradecanoic acid (PFTeDA)
S099071-CCB4

Z-01

Analyte detected in method blank >1/3 MRL

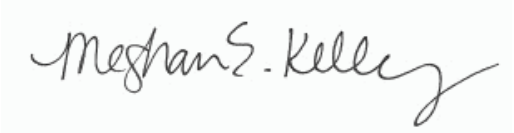
Analyte & Samples(s) Qualified:

Perfluorobutanesulfonic acid (PFBS)
23L2655-12RE1[SW-5], 23L2655-14RE1[Duplicate], B362328-BLK1

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The results of analyses reported only relate to samples submitted to Con-Test, a Pace Analytical Laboratory, for testing.
I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.



Meghan E. Kelley
Reporting Specialist

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SS-1 | Sampled: 12/15/2023 09:05

Sample ID: 23L2655-01

Sample Matrix: Sediment

Sample Flags: D-01

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	8.3	1.5	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
Perfluoropentanoic acid (PFPeA)	ND	4.2	0.27	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
Perfluorohexanoic acid (PFHxA)	ND	2.1	0.14	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
Perfluoroheptanoic acid (PFHpA)	ND	2.1	0.16	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
Perfluorooctanoic acid (PFOA)	ND	2.1	0.30	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
Perfluorononanoic acid (PFNA)	ND	2.1	0.27	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
Perfluorodecanoic acid (PFDA)	ND	2.1	0.19	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
Perfluoroundecanoic acid (PFUnA)	ND	2.1	0.21	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
Perfluorododecanoic acid (PFDoA)	ND	2.1	0.23	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	2.1	0.28	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	2.1	0.19	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	2.1	0.21	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	2.1	0.31	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	2.1	0.26	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	2.1	0.23	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	2.1	0.37	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
Perfluorononanesulfonic acid (PFNS)	ND	2.1	0.31	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	2.1	0.47	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	2.1	0.22	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	8.3	0.78	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	8.3	0.85	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	8.3	0.77	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	2.1	1.1	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	2.1	0.21	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	2.1	0.29	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
N-MeFOSAA (NMeFOSAA)	ND	2.1	0.29	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
N-EtFOSAA (NEtFOSAA)	ND	2.1	0.44	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	21	1.6	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	21	1.8	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	8.3	0.68	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	8.3	0.84	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
9Cl-PF3ONS (F53B Minor)	ND	8.3	0.80	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
11Cl-PF3OUdS (F53B Major)	ND	8.3	1.1	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	21	1.8	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	100	12	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	100	10	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	4.2	0.21	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	4.2	0.44	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SS-1 | Sampled: 12/15/2023 09:05

Sample ID: 23L2655-01

Sample Matrix: Sediment

Sample Flags: D-01

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	4.2	0.32	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	4.2	0.42	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 21:49	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	95.4	10-130		1/9/24 21:49
13C5-PFPeA	88.1	35-150		1/9/24 21:49
13C5-PFHxA	95.0	55-150		1/9/24 21:49
13C4-PFHpA	96.1	55-150		1/9/24 21:49
13C8-PFOA	96.6	60-140		1/9/24 21:49
13C9-PFNA	95.7	55-140		1/9/24 21:49
13C6-PFDA	97.8	50-140		1/9/24 21:49
13C7-PFUnA	104	30-140		1/9/24 21:49
13C2-PFDoA	112	10-150		1/9/24 21:49
13C2-PFTeDA	129	10-130		1/9/24 21:49
13C3-PFBS	96.5	55-150		1/9/24 21:49
13C3-PFHxS	96.3	55-150		1/9/24 21:49
13C8-PFOS	93.9	45-140		1/9/24 21:49
13C2-4:2FTS	99.6	60-200		1/9/24 21:49
13C2-6:2FTS	101	60-200		1/9/24 21:49
13C2-8:2FTS	102	50-200		1/9/24 21:49
13C8-PFOSA	110	30-130		1/9/24 21:49
D3-NMeFOSA	75.8	15-130		1/9/24 21:49
D5-NEtFOSA	65.3	10-130		1/9/24 21:49
D3-NMeFOSAA	126	45-200		1/9/24 21:49
D5-NEtFOSAA	136	10-200		1/9/24 21:49
D7-NMeFOSE	140	10-150		1/9/24 21:49
D9-NEtFOSE	124	10-150		1/9/24 21:49
13C3-HFPO-DA	93.9	25-160		1/9/24 21:49

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SS-1 | Sampled: 12/15/2023 09:05

Sample ID: 23L2655-01

Sample Matrix: Sediment

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	75.9			% Wt	1		SM 2540G	12/20/23	12/20/23 9:53	DV

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SS-2 | Sampled: 12/15/2023 10:15

Sample ID: 23L2655-02

Sample Matrix: Sediment

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	0.79	0.14	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
Perfluoropentanoic acid (PFPeA)	0.027	0.40	0.026	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/5/24 10:58	AMS
Perfluorohexanoic acid (PFHxA)	ND	0.20	0.013	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
Perfluoroheptanoic acid (PFHpA)	ND	0.20	0.015	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
Perfluorooctanoic acid (PFOA)	ND	0.20	0.029	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
Perfluorononanoic acid (PFNA)	ND	0.20	0.026	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
Perfluorodecanoic acid (PFDA)	ND	0.20	0.018	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
Perfluoroundecanoic acid (PFUnA)	0.044	0.20	0.020	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/5/24 10:58	AMS
Perfluorododecanoic acid (PFDoA)	0.024	0.20	0.022	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/5/24 10:58	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.20	0.027	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.20	0.018	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	0.20	0.020	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.20	0.029	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	0.20	0.025	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.20	0.022	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
Perfluorooctanesulfonic acid (PFOS)	0.25	0.20	0.035	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.20	0.030	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.20	0.044	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.20	0.021	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	0.79	0.074	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	0.79	0.081	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	0.79	0.074	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.20	0.10	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.20	0.021	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.20	0.028	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.20	0.028	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.20	0.042	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	2.0	0.15	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	2.0	0.17	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.79	0.065	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.79	0.080	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
9Cl-PF3ONS (F53B Minor)	ND	0.79	0.076	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
11Cl-PF3OUdS (F53B Major)	ND	0.79	0.10	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	2.0	0.17	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	9.9	1.2	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	9.9	0.97	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	0.40	0.020	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	0.40	0.042	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SS-2 | Sampled: 12/15/2023 10:15

Sample ID: 23L2655-02

Sample Matrix: Sediment

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	0.40	0.031	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.40	0.040	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 10:58	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	65.7	10-130		1/5/24 10:58
13C5-PFPeA	62.9	35-150		1/5/24 10:58
13C5-PFHxA	66.4	55-150		1/5/24 10:58
13C4-PFHpA	67.2	55-150		1/5/24 10:58
13C8-PFOA	69.2	60-140		1/5/24 10:58
13C9-PFNA	67.6	55-140		1/5/24 10:58
13C6-PFDA	65.4	50-140		1/5/24 10:58
13C7-PFUnA	67.8	30-140		1/5/24 10:58
13C2-PFDoA	65.9	10-150		1/5/24 10:58
13C2-PFTeDA	37.8	10-130		1/5/24 10:58
13C3-PFBS	69.7	55-150		1/5/24 10:58
13C3-PFHxS	69.4	55-150		1/5/24 10:58
13C8-PFOS	64.2	45-140		1/5/24 10:58
13C2-4:2FTS	75.7	60-200		1/5/24 10:58
13C2-6:2FTS	79.1	60-200		1/5/24 10:58
13C2-8:2FTS	89.4	50-200		1/5/24 10:58
13C8-PFOSA	70.8	30-130		1/5/24 10:58
D3-NMeFOSA	39.5	15-130		1/5/24 10:58
D5-NEtFOSA	29.5	10-130		1/5/24 10:58
D3-NMeFOSAA	98.0	45-200		1/5/24 10:58
D5-NEtFOSAA	115	10-200		1/5/24 10:58
D7-NMeFOSE	36.7	10-150		1/5/24 10:58
D9-NEtFOSE	33.5	10-150		1/5/24 10:58
13C3-HFPO-DA	64.0	25-160		1/5/24 10:58

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SS-2 | Sampled: 12/15/2023 10:15

Sample ID: 23L2655-02

Sample Matrix: Sediment

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	24.5			% Wt	1		SM 2540G	12/20/23	12/20/23 9:53	DV

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SS-3 | Sampled: 12/15/2023 11:00

Sample ID: 23L2655-03

Sample Matrix: Sediment

Sample Flags: D-01

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	0.28	1.2	0.21	µg/kg dry	1	J	Draft Method 1633	1/5/24	1/9/24 22:05	AMS
Perfluoropentanoic acid (PFPeA)	ND	0.58	0.038	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
Perfluorohexanoic acid (PFHxA)	ND	0.29	0.020	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
Perfluoroheptanoic acid (PFHpA)	ND	0.29	0.022	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
Perfluorooctanoic acid (PFOA)	ND	0.29	0.042	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
Perfluorononanoic acid (PFNA)	ND	0.29	0.038	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
Perfluorodecanoic acid (PFDA)	ND	0.29	0.027	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
Perfluoroundecanoic acid (PFUnA)	0.15	0.29	0.030	µg/kg dry	1	J	Draft Method 1633	1/5/24	1/9/24 22:05	AMS
Perfluorododecanoic acid (PFDoA)	0.056	0.29	0.032	µg/kg dry	1	J	Draft Method 1633	1/5/24	1/9/24 22:05	AMS
Perfluorotridecanoic acid (PFTrDA)	0.061	0.29	0.039	µg/kg dry	1	J	Draft Method 1633	1/5/24	1/9/24 22:05	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.29	0.027	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	0.29	0.029	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.29	0.043	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	0.29	0.036	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.29	0.033	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
Perfluorooctanesulfonic acid (PFOS)	0.61	0.29	0.052	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.29	0.044	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.29	0.065	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.29	0.031	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	1.2	0.11	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	1.2	0.12	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	1.2	0.11	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.29	0.15	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.29	0.030	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.29	0.041	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.29	0.041	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.29	0.061	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	2.9	0.23	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	2.9	0.25	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.2	0.095	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.2	0.12	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
9Cl-PF3ONS (F53B Minor)	ND	1.2	0.11	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
11Cl-PF3OUdS (F53B Major)	ND	1.2	0.15	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	2.9	0.25	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	15	1.7	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	15	1.4	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	0.58	0.029	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	0.58	0.061	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SS-3 | Sampled: 12/15/2023 11:00

Sample ID: 23L2655-03

Sample Matrix: Sediment

Sample Flags: D-01

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	0.58	0.045	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.58	0.059	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:05	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	22.3	10-130		1/9/24 22:05
13C5-PFPeA	46.3	35-150		1/9/24 22:05
13C5-PFHxA	71.9	55-150		1/9/24 22:05
13C4-PFHpA	74.4	55-150		1/9/24 22:05
13C8-PFOA	72.8	60-140		1/9/24 22:05
13C9-PFNA	71.7	55-140		1/9/24 22:05
13C6-PFDA	69.2	50-140		1/9/24 22:05
13C7-PFUnA	65.0	30-140		1/9/24 22:05
13C2-PFDoA	51.1	10-150		1/9/24 22:05
13C2-PFTeDA	21.7	10-130		1/9/24 22:05
13C3-PFBS	70.7	55-150		1/9/24 22:05
13C3-PFHxS	73.7	55-150		1/9/24 22:05
13C8-PFOS	71.9	45-140		1/9/24 22:05
13C2-4:2FTS	100	60-200		1/9/24 22:05
13C2-6:2FTS	102	60-200		1/9/24 22:05
13C2-8:2FTS	112	50-200		1/9/24 22:05
13C8-PFOSA	72.3	30-130		1/9/24 22:05
D3-NMeFOSA	28.3	15-130		1/9/24 22:05
D5-NEtFOSA	18.6	10-130		1/9/24 22:05
D3-NMeFOSAA	98.7	45-200		1/9/24 22:05
D5-NEtFOSAA	121	10-200		1/9/24 22:05
D7-NMeFOSE	16.3	10-150		1/9/24 22:05
D9-NEtFOSE	18.8	10-150		1/9/24 22:05
13C3-HFPO-DA	68.0	25-160		1/9/24 22:05

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SS-3 | Sampled: 12/15/2023 11:00

Sample ID: 23L2655-03

Sample Matrix: Sediment

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	16.7			% Wt	1		SM 2540G	12/20/23	12/20/23 9:53	DV

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SS-4 | Sampled: 12/15/2023 13:35

Sample ID: 23L2655-04

Sample Matrix: Sediment

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	0.78	0.14	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
Perfluoropentanoic acid (PFPeA)	ND	0.39	0.025	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
Perfluorohexanoic acid (PFHxA)	ND	0.20	0.013	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
Perfluoroheptanoic acid (PFHpA)	ND	0.20	0.015	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
Perfluorooctanoic acid (PFOA)	ND	0.20	0.028	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
Perfluorononanoic acid (PFNA)	ND	0.20	0.025	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
Perfluorodecanoic acid (PFDA)	ND	0.20	0.018	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
Perfluoroundecanoic acid (PFUnA)	0.027	0.20	0.020	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/5/24 11:29	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.20	0.021	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.20	0.026	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.20	0.018	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	0.20	0.019	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.20	0.029	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	0.20	0.024	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.20	0.022	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
Perfluorooctanesulfonic acid (PFOS)	0.059	0.20	0.035	µg/kg dry	1	PF-22, J	Draft Method 1633	1/2/24	1/5/24 11:29	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.20	0.029	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.20	0.044	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.20	0.021	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	0.78	0.073	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	0.78	0.080	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	0.78	0.073	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.20	0.10	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.20	0.020	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.20	0.027	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.20	0.027	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.20	0.041	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	2.0	0.15	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	2.0	0.17	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.78	0.064	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.78	0.079	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
9Cl-PF3ONS (F53B Minor)	ND	0.78	0.075	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
11Cl-PF3OUdS (F53B Major)	ND	0.78	0.10	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	2.0	0.16	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	9.8	1.2	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	9.8	0.95	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	0.39	0.020	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	0.39	0.041	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SS-4 | Sampled: 12/15/2023 13:35

Sample ID: 23L2655-04

Sample Matrix: Sediment

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	0.39	0.030	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.39	0.040	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:29	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	82.4	10-130		1/5/24 11:29
13C5-PFPeA	78.9	35-150		1/5/24 11:29
13C5-PFHxA	79.0	55-150		1/5/24 11:29
13C4-PFHpA	80.8	55-150		1/5/24 11:29
13C8-PFOA	83.9	60-140		1/5/24 11:29
13C9-PFNA	79.6	55-140		1/5/24 11:29
13C6-PFDA	83.3	50-140		1/5/24 11:29
13C7-PFUnA	85.2	30-140		1/5/24 11:29
13C2-PFDoA	89.2	10-150		1/5/24 11:29
13C2-PFTeDA	94.8	10-130		1/5/24 11:29
13C3-PFBS	79.6	55-150		1/5/24 11:29
13C3-PFHxS	80.2	55-150		1/5/24 11:29
13C8-PFOS	79.5	45-140		1/5/24 11:29
13C2-4:2FTS	77.8	60-200		1/5/24 11:29
13C2-6:2FTS	74.2	60-200		1/5/24 11:29
13C2-8:2FTS	82.7	50-200		1/5/24 11:29
13C8-PFOSA	82.8	30-130		1/5/24 11:29
D3-NMeFOSA	35.4	15-130		1/5/24 11:29
D5-NEtFOSA	24.9	10-130		1/5/24 11:29
D3-NMeFOSAA	103	45-200		1/5/24 11:29
D5-NEtFOSAA	108	10-200		1/5/24 11:29
D7-NMeFOSE	73.3	10-150		1/5/24 11:29
D9-NEtFOSE	77.2	10-150		1/5/24 11:29
13C3-HFPO-DA	80.5	25-160		1/5/24 11:29

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SS-4 | Sampled: 12/15/2023 13:35

Sample ID: 23L2655-04

Sample Matrix: Sediment

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	68.0			% Wt	1		SM 2540G	12/20/23	12/20/23 9:53	DV

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SS-5 | Sampled: 12/15/2023 15:15

Sample ID: 23L2655-05

Sample Matrix: Sediment

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	0.28	0.79	0.14	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/5/24 11:45	AMS
Perfluoropentanoic acid (PFPeA)	0.34	0.40	0.026	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/5/24 11:45	AMS
Perfluorohexanoic acid (PFHxA)	0.22	0.20	0.014	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS
Perfluoroheptanoic acid (PFHpA)	0.16	0.20	0.015	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/5/24 11:45	AMS
Perfluorooctanoic acid (PFOA)	0.43	0.20	0.029	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS
Perfluorononanoic acid (PFNA)	0.16	0.20	0.026	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/5/24 11:45	AMS
Perfluorodecanoic acid (PFDA)	0.083	0.20	0.018	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/5/24 11:45	AMS
Perfluoroundecanoic acid (PFUnA)	0.18	0.20	0.020	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/5/24 11:45	AMS
Perfluorododecanoic acid (PFDoA)	0.056	0.20	0.022	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/5/24 11:45	AMS
Perfluorotridecanoic acid (PFTrDA)	0.054	0.20	0.027	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/5/24 11:45	AMS
Perfluorotetradecanoic acid (PFTeDA)	0.026	0.20	0.018	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/5/24 11:45	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	0.20	0.020	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.20	0.030	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS
Perfluorohexanesulfonic acid (PFHxS)	0.028	0.20	0.025	µg/kg dry	1	J	Draft Method 1633	1/2/24	1/5/24 11:45	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.20	0.022	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS
Perfluorooctanesulfonic acid (PFOS)	0.60	0.20	0.036	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.20	0.030	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.20	0.045	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.20	0.021	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	0.79	0.074	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	0.79	0.081	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	0.79	0.074	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.20	0.10	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.20	0.021	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.20	0.028	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.20	0.028	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.20	0.042	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	2.0	0.15	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	2.0	0.17	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.79	0.065	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.79	0.080	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS
9Cl-PF3ONS (F53B Minor)	ND	0.79	0.077	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS
11Cl-PF3OUdS (F53B Major)	ND	0.79	0.10	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	2.0	0.17	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	9.9	1.2	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	9.9	0.97	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	0.40	0.020	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	0.40	0.042	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS

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39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SS-5 | Sampled: 12/15/2023 15:15

Sample ID: 23L2655-05

Sample Matrix: Sediment

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	0.40	0.031	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.40	0.040	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 11:45	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	48.8	10-130		1/5/24 11:45
13C5-PFPeA	73.0	35-150		1/5/24 11:45
13C5-PFHxA	82.8	55-150		1/5/24 11:45
13C4-PFHpA	83.0	55-150		1/5/24 11:45
13C8-PFOA	81.1	60-140		1/5/24 11:45
13C9-PFNA	83.7	55-140		1/5/24 11:45
13C6-PFDA	84.8	50-140		1/5/24 11:45
13C7-PFUnA	86.6	30-140		1/5/24 11:45
13C2-PFDoA	91.0	10-150		1/5/24 11:45
13C2-PFTeDA	68.9	10-130		1/5/24 11:45
13C3-PFBS	83.6	55-150		1/5/24 11:45
13C3-PFHxS	81.3	55-150		1/5/24 11:45
13C8-PFOS	79.2	45-140		1/5/24 11:45
13C2-4:2FTS	97.0	60-200		1/5/24 11:45
13C2-6:2FTS	107	60-200		1/5/24 11:45
13C2-8:2FTS	131	50-200		1/5/24 11:45
13C8-PFOSA	88.5	30-130		1/5/24 11:45
D3-NMeFOSA	52.7	15-130		1/5/24 11:45
D5-NEtFOSA	42.0	10-130		1/5/24 11:45
D3-NMeFOSAA	120	45-200		1/5/24 11:45
D5-NEtFOSAA	165	10-200		1/5/24 11:45
D7-NMeFOSE	43.0	10-150		1/5/24 11:45
D9-NEtFOSE	47.6	10-150		1/5/24 11:45
13C3-HFPO-DA	82.4	25-160		1/5/24 11:45

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SS-5 | Sampled: 12/15/2023 15:15

Sample ID: 23L2655-05

Sample Matrix: Sediment

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	38.4			% Wt	1		SM 2540G	12/20/23	12/20/23 9:53	DV

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SS-6 | Sampled: 12/15/2023 15:45

Sample ID: 23L2655-06

Sample Matrix: Sediment

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	ND	0.78	0.14	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
Perfluoropentanoic acid (PFPeA)	ND	0.39	0.025	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
Perfluorohexanoic acid (PFHxA)	ND	0.19	0.013	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
Perfluoroheptanoic acid (PFHpA)	ND	0.19	0.015	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
Perfluorooctanoic acid (PFOA)	ND	0.19	0.028	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
Perfluorononanoic acid (PFNA)	ND	0.19	0.025	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
Perfluorodecanoic acid (PFDA)	ND	0.19	0.018	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.19	0.020	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.19	0.021	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.19	0.026	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.19	0.018	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	0.19	0.019	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.19	0.029	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	0.19	0.024	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.19	0.022	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
Perfluorooctanesulfonic acid (PFOS)	ND	0.19	0.035	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.19	0.029	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.19	0.044	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.19	0.021	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	0.78	0.073	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	0.78	0.080	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	0.78	0.072	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.19	0.10	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.19	0.020	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.19	0.027	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.19	0.027	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.19	0.041	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	1.9	0.15	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	1.9	0.17	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.78	0.064	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.78	0.079	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
9Cl-PF3ONS (F53B Minor)	ND	0.78	0.075	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
11Cl-PF3OUdS (F53B Major)	ND	0.78	0.10	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	1.9	0.16	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	9.7	1.2	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	9.7	0.95	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	0.39	0.019	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	0.39	0.041	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SS-6 | Sampled: 12/15/2023 15:45

Sample ID: 23L2655-06

Sample Matrix: Sediment

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	0.39	0.030	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.39	0.039	µg/kg dry	1		Draft Method 1633	1/2/24	1/5/24 12:01	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	82.4	10-130		1/5/24 12:01
13C5-PFPeA	79.2	35-150		1/5/24 12:01
13C5-PFHxA	78.8	55-150		1/5/24 12:01
13C4-PFHpA	80.2	55-150		1/5/24 12:01
13C8-PFOA	82.5	60-140		1/5/24 12:01
13C9-PFNA	77.7	55-140		1/5/24 12:01
13C6-PFDA	84.4	50-140		1/5/24 12:01
13C7-PFUnA	87.2	30-140		1/5/24 12:01
13C2-PFDoA	92.4	10-150		1/5/24 12:01
13C2-PFTeDA	108	10-130		1/5/24 12:01
13C3-PFBS	79.1	55-150		1/5/24 12:01
13C3-PFHxS	78.9	55-150		1/5/24 12:01
13C8-PFOS	81.0	45-140		1/5/24 12:01
13C2-4:2FTS	77.3	60-200		1/5/24 12:01
13C2-6:2FTS	72.8	60-200		1/5/24 12:01
13C2-8:2FTS	77.3	50-200		1/5/24 12:01
13C8-PFOSA	85.7	30-130		1/5/24 12:01
D3-NMeFOSA	62.9	15-130		1/5/24 12:01
D5-NEtFOSA	57.3	10-130		1/5/24 12:01
D3-NMeFOSAA	97.8	45-200		1/5/24 12:01
D5-NEtFOSAA	106	10-200		1/5/24 12:01
D7-NMeFOSE	64.4	10-150		1/5/24 12:01
D9-NEtFOSE	53.7	10-150		1/5/24 12:01
13C3-HFPO-DA	80.2	25-160		1/5/24 12:01

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SS-6 | Sampled: 12/15/2023 15:45

Sample ID: 23L2655-06

Sample Matrix: Sediment

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	77.8			% Wt	1		SM 2540G	12/20/23	12/20/23 9:53	DV

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: Duplicate | Sampled: 12/15/2023 00:00

Sample ID: 23L2655-07

Sample Matrix: Sediment

Sample Flags: D-01

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	0.32	1.2	0.22	µg/kg dry	1	J	Draft Method 1633	1/5/24	1/9/24 22:20	AMS
Perfluoropentanoic acid (PFPeA)	ND	0.60	0.039	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
Perfluorohexanoic acid (PFHxA)	ND	0.30	0.021	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
Perfluoroheptanoic acid (PFHpA)	ND	0.30	0.023	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
Perfluorooctanoic acid (PFOA)	ND	0.30	0.044	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
Perfluorononanoic acid (PFNA)	ND	0.30	0.039	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
Perfluorodecanoic acid (PFDA)	0.034	0.30	0.028	µg/kg dry	1	PF-23, J	Draft Method 1633	1/5/24	1/9/24 22:20	AMS
Perfluoroundecanoic acid (PFUnA)	0.14	0.30	0.031	µg/kg dry	1	J	Draft Method 1633	1/5/24	1/9/24 22:20	AMS
Perfluorododecanoic acid (PFDoA)	0.059	0.30	0.033	µg/kg dry	1	J	Draft Method 1633	1/5/24	1/9/24 22:20	AMS
Perfluorotridecanoic acid (PFTrDA)	0.090	0.30	0.041	µg/kg dry	1	J	Draft Method 1633	1/5/24	1/9/24 22:20	AMS
Perfluorotetradecanoic acid (PFTeDA)	0.039	0.30	0.028	µg/kg dry	1	J	Draft Method 1633	1/5/24	1/9/24 22:20	AMS
Perfluorobutanesulfonic acid (PFBS)	ND	0.30	0.030	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.30	0.045	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
Perfluorohexanesulfonic acid (PFHxS)	ND	0.30	0.038	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.30	0.034	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
Perfluorooctanesulfonic acid (PFOS)	0.67	0.30	0.054	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.30	0.045	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.30	0.068	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.30	0.032	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	1.2	0.11	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	1.2	0.12	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	1.2	0.11	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.30	0.16	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.30	0.031	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.30	0.042	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.30	0.042	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.30	0.063	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	3.0	0.23	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	3.0	0.26	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	1.2	0.099	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	1.2	0.12	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
9Cl-PF3ONS (F53B Minor)	ND	1.2	0.12	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
11Cl-PF3OUdS (F53B Major)	ND	1.2	0.16	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	3.0	0.26	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	15	1.8	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	15	1.5	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	0.60	0.030	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	0.60	0.063	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: Duplicate | Sampled: 12/15/2023 00:00

Sample ID: 23L2655-07

Sample Matrix: Sediment

Sample Flags: D-01

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	0.60	0.047	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.60	0.061	µg/kg dry	1		Draft Method 1633	1/5/24	1/9/24 22:20	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	10.6	10-130		1/9/24 22:20
13C5-PFPeA	37.7	35-150		1/9/24 22:20
13C5-PFHxA	67.9	55-150		1/9/24 22:20
13C4-PFHpA	71.0	55-150		1/9/24 22:20
13C8-PFOA	69.2	60-140		1/9/24 22:20
13C9-PFNA	67.5	55-140		1/9/24 22:20
13C6-PFDA	66.5	50-140		1/9/24 22:20
13C7-PFUnA	63.1	30-140		1/9/24 22:20
13C2-PFDoA	54.4	10-150		1/9/24 22:20
13C2-PFTeDA	29.7	10-130		1/9/24 22:20
13C3-PFBS	64.9	55-150		1/9/24 22:20
13C3-PFHxS	68.3	55-150		1/9/24 22:20
13C8-PFOS	67.5	45-140		1/9/24 22:20
13C2-4:2FTS	97.3	60-200		1/9/24 22:20
13C2-6:2FTS	98.3	60-200		1/9/24 22:20
13C2-8:2FTS	112	50-200		1/9/24 22:20
13C8-PFOSA	70.8	30-130		1/9/24 22:20
D3-NMeFOSA	34.2	15-130		1/9/24 22:20
D5-NEtFOSA	23.5	10-130		1/9/24 22:20
D3-NMeFOSAA	104	45-200		1/9/24 22:20
D5-NEtFOSAA	128	10-200		1/9/24 22:20
D7-NMeFOSE	21.0	10-150		1/9/24 22:20
D9-NEtFOSE	27.8	10-150		1/9/24 22:20
13C3-HFPO-DA	64.8	25-160		1/9/24 22:20

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: Duplicate | Sampled: 12/15/2023 00:00

Sample ID: 23L2655-07

Sample Matrix: Sediment

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
% Solids	16.1			% Wt	1		SM 2540G	12/20/23	12/20/23 9:53	DV

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SW-1 | Sampled: 12/15/2023 09:05

Sample ID: 23L2655-08

Sample Matrix: Surface Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	5.1	3.7	1.3	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
Perfluoropentanoic acid (PFPeA)	ND	1.8	0.32	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
Perfluorohexanoic acid (PFHxA)	0.53	0.91	0.20	ng/L	1	J	Draft Method 1633	12/28/23	1/2/24 21:51	AMS
Perfluoroheptanoic acid (PFHpA)	0.33	0.91	0.23	ng/L	1	J	Draft Method 1633	12/28/23	1/2/24 21:51	AMS
Perfluorooctanoic acid (PFOA)	ND	0.91	0.21	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
Perfluorononanoic acid (PFNA)	ND	0.91	0.17	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
Perfluorodecanoic acid (PFDA)	ND	0.91	0.17	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.91	0.25	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.91	0.24	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.91	0.25	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.91	0.23	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
Perfluorobutanesulfonic acid (PFBS)	1.1	0.91	0.24	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.91	0.22	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
Perfluorohexanesulfonic acid (PFHxS)	0.52	0.91	0.19	ng/L	1	J	Draft Method 1633	12/28/23	1/2/24 21:51	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.91	0.28	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
Perfluorooctanesulfonic acid (PFOS)	0.83	0.91	0.29	ng/L	1	J	Draft Method 1633	12/28/23	1/2/24 21:51	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.91	0.27	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.91	0.29	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.91	0.24	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.7	0.64	ng/L	1	PF-17C	Draft Method 1633	12/28/23	1/2/24 21:51	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.7	0.90	ng/L	1	PF-17C	Draft Method 1633	12/28/23	1/2/24 21:51	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.7	0.99	ng/L	1	PF-17C	Draft Method 1633	12/28/23	1/2/24 21:51	AMS
Perfluorooctanesulfonamide (PFOSA)	0.38	0.91	0.28	ng/L	1	J	Draft Method 1633	12/28/23	1/2/24 21:51	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.91	0.38	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.91	0.28	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.91	0.40	ng/L	1	S-29	Draft Method 1633	12/28/23	1/2/24 21:51	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.91	0.20	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.1	2.4	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.1	2.2	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.7	0.96	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.7	0.63	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.7	0.78	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
11Cl-PF3OUdS (F53B Major)	ND	3.7	0.89	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.1	1.6	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	46	9.3	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	46	8.1	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8	0.45	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.8	0.46	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SW-1 | Sampled: 12/15/2023 09:05

Sample ID: 23L2655-08

Sample Matrix: Surface Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.8	0.37	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8	0.79	ng/L	1		Draft Method 1633	12/28/23	1/2/24 21:51	AMS

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
13C4-PFBA	55.0		10-130		1/2/24 21:51
13C5-PFPeA	70.5		35-150		1/2/24 21:51
13C5-PFHxA	66.2		55-150		1/2/24 21:51
13C4-PFHpA	61.9		55-150		1/2/24 21:51
13C8-PFOA	64.6		60-140		1/2/24 21:51
13C9-PFNA	59.0		55-140		1/2/24 21:51
13C6-PFDA	59.1		50-140		1/2/24 21:51
13C7-PFUnA	54.2		30-140		1/2/24 21:51
13C2-PFDoA	47.4		10-150		1/2/24 21:51
13C2-PFTeDA	25.6		10-130		1/2/24 21:51
13C3-PFBS	63.5		55-150		1/2/24 21:51
13C3-PFHxS	62.7		55-150		1/2/24 21:51
13C8-PFOS	55.0		45-140		1/2/24 21:51
13C2-4:2FTS	**51.9**	*	60-200	PF-17C	1/2/24 21:51
13C2-6:2FTS	**38.3**	*	60-200	PF-17C	1/2/24 21:51
13C2-8:2FTS	**39.6**	*	50-200	PF-17C	1/2/24 21:51
13C8-PFOSA	62.4		30-130		1/2/24 21:51
D3-NMeFOSA	46.5		15-130		1/2/24 21:51
D5-NEtFOSA	42.2		10-130		1/2/24 21:51
D3-NMeFOSAA	**40.2**	*	45-200	S-29	1/2/24 21:51
D5-NEtFOSAA	34.3		10-200		1/2/24 21:51
D7-NMeFOSE	25.4		10-150		1/2/24 21:51
D9-NEtFOSE	19.7		10-150		1/2/24 21:51
13C3-HFPO-DA	64.6		25-160		1/2/24 21:51

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SW-1 | Sampled: 12/15/2023 09:05

Sample ID: 23L2655-08

Sample Matrix: Surface Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	80	10	10	mg/L	1		Draft Method 1633	12/20/23	12/20/23 12:30	LL

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SW-2 | Sampled: 12/15/2023 10:15

Sample ID: 23L2655-09

Sample Matrix: Surface Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	4.7	3.7	1.3	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
Perfluoropentanoic acid (PFPeA)	2.7	1.8	0.32	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
Perfluorohexanoic acid (PFHxA)	1.7	0.92	0.20	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
Perfluoroheptanoic acid (PFHpA)	0.62	0.92	0.24	ng/L	1	J	Draft Method 1633	12/28/23	1/2/24 22:06	AMS
Perfluorooctanoic acid (PFOA)	1.2	0.92	0.21	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
Perfluorononanoic acid (PFNA)	0.41	0.92	0.18	ng/L	1	J	Draft Method 1633	12/28/23	1/2/24 22:06	AMS
Perfluorodecanoic acid (PFDA)	ND	0.92	0.17	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.92	0.25	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.92	0.24	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.92	0.25	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.92	0.23	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
Perfluorobutanesulfonic acid (PFBS)	0.97	0.92	0.24	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.92	0.22	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
Perfluorohexanesulfonic acid (PFHxS)	0.40	0.92	0.19	ng/L	1	J	Draft Method 1633	12/28/23	1/2/24 22:06	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.92	0.28	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
Perfluorooctanesulfonic acid (PFOS)	1.8	0.92	0.29	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.92	0.27	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.92	0.29	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.92	0.25	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.7	0.64	ng/L	1	PF-17C	Draft Method 1633	12/28/23	1/2/24 22:06	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.7	0.91	ng/L	1	PF-17C	Draft Method 1633	12/28/23	1/2/24 22:06	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.7	1.0	ng/L	1	PF-17C	Draft Method 1633	12/28/23	1/2/24 22:06	AMS
Perfluorooctanesulfonamide (PFOSA)	0.29	0.92	0.28	ng/L	1	J	Draft Method 1633	12/28/23	1/2/24 22:06	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.92	0.38	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.92	0.28	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.92	0.41	ng/L	1	S-29	Draft Method 1633	12/28/23	1/2/24 22:06	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.92	0.20	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.2	2.4	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.2	2.3	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.7	0.96	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.7	0.63	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.7	0.79	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
11Cl-PF3OUdS (F53B Major)	ND	3.7	0.89	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.2	1.7	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	46	9.4	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	46	8.1	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8	0.45	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.8	0.46	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SW-2 | Sampled: 12/15/2023 10:15

Sample ID: 23L2655-09

Sample Matrix: Surface Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.8	0.37	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8	0.80	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:06	AMS

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
13C4-PFBA	59.5		10-130		1/2/24 22:06
13C5-PFPeA	71.1		35-150		1/2/24 22:06
13C5-PFHxA	66.4		55-150		1/2/24 22:06
13C4-PFHpA	62.5		55-150		1/2/24 22:06
13C8-PFOA	64.4		60-140		1/2/24 22:06
13C9-PFNA	60.8		55-140		1/2/24 22:06
13C6-PFDA	60.9		50-140		1/2/24 22:06
13C7-PFUnA	55.8		30-140		1/2/24 22:06
13C2-PFDoA	47.5		10-150		1/2/24 22:06
13C2-PFTeDA	24.4		10-130		1/2/24 22:06
13C3-PFBS	64.1		55-150		1/2/24 22:06
13C3-PFHxS	65.4		55-150		1/2/24 22:06
13C8-PFOS	60.0		45-140		1/2/24 22:06
13C2-4:2FTS	**56.2**	*	60-200	PF-17C	1/2/24 22:06
13C2-6:2FTS	**39.1**	*	60-200	PF-17C	1/2/24 22:06
13C2-8:2FTS	**37.9**	*	50-200	PF-17C	1/2/24 22:06
13C8-PFOSA	63.0		30-130		1/2/24 22:06
D3-NMeFOSA	45.8		15-130		1/2/24 22:06
D5-NEtFOSA	43.8		10-130		1/2/24 22:06
D3-NMeFOSAA	**40.9**	*	45-200	S-29	1/2/24 22:06
D5-NEtFOSAA	33.9		10-200		1/2/24 22:06
D7-NMeFOSE	29.5		10-150		1/2/24 22:06
D9-NEtFOSE	23.3		10-150		1/2/24 22:06
13C3-HFPO-DA	63.6		25-160		1/2/24 22:06

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SW-2 | Sampled: 12/15/2023 10:15

Sample ID: 23L2655-09

Sample Matrix: Surface Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	14	10	10	mg/L	1		Draft Method 1633	12/20/23	12/20/23 12:30	LL

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SW-3 | Sampled: 12/15/2023 11:00

Sample ID: 23L2655-10

Sample Matrix: Surface Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	3.8	3.8	1.4	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
Perfluoropentanoic acid (PFPeA)	3.2	1.9	0.33	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
Perfluorohexanoic acid (PFHxA)	1.6	0.95	0.20	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
Perfluoroheptanoic acid (PFHpA)	0.51	0.95	0.24	ng/L	1	J	Draft Method 1633	12/28/23	1/2/24 22:22	AMS
Perfluorooctanoic acid (PFOA)	1.0	0.95	0.21	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
Perfluorononanoic acid (PFNA)	0.32	0.95	0.18	ng/L	1	J	Draft Method 1633	12/28/23	1/2/24 22:22	AMS
Perfluorodecanoic acid (PFDA)	ND	0.95	0.18	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.95	0.26	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.95	0.24	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.95	0.26	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.95	0.24	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
Perfluorobutanesulfonic acid (PFBS)	0.97	0.95	0.25	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.95	0.23	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
Perfluorohexanesulfonic acid (PFHxS)	0.42	0.95	0.19	ng/L	1	J	Draft Method 1633	12/28/23	1/2/24 22:22	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.95	0.29	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
Perfluorooctanesulfonic acid (PFOS)	1.4	0.95	0.30	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.95	0.28	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.95	0.30	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.95	0.25	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.8	0.66	ng/L	1	PF-17C	Draft Method 1633	12/28/23	1/2/24 22:22	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.8	0.93	ng/L	1	PF-17C	Draft Method 1633	12/28/23	1/2/24 22:22	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.8	1.0	ng/L	1	PF-17C	Draft Method 1633	12/28/23	1/2/24 22:22	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.95	0.29	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.95	0.39	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.95	0.29	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.95	0.42	ng/L	1	S-29	Draft Method 1633	12/28/23	1/2/24 22:22	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.95	0.21	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.5	2.5	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.5	2.3	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.8	0.99	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.8	0.65	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.8	0.81	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
11Cl-PF3OUdS (F53B Major)	ND	3.8	0.92	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.5	1.7	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	47	9.7	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	47	8.3	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.46	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	0.47	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SW-3 | Sampled: 12/15/2023 11:00

Sample ID: 23L2655-10

Sample Matrix: Surface Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	0.38	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.82	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:22	AMS

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
13C4-PFBA	60.9		10-130		1/2/24 22:22
13C5-PFPeA	69.8		35-150		1/2/24 22:22
13C5-PFHxA	64.8		55-150		1/2/24 22:22
13C4-PFHpA	63.1		55-150		1/2/24 22:22
13C8-PFOA	61.5		60-140		1/2/24 22:22
13C9-PFNA	58.8		55-140		1/2/24 22:22
13C6-PFDA	56.4		50-140		1/2/24 22:22
13C7-PFUnA	50.9		30-140		1/2/24 22:22
13C2-PFDoA	39.8		10-150		1/2/24 22:22
13C2-PFTeDA	19.5		10-130		1/2/24 22:22
13C3-PFBS	61.5		55-150		1/2/24 22:22
13C3-PFHxS	61.4		55-150		1/2/24 22:22
13C8-PFOS	54.0		45-140		1/2/24 22:22
13C2-4:2FTS	**55.9**	*	60-200	PF-17C	1/2/24 22:22
13C2-6:2FTS	**40.5**	*	60-200	PF-17C	1/2/24 22:22
13C2-8:2FTS	**37.4**	*	50-200	PF-17C	1/2/24 22:22
13C8-PFOSA	62.4		30-130		1/2/24 22:22
D3-NMeFOSA	40.8		15-130		1/2/24 22:22
D5-NEtFOSA	34.0		10-130		1/2/24 22:22
D3-NMeFOSAA	**37.0**	*	45-200	S-29	1/2/24 22:22
D5-NEtFOSAA	30.0		10-200		1/2/24 22:22
D7-NMeFOSE	18.8		10-150		1/2/24 22:22
D9-NEtFOSE	13.6		10-150		1/2/24 22:22
13C3-HFPO-DA	62.1		25-160		1/2/24 22:22

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SW-3 | Sampled: 12/15/2023 11:00

Sample ID: 23L2655-10

Sample Matrix: Surface Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	10	mg/L	1		Draft Method 1633	12/20/23	12/20/23 12:30	LL

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SW-4 | Sampled: 12/15/2023 12:45

Sample ID: 23L2655-11

Sample Matrix: Surface Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	8.1	3.8	1.4	ng/L	1	R-06	Draft Method 1633	12/28/23	1/2/24 22:38	AMS
Perfluoropentanoic acid (PFPeA)	1.3	1.9	0.33	ng/L	1	R-06, J	Draft Method 1633	12/28/23	1/2/24 22:38	AMS
Perfluorohexanoic acid (PFHxA)	1.2	0.95	0.20	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS
Perfluoroheptanoic acid (PFHpA)	1.6	0.95	0.24	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS
Perfluorooctanoic acid (PFOA)	1.6	0.95	0.21	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS
Perfluorononanoic acid (PFNA)	0.67	0.95	0.18	ng/L	1	J	Draft Method 1633	12/28/23	1/2/24 22:38	AMS
Perfluorodecanoic acid (PFDA)	ND	0.95	0.18	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.95	0.26	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.95	0.25	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.95	0.26	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.95	0.24	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS
Perfluorobutanesulfonic acid (PFBS)	0.59	0.95	0.25	ng/L	1	R-06, J	Draft Method 1633	12/28/23	1/2/24 22:38	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.95	0.23	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS
Perfluorohexanesulfonic acid (PFHxS)	0.27	0.95	0.20	ng/L	1	J	Draft Method 1633	12/28/23	1/2/24 22:38	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.95	0.29	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS
Perfluorooctanesulfonic acid (PFOS)	1.2	0.95	0.30	ng/L	1	R-06	Draft Method 1633	12/28/23	1/2/24 22:38	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.95	0.28	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.95	0.30	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.95	0.25	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.8	0.66	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.8	0.94	ng/L	1	PF-18	Draft Method 1633	12/28/23	1/2/24 22:38	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.8	1.0	ng/L	1	PF-18	Draft Method 1633	12/28/23	1/2/24 22:38	AMS
Perfluorooctanesulfonamide (PFOSA)	0.32	0.95	0.29	ng/L	1	R-06, J	Draft Method 1633	12/28/23	1/2/24 22:38	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.95	0.39	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.95	0.29	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.95	0.42	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.95	0.21	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.5	2.5	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.5	2.3	ng/L	1	PF-18	Draft Method 1633	12/28/23	1/2/24 22:38	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.8	0.99	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.8	0.65	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.8	0.81	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS
11Cl-PF3OUdS (F53B Major)	ND	3.8	0.92	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.5	1.7	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	48	9.7	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	48	8.4	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.47	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	0.47	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SW-4 | Sampled: 12/15/2023 12:45

Sample ID: 23L2655-11

Sample Matrix: Surface Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	0.38	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.82	ng/L	1		Draft Method 1633	12/28/23	1/2/24 22:38	AMS

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
13C4-PFBA	57.2		10-130		1/2/24 22:38
13C5-PFPeA	65.5		35-150		1/2/24 22:38
13C5-PFHxA	64.7		55-150		1/2/24 22:38
13C4-PFHpA	64.1		55-150		1/2/24 22:38
13C8-PFOA	66.4		60-140		1/2/24 22:38
13C9-PFNA	63.5		55-140		1/2/24 22:38
13C6-PFDA	63.5		50-140		1/2/24 22:38
13C7-PFUnA	63.4		30-140		1/2/24 22:38
13C2-PFDoA	56.6		10-150		1/2/24 22:38
13C2-PFTeDA	30.0		10-130		1/2/24 22:38
13C3-PFBS	62.5		55-150		1/2/24 22:38
13C3-PFHxS	66.2		55-150		1/2/24 22:38
13C8-PFOS	62.5		45-140		1/2/24 22:38
13C2-4:2FTS	104		60-200		1/2/24 22:38
13C2-6:2FTS	**53.3**	*	60-200	PF-18	1/2/24 22:38
13C2-8:2FTS	**47.7**	*	50-200	PF-18	1/2/24 22:38
13C8-PFOSA	69.7		30-130		1/2/24 22:38
D3-NMeFOSA	47.7		15-130		1/2/24 22:38
D5-NEtFOSA	46.0		10-130		1/2/24 22:38
D3-NMeFOSAA	51.3		45-200		1/2/24 22:38
D5-NEtFOSAA	44.4		10-200		1/2/24 22:38
D7-NMeFOSE	18.2		10-150		1/2/24 22:38
D9-NEtFOSE	**4.87**	*	10-150	PF-18	1/2/24 22:38
13C3-HFPO-DA	60.1		25-160		1/2/24 22:38

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SW-4 | Sampled: 12/15/2023 12:45

Sample ID: 23L2655-11

Sample Matrix: Surface Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	16	10	10	mg/L	1		Draft Method 1633	12/20/23	12/20/23 12:30	LL

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SW-5 | Sampled: 12/15/2023 15:10

Sample ID: 23L2655-12

Sample Matrix: Surface Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	2.5	3.6	1.3	ng/L	1	J	Draft Method 1633	1/8/24	1/8/24 19:28	AMS
Perfluoropentanoic acid (PFPeA)	2.0	1.8	0.31	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
Perfluorohexanoic acid (PFHxA)	1.3	0.89	0.19	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
Perfluoroheptanoic acid (PFHpA)	0.51	0.89	0.23	ng/L	1	J	Draft Method 1633	1/8/24	1/8/24 19:28	AMS
Perfluorooctanoic acid (PFOA)	ND	0.89	0.20	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
Perfluorononanoic acid (PFNA)	ND	0.89	0.17	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
Perfluorodecanoic acid (PFDA)	ND	0.89	0.17	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.89	0.24	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.89	0.23	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.89	0.24	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.89	0.22	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
Perfluorobutanesulfonic acid (PFBS)	0.89	0.89	0.23	ng/L	1	Z-01	Draft Method 1633	1/8/24	1/8/24 19:28	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.89	0.21	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
Perfluorohexanesulfonic acid (PFHxS)	0.28	0.89	0.18	ng/L	1	J	Draft Method 1633	1/8/24	1/8/24 19:28	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.89	0.27	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
Perfluorooctanesulfonic acid (PFOS)	0.73	0.89	0.28	ng/L	1	J	Draft Method 1633	1/8/24	1/8/24 19:28	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.89	0.26	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.89	0.28	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.89	0.24	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.6	0.62	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.6	0.88	ng/L	1	PF-18	Draft Method 1633	1/8/24	1/8/24 19:28	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.6	0.97	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
Perfluorooctanesulfonamide (PFOSA)	0.35	0.89	0.27	ng/L	1	J	Draft Method 1633	1/8/24	1/8/24 19:28	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.89	0.37	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.89	0.28	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.89	0.39	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.89	0.20	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	8.9	2.3	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	8.9	2.2	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.6	0.93	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.6	0.61	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.6	0.76	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
11Cl-PF3OUdS (F53B Major)	ND	3.6	0.87	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	8.9	1.6	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	45	9.1	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	45	7.9	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8	0.44	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.8	0.45	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SW-5 | Sampled: 12/15/2023 15:10

Sample ID: 23L2655-12

Sample Matrix: Surface Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.8	0.36	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8	0.77	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:28	AMS

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
13C4-PFBA	55.9		10-130		1/8/24 19:28
13C5-PFPeA	71.7		35-150		1/8/24 19:28
13C5-PFHxA	71.1		55-150		1/8/24 19:28
13C4-PFHpA	70.0		55-150		1/8/24 19:28
13C8-PFOA	67.9		60-140		1/8/24 19:28
13C9-PFNA	69.2		55-140		1/8/24 19:28
13C6-PFDA	67.5		50-140		1/8/24 19:28
13C7-PFUnA	63.4		30-140		1/8/24 19:28
13C2-PFDoA	62.9		10-150		1/8/24 19:28
13C2-PFTeDA	46.2		10-130		1/8/24 19:28
13C3-PFBS	74.7		55-150		1/8/24 19:28
13C3-PFHxS	69.1		55-150		1/8/24 19:28
13C8-PFOS	69.0		45-140		1/8/24 19:28
13C2-4:2FTS	75.2		60-200		1/8/24 19:28
13C2-6:2FTS	**59.7**	*	60-200	PF-18	1/8/24 19:28
13C2-8:2FTS	54.3		50-200		1/8/24 19:28
13C8-PFOSA	64.9		30-130		1/8/24 19:28
D3-NMeFOSA	55.1		15-130		1/8/24 19:28
D5-NEtFOSA	53.6		10-130		1/8/24 19:28
D3-NMeFOSAA	68.2		45-200		1/8/24 19:28
D5-NEtFOSAA	66.3		10-200		1/8/24 19:28
D7-NMeFOSE	45.1		10-150		1/8/24 19:28
D9-NEtFOSE	37.7		10-150		1/8/24 19:28
13C3-HFPO-DA	71.8		25-160		1/8/24 19:28

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SW-5 | Sampled: 12/15/2023 15:10

Sample ID: 23L2655-12

Sample Matrix: Surface Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	10	mg/L	1		Draft Method 1633	12/20/23	12/20/23 12:30	LL

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SW-6 | Sampled: 12/15/2023 14:30

Sample ID: 23L2655-13

Sample Matrix: Surface Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	3.9	3.9	1.4	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
Perfluoropentanoic acid (PFPeA)	2.7	1.9	0.34	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
Perfluorohexanoic acid (PFHxA)	1.6	0.97	0.21	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
Perfluoroheptanoic acid (PFHpA)	0.58	0.97	0.25	ng/L	1	J	Draft Method 1633	12/28/23	1/2/24 23:09	AMS
Perfluorooctanoic acid (PFOA)	1.5	0.97	0.22	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
Perfluorononanoic acid (PFNA)	0.33	0.97	0.19	ng/L	1	J	Draft Method 1633	12/28/23	1/2/24 23:09	AMS
Perfluorodecanoic acid (PFDA)	ND	0.97	0.18	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.97	0.26	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.97	0.25	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.97	0.26	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.97	0.24	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
Perfluorobutanesulfonic acid (PFBS)	0.85	0.97	0.25	ng/L	1	J	Draft Method 1633	12/28/23	1/2/24 23:09	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.97	0.23	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
Perfluorohexanesulfonic acid (PFHxS)	0.34	0.97	0.20	ng/L	1	J	Draft Method 1633	12/28/23	1/2/24 23:09	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.97	0.30	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
Perfluorooctanesulfonic acid (PFOS)	1.2	0.97	0.31	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.97	0.29	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.97	0.30	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.97	0.26	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.9	0.68	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.9	0.96	ng/L	1	PF-17C	Draft Method 1633	12/28/23	1/2/24 23:09	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.9	1.1	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.97	0.30	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.97	0.40	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.97	0.30	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.97	0.43	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.97	0.21	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.7	2.5	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.7	2.4	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.9	1.0	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.9	0.67	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.9	0.83	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
11Cl-PF3OUdS (F53B Major)	ND	3.9	0.94	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.7	1.7	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	48	9.9	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	48	8.5	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.9	0.48	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.9	0.48	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SW-6 | Sampled: 12/15/2023 14:30

Sample ID: 23L2655-13

Sample Matrix: Surface Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.9	0.39	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.9	0.84	ng/L	1		Draft Method 1633	12/28/23	1/2/24 23:09	AMS

Surrogates	% Recovery		Recovery Limits	Flag/Qual	
13C4-PFBA	78.2		10-130		1/2/24 23:09
13C5-PFPeA	90.1		35-150		1/2/24 23:09
13C5-PFHxA	85.0		55-150		1/2/24 23:09
13C4-PFHpA	81.9		55-150		1/2/24 23:09
13C8-PFOA	83.3		60-140		1/2/24 23:09
13C9-PFNA	78.9		55-140		1/2/24 23:09
13C6-PFDA	77.2		50-140		1/2/24 23:09
13C7-PFUnA	75.4		30-140		1/2/24 23:09
13C2-PFDoA	60.9		10-150		1/2/24 23:09
13C2-PFTeDA	36.0		10-130		1/2/24 23:09
13C3-PFBS	83.2		55-150		1/2/24 23:09
13C3-PFHxS	81.2		55-150		1/2/24 23:09
13C8-PFOS	73.6		45-140		1/2/24 23:09
13C2-4:2FTS	63.6		60-200		1/2/24 23:09
13C2-6:2FTS	**52.1**	*	60-200	PF-17C	1/2/24 23:09
13C2-8:2FTS	51.0		50-200		1/2/24 23:09
13C8-PFOSA	83.8		30-130		1/2/24 23:09
D3-NMeFOSA	58.7		15-130		1/2/24 23:09
D5-NEtFOSA	52.1		10-130		1/2/24 23:09
D3-NMeFOSAA	52.9		45-200		1/2/24 23:09
D5-NEtFOSAA	43.6		10-200		1/2/24 23:09
D7-NMeFOSE	32.1		10-150		1/2/24 23:09
D9-NEtFOSE	23.3		10-150		1/2/24 23:09
13C3-HFPO-DA	82.1		25-160		1/2/24 23:09

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: SW-6 | Sampled: 12/15/2023 14:30

Sample ID: 23L2655-13

Sample Matrix: Surface Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	10	10	10	mg/L	1		Draft Method 1633	12/20/23	12/20/23 12:30	LL

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: Duplicate | Sampled: 12/15/2023 00:00

Sample ID: 23L2655-14

Sample Matrix: Surface Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluorobutanoic acid (PFBA)	2.9	3.5	1.3	ng/L	1	J	Draft Method 1633	1/8/24	1/8/24 19:44	AMS
Perfluoropentanoic acid (PFPeA)	2.6	1.7	0.30	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
Perfluorohexanoic acid (PFHxA)	1.3	0.87	0.19	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
Perfluoroheptanoic acid (PFHpA)	0.58	0.87	0.22	ng/L	1	J	Draft Method 1633	1/8/24	1/8/24 19:44	AMS
Perfluorooctanoic acid (PFOA)	1.2	0.87	0.20	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
Perfluorononanoic acid (PFNA)	0.29	0.87	0.17	ng/L	1	J	Draft Method 1633	1/8/24	1/8/24 19:44	AMS
Perfluorodecanoic acid (PFDA)	ND	0.87	0.16	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
Perfluoroundecanoic acid (PFUnA)	ND	0.87	0.24	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
Perfluorododecanoic acid (PFDoA)	ND	0.87	0.23	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
Perfluorotridecanoic acid (PFTrDA)	ND	0.87	0.24	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
Perfluorotetradecanoic acid (PFTeDA)	ND	0.87	0.22	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
Perfluorobutanesulfonic acid (PFBS)	1.1	0.87	0.23	ng/L	1	Z-01	Draft Method 1633	1/8/24	1/8/24 19:44	AMS
Perfluoropentanesulfonic acid (PFPeS)	ND	0.87	0.21	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
Perfluorohexanesulfonic acid (PFHxS)	0.36	0.87	0.18	ng/L	1	J	Draft Method 1633	1/8/24	1/8/24 19:44	AMS
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.87	0.27	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
Perfluorooctanesulfonic acid (PFOS)	1.2	0.87	0.28	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
Perfluorononanesulfonic acid (PFNS)	ND	0.87	0.26	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
Perfluorodecanesulfonic acid (PFDS)	ND	0.87	0.27	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
Perfluorododecanesulfonic acid (PFDoS)	ND	0.87	0.23	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.5	0.61	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.5	0.86	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.5	0.95	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
Perfluorooctanesulfonamide (PFOSA)	ND	0.87	0.27	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.87	0.36	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.87	0.27	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
N-MeFOSAA (NMeFOSAA)	ND	0.87	0.39	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
N-EtFOSAA (NEtFOSAA)	ND	0.87	0.19	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	8.7	2.3	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	8.7	2.1	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.5	0.91	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.5	0.60	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
9Cl-PF3ONS (F53B Minor)	ND	3.5	0.75	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
11Cl-PF3OUdS (F53B Major)	ND	3.5	0.85	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	8.7	1.6	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	44	8.9	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	44	7.7	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.7	0.43	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.7	0.44	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: Duplicate | Sampled: 12/15/2023 00:00

Sample ID: 23L2655-14

Sample Matrix: Surface Water

Semivolatile Organic Compounds by - LC/MS-MS

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.7	0.35	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.7	0.76	ng/L	1		Draft Method 1633	1/8/24	1/8/24 19:44	AMS

Surrogates	% Recovery	Recovery Limits	Flag/Qual	
13C4-PFBA	62.5	10-130		1/8/24 19:44
13C5-PFPeA	72.6	35-150		1/8/24 19:44
13C5-PFHxA	72.8	55-150		1/8/24 19:44
13C4-PFHpA	73.2	55-150		1/8/24 19:44
13C8-PFOA	72.3	60-140		1/8/24 19:44
13C9-PFNA	74.5	55-140		1/8/24 19:44
13C6-PFDA	71.7	50-140		1/8/24 19:44
13C7-PFUnA	67.1	30-140		1/8/24 19:44
13C2-PFDoA	59.2	10-150		1/8/24 19:44
13C2-PFTeDA	34.3	10-130		1/8/24 19:44
13C3-PFBS	76.6	55-150		1/8/24 19:44
13C3-PFHxS	71.1	55-150		1/8/24 19:44
13C8-PFOS	69.0	45-140		1/8/24 19:44
13C2-4:2FTS	98.2	60-200		1/8/24 19:44
13C2-6:2FTS	63.0	60-200		1/8/24 19:44
13C2-8:2FTS	53.1	50-200		1/8/24 19:44
13C8-PFOSA	66.7	30-130		1/8/24 19:44
D3-NMeFOSA	57.0	15-130		1/8/24 19:44
D5-NEtFOSA	51.6	10-130		1/8/24 19:44
D3-NMeFOSAA	69.7	45-200		1/8/24 19:44
D5-NEtFOSAA	68.3	10-200		1/8/24 19:44
D7-NMeFOSE	36.5	10-150		1/8/24 19:44
D9-NEtFOSE	28.0	10-150		1/8/24 19:44
13C3-HFPO-DA	71.6	25-160		1/8/24 19:44

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Project Location: Alpha Portland Site | Sample Description: | Work Order: 23L2655

Date Received: 12/19/2023

Field Sample #: Duplicate | Sampled: 12/15/2023 00:00

Sample ID: 23L2655-14

Sample Matrix: Surface Water

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total)

Analyte	Results	RL	DL	Units	Dilution	Flag/Qual	Method	Date Prepared	Date/Time Analyzed	Analyst
Total Suspended Solids	ND	10	10	mg/L	1		Draft Method 1633	12/20/23	12/20/23 12:30	LL

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Sample Extraction Data

Prep Method:Draft Method 1633 **Analytical Method:Draft Method 1633**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L2655-02 [SS-2]	B361583	20.6	5.00	01/02/24
23L2655-04 [SS-4]	B361583	7.54	5.00	01/02/24
23L2655-05 [SS-5]	B361583	13.1	5.00	01/02/24
23L2655-06 [SS-6]	B361583	6.62	5.00	01/02/24

Prep Method:Draft Method 1633 **Analytical Method:Draft Method 1633**

Lab Number [Field ID]	Batch	Initial [g]	Final [mL]	Date
23L2655-01RE1 [SS-1]	B362575	0.635	5.00	01/05/24
23L2655-03RE1 [SS-3]	B362575	20.6	5.00	01/05/24
23L2655-07RE1 [Duplicate]	B362575	20.6	5.00	01/05/24

Draft Method 1633

Lab Number [Field ID]	Batch	Initial [mL]	Date
23L2655-08 [SW-1]	B361242	50.0	12/20/23
23L2655-09 [SW-2]	B361242	50.0	12/20/23
23L2655-10 [SW-3]	B361242	50.0	12/20/23
23L2655-11 [SW-4]	B361242	50.0	12/20/23
23L2655-12 [SW-5]	B361242	50.0	12/20/23
23L2655-13 [SW-6]	B361242	50.0	12/20/23
23L2655-14 [Duplicate]	B361242	50.0	12/20/23

Prep Method:Draft Method 1633 **Analytical Method:Draft Method 1633** **Leachates were extracted on 12/20/2023 per NO PREP in Batch B361242**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23L2655-08 [SW-1]	B361588	547	5.00	12/28/23
23L2655-09 [SW-2]	B361588	542	5.00	12/28/23
23L2655-10 [SW-3]	B361588	528	5.00	12/28/23
23L2655-11 [SW-4]	B361588	526	5.00	12/28/23
23L2655-13 [SW-6]	B361588	516	5.00	12/28/23

Prep Method:Draft Method 1633 **Analytical Method:Draft Method 1633** **Leachates were extracted on 12/20/2023 per NO PREP in Batch B361242**

Lab Number [Field ID]	Batch	Initial [mL]	Final [mL]	Date
23L2655-12RE1 [SW-5]	B362328	559	5.00	01/08/24
23L2655-14RE1 [Duplicate]	B362328	572	5.00	01/08/24

Prep Method:% Solids **Analytical Method:SM 2540G**

Lab Number [Field ID]	Batch	Date
23L2655-01 [SS-1]	B361285	12/20/23
23L2655-02 [SS-2]	B361285	12/20/23
23L2655-03 [SS-3]	B361285	12/20/23
23L2655-04 [SS-4]	B361285	12/20/23
23L2655-05 [SS-5]	B361285	12/20/23
23L2655-06 [SS-6]	B361285	12/20/23
23L2655-07 [Duplicate]	B361285	12/20/23

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Sample Extraction Data

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361583 - Draft Method 1633										
Blank (B361583-BLK1)				Prepared: 01/02/24 Analyzed: 01/04/24						
Perfluorobutanoic acid (PFBA)	ND	0.77	µg/kg wet							
Perfluoropentanoic acid (PFPeA)	ND	0.39	µg/kg wet							
Perfluorohexanoic acid (PFHxA)	ND	0.19	µg/kg wet							
Perfluoroheptanoic acid (PFHpA)	ND	0.19	µg/kg wet							
Perfluorooctanoic acid (PFOA)	ND	0.19	µg/kg wet							
Perfluorononanoic acid (PFNA)	ND	0.19	µg/kg wet							
Perfluorodecanoic acid (PFDA)	ND	0.19	µg/kg wet							
Perfluoroundecanoic acid (PFUnA)	ND	0.19	µg/kg wet							
Perfluorododecanoic acid (PFDoA)	ND	0.19	µg/kg wet							
Perfluorotridecanoic acid (PFTrDA)	ND	0.19	µg/kg wet							
Perfluorotetradecanoic acid (PFTeDA)	ND	0.19	µg/kg wet							
Perfluorobutanesulfonic acid (PFBS)	ND	0.19	µg/kg wet							
Perfluoropentanesulfonic acid (PFPeS)	ND	0.19	µg/kg wet							
Perfluorohexanesulfonic acid (PFHxS)	ND	0.19	µg/kg wet							
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.19	µg/kg wet							
Perfluorooctanesulfonic acid (PFOS)	ND	0.19	µg/kg wet							
Perfluorononanesulfonic acid (PFNS)	ND	0.19	µg/kg wet							
Perfluorodecanesulfonic acid (PFDS)	ND	0.19	µg/kg wet							
Perfluorododecanesulfonic acid (PFDoS)	ND	0.19	µg/kg wet							
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	0.77	µg/kg wet							
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	0.77	µg/kg wet							
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	0.77	µg/kg wet							
Perfluorooctanesulfonamide (PFOSA)	ND	0.19	µg/kg wet							
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.19	µg/kg wet							
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.19	µg/kg wet							
N-MeFOSAA (NMeFOSAA)	ND	0.19	µg/kg wet							
N-EtFOSAA (NEtFOSAA)	ND	0.19	µg/kg wet							
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	1.9	µg/kg wet							
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	1.9	µg/kg wet							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.77	µg/kg wet							
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.77	µg/kg wet							
9Cl-PF3ONS (F53B Minor)	ND	0.77	µg/kg wet							
11Cl-PF3OUdS (F53B Major)	ND	0.77	µg/kg wet							
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	1.9	µg/kg wet							
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	9.7	µg/kg wet							
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	9.7	µg/kg wet							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	0.39	µg/kg wet							
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	0.39	µg/kg wet							
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	0.39	µg/kg wet							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.39	µg/kg wet							
Surrogate: 13C4-PFBA	*7.88*		µg/kg wet	9.68		81.4	10-130			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361583 - Draft Method 1633										
Blank (B361583-BLK1)				Prepared: 01/02/24 Analyzed: 01/04/24						
Surrogate: 13C5-PFPeA	*3.92*		µg/kg wet	4.84		80.9	35-150			
Surrogate: 13C5-PFHxA	*1.89*		µg/kg wet	2.42		78.1	55-150			
Surrogate: 13C4-PFHpA	*1.88*		µg/kg wet	2.42		77.8	55-150			
Surrogate: 13C8-PFOA	*1.91*		µg/kg wet	2.42		78.7	60-140			
Surrogate: 13C9-PFNA	*0.915*		µg/kg wet	1.21		75.6	55-140			
Surrogate: 13C6-PFDA	*0.952*		µg/kg wet	1.21		78.6	50-140			
Surrogate: 13C7-PFUnA	*0.907*		µg/kg wet	1.21		74.9	30-140			
Surrogate: 13C2-PFDoA	*0.922*		µg/kg wet	1.21		76.2	10-150			
Surrogate: 13C2-PFTeDA	*0.804*		µg/kg wet	1.21		66.4	10-130			
Surrogate: 13C3-PFBS	*1.92*		µg/kg wet	2.42		79.3	55-150			
Surrogate: 13C3-PFHxS	*1.86*		µg/kg wet	2.42		77.0	55-150			
Surrogate: 13C8-PFOS	*1.87*		µg/kg wet	2.42		77.0	45-140			
Surrogate: 13C2-4:2FTS	*3.67*		µg/kg wet	4.84		75.8	60-200			
Surrogate: 13C2-6:2FTS	*3.35*		µg/kg wet	4.84		69.2	60-200			
Surrogate: 13C2-8:2FTS	*3.40*		µg/kg wet	4.84		70.1	50-200			
Surrogate: 13C8-PFOSA	*1.94*		µg/kg wet	2.42		80.3	30-130			
Surrogate: D3-NMeFOSA	*1.46*		µg/kg wet	2.42		60.2	15-130			
Surrogate: D5-NEtFOSA	*1.39*		µg/kg wet	2.42		57.5	10-130			
Surrogate: D3-NMeFOSAA	*3.55*		µg/kg wet	4.84		73.3	45-200			
Surrogate: D5-NEtFOSAA	*3.39*		µg/kg wet	4.84		69.9	10-200			
Surrogate: D7-NMeFOSE	*17.3*		µg/kg wet	24.2		71.4	10-150			
Surrogate: D9-NEtFOSE	*16.2*		µg/kg wet	24.2		67.1	10-150			
Surrogate: 13C3-HFPO-DA	*7.84*		µg/kg wet	9.68		81.0	25-160			
LCS (B361583-BS1)				Prepared: 01/02/24 Analyzed: 01/04/24						
Perfluorobutanoic acid (PFBA)	9.72	0.79	µg/kg wet	9.52		102	58-148			
Perfluoropentanoic acid (PFPeA)	4.95	0.40	µg/kg wet	4.76		104	54-152			
Perfluorohexanoic acid (PFHxA)	2.50	0.20	µg/kg wet	2.38		105	55-152			
Perfluoroheptanoic acid (PFHpA)	2.45	0.20	µg/kg wet	2.38		103	54-154			
Perfluorooctanoic acid (PFOA)	2.35	0.20	µg/kg wet	2.38		98.7	52-161			
Perfluorononanoic acid (PFNA)	2.52	0.20	µg/kg wet	2.38		106	59-149			
Perfluorodecanoic acid (PFDA)	2.51	0.20	µg/kg wet	2.38		106	52-147			
Perfluoroundecanoic acid (PFUnA)	2.53	0.20	µg/kg wet	2.38		106	48-159			
Perfluorododecanoic acid (PFDoA)	2.53	0.20	µg/kg wet	2.38		106	64-142			
Perfluorotridecanoic acid (PFTrDA)	2.33	0.20	µg/kg wet	2.38		98.0	49-148			
Perfluorotetradecanoic acid (PFTeDA)	2.56	0.20	µg/kg wet	2.38		107	47-161			
Perfluorobutanesulfonic acid (PFBS)	2.24	0.20	µg/kg wet	2.11		106	62-144			
Perfluoropentanesulfonic acid (PFPeS)	2.32	0.20	µg/kg wet	2.24		104	59-151			
Perfluorohexanesulfonic acid (PFHxS)	2.24	0.20	µg/kg wet	2.18		103	57-146			
Perfluoroheptanesulfonic acid (PFHpS)	2.36	0.20	µg/kg wet	2.27		104	55-152			
Perfluorooctanesulfonic acid (PFOS)	2.24	0.20	µg/kg wet	2.21		102	58-149			
Perfluorononanesulfonic acid (PFNS)	2.32	0.20	µg/kg wet	2.29		101	52-148			
Perfluorodecanesulfonic acid (PFDS)	2.28	0.20	µg/kg wet	2.30		99.2	51-147			
Perfluorododecanesulfonic acid (PFDoS)	2.13	0.20	µg/kg wet	2.31		92.1	36-145			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	10.0	0.79	µg/kg wet	8.92		112	67-146			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	9.64	0.79	µg/kg wet	9.04		107	61-151			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	9.55	0.79	µg/kg wet	9.16		104	63-152			
Perfluorooctanesulfonamide (PFOSA)	2.48	0.20	µg/kg wet	2.38		104	61-148			
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	2.28	0.20	µg/kg wet	2.38		95.7	63-145			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361583 - Draft Method 1633										
LCS (B361583-BS1)				Prepared: 01/02/24 Analyzed: 01/04/24						
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	2.37	0.20	µg/kg wet	2.38		99.5	65-139			
N-MeFOSAA (NMeFOSAA)	2.47	0.20	µg/kg wet	2.38		104	58-144			
N-EtFOSAA (NEtFOSAA)	2.43	0.20	µg/kg wet	2.38		102	59-146			
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	24.7	2.0	µg/kg wet	23.8		104	71-136			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	24.4	2.0	µg/kg wet	23.8		102	69-137			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	9.99	0.79	µg/kg wet	9.52		105	63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	8.58	0.79	µg/kg wet	8.98		95.6	68-146			
9Cl-PF3ONS (F53B Minor)	8.31	0.79	µg/kg wet	8.92		93.1	56-156			
11Cl-PF3OUdS (F53B Major)	8.06	0.79	µg/kg wet	8.98		89.7	46-156			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	20.8	2.0	µg/kg wet	23.8		87.5	62-129			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	107	9.9	µg/kg wet	119		90.0	63-134			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	101	9.9	µg/kg wet	119		85.0	50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	4.37	0.40	µg/kg wet	4.23		103	56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.74	0.40	µg/kg wet	4.76		99.6	51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.93	0.40	µg/kg wet	4.76		104	55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.63	0.40	µg/kg wet	4.76		97.2	48-161			
Surrogate: 13C4-PFBA	*8.41*		µg/kg wet	9.91		84.9	10-130			
Surrogate: 13C5-PFPeA	*4.12*		µg/kg wet	4.96		83.2	35-150			
Surrogate: 13C5-PFHxA	*2.01*		µg/kg wet	2.48		81.2	55-150			
Surrogate: 13C4-PFHpA	*1.99*		µg/kg wet	2.48		80.1	55-150			
Surrogate: 13C8-PFOA	*2.05*		µg/kg wet	2.48		82.8	60-140			
Surrogate: 13C9-PFNA	*0.980*		µg/kg wet	1.24		79.1	55-140			
Surrogate: 13C6-PFDA	*1.00*		µg/kg wet	1.24		80.7	50-140			
Surrogate: 13C7-PFUnA	*0.951*		µg/kg wet	1.24		76.7	30-140			
Surrogate: 13C2-PFDoA	*0.962*		µg/kg wet	1.24		77.7	10-150			
Surrogate: 13C2-PFTeDA	*0.836*		µg/kg wet	1.24		67.5	10-130			
Surrogate: 13C3-PFBS	*2.04*		µg/kg wet	2.48		82.5	55-150			
Surrogate: 13C3-PFHxS	*2.01*		µg/kg wet	2.48		80.9	55-150			
Surrogate: 13C8-PFOS	*1.93*		µg/kg wet	2.48		77.7	45-140			
Surrogate: 13C2-4:2FTS	*4.25*		µg/kg wet	4.96		85.7	60-200			
Surrogate: 13C2-6:2FTS	*3.90*		µg/kg wet	4.96		78.7	60-200			
Surrogate: 13C2-8:2FTS	*3.88*		µg/kg wet	4.96		78.2	50-200			
Surrogate: 13C8-PFOSA	*1.96*		µg/kg wet	2.48		79.2	30-130			
Surrogate: D3-NMeFOSA	*1.48*		µg/kg wet	2.48		59.8	15-130			
Surrogate: D5-NEtFOSA	*1.38*		µg/kg wet	2.48		55.6	10-130			
Surrogate: D3-NMeFOSAA	*3.88*		µg/kg wet	4.96		78.3	45-200			
Surrogate: D5-NEtFOSAA	*3.77*		µg/kg wet	4.96		76.1	10-200			
Surrogate: D7-NMeFOSE	*17.0*		µg/kg wet	24.8		68.4	10-150			
Surrogate: D9-NEtFOSE	*16.6*		µg/kg wet	24.8		67.0	10-150			
Surrogate: 13C3-HFPO-DA	*8.32*		µg/kg wet	9.91		83.9	25-160			
MRL Check (B361583-MRL1)				Prepared: 01/02/24 Analyzed: 01/04/24						
Perfluorobutanoic acid (PFBA)	0.825	0.78	µg/kg wet	0.780		106	44-157			
Perfluoropentanoic acid (PFPeA)	0.404	0.39	µg/kg wet	0.390		104	57-148			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361583 - Draft Method 1633										
MRL Check (B361583-MRL1)				Prepared: 01/02/24 Analyzed: 01/04/24						
Perfluorohexanoic acid (PFHxA)	0.201	0.20	µg/kg wet	0.195		103	62-149			
Perfluoroheptanoic acid (PFHpA)	0.202	0.20	µg/kg wet	0.195		104	56-150			
Perfluorooctanoic acid (PFOA)	0.186	0.20	µg/kg wet	0.195		95.6	57-161			J
Perfluorononanoic acid (PFNA)	0.189	0.20	µg/kg wet	0.195		96.8	53-157			J
Perfluorodecanoic acid (PFDA)	0.197	0.20	µg/kg wet	0.195		101	43-158			
Perfluoroundecanoic acid (PFUnA)	0.198	0.20	µg/kg wet	0.195		101	50-155			
Perfluorododecanoic acid (PFDoA)	0.204	0.20	µg/kg wet	0.195		105	60-141			
Perfluorotridecanoic acid (PFTrDA)	0.183	0.20	µg/kg wet	0.195		93.9	52-140			J
Perfluorotetradecanoic acid (PFTeDA)	0.196	0.20	µg/kg wet	0.195		100	52-156			
Perfluorobutanesulfonic acid (PFBS)	0.163	0.20	µg/kg wet	0.173		94.3	63-145			J
Perfluoropentanesulfonic acid (PFPeS)	0.183	0.20	µg/kg wet	0.183		99.6	58-144			J
Perfluorohexanesulfonic acid (PFHxS)	0.192	0.20	µg/kg wet	0.178		108	44-158			J
Perfluoroheptanesulfonic acid (PFHpS)	0.181	0.20	µg/kg wet	0.186		97.5	51-150			J
Perfluorooctanesulfonic acid (PFOS)	0.189	0.20	µg/kg wet	0.181		104	43-162			J
Perfluorononanesulfonic acid (PFNS)	0.190	0.20	µg/kg wet	0.188		101	46-151			J
Perfluorodecanesulfonic acid (PFDS)	0.186	0.20	µg/kg wet	0.188		98.6	50-144			J
Perfluorododecanesulfonic acid (PFDoS)	0.191	0.20	µg/kg wet	0.189		101	30-138			J
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	0.773	0.78	µg/kg wet	0.731		106	52-158			J
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	0.876	0.78	µg/kg wet	0.741		118	48-158			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	0.813	0.78	µg/kg wet	0.751		108	46-165			
Perfluorooctanesulfonamide (PFOSA)	0.196	0.20	µg/kg wet	0.195		101	47-163			
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	0.177	0.20	µg/kg wet	0.195		90.8	54-155			J
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	0.200	0.20	µg/kg wet	0.195		102	49-156			
N-MeFOSAA (NMeFOSAA)	0.222	0.20	µg/kg wet	0.195		114	32-160			
N-EtFOSAA (NEtFOSAA)	0.209	0.20	µg/kg wet	0.195		107	51-154			
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	1.96	2.0	µg/kg wet	1.95		101	56-151			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	1.97	2.0	µg/kg wet	1.95		101	60-147			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	0.780	0.78	µg/kg wet	0.780		100	58-154			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.707	0.78	µg/kg wet	0.736		96.0	61-148			J
9Cl-PF3ONS (F53B Minor)	0.688	0.78	µg/kg wet	0.731		94.0	44-167			J
11Cl-PF3OUdS (F53B Major)	0.661	0.78	µg/kg wet	0.736		89.8	36-158			J
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	1.65	2.0	µg/kg wet	1.95		84.6	32-161			J
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	9.19	9.8	µg/kg wet	9.75		94.3	39-156			J
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	8.97	9.8	µg/kg wet	9.75		91.9	36-149			J
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.395	0.39	µg/kg wet	0.347		114	56-144			
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.457	0.39	µg/kg wet	0.390		117	48-150			
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.455	0.39	µg/kg wet	0.390		117	49-154			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.446	0.39	µg/kg wet	0.390		114	47-160			
Surrogate: 13C4-PFBA	*7.90*		µg/kg wet	9.75		81.0	10-130			
Surrogate: 13C5-PFPeA	*3.75*		µg/kg wet	4.88		76.9	35-150			
Surrogate: 13C5-PFHxA	*1.86*		µg/kg wet	2.44		76.2	55-150			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361583 - Draft Method 1633										
MRL Check (B361583-MRL1)				Prepared: 01/02/24 Analyzed: 01/04/24						
Surrogate: 13C4-PFHpA	*1.82*		µg/kg wet	2.44		74.7	55-150			
Surrogate: 13C8-PFOA	*1.89*		µg/kg wet	2.44		77.7	60-140			
Surrogate: 13C9-PFNA	*0.904*		µg/kg wet	1.22		74.2	55-140			
Surrogate: 13C6-PFDA	*0.945*		µg/kg wet	1.22		77.5	50-140			
Surrogate: 13C7-PFUnA	*0.898*		µg/kg wet	1.22		73.7	30-140			
Surrogate: 13C2-PFDoA	*0.898*		µg/kg wet	1.22		73.7	10-150			
Surrogate: 13C2-PFTeDA	*0.809*		µg/kg wet	1.22		66.3	10-130			
Surrogate: 13C3-PFBS	*1.88*		µg/kg wet	2.44		77.3	55-150			
Surrogate: 13C3-PFHxS	*1.82*		µg/kg wet	2.44		74.6	55-150			
Surrogate: 13C8-PFOS	*1.83*		µg/kg wet	2.44		75.0	45-140			
Surrogate: 13C2-4:2FTS	*3.72*		µg/kg wet	4.88		76.3	60-200			
Surrogate: 13C2-6:2FTS	*3.49*		µg/kg wet	4.88		71.5	60-200			
Surrogate: 13C2-8:2FTS	*3.57*		µg/kg wet	4.88		73.3	50-200			
Surrogate: 13C8-PFOSA	*1.92*		µg/kg wet	2.44		78.6	30-130			
Surrogate: D3-NMeFOSA	*1.41*		µg/kg wet	2.44		57.8	15-130			
Surrogate: D5-NEtFOSA	*1.43*		µg/kg wet	2.44		58.5	10-130			
Surrogate: D3-NMeFOSAA	*3.88*		µg/kg wet	4.88		79.7	45-200			
Surrogate: D5-NEtFOSAA	*3.55*		µg/kg wet	4.88		72.8	10-200			
Surrogate: D7-NMeFOSE	*16.6*		µg/kg wet	24.4		68.2	10-150			
Surrogate: D9-NEtFOSE	*16.0*		µg/kg wet	24.4		65.6	10-150			
Surrogate: 13C3-HFPO-DA	*7.48*		µg/kg wet	9.75		76.7	25-160			
Matrix Spike (B361583-MS2)	**Source: 23L2655-04**			Prepared: 01/02/24 Analyzed: 01/05/24						
Perfluorobutanoic acid (PFBA)	10.8	0.78	µg/kg dry	9.41	ND	115	58-148			
Perfluoropentanoic acid (PFPeA)	5.49	0.39	µg/kg dry	4.70	ND	117	54-152			
Perfluorohexanoic acid (PFHxA)	2.69	0.20	µg/kg dry	2.35	ND	114	55-152			
Perfluoroheptanoic acid (PFHpA)	2.70	0.20	µg/kg dry	2.35	ND	115	54-154			
Perfluorooctanoic acid (PFOA)	2.57	0.20	µg/kg dry	2.35	ND	109	52-161			
Perfluorononanoic acid (PFNA)	2.82	0.20	µg/kg dry	2.35	ND	120	59-149			
Perfluorodecanoic acid (PFDA)	2.72	0.20	µg/kg dry	2.35	ND	115	52-147			
Perfluoroundecanoic acid (PFUnA)	2.85	0.20	µg/kg dry	2.35	0.0269	120	48-159			
Perfluorododecanoic acid (PFDoA)	2.78	0.20	µg/kg dry	2.35	ND	118	64-142			
Perfluorotridecanoic acid (PFTrDA)	2.76	0.20	µg/kg dry	2.35	ND	117	49-148			
Perfluorotetradecanoic acid (PFTeDA)	2.84	0.20	µg/kg dry	2.35	ND	121	47-161			
Perfluorobutanesulfonic acid (PFBS)	2.49	0.20	µg/kg dry	2.09	ND	119	62-144			
Perfluoropentanesulfonic acid (PFPeS)	2.55	0.20	µg/kg dry	2.21	ND	116	59-151			
Perfluorohexanesulfonic acid (PFHxS)	2.51	0.20	µg/kg dry	2.15	ND	117	57-146			
Perfluoroheptanesulfonic acid (PFHpS)	2.55	0.20	µg/kg dry	2.24	ND	114	55-152			
Perfluorooctanesulfonic acid (PFOS)	2.50	0.20	µg/kg dry	2.18	0.0586	112	58-149			
Perfluorononanesulfonic acid (PFNS)	2.66	0.20	µg/kg dry	2.26	ND	118	52-148			
Perfluorodecanesulfonic acid (PFDS)	2.62	0.20	µg/kg dry	2.27	ND	116	51-147			
Perfluorododecanesulfonic acid (PFDoS)	2.64	0.20	µg/kg dry	2.28	ND	116	36-145			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	11.2	0.78	µg/kg dry	8.82	ND	126	67-146			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	11.0	0.78	µg/kg dry	8.94	ND	123	61-151			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	10.5	0.78	µg/kg dry	9.06	ND	116	63-152			
Perfluorooctanesulfonamide (PFOSA)	2.85	0.20	µg/kg dry	2.35	ND	121	61-148			
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	2.67	0.20	µg/kg dry	2.35	ND	113	63-145			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	2.69	0.20	µg/kg dry	2.35	ND	115	65-139			
N-MeFOSAA (NMeFOSAA)	2.79	0.20	µg/kg dry	2.35	ND	119	58-144			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361583 - Draft Method 1633										
Matrix Spike (B361583-MS2)	**Source: 23L2655-04**			Prepared: 01/02/24 Analyzed: 01/05/24						
N-EtFOSAA (NEtFOSAA)	2.73	0.20	µg/kg dry	2.35	ND	116	59-146			
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	26.9	2.0	µg/kg dry	23.5	ND	114	71-136			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	26.9	2.0	µg/kg dry	23.5	ND	114	69-137			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	10.7	0.78	µg/kg dry	9.41	ND	114	63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	9.59	0.78	µg/kg dry	8.88	ND	108	68-146			
9Cl-PF3ONS (F53B Minor)	9.93	0.78	µg/kg dry	8.82	ND	113	56-156			
11Cl-PF3OUdS (F53B Major)	10.3	0.78	µg/kg dry	8.88	ND	116	46-156			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	21.0	2.0	µg/kg dry	23.5	ND	89.2	62-129			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	118	9.8	µg/kg dry	118	ND	101	63-134			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	117	9.8	µg/kg dry	118	ND	99.4	50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	5.18	0.39	µg/kg dry	4.19	ND	124	56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	5.22	0.39	µg/kg dry	4.70	ND	111	51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	5.40	0.39	µg/kg dry	4.70	ND	115	55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	5.40	0.39	µg/kg dry	4.70	ND	115	48-161			
Surrogate: 13C4-PFBA	*7.81*		µg/kg dry	9.80		79.6	10-130			
Surrogate: 13C5-PFPeA	*3.71*		µg/kg dry	4.90		75.7	35-150			
Surrogate: 13C5-PFHxA	*1.86*		µg/kg dry	2.45		76.1	55-150			
Surrogate: 13C4-PFHpA	*1.92*		µg/kg dry	2.45		78.5	55-150			
Surrogate: 13C8-PFOA	*1.85*		µg/kg dry	2.45		75.7	60-140			
Surrogate: 13C9-PFNA	*0.906*		µg/kg dry	1.23		73.9	55-140			
Surrogate: 13C6-PFDA	*0.933*		µg/kg dry	1.23		76.1	50-140			
Surrogate: 13C7-PFUnA	*0.907*		µg/kg dry	1.23		74.1	30-140			
Surrogate: 13C2-PFDoA	*1.01*		µg/kg dry	1.23		82.6	10-150			
Surrogate: 13C2-PFTeDA	*0.992*		µg/kg dry	1.23		81.0	10-130			
Surrogate: 13C3-PFBS	*1.86*		µg/kg dry	2.45		75.7	55-150			
Surrogate: 13C3-PFHxS	*1.87*		µg/kg dry	2.45		76.3	55-150			
Surrogate: 13C8-PFOS	*1.80*		µg/kg dry	2.45		73.4	45-140			
Surrogate: 13C2-4:2FTS	*3.68*		µg/kg dry	4.90		75.1	60-200			
Surrogate: 13C2-6:2FTS	*3.64*		µg/kg dry	4.90		74.3	60-200			
Surrogate: 13C2-8:2FTS	*3.58*		µg/kg dry	4.90		73.0	50-200			
Surrogate: 13C8-PFOSA	*1.72*		µg/kg dry	2.45		70.3	30-130			
Surrogate: D3-NMeFOSA	*1.05*		µg/kg dry	2.45		43.0	15-130			
Surrogate: D5-NEtFOSA	*0.881*		µg/kg dry	2.45		35.9	10-130			
Surrogate: D3-NMeFOSAA	*3.88*		µg/kg dry	4.90		79.1	45-200			
Surrogate: D5-NEtFOSAA	*3.89*		µg/kg dry	4.90		79.3	10-200			
Surrogate: D7-NMeFOSE	*16.5*		µg/kg dry	24.5		67.5	10-150			
Surrogate: D9-NEtFOSE	*15.7*		µg/kg dry	24.5		64.1	10-150			
Surrogate: 13C3-HFPO-DA	*7.83*		µg/kg dry	9.80		79.9	25-160			
Matrix Spike Dup (B361583-MSD2)	**Source: 23L2655-04**			Prepared: 01/02/24 Analyzed: 01/05/24						
Perfluorobutanoic acid (PFBA)	10.8	0.78	µg/kg dry	9.40	ND	114	58-148	0.276	20	
Perfluoropentanoic acid (PFPeA)	5.44	0.39	µg/kg dry	4.70	ND	116	54-152	0.967	20	
Perfluorohexanoic acid (PFHxA)	2.71	0.20	µg/kg dry	2.35	ND	115	55-152	0.735	25	
Perfluoroheptanoic acid (PFHpA)	2.70	0.20	µg/kg dry	2.35	ND	115	54-154	0.121	25	
Perfluorooctanoic acid (PFOA)	2.46	0.20	µg/kg dry	2.35	ND	105	52-161	4.33	25	

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD		RPD Limit	Notes
Batch B361583 - Draft Method 1633											
Matrix Spike Dup (B361583-MSD2)	**Source: 23L2655-04**			Prepared: 01/02/24 Analyzed: 01/05/24							
Perfluorononanoic acid (PFNA)	2.74	0.20	µg/kg dry	2.35	ND	117	59-149	2.90		25	
Perfluorodecanoic acid (PFDA)	2.69	0.20	µg/kg dry	2.35	ND	115	52-147	0.882		25	
Perfluoroundecanoic acid (PFUnA)	2.75	0.20	µg/kg dry	2.35	0.0269	116	48-159	3.57		30	
Perfluorododecanoic acid (PFDoA)	2.83	0.20	µg/kg dry	2.35	ND	120	64-142	1.70		25	
Perfluorotridecanoic acid (PFTrDA)	3.18	0.20	µg/kg dry	2.35	ND	135	49-148	13.9		25	
Perfluorotetradecanoic acid (PFTeDA)	2.73	0.20	µg/kg dry	2.35	ND	116	47-161	3.95		25	
Perfluorobutanesulfonic acid (PFBS)	2.44	0.20	µg/kg dry	2.09	ND	117	62-144	1.78		20	
Perfluoropentanesulfonic acid (PFPeS)	2.52	0.20	µg/kg dry	2.21	ND	114	59-151	1.22		25	
Perfluorohexanesulfonic acid (PFHxS)	2.55	0.20	µg/kg dry	2.15	ND	119	57-146	1.71		25	
Perfluoroheptanesulfonic acid (PFHpS)	2.54	0.20	µg/kg dry	2.24	ND	113	55-152	0.460		25	
Perfluorooctanesulfonic acid (PFOS)	2.35	0.20	µg/kg dry	2.18	0.0586	105	58-149	6.09		20	
Perfluorononanesulfonic acid (PFNS)	2.53	0.20	µg/kg dry	2.26	ND	112	52-148	4.89		25	
Perfluorodecanesulfonic acid (PFDS)	2.57	0.20	µg/kg dry	2.27	ND	113	51-147	2.25		25	
Perfluorododecanesulfonic acid (PFDoS)	2.50	0.20	µg/kg dry	2.28	ND	110	36-145	5.57		30	
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	10.4	0.78	µg/kg dry	8.81	ND	118	67-146	6.98		25	
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	10.2	0.78	µg/kg dry	8.93	ND	114	61-151	7.35		30	
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	10.5	0.78	µg/kg dry	9.05	ND	116	63-152	0.380		30	
Perfluorooctanesulfonamide (PFOSA)	2.76	0.20	µg/kg dry	2.35	ND	117	61-148	3.52		20	
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	2.64	0.20	µg/kg dry	2.35	ND	112	63-145	1.08		25	
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	2.64	0.20	µg/kg dry	2.35	ND	113	65-139	1.85		25	
N-MeFOSAA (NMeFOSAA)	2.88	0.20	µg/kg dry	2.35	ND	123	58-144	3.07		25	
N-EtFOSAA (NEtFOSAA)	2.75	0.20	µg/kg dry	2.35	ND	117	59-146	0.764		25	
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	26.9	2.0	µg/kg dry	23.5	ND	114	71-136	0.115		20	
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	27.0	2.0	µg/kg dry	23.5	ND	115	69-137	0.413		25	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	10.7	0.78	µg/kg dry	9.40	ND	114	63-144	0.355		25	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	9.83	0.78	µg/kg dry	8.87	ND	111	68-146	2.46		20	
9Cl-PF3ONS (F53B Minor)	10.1	0.78	µg/kg dry	8.81	ND	115	56-156	1.84		30	
11Cl-PF3OUdS (F53B Major)	10.5	0.78	µg/kg dry	8.87	ND	119	46-156	2.53		35	
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	23.3	2.0	µg/kg dry	23.5	ND	99.1	62-129	10.4		20	
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	121	9.8	µg/kg dry	117	ND	103	63-134	1.97		20	
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	120	9.8	µg/kg dry	117	ND	102	50-138	2.69		25	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.82	0.39	µg/kg dry	4.18	ND	91.4	56-151	**30.1**	*	20	R-06
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.96	0.39	µg/kg dry	4.70	ND	84.3	51-145	**27.4**	*	25	R-06
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.03	0.39	µg/kg dry	4.70	ND	85.7	55-148	**29.2**	*	20	R-06
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.94	0.39	µg/kg dry	4.70	ND	83.7	48-161	31.4		35	
Surrogate: 13C4-PFBA	*8.25*		µg/kg dry	9.79		84.3	10-130				
Surrogate: 13C5-PFPeA	*3.90*		µg/kg dry	4.90		79.7	35-150				
Surrogate: 13C5-PFHxA	*1.93*		µg/kg dry	2.45		78.7	55-150				
Surrogate: 13C4-PFHpA	*1.97*		µg/kg dry	2.45		80.6	55-150				
Surrogate: 13C8-PFOA	*1.94*		µg/kg dry	2.45		79.4	60-140				
Surrogate: 13C9-PFNA	*0.967*		µg/kg dry	1.22		79.0	55-140				

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361583 - Draft Method 1633										
Matrix Spike Dup (B361583-MSD2)	**Source: 23L2655-04**			Prepared: 01/02/24 Analyzed: 01/05/24						
Surrogate: 13C6-PFDA	*0.999*		µg/kg dry	1.22		81.7	50-140			
Surrogate: 13C7-PFUnA	*1.03*		µg/kg dry	1.22		84.1	30-140			
Surrogate: 13C2-PFDoA	*1.07*		µg/kg dry	1.22		87.4	10-150			
Surrogate: 13C2-PFTeDA	*1.19*		µg/kg dry	1.22		97.2	10-130			
Surrogate: 13C3-PFBS	*1.93*		µg/kg dry	2.45		78.9	55-150			
Surrogate: 13C3-PFHxS	*2.00*		µg/kg dry	2.45		81.6	55-150			
Surrogate: 13C8-PFOS	*1.93*		µg/kg dry	2.45		78.7	45-140			
Surrogate: 13C2-4:2FTS	*4.05*		µg/kg dry	4.90		82.7	60-200			
Surrogate: 13C2-6:2FTS	*3.87*		µg/kg dry	4.90		79.1	60-200			
Surrogate: 13C2-8:2FTS	*4.05*		µg/kg dry	4.90		82.6	50-200			
Surrogate: 13C8-PFOSA	*1.97*		µg/kg dry	2.45		80.4	30-130			
Surrogate: D3-NMeFOSA	*1.42*		µg/kg dry	2.45		58.0	15-130			
Surrogate: D5-NEtFOSA	*1.35*		µg/kg dry	2.45		55.3	10-130			
Surrogate: D3-NMeFOSAA	*4.44*		µg/kg dry	4.90		90.6	45-200			
Surrogate: D5-NEtFOSAA	*4.64*		µg/kg dry	4.90		94.8	10-200			
Surrogate: D7-NMeFOSE	*17.5*		µg/kg dry	24.5		71.7	10-150			
Surrogate: D9-NEtFOSE	*17.1*		µg/kg dry	24.5		70.0	10-150			
Surrogate: 13C3-HFPO-DA	*7.76*		µg/kg dry	9.79		79.2	25-160			
Batch B361588 - Draft Method 1633										
Blank (B361588-BLK1)				Prepared: 12/28/23 Analyzed: 01/02/24						
Perfluorobutanoic acid (PFBA)	ND	3.9	ng/L							
Perfluoropentanoic acid (PFPeA)	ND	2.0	ng/L							
Perfluorohexanoic acid (PFHxA)	ND	0.98	ng/L							
Perfluoroheptanoic acid (PFHpA)	ND	0.98	ng/L							
Perfluorooctanoic acid (PFOA)	ND	0.98	ng/L							
Perfluorononanoic acid (PFNA)	ND	0.98	ng/L							
Perfluorodecanoic acid (PFDA)	ND	0.98	ng/L							
Perfluoroundecanoic acid (PFUnA)	ND	0.98	ng/L							
Perfluorododecanoic acid (PFDoA)	ND	0.98	ng/L							
Perfluorotridecanoic acid (PFTrDA)	ND	0.98	ng/L							
Perfluorotetradecanoic acid (PFTeDA)	ND	0.98	ng/L							
Perfluorobutanesulfonic acid (PFBS)	ND	0.98	ng/L							
Perfluoropentanesulfonic acid (PFPeS)	ND	0.98	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	0.98	ng/L							
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.98	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	0.98	ng/L							
Perfluorononanesulfonic acid (PFNS)	ND	0.98	ng/L							
Perfluorodecanesulfonic acid (PFDS)	ND	0.98	ng/L							
Perfluorododecanesulfonic acid (PFDoS)	ND	0.98	ng/L							
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.9	ng/L							PF-17C
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.9	ng/L							PF-17C
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.9	ng/L							
Perfluorooctanesulfonamide (PFOSA)	ND	0.98	ng/L							
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.98	ng/L							
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.98	ng/L							
N-MeFOSAA (NMeFOSAA)	ND	0.98	ng/L							
N-EtFOSAA (NEtFOSAA)	ND	0.98	ng/L							

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B361588 - Draft Method 1633											
Blank (B361588-BLK1)				Prepared: 12/28/23 Analyzed: 01/02/24							
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.8	ng/L								
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.8	ng/L								
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.9	ng/L								
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.9	ng/L								
9Cl-PF3ONS (F53B Minor)	ND	3.9	ng/L								
11Cl-PF3OUdS (F53B Major)	ND	3.9	ng/L								
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.8	ng/L								
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	49	ng/L								
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	49	ng/L								
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	2.0	ng/L								
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	2.0	ng/L								
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	2.0	ng/L								
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	2.0	ng/L								
Surrogate: 13C4-PFBA	*72.6*		ng/L	98.0		74.1		10-130			
Surrogate: 13C5-PFPeA	*39.9*		ng/L	49.0		81.4		35-150			
Surrogate: 13C5-PFHxA	*18.0*		ng/L	24.5		73.6		55-150			
Surrogate: 13C4-PFHpA	*17.8*		ng/L	24.5		72.6		55-150			
Surrogate: 13C8-PFOA	*18.3*		ng/L	24.5		74.8		60-140			
Surrogate: 13C9-PFNA	*8.66*		ng/L	12.3		70.7		55-140			
Surrogate: 13C6-PFDA	*8.96*		ng/L	12.3		73.1		50-140			
Surrogate: 13C7-PFUnA	*8.45*		ng/L	12.3		69.0		30-140			
Surrogate: 13C2-PFDoA	*7.87*		ng/L	12.3		64.2		10-150			
Surrogate: 13C2-PFTeDA	*7.33*		ng/L	12.3		59.8		10-130			
Surrogate: 13C3-PFBS	*18.1*		ng/L	24.5		73.8		55-150			
Surrogate: 13C3-PFHxS	*18.6*		ng/L	24.5		75.9		55-150			
Surrogate: 13C8-PFOS	*16.7*		ng/L	24.5		68.3		45-140			
Surrogate: 13C2-4:2FTS	*28.0*		ng/L	49.0		**57.2**	*	60-200			PF-17C
Surrogate: 13C2-6:2FTS	*22.9*		ng/L	49.0		**46.8**	*	60-200			PF-17C
Surrogate: 13C2-8:2FTS	*25.5*		ng/L	49.0		52.1		50-200			
Surrogate: 13C8-PFOSA	*17.3*		ng/L	24.5		70.5		30-130			
Surrogate: D3-NMeFOSA	*14.4*		ng/L	24.5		58.6		15-130			
Surrogate: D5-NEtFOSA	*15.2*		ng/L	24.5		61.9		10-130			
Surrogate: D3-NMeFOSAA	*27.1*		ng/L	49.0		55.3		45-200			
Surrogate: D5-NEtFOSAA	*23.5*		ng/L	49.0		48.0		10-200			
Surrogate: D7-NMeFOSE	*172*		ng/L	245		70.3		10-150			
Surrogate: D9-NEtFOSE	*164*		ng/L	245		67.0		10-150			
Surrogate: 13C3-HFPO-DA	*74.7*		ng/L	98.0		76.2		25-160			
LCS (B361588-BS1)				Prepared: 12/28/23 Analyzed: 01/02/24							
Perfluorobutanoic acid (PFBA)	104	3.9	ng/L	94.3		110		58-148			
Perfluoropentanoic acid (PFPeA)	51.4	2.0	ng/L	47.2		109		54-152			
Perfluorohexanoic acid (PFHxA)	25.1	0.98	ng/L	23.6		106		55-152			
Perfluoroheptanoic acid (PFHpA)	24.7	0.98	ng/L	23.6		105		54-154			
Perfluorooctanoic acid (PFOA)	24.9	0.98	ng/L	23.6		105		52-161			
Perfluorononanoic acid (PFNA)	25.8	0.98	ng/L	23.6		109		59-149			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361588 - Draft Method 1633										
LCS (B361588-BS1)				Prepared: 12/28/23 Analyzed: 01/02/24						
Perfluorodecanoic acid (PFDA)	25.3	0.98	ng/L	23.6		107	52-147			
Perfluoroundecanoic acid (PFUnA)	25.8	0.98	ng/L	23.6		109	48-159			
Perfluorododecanoic acid (PFDoA)	26.7	0.98	ng/L	23.6		113	64-142			
Perfluorotridecanoic acid (PFTrDA)	25.2	0.98	ng/L	23.6		107	49-148			
Perfluorotetradecanoic acid (PFTeDA)	25.9	0.98	ng/L	23.6		110	47-161			
Perfluorobutanesulfonic acid (PFBS)	22.7	0.98	ng/L	20.9		108	62-144			
Perfluoropentanesulfonic acid (PFPeS)	23.8	0.98	ng/L	22.2		108	59-151			
Perfluorohexanesulfonic acid (PFHxS)	21.8	0.98	ng/L	21.6		101	57-146			
Perfluoroheptanesulfonic acid (PFHpS)	24.9	0.98	ng/L	22.5		111	55-152			
Perfluorooctanesulfonic acid (PFOS)	24.0	0.98	ng/L	21.9		110	58-149			
Perfluorononanesulfonic acid (PFNS)	25.4	0.98	ng/L	22.7		112	52-148			
Perfluorodecanesulfonic acid (PFDS)	23.5	0.98	ng/L	22.8		103	51-147			
Perfluorododecanesulfonic acid (PFDoS)	23.0	0.98	ng/L	22.9		101	36-145			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	94.7	3.9	ng/L	88.5		107	67-146			PF-17C
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	96.1	3.9	ng/L	89.6		107	61-151			PF-17C
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	102	3.9	ng/L	90.8		113	63-152			
Perfluorooctanesulfonamide (PFOSA)	25.4	0.98	ng/L	23.6		108	61-148			
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	25.3	0.98	ng/L	23.6		107	63-145			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	26.0	0.98	ng/L	23.6		110	65-139			
N-MeFOSAA (NMeFOSAA)	24.2	0.98	ng/L	23.6		103	58-144			
N-EtFOSAA (NEtFOSAA)	25.4	0.98	ng/L	23.6		108	59-146			
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	256	9.8	ng/L	236		109	71-136			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	257	9.8	ng/L	236		109	69-137			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	91.5	3.9	ng/L	94.3		96.9	63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	84.1	3.9	ng/L	89.0		94.4	68-146			
9Cl-PF3ONS (F53B Minor)	71.7	3.9	ng/L	88.5		81.1	56-156			
11Cl-PF3OUdS (F53B Major)	78.8	3.9	ng/L	89.0		88.5	46-156			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	203	9.8	ng/L	236		86.1	62-129			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	980	49	ng/L	1180		83.1	63-134			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	876	49	ng/L	1180		74.2	50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	43.0	2.0	ng/L	42.0		102	56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	50.7	2.0	ng/L	47.2		108	51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	51.4	2.0	ng/L	47.2		109	55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	49.6	2.0	ng/L	47.2		105	48-161			
Surrogate: 13C4-PFBA	*74.2*		ng/L	98.3		75.5	10-130			
Surrogate: 13C5-PFPeA	*41.0*		ng/L	49.1		83.5	35-150			
Surrogate: 13C5-PFHxA	*19.0*		ng/L	24.6		77.2	55-150			
Surrogate: 13C4-PFHpA	*18.8*		ng/L	24.6		76.6	55-150			
Surrogate: 13C8-PFOA	*18.6*		ng/L	24.6		75.8	60-140			
Surrogate: 13C9-PFNA	*8.69*		ng/L	12.3		70.7	55-140			
Surrogate: 13C6-PFDA	*9.36*		ng/L	12.3		76.2	50-140			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B361588 - Draft Method 1633											
LCS (B361588-BS1)				Prepared: 12/28/23 Analyzed: 01/02/24							
Surrogate: 13C7-PFUnA	*8.94*		ng/L	12.3		72.8		30-140			
Surrogate: 13C2-PFDoA	*8.49*		ng/L	12.3		69.1		10-150			
Surrogate: 13C2-PFTeDA	*7.75*		ng/L	12.3		63.1		10-130			
Surrogate: 13C3-PFBS	*18.1*		ng/L	24.6		73.7		55-150			
Surrogate: 13C3-PFHxS	*18.6*		ng/L	24.6		75.7		55-150			
Surrogate: 13C8-PFOS	*17.8*		ng/L	24.6		72.4		45-140			
Surrogate: 13C2-4:2FTS	*28.9*		ng/L	49.1		**58.9**	*	60-200			PF-17C
Surrogate: 13C2-6:2FTS	*24.6*		ng/L	49.1		**50.1**	*	60-200			PF-17C
Surrogate: 13C2-8:2FTS	*27.1*		ng/L	49.1		55.1		50-200			
Surrogate: 13C8-PFOSA	*17.9*		ng/L	24.6		73.0		30-130			
Surrogate: D3-NMeFOSA	*15.9*		ng/L	24.6		64.8		15-130			
Surrogate: D5-NEtFOSA	*16.1*		ng/L	24.6		65.4		10-130			
Surrogate: D3-NMeFOSAA	*27.0*		ng/L	49.1		54.9		45-200			
Surrogate: D5-NEtFOSAA	*23.4*		ng/L	49.1		47.6		10-200			
Surrogate: D7-NMeFOSE	*180*		ng/L	246		73.2		10-150			
Surrogate: D9-NEtFOSE	*177*		ng/L	246		72.2		10-150			
Surrogate: 13C3-HFPO-DA	*76.1*		ng/L	98.3		77.5		25-160			
MRL Check (B361588-MRL1)				Prepared: 12/28/23 Analyzed: 01/02/24							
Perfluorobutanoic acid (PFBA)	8.04	4.0	ng/L	7.91		102		44-157			
Perfluoropentanoic acid (PFPeA)	3.90	2.0	ng/L	3.96		98.7		57-148			
Perfluorohexanoic acid (PFHxA)	1.90	0.99	ng/L	1.98		96.1		62-149			
Perfluoroheptanoic acid (PFHpA)	1.82	0.99	ng/L	1.98		92.2		56-150			
Perfluorooctanoic acid (PFOA)	1.94	0.99	ng/L	1.98		98.0		57-161			
Perfluorononanoic acid (PFNA)	1.79	0.99	ng/L	1.98		90.6		53-157			
Perfluorodecanoic acid (PFDA)	1.85	0.99	ng/L	1.98		93.4		43-158			
Perfluoroundecanoic acid (PFUnA)	1.82	0.99	ng/L	1.98		92.1		50-155			
Perfluorododecanoic acid (PFDoA)	1.86	0.99	ng/L	1.98		94.1		60-141			
Perfluorotridecanoic acid (PFTrDA)	2.18	0.99	ng/L	1.98		110		52-140			
Perfluorotetradecanoic acid (PFTeDA)	1.97	0.99	ng/L	1.98		99.6		52-156			
Perfluorobutanesulfonic acid (PFBS)	1.68	0.99	ng/L	1.76		95.5		63-145			
Perfluoropentanesulfonic acid (PFPeS)	1.72	0.99	ng/L	1.86		92.7		58-144			
Perfluorohexanesulfonic acid (PFHxS)	1.80	0.99	ng/L	1.81		99.5		44-158			
Perfluoroheptanesulfonic acid (PFHpS)	1.82	0.99	ng/L	1.88		96.4		51-150			
Perfluorooctanesulfonic acid (PFOS)	1.87	0.99	ng/L	1.83		102		43-162			
Perfluorononanesulfonic acid (PFNS)	1.80	0.99	ng/L	1.90		94.4		46-151			
Perfluorodecanesulfonic acid (PFDS)	1.87	0.99	ng/L	1.91		97.8		50-144			
Perfluorododecanesulfonic acid (PFDoS)	1.84	0.99	ng/L	1.92		96.1		30-138			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	7.06	4.0	ng/L	7.42		95.1		52-158			PF-17C
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	6.98	4.0	ng/L	7.52		92.8		48-158			PF-17C
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	8.05	4.0	ng/L	7.62		106		46-165			
Perfluorooctanesulfonamide (PFOSA)	1.87	0.99	ng/L	1.98		94.3		47-163			
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	1.98	0.99	ng/L	1.98		100		54-155			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	2.00	0.99	ng/L	1.98		101		49-156			
N-MeFOSAA (NMeFOSAA)	1.78	0.99	ng/L	1.98		90.1		32-160			
N-EtFOSAA (NEtFOSAA)	1.97	0.99	ng/L	1.98		99.5		51-154			
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	18.9	9.9	ng/L	19.8		95.4		56-151			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	18.1	9.9	ng/L	19.8		91.4		60-147			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B361588 - Draft Method 1633											
MRL Check (B361588-MRL1)				Prepared: 12/28/23 Analyzed: 01/02/24							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	7.88	4.0	ng/L	7.91		99.5		58-154			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	7.19	4.0	ng/L	7.47		96.3		61-148			
9Cl-PF3ONS (F53B Minor)	6.27	4.0	ng/L	7.42		84.6		44-167			
11Cl-PF3OUdS (F53B Major)	7.01	4.0	ng/L	7.47		93.9		36-158			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	19.3	9.9	ng/L	19.8		97.4		32-161			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	88.4	49	ng/L	98.9		89.4		39-156			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	83.6	49	ng/L	98.9		84.5		36-149			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.23	2.0	ng/L	3.52		91.7		56-144			
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.85	2.0	ng/L	3.96		97.3		48-150			
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.68	2.0	ng/L	3.96		93.0		49-154			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.19	2.0	ng/L	3.96		106		47-160			
Surrogate: 13C4-PFBA	*71.8*		ng/L	98.9		72.6		10-130			
Surrogate: 13C5-PFPeA	*39.4*		ng/L	49.5		79.6		35-150			
Surrogate: 13C5-PFHxA	*18.1*		ng/L	24.7		73.1		55-150			
Surrogate: 13C4-PFHpA	*17.8*		ng/L	24.7		71.9		55-150			
Surrogate: 13C8-PFOA	*18.0*		ng/L	24.7		72.7		60-140			
Surrogate: 13C9-PFNA	*8.72*		ng/L	12.4		70.5		55-140			
Surrogate: 13C6-PFDA	*8.74*		ng/L	12.4		70.7		50-140			
Surrogate: 13C7-PFUnA	*8.95*		ng/L	12.4		72.4		30-140			
Surrogate: 13C2-PFDoA	*8.61*		ng/L	12.4		69.6		10-150			
Surrogate: 13C2-PFTeDA	*8.19*		ng/L	12.4		66.2		10-130			
Surrogate: 13C3-PFBS	*18.1*		ng/L	24.7		73.3		55-150			
Surrogate: 13C3-PFHxS	*18.2*		ng/L	24.7		73.6		55-150			
Surrogate: 13C8-PFOS	*16.9*		ng/L	24.7		68.3		45-140			
Surrogate: 13C2-4:2FTS	*29.4*		ng/L	49.5		**59.4**	*	60-200			PF-17C
Surrogate: 13C2-6:2FTS	*26.0*		ng/L	49.5		**52.5**	*	60-200			PF-17C
Surrogate: 13C2-8:2FTS	*28.5*		ng/L	49.5		57.6		50-200			
Surrogate: 13C8-PFOSA	*19.7*		ng/L	24.7		79.8		30-130			
Surrogate: D3-NMeFOSA	*13.3*		ng/L	24.7		54.0		15-130			
Surrogate: D5-NEtFOSA	*13.8*		ng/L	24.7		55.9		10-130			
Surrogate: D3-NMeFOSAA	*28.5*		ng/L	49.5		57.7		45-200			
Surrogate: D5-NEtFOSAA	*26.2*		ng/L	49.5		53.0		10-200			
Surrogate: D7-NMeFOSE	*162*		ng/L	247		65.7		10-150			
Surrogate: D9-NEtFOSE	*159*		ng/L	247		64.4		10-150			
Surrogate: 13C3-HFPO-DA	*71.2*		ng/L	98.9		72.0		25-160			
Matrix Spike (B361588-MS1)		**Source: 23L2655-11**		Prepared: 12/28/23 Analyzed: 01/02/24							
Perfluorobutanoic acid (PFBA)	110	3.9	ng/L	93.4	8.06	109		58-148			
Perfluoropentanoic acid (PFPeA)	51.2	1.9	ng/L	46.7	1.30	107		54-152			
Perfluorohexanoic acid (PFHxA)	25.4	0.97	ng/L	23.4	1.19	104		55-152			
Perfluoroheptanoic acid (PFHpA)	25.5	0.97	ng/L	23.4	1.60	102		54-154			
Perfluorooctanoic acid (PFOA)	24.9	0.97	ng/L	23.4	1.56	99.8		52-161			
Perfluorononanoic acid (PFNA)	25.6	0.97	ng/L	23.4	0.669	107		59-149			
Perfluorodecanoic acid (PFDA)	24.6	0.97	ng/L	23.4	ND	105		52-147			
Perfluoroundecanoic acid (PFUnA)	23.9	0.97	ng/L	23.4	ND	102		48-159			
Perfluorododecanoic acid (PFDoA)	24.1	0.97	ng/L	23.4	ND	103		64-142			
Perfluorotridecanoic acid (PFTrDA)	16.6	0.97	ng/L	23.4	ND	71.0		49-148			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD	RPD Limit	Notes
Batch B361588 - Draft Method 1633											
Matrix Spike (B361588-MS1)	**Source: 23L2655-11**			Prepared: 12/28/23 Analyzed: 01/02/24							
Perfluorotetradecanoic acid (PFTeDA)	23.0	0.97	ng/L	23.4	ND	98.6		47-161			
Perfluorobutanesulfonic acid (PFBS)	22.1	0.97	ng/L	20.7	0.595	104		62-144			
Perfluoropentanesulfonic acid (PFPeS)	23.6	0.97	ng/L	22.0	ND	108		59-151			
Perfluorohexanesulfonic acid (PFHxS)	21.2	0.97	ng/L	21.4	0.266	98.0		57-146			
Perfluoroheptanesulfonic acid (PFHpS)	24.2	0.97	ng/L	22.3	ND	109		55-152			
Perfluorooctanesulfonic acid (PFOS)	23.6	0.97	ng/L	21.7	1.23	103		58-149			
Perfluorononanesulfonic acid (PFNS)	22.7	0.97	ng/L	22.5	ND	101		52-148			
Perfluorodecanesulfonic acid (PFDS)	18.2	0.97	ng/L	22.5	ND	80.7		51-147			
Perfluorododecanesulfonic acid (PFDoS)	6.77	0.97	ng/L	22.7	ND	**29.9**	*	36-145			MS-22
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	94.3	3.9	ng/L	87.6	ND	108		67-146			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	91.2	3.9	ng/L	88.8	ND	103		61-151			PF-18
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	93.4	3.9	ng/L	89.9	ND	104		63-152			PF-18
Perfluorooctanesulfonamide (PFOSA)	23.6	0.97	ng/L	23.4	0.324	99.7		61-148			
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	23.7	0.97	ng/L	23.4	ND	101		63-145			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	24.8	0.97	ng/L	23.4	ND	106		65-139			
N-MeFOSAA (NMeFOSAA)	24.5	0.97	ng/L	23.4	ND	105		58-144			
N-EtFOSAA (NEtFOSAA)	24.3	0.97	ng/L	23.4	ND	104		59-146			
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	202	9.7	ng/L	234	ND	86.5		71-136			PF-18
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	192	9.7	ng/L	234	ND	82.1		69-137			PF-18
Hexafluoropropylene oxide dimer acid (HFPO-DA)	90.5	3.9	ng/L	93.4	ND	96.9		63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	88.0	3.9	ng/L	88.2	ND	99.7		68-146			
9Cl-PF3ONS (F53B Minor)	53.2	3.9	ng/L	87.6	ND	60.7		56-156			
11Cl-PF3OUdS (F53B Major)	39.0	3.9	ng/L	88.2	ND	**44.2**	*	46-156			MS-23
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	284	9.7	ng/L	234	ND	121		62-129			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	1150	49	ng/L	1170	ND	98.1		63-134			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	986	49	ng/L	1170	ND	84.4		50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	41.4	1.9	ng/L	41.6	ND	99.5		56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	46.9	1.9	ng/L	46.7	ND	100		51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	50.5	1.9	ng/L	46.7	ND	108		55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	46.7	1.9	ng/L	46.7	ND	100		48-161			
Surrogate: 13C4-PFBA	*54.2*		ng/L	97.3		55.7		10-130			
Surrogate: 13C5-PFPeA	*35.3*		ng/L	48.7		72.5		35-150			
Surrogate: 13C5-PFHxA	*17.0*		ng/L	24.3		70.0		55-150			
Surrogate: 13C4-PFHpA	*17.1*		ng/L	24.3		70.2		55-150			
Surrogate: 13C8-PFOA	*16.5*		ng/L	24.3		67.9		60-140			
Surrogate: 13C9-PFNA	*8.03*		ng/L	12.2		66.0		55-140			
Surrogate: 13C6-PFDA	*8.08*		ng/L	12.2		66.4		50-140			
Surrogate: 13C7-PFUnA	*7.39*		ng/L	12.2		60.7		30-140			
Surrogate: 13C2-PFDoA	*6.31*		ng/L	12.2		51.8		10-150			
Surrogate: 13C2-PFTeDA	*2.39*		ng/L	12.2		19.7		10-130			
Surrogate: 13C3-PFBS	*16.9*		ng/L	24.3		69.5		55-150			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD		RPD Limit	Notes
Batch B361588 - Draft Method 1633												
Matrix Spike (B361588-MS1)	**Source: 23L2655-11**			Prepared: 12/28/23 Analyzed: 01/02/24								
Surrogate: 13C3-PFHxS	*17.0*		ng/L	24.3		69.9		55-150				
Surrogate: 13C8-PFOS	*15.4*		ng/L	24.3		63.2		45-140				
Surrogate: 13C2-4:2FTS	*55.9*		ng/L	48.7		115		60-200				
Surrogate: 13C2-6:2FTS	*26.0*		ng/L	48.7		**53.4**	*	60-200				PF-18
Surrogate: 13C2-8:2FTS	*23.0*		ng/L	48.7		**47.2**	*	50-200				PF-18
Surrogate: 13C8-PFOSA	*15.8*		ng/L	24.3		65.0		30-130				
Surrogate: D3-NMeFOSA	*12.2*		ng/L	24.3		50.2		15-130				
Surrogate: D5-NEtFOSA	*10.7*		ng/L	24.3		43.9		10-130				
Surrogate: D3-NMeFOSAA	*22.5*		ng/L	48.7		46.2		45-200				
Surrogate: D5-NEtFOSAA	*19.1*		ng/L	48.7		39.3		10-200				
Surrogate: D7-NMeFOSE	*18.2*		ng/L	243		**7.47**	*	10-150				PF-18
Surrogate: D9-NEtFOSE	*6.93*		ng/L	243		**2.85**	*	10-150				PF-18
Surrogate: 13C3-HFPO-DA	*65.4*		ng/L	97.3		67.2		25-160				
Matrix Spike Dup (B361588-MSD1)	**Source: 23L2655-11**			Prepared: 12/28/23 Analyzed: 01/02/24								
Perfluorobutanoic acid (PFBA)	140	3.7	ng/L	88.7	8.06	148		58-148	**23.6**	*	20	R-06
Perfluoropentanoic acid (PFPeA)	64.0	1.8	ng/L	44.3	1.30	141		54-152	**22.2**	*	20	R-06
Perfluorohexanoic acid (PFHxA)	31.5	0.92	ng/L	22.2	1.19	137		55-152	21.3		25	S-29
Perfluoroheptanoic acid (PFHpA)	31.3	0.92	ng/L	22.2	1.60	134		54-154	20.3		25	S-29
Perfluorooctanoic acid (PFOA)	31.7	0.92	ng/L	22.2	1.56	136		52-161	24.2		25	S-29
Perfluorononanoic acid (PFNA)	32.0	0.92	ng/L	22.2	0.669	141		59-149	22.1		25	S-29
Perfluorodecanoic acid (PFDA)	30.8	0.92	ng/L	22.2	ND	139		52-147	22.2		25	
Perfluoroundecanoic acid (PFUnA)	33.4	0.92	ng/L	22.2	ND	151		48-159	**33.1**	*	30	R-06
Perfluorododecanoic acid (PFDoA)	30.8	0.92	ng/L	22.2	ND	139		64-142	24.4		25	
Perfluorotridecanoic acid (PFTrDA)	20.5	0.92	ng/L	22.2	ND	92.3		49-148	20.9		25	
Perfluorotetradecanoic acid (PFTeDA)	30.7	0.92	ng/L	22.2	ND	139		47-161	**28.6**	*	25	R-06
Perfluorobutanesulfonic acid (PFBS)	28.2	0.92	ng/L	19.7	0.595	140		62-144	**24.3**	*	20	R-06, S-29
Perfluoropentanesulfonic acid (PFPeS)	29.9	0.92	ng/L	20.8	ND	143		59-151	23.5		25	S-29
Perfluorohexanesulfonic acid (PFHxS)	27.0	0.92	ng/L	20.3	0.266	132		57-146	24.0		25	S-29
Perfluoroheptanesulfonic acid (PFHpS)	30.7	0.92	ng/L	21.1	ND	146		55-152	24.0		25	
Perfluorooctanesulfonic acid (PFOS)	30.2	0.92	ng/L	20.6	1.23	141		58-149	**24.4**	*	20	R-06
Perfluorononanesulfonic acid (PFNS)	29.5	0.92	ng/L	21.3	ND	138		52-148	**26.1**	*	25	R-06
Perfluorodecanesulfonic acid (PFDS)	23.6	0.92	ng/L	21.4	ND	110		51-147	**26.0**	*	25	R-06
Perfluorododecanesulfonic acid (PFDoS)	7.95	0.92	ng/L	21.5	ND	37.0		36-145	16.1		30	
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	119	3.7	ng/L	83.1	ND	143		67-146	23.1		25	
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	120	3.7	ng/L	84.3	ND	142		61-151	27.3		30	PF-18
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	125	3.7	ng/L	85.4	ND	146		63-152	28.9		30	PF-18
Perfluorooctanesulfonamide (PFOSA)	30.7	0.92	ng/L	22.2	0.324	137		61-148	**26.1**	*	20	R-06
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	31.2	0.92	ng/L	22.2	ND	141		63-145	**27.4**	*	25	R-06
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	31.0	0.92	ng/L	22.2	ND	**140**	*	65-139	22.4		25	MS-22
N-MeFOSAA (NMeFOSAA)	34.7	0.92	ng/L	22.2	ND	**157**	*	58-144	**34.5**	*	25	MS-23, S-29
N-EtFOSAA (NEtFOSAA)	35.0	0.92	ng/L	22.2	ND	**158**	*	59-146	**35.9**	*	25	MS-23
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	246	9.2	ng/L	222	ND	111		71-136	19.8		20	PF-18
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	243	9.2	ng/L	222	ND	110		69-137	23.7		25	PF-18
Hexafluoropropylene oxide dimer acid (HFPO-DA)	112	3.7	ng/L	88.7	ND	126		63-144	21.3		25	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	109	3.7	ng/L	83.7	ND	130		68-146	**21.4**	*	20	R-06

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC		%REC Limits	RPD		RPD Limit	Notes
Batch B361588 - Draft Method 1633												
Matrix Spike Dup (B361588-MSD1)	**Source: 23L2655-11**			Prepared: 12/28/23 Analyzed: 01/02/24								
9Cl-PF3ONS (F53B Minor)	87.4	3.7	ng/L	83.1	ND	105		56-156	**48.7**	*	30	R-06
11Cl-PF3OUdS (F53B Major)	70.1	3.7	ng/L	83.7	ND	83.8		46-156	**57.1**	*	35	R-06
3-Perfluoropropyl propanoic acid (FPrPA)(3:3FTCA)	314	9.2	ng/L	222	ND	**142**	*	62-129	10.3		20	MS-22
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	1280	46	ng/L	1110	ND	115		63-134	10.8		20	S-29
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	1120	46	ng/L	1110	ND	101		50-138	13.0		25	S-29
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	47.9	1.8	ng/L	39.5	ND	121		56-151	14.6		20	S-29
Perfluoro-3-methoxypropanoic acid (PFMPA)	53.9	1.8	ng/L	44.3	ND	122		51-145	13.8		25	
Perfluoro-4-methoxybutanoic acid (PFMBA)	59.2	1.8	ng/L	44.3	ND	134		55-148	15.8		20	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	52.6	1.8	ng/L	44.3	ND	119		48-161	11.9		35	S-29
Surrogate: 13C4-PFBA	*40.4*		ng/L	92.4		43.7		10-130				
Surrogate: 13C5-PFPeA	*25.6*		ng/L	46.2		55.5		35-150				
Surrogate: 13C5-PFHxA	*12.4*		ng/L	23.1		**53.6**	*	55-150				S-29
Surrogate: 13C4-PFHpA	*12.4*		ng/L	23.1		**53.7**	*	55-150				S-29
Surrogate: 13C8-PFOA	*12.0*		ng/L	23.1		**52.1**	*	60-140				S-29
Surrogate: 13C9-PFNA	*5.84*		ng/L	11.5		**50.6**	*	55-140				S-29
Surrogate: 13C6-PFDA	*6.05*		ng/L	11.5		52.4		50-140				
Surrogate: 13C7-PFUnA	*5.14*		ng/L	11.5		44.5		30-140				
Surrogate: 13C2-PFDoA	*4.62*		ng/L	11.5		40.0		10-150				
Surrogate: 13C2-PFTeDA	*1.54*		ng/L	11.5		13.4		10-130				
Surrogate: 13C3-PFBS	*12.3*		ng/L	23.1		**53.3**	*	55-150				S-29
Surrogate: 13C3-PFHxS	*12.4*		ng/L	23.1		**53.7**	*	55-150				S-29
Surrogate: 13C8-PFOS	*11.7*		ng/L	23.1		50.6		45-140				
Surrogate: 13C2-4:2FTS	*42.4*		ng/L	46.2		91.8		60-200				
Surrogate: 13C2-6:2FTS	*20.4*		ng/L	46.2		**44.2**	*	60-200				PF-18
Surrogate: 13C2-8:2FTS	*19.0*		ng/L	46.2		**41.1**	*	50-200				PF-18
Surrogate: 13C8-PFOSA	*12.1*		ng/L	23.1		52.5		30-130				
Surrogate: D3-NMeFOSA	*9.50*		ng/L	23.1		41.1		15-130				
Surrogate: D5-NEtFOSA	*8.58*		ng/L	23.1		37.2		10-130				
Surrogate: D3-NMeFOSAA	*17.4*		ng/L	46.2		**37.7**	*	45-200				S-29
Surrogate: D5-NEtFOSAA	*14.6*		ng/L	46.2		31.5		10-200				
Surrogate: D7-NMeFOSE	*11.0*		ng/L	231		**4.75**	*	10-150				PF-18
Surrogate: D9-NEtFOSE	*2.76*		ng/L	231		**1.19**	*	10-150				PF-18
Surrogate: 13C3-HFPO-DA	*47.3*		ng/L	92.4		51.2		25-160				
Batch B362328 - Draft Method 1633												
Blank (B362328-BLK1)				Prepared & Analyzed: 01/08/24								
Perfluorobutanoic acid (PFBA)	ND	3.6	ng/L									
Perfluoropentanoic acid (PFPeA)	ND	1.8	ng/L									
Perfluorohexanoic acid (PFHxA)	ND	0.90	ng/L									
Perfluoroheptanoic acid (PFHpA)	ND	0.90	ng/L									
Perfluorooctanoic acid (PFOA)	ND	0.90	ng/L									
Perfluorononanoic acid (PFNA)	ND	0.90	ng/L									
Perfluorodecanoic acid (PFDA)	ND	0.90	ng/L									
Perfluoroundecanoic acid (PFUnA)	ND	0.90	ng/L									
Perfluorododecanoic acid (PFDoA)	ND	0.90	ng/L									
Perfluorotridecanoic acid (PFTrDA)	ND	0.90	ng/L									
Perfluorotetradecanoic acid (PFTeDA)	ND	0.90	ng/L									

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B362328 - Draft Method 1633										
Blank (B362328-BLK1)				Prepared & Analyzed: 01/08/24						
Perfluorobutanesulfonic acid (PFBS)	0.82	0.90	ng/L							Z-01, J
Perfluoropentanesulfonic acid (PFPeS)	ND	0.90	ng/L							
Perfluorohexanesulfonic acid (PFHxS)	ND	0.90	ng/L							
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.90	ng/L							
Perfluorooctanesulfonic acid (PFOS)	ND	0.90	ng/L							
Perfluorononanesulfonic acid (PFNS)	ND	0.90	ng/L							
Perfluorodecanesulfonic acid (PFDS)	ND	0.90	ng/L							
Perfluorododecanesulfonic acid (PFDoS)	ND	0.90	ng/L							
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	3.6	ng/L							
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	3.6	ng/L							
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	3.6	ng/L							
Perfluorooctanesulfonamide (PFOSA)	ND	0.90	ng/L							
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.90	ng/L							
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.90	ng/L							
N-MeFOSAA (NMeFOSAA)	ND	0.90	ng/L							
N-EtFOSAA (NEtFOSAA)	ND	0.90	ng/L							
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	9.0	ng/L							
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	9.0	ng/L							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	3.6	ng/L							
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	3.6	ng/L							
9Cl-PF3ONS (F53B Minor)	ND	3.6	ng/L							
11Cl-PF3OUdS (F53B Major)	ND	3.6	ng/L							
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	9.0	ng/L							
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	45	ng/L							
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	45	ng/L							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	1.8	ng/L							
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	1.8	ng/L							
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	1.8	ng/L							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	1.8	ng/L							
Surrogate: 13C4-PFBA	*81.2*		ng/L	90.1		90.1	10-130			
Surrogate: 13C5-PFPeA	*40.2*		ng/L	45.1		89.2	35-150			
Surrogate: 13C5-PFHxA	*19.9*		ng/L	22.5		88.5	55-150			
Surrogate: 13C4-PFHpA	*20.3*		ng/L	22.5		90.3	55-150			
Surrogate: 13C8-PFOA	*20.2*		ng/L	22.5		89.6	60-140			
Surrogate: 13C9-PFNA	*9.85*		ng/L	11.3		87.4	55-140			
Surrogate: 13C6-PFDA	*9.95*		ng/L	11.3		88.3	50-140			
Surrogate: 13C7-PFUnA	*9.62*		ng/L	11.3		85.4	30-140			
Surrogate: 13C2-PFDoA	*9.20*		ng/L	11.3		81.6	10-150			
Surrogate: 13C2-PFTeDA	*8.54*		ng/L	11.3		75.9	10-130			
Surrogate: 13C3-PFBS	*20.2*		ng/L	22.5		89.7	55-150			
Surrogate: 13C3-PFHxS	*19.7*		ng/L	22.5		87.5	55-150			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B362328 - Draft Method 1633										
Blank (B362328-BLK1)				Prepared & Analyzed: 01/08/24						
Surrogate: 13C8-PFOS	*19.9*		ng/L	22.5		88.3	45-140			
Surrogate: 13C2-4:2FTS	*38.1*		ng/L	45.1		84.5	60-200			
Surrogate: 13C2-6:2FTS	*37.3*		ng/L	45.1		82.7	60-200			
Surrogate: 13C2-8:2FTS	*30.2*		ng/L	45.1		67.0	50-200			
Surrogate: 13C8-PFOSA	*18.5*		ng/L	22.5		82.0	30-130			
Surrogate: D3-NMeFOSA	*13.3*		ng/L	22.5		58.8	15-130			
Surrogate: D5-NEtFOSA	*14.2*		ng/L	22.5		62.8	10-130			
Surrogate: D3-NMeFOSAA	*39.8*		ng/L	45.1		88.4	45-200			
Surrogate: D5-NEtFOSAA	*40.3*		ng/L	45.1		89.5	10-200			
Surrogate: D7-NMeFOSE	*187*		ng/L	225		82.9	10-150			
Surrogate: D9-NEtFOSE	*181*		ng/L	225		80.5	10-150			
Surrogate: 13C3-HFPO-DA	*79.5*		ng/L	90.1		88.2	25-160			
LCS (B362328-BS1)				Prepared & Analyzed: 01/08/24						
Perfluorobutanoic acid (PFBA)	94.8	3.6	ng/L	87.1		109	58-148			
Perfluoropentanoic acid (PFPeA)	48.9	1.8	ng/L	43.5		112	54-152			
Perfluorohexanoic acid (PFHxA)	24.5	0.91	ng/L	21.8		113	55-152			
Perfluoroheptanoic acid (PFHpA)	24.3	0.91	ng/L	21.8		112	54-154			
Perfluorooctanoic acid (PFOA)	23.0	0.91	ng/L	21.8		105	52-161			
Perfluorononanoic acid (PFNA)	24.5	0.91	ng/L	21.8		113	59-149			
Perfluorodecanoic acid (PFDA)	24.8	0.91	ng/L	21.8		114	52-147			
Perfluoroundecanoic acid (PFUnA)	25.6	0.91	ng/L	21.8		118	48-159			
Perfluorododecanoic acid (PFDoA)	24.9	0.91	ng/L	21.8		114	64-142			
Perfluorotridecanoic acid (PFTrDA)	24.7	0.91	ng/L	21.8		114	49-148			
Perfluorotetradecanoic acid (PFTeDA)	25.8	0.91	ng/L	21.8		119	47-161			
Perfluorobutanesulfonic acid (PFBS)	22.7	0.91	ng/L	19.3		117	62-144			
Perfluoropentanesulfonic acid (PFPeS)	22.3	0.91	ng/L	20.5		109	59-151			
Perfluorohexanesulfonic acid (PFHxS)	21.5	0.91	ng/L	19.9		108	57-146			
Perfluoroheptanesulfonic acid (PFHpS)	24.0	0.91	ng/L	20.7		116	55-152			
Perfluorooctanesulfonic acid (PFOS)	20.8	0.91	ng/L	20.2		103	58-149			
Perfluorononanesulfonic acid (PFNS)	22.0	0.91	ng/L	20.9		105	52-148			
Perfluorodecanesulfonic acid (PFDS)	21.9	0.91	ng/L	21.0		104	51-147			
Perfluorododecanesulfonic acid (PFDoS)	22.5	0.91	ng/L	21.1		106	36-145			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	98.2	3.6	ng/L	81.6		120	67-146			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	98.1	3.6	ng/L	82.7		119	61-151			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	96.8	3.6	ng/L	83.8		116	63-152			
Perfluorooctanesulfonamide (PFOSA)	24.8	0.91	ng/L	21.8		114	61-148			
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	23.6	0.91	ng/L	21.8		109	63-145			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	23.3	0.91	ng/L	21.8		107	65-139			
N-MeFOSAA (NMeFOSAA)	24.4	0.91	ng/L	21.8		112	58-144			
N-EtFOSAA (NEtFOSAA)	24.4	0.91	ng/L	21.8		112	59-146			
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	248	9.1	ng/L	218		114	71-136			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	246	9.1	ng/L	218		113	69-137			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	91.2	3.6	ng/L	87.1		105	63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	86.5	3.6	ng/L	82.2		105	68-146			
9Cl-PF3ONS (F53B Minor)	85.8	3.6	ng/L	81.6		105	56-156			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B362328 - Draft Method 1633										
LCS (B362328-BS1)				Prepared & Analyzed: 01/08/24						
11Cl-PF3OUdS (F53B Major)	84.0	3.6	ng/L	82.2		102	46-156			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	207	9.1	ng/L	218		95.3	62-129			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	1090	45	ng/L	1090		101	63-134			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	1050	45	ng/L	1090		96.2	50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	41.2	1.8	ng/L	38.7		106	56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	44.0	1.8	ng/L	43.5		101	51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	45.0	1.8	ng/L	43.5		103	55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	43.2	1.8	ng/L	43.5		99.2	48-161			
Surrogate: 13C4-PFBA	*66.7*		ng/L	90.7		73.6	10-130			
Surrogate: 13C5-PFPeA	*32.8*		ng/L	45.3		72.2	35-150			
Surrogate: 13C5-PFHxA	*16.3*		ng/L	22.7		72.0	55-150			
Surrogate: 13C4-PFHpA	*16.4*		ng/L	22.7		72.4	55-150			
Surrogate: 13C8-PFOA	*16.9*		ng/L	22.7		74.7	60-140			
Surrogate: 13C9-PFNA	*8.20*		ng/L	11.3		72.3	55-140			
Surrogate: 13C6-PFDA	*8.15*		ng/L	11.3		71.9	50-140			
Surrogate: 13C7-PFUnA	*7.58*		ng/L	11.3		66.9	30-140			
Surrogate: 13C2-PFDoA	*7.78*		ng/L	11.3		68.6	10-150			
Surrogate: 13C2-PFTeDA	*7.23*		ng/L	11.3		63.7	10-130			
Surrogate: 13C3-PFBS	*16.3*		ng/L	22.7		72.0	55-150			
Surrogate: 13C3-PFHxS	*16.3*		ng/L	22.7		71.8	55-150			
Surrogate: 13C8-PFOS	*16.1*		ng/L	22.7		70.9	45-140			
Surrogate: 13C2-4:2FTS	*34.9*		ng/L	45.3		77.1	60-200			
Surrogate: 13C2-6:2FTS	*32.8*		ng/L	45.3		72.4	60-200			
Surrogate: 13C2-8:2FTS	*29.0*		ng/L	45.3		64.0	50-200			
Surrogate: 13C8-PFOSA	*15.2*		ng/L	22.7		67.0	30-130			
Surrogate: D3-NMeFOSA	*12.7*		ng/L	22.7		56.0	15-130			
Surrogate: D5-NEtFOSA	*12.8*		ng/L	22.7		56.4	10-130			
Surrogate: D3-NMeFOSAA	*32.6*		ng/L	45.3		71.8	45-200			
Surrogate: D5-NEtFOSAA	*32.4*		ng/L	45.3		71.5	10-200			
Surrogate: D7-NMeFOSE	*159*		ng/L	227		70.1	10-150			
Surrogate: D9-NEtFOSE	*156*		ng/L	227		68.7	10-150			
Surrogate: 13C3-HFPO-DA	*63.7*		ng/L	90.7		70.3	25-160			
MRL Check (B362328-MRL1)				Prepared & Analyzed: 01/08/24						
Perfluorobutanoic acid (PFBA)	6.98	3.6	ng/L	7.27		96.1	44-157			
Perfluoropentanoic acid (PFPeA)	3.36	1.8	ng/L	3.63		92.4	57-148			
Perfluorohexanoic acid (PFHxA)	1.63	0.91	ng/L	1.82		89.6	62-149			
Perfluoroheptanoic acid (PFHpA)	1.64	0.91	ng/L	1.82		90.2	56-150			
Perfluorooctanoic acid (PFOA)	1.75	0.91	ng/L	1.82		96.3	57-161			
Perfluorononanoic acid (PFNA)	1.54	0.91	ng/L	1.82		84.7	53-157			
Perfluorodecanoic acid (PFDA)	1.55	0.91	ng/L	1.82		85.3	43-158			
Perfluoroundecanoic acid (PFUnA)	1.61	0.91	ng/L	1.82		88.4	50-155			
Perfluorododecanoic acid (PFDoA)	1.57	0.91	ng/L	1.82		86.2	60-141			
Perfluorotridecanoic acid (PFTrDA)	1.53	0.91	ng/L	1.82		84.0	52-140			
Perfluorotetradecanoic acid (PFTeDA)	1.62	0.91	ng/L	1.82		89.4	52-156			
Perfluorobutanesulfonic acid (PFBS)	1.79	0.91	ng/L	1.61		111	63-145			
Perfluoropentanesulfonic acid (PFPeS)	1.52	0.91	ng/L	1.71		89.2	58-144			
Perfluorohexanesulfonic acid (PFHxS)	1.65	0.91	ng/L	1.66		99.1	44-158			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B362328 - Draft Method 1633										
MRL Check (B362328-MRL1)				Prepared & Analyzed: 01/08/24						
Perfluoroheptanesulfonic acid (PFHpS)	1.72	0.91	ng/L	1.73		99.6	51-150			
Perfluorooctanesulfonic acid (PFOS)	1.50	0.91	ng/L	1.68		89.0	43-162			
Perfluorononanesulfonic acid (PFNS)	1.51	0.91	ng/L	1.75		86.1	46-151			
Perfluorodecanesulfonic acid (PFDS)	1.53	0.91	ng/L	1.75		87.4	50-144			
Perfluorododecanesulfonic acid (PFDoS)	1.48	0.91	ng/L	1.76		84.0	30-138			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	6.39	3.6	ng/L	6.81		93.9	52-158			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	6.57	3.6	ng/L	6.90		95.1	48-158			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	6.63	3.6	ng/L	6.99		94.8	46-165			
Perfluorooctanesulfonamide (PFOSA)	1.58	0.91	ng/L	1.82		86.9	47-163			
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	1.51	0.91	ng/L	1.82		83.2	54-155			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	1.52	0.91	ng/L	1.82		83.6	49-156			
N-MeFOSAA (NMeFOSAA)	1.87	0.91	ng/L	1.82		103	32-160			
N-EtFOSAA (NEtFOSAA)	1.68	0.91	ng/L	1.82		92.7	51-154			
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	16.0	9.1	ng/L	18.2		88.0	56-151			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	15.6	9.1	ng/L	18.2		86.2	60-147			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	6.47	3.6	ng/L	7.27		89.1	58-154			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	6.42	3.6	ng/L	6.86		93.6	61-148			
9Cl-PF3ONS (F53B Minor)	6.30	3.6	ng/L	6.81		92.5	44-167			
11Cl-PF3OUdS (F53B Major)	6.18	3.6	ng/L	6.86		90.1	36-158			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	15.9	9.1	ng/L	18.2		87.6	32-161			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	85.0	45	ng/L	90.8		93.5	39-156			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	77.5	45	ng/L	90.8		85.4	36-149			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	3.12	1.8	ng/L	3.23		96.3	56-144			
Perfluoro-3-methoxypropanoic acid (PFMPA)	3.64	1.8	ng/L	3.63		100	48-150			
Perfluoro-4-methoxybutanoic acid (PFMBA)	3.42	1.8	ng/L	3.63		94.2	49-154			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	3.91	1.8	ng/L	3.63		108	47-160			
Surrogate: 13C4-PFBA	*73.9*		ng/L	90.8		81.4	10-130			
Surrogate: 13C5-PFPeA	*36.0*		ng/L	45.4		79.3	35-150			
Surrogate: 13C5-PFHxA	*18.1*		ng/L	22.7		79.7	55-150			
Surrogate: 13C4-PFHpA	*17.9*		ng/L	22.7		79.0	55-150			
Surrogate: 13C8-PFOA	*18.2*		ng/L	22.7		80.0	60-140			
Surrogate: 13C9-PFNA	*9.29*		ng/L	11.4		81.8	55-140			
Surrogate: 13C6-PFDA	*8.97*		ng/L	11.4		79.0	50-140			
Surrogate: 13C7-PFUnA	*8.55*		ng/L	11.4		75.3	30-140			
Surrogate: 13C2-PFDoA	*8.70*		ng/L	11.4		76.6	10-150			
Surrogate: 13C2-PFTeDA	*7.90*		ng/L	11.4		69.6	10-130			
Surrogate: 13C3-PFBS	*18.5*		ng/L	22.7		81.6	55-150			
Surrogate: 13C3-PFHxS	*18.5*		ng/L	22.7		81.4	55-150			
Surrogate: 13C8-PFOS	*17.4*		ng/L	22.7		76.8	45-140			
Surrogate: 13C2-4:2FTS	*37.1*		ng/L	45.4		81.6	60-200			
Surrogate: 13C2-6:2FTS	*33.8*		ng/L	45.4		74.5	60-200			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B362328 - Draft Method 1633										
MRL Check (B362328-MRL1)				Prepared & Analyzed: 01/08/24						
Surrogate: 13C2-8:2FTS	*30.9*		ng/L	45.4		68.0	50-200			
Surrogate: 13C8-PFOSA	*16.7*		ng/L	22.7		73.7	30-130			
Surrogate: D3-NMeFOSA	*11.1*		ng/L	22.7		48.9	15-130			
Surrogate: D5-NEtFOSA	*10.7*		ng/L	22.7		47.3	10-130			
Surrogate: D3-NMeFOSAA	*36.5*		ng/L	45.4		80.5	45-200			
Surrogate: D5-NEtFOSAA	*36.1*		ng/L	45.4		79.6	10-200			
Surrogate: D7-NMeFOSE	*169*		ng/L	227		74.5	10-150			
Surrogate: D9-NEtFOSE	*171*		ng/L	227		75.2	10-150			
Surrogate: 13C3-HFPO-DA	*73.9*		ng/L	90.8		81.3	25-160			
Batch B362575 - Draft Method 1633										
Blank (B362575-BLK1)				Prepared: 01/05/24 Analyzed: 01/09/24						
Perfluorobutanoic acid (PFBA)	ND	0.78	µg/kg wet							
Perfluoropentanoic acid (PFPeA)	ND	0.39	µg/kg wet							
Perfluorohexanoic acid (PFHxA)	ND	0.19	µg/kg wet							
Perfluoroheptanoic acid (PFHpA)	ND	0.19	µg/kg wet							
Perfluorooctanoic acid (PFOA)	ND	0.19	µg/kg wet							
Perfluorononanoic acid (PFNA)	ND	0.19	µg/kg wet							
Perfluorodecanoic acid (PFDA)	ND	0.19	µg/kg wet							
Perfluoroundecanoic acid (PFUnA)	ND	0.19	µg/kg wet							
Perfluorododecanoic acid (PFDoA)	ND	0.19	µg/kg wet							
Perfluorotridecanoic acid (PFTrDA)	ND	0.19	µg/kg wet							
Perfluorotetradecanoic acid (PFTeDA)	ND	0.19	µg/kg wet							
Perfluorobutanesulfonic acid (PFBS)	0.052	0.19	µg/kg wet							J
Perfluoropentanesulfonic acid (PFPeS)	ND	0.19	µg/kg wet							
Perfluorohexanesulfonic acid (PFHxS)	ND	0.19	µg/kg wet							
Perfluoroheptanesulfonic acid (PFHpS)	ND	0.19	µg/kg wet							
Perfluorooctanesulfonic acid (PFOS)	ND	0.19	µg/kg wet							
Perfluorononanesulfonic acid (PFNS)	ND	0.19	µg/kg wet							
Perfluorodecanesulfonic acid (PFDS)	ND	0.19	µg/kg wet							
Perfluorododecanesulfonic acid (PFDoS)	ND	0.19	µg/kg wet							
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	ND	0.78	µg/kg wet							
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	ND	0.78	µg/kg wet							
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	ND	0.78	µg/kg wet							
Perfluorooctanesulfonamide (PFOSA)	ND	0.19	µg/kg wet							
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	ND	0.19	µg/kg wet							
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	ND	0.19	µg/kg wet							
N-MeFOSAA (NMeFOSAA)	ND	0.19	µg/kg wet							
N-EtFOSAA (NEtFOSAA)	ND	0.19	µg/kg wet							
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	ND	1.9	µg/kg wet							
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	ND	1.9	µg/kg wet							
Hexafluoropropylene oxide dimer acid (HFPO-DA)	ND	0.78	µg/kg wet							
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	ND	0.78	µg/kg wet							
9Cl-PF3ONS (F53B Minor)	ND	0.78	µg/kg wet							
11Cl-PF3OUdS (F53B Major)	ND	0.78	µg/kg wet							

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B362575 - Draft Method 1633										
Blank (B362575-BLK1)				Prepared: 01/05/24 Analyzed: 01/09/24						
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	ND	1.9	µg/kg wet							
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	ND	9.7	µg/kg wet							
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	ND	9.7	µg/kg wet							
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	ND	0.39	µg/kg wet							
Perfluoro-3-methoxypropanoic acid (PFMPA)	ND	0.39	µg/kg wet							
Perfluoro-4-methoxybutanoic acid (PFMBA)	ND	0.39	µg/kg wet							
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	ND	0.39	µg/kg wet							
Surrogate: 13C4-PFBA	*9.07*		µg/kg wet	9.71		93.4	10-130			
Surrogate: 13C5-PFPeA	*4.39*		µg/kg wet	4.86		90.4	35-150			
Surrogate: 13C5-PFHxA	*2.28*		µg/kg wet	2.43		93.8	55-150			
Surrogate: 13C4-PFHpA	*2.31*		µg/kg wet	2.43		95.0	55-150			
Surrogate: 13C8-PFOA	*2.27*		µg/kg wet	2.43		93.5	60-140			
Surrogate: 13C9-PFNA	*1.11*		µg/kg wet	1.21		91.5	55-140			
Surrogate: 13C6-PFDA	*1.18*		µg/kg wet	1.21		97.2	50-140			
Surrogate: 13C7-PFUnA	*1.16*		µg/kg wet	1.21		95.2	30-140			
Surrogate: 13C2-PFDoA	*1.23*		µg/kg wet	1.21		101	10-150			
Surrogate: 13C2-PFTeDA	*1.27*		µg/kg wet	1.21		105	10-130			
Surrogate: 13C3-PFBS	*2.28*		µg/kg wet	2.43		93.9	55-150			
Surrogate: 13C3-PFHxS	*2.26*		µg/kg wet	2.43		93.0	55-150			
Surrogate: 13C8-PFOS	*2.21*		µg/kg wet	2.43		90.9	45-140			
Surrogate: 13C2-4:2FTS	*4.57*		µg/kg wet	4.86		94.1	60-200			
Surrogate: 13C2-6:2FTS	*4.38*		µg/kg wet	4.86		90.3	60-200			
Surrogate: 13C2-8:2FTS	*4.40*		µg/kg wet	4.86		90.5	50-200			
Surrogate: 13C8-PFOSA	*2.24*		µg/kg wet	2.43		92.2	30-130			
Surrogate: D3-NMeFOSA	*1.89*		µg/kg wet	2.43		77.9	15-130			
Surrogate: D5-NEtFOSA	*1.86*		µg/kg wet	2.43		76.7	10-130			
Surrogate: D3-NMeFOSAA	*4.93*		µg/kg wet	4.86		102	45-200			
Surrogate: D5-NEtFOSAA	*5.16*		µg/kg wet	4.86		106	10-200			
Surrogate: D7-NMeFOSE	*25.2*		µg/kg wet	24.3		104	10-150			
Surrogate: D9-NEtFOSE	*25.1*		µg/kg wet	24.3		103	10-150			
Surrogate: 13C3-HFPO-DA	*9.03*		µg/kg wet	9.71		93.0	25-160			
LCS (B362575-BS1)				Prepared: 01/05/24 Analyzed: 01/09/24						
Perfluorobutanoic acid (PFBA)	9.49	0.79	µg/kg wet	9.43		101	58-148			
Perfluoropentanoic acid (PFPeA)	4.88	0.39	µg/kg wet	4.71		103	54-152			
Perfluorohexanoic acid (PFHxA)	2.41	0.20	µg/kg wet	2.36		102	55-152			
Perfluoroheptanoic acid (PFHpA)	2.39	0.20	µg/kg wet	2.36		101	54-154			
Perfluorooctanoic acid (PFOA)	2.29	0.20	µg/kg wet	2.36		97.1	52-161			
Perfluorononanoic acid (PFNA)	2.40	0.20	µg/kg wet	2.36		102	59-149			
Perfluorodecanoic acid (PFDA)	2.48	0.20	µg/kg wet	2.36		105	52-147			
Perfluoroundecanoic acid (PFUnA)	2.42	0.20	µg/kg wet	2.36		103	48-159			
Perfluorododecanoic acid (PFDoA)	2.48	0.20	µg/kg wet	2.36		105	64-142			
Perfluorotridecanoic acid (PFTrDA)	2.67	0.20	µg/kg wet	2.36		113	49-148			
Perfluorotetradecanoic acid (PFTeDA)	2.50	0.20	µg/kg wet	2.36		106	47-161			
Perfluorobutanesulfonic acid (PFBS)	2.16	0.20	µg/kg wet	2.09		103	62-144			
Perfluoropentanesulfonic acid (PFPeS)	2.27	0.20	µg/kg wet	2.22		102	59-151			
Perfluorohexanesulfonic acid (PFHxS)	2.15	0.20	µg/kg wet	2.16		99.6	57-146			
Perfluoroheptanesulfonic acid (PFHpS)	2.29	0.20	µg/kg wet	2.24		102	55-152			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B362575 - Draft Method 1633										
LCS (B362575-BS1)				Prepared: 01/05/24 Analyzed: 01/09/24						
Perfluorooctanesulfonic acid (PFOS)	2.17	0.20	µg/kg wet	2.19		99.1	58-149			
Perfluorononanesulfonic acid (PFNS)	2.24	0.20	µg/kg wet	2.27		98.7	52-148			
Perfluorodecanesulfonic acid (PFDS)	2.29	0.20	µg/kg wet	2.27		101	51-147			
Perfluorododecanesulfonic acid (PFDoS)	2.25	0.20	µg/kg wet	2.29		98.3	36-145			
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	9.99	0.79	µg/kg wet	8.84		113	67-146			
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	9.34	0.79	µg/kg wet	8.96		104	61-151			
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	9.80	0.79	µg/kg wet	9.07		108	63-152			
Perfluorooctanesulfonamide (PFOSA)	2.39	0.20	µg/kg wet	2.36		102	61-148			
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	2.20	0.20	µg/kg wet	2.36		93.4	63-145			
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	2.30	0.20	µg/kg wet	2.36		97.6	65-139			
N-MeFOSAA (NMeFOSAA)	2.43	0.20	µg/kg wet	2.36		103	58-144			
N-EtFOSAA (NEtFOSAA)	2.36	0.20	µg/kg wet	2.36		100	59-146			
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	24.3	2.0	µg/kg wet	23.6		103	71-136			
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	24.2	2.0	µg/kg wet	23.6		103	69-137			
Hexafluoropropylene oxide dimer acid (HFPO-DA)	8.67	0.79	µg/kg wet	9.43		92.0	63-144			
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	8.10	0.79	µg/kg wet	8.90		91.1	68-146			
9Cl-PF3ONS (F53B Minor)	8.18	0.79	µg/kg wet	8.84		92.5	56-156			
11Cl-PF3OUdS (F53B Major)	8.63	0.79	µg/kg wet	8.90		97.0	46-156			
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	20.7	2.0	µg/kg wet	23.6		87.9	62-129			
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	107	9.8	µg/kg wet	118		91.0	63-134			
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	107	9.8	µg/kg wet	118		91.2	50-138			
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	4.09	0.39	µg/kg wet	4.19		97.5	56-151			
Perfluoro-3-methoxypropanoic acid (PFMPA)	4.57	0.39	µg/kg wet	4.71		96.9	51-145			
Perfluoro-4-methoxybutanoic acid (PFMBA)	4.75	0.39	µg/kg wet	4.71		101	55-148			
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	4.73	0.39	µg/kg wet	4.71		100	48-161			
Surrogate: 13C4-PFBA	*8.10*		µg/kg wet	9.82		82.5	10-130			
Surrogate: 13C5-PFPeA	*3.87*		µg/kg wet	4.91		78.9	35-150			
Surrogate: 13C5-PFHxA	*1.99*		µg/kg wet	2.45		81.1	55-150			
Surrogate: 13C4-PFHpA	*2.00*		µg/kg wet	2.45		81.4	55-150			
Surrogate: 13C8-PFOA	*2.08*		µg/kg wet	2.45		84.7	60-140			
Surrogate: 13C9-PFNA	*1.01*		µg/kg wet	1.23		82.5	55-140			
Surrogate: 13C6-PFDA	*1.03*		µg/kg wet	1.23		83.6	50-140			
Surrogate: 13C7-PFUnA	*1.07*		µg/kg wet	1.23		87.6	30-140			
Surrogate: 13C2-PFDoA	*1.06*		µg/kg wet	1.23		86.2	10-150			
Surrogate: 13C2-PFTeDA	*1.26*		µg/kg wet	1.23		103	10-130			
Surrogate: 13C3-PFBS	*2.07*		µg/kg wet	2.45		84.2	55-150			
Surrogate: 13C3-PFHxS	*2.01*		µg/kg wet	2.45		82.1	55-150			
Surrogate: 13C8-PFOS	*1.99*		µg/kg wet	2.45		80.9	45-140			
Surrogate: 13C2-4:2FTS	*4.39*		µg/kg wet	4.91		89.5	60-200			
Surrogate: 13C2-6:2FTS	*4.15*		µg/kg wet	4.91		84.4	60-200			
Surrogate: 13C2-8:2FTS	*4.42*		µg/kg wet	4.91		90.0	50-200			

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B362575 - Draft Method 1633										
LCS (B362575-BS1)				Prepared: 01/05/24 Analyzed: 01/09/24						
Surrogate: 13C8-PFOSA	*2.06*		µg/kg wet	2.45		83.7	30-130			
Surrogate: D3-NMeFOSA	*1.76*		µg/kg wet	2.45		71.9	15-130			
Surrogate: D5-NEtFOSA	*1.74*		µg/kg wet	2.45		71.0	10-130			
Surrogate: D3-NMeFOSAA	*4.37*		µg/kg wet	4.91		89.0	45-200			
Surrogate: D5-NEtFOSAA	*4.36*		µg/kg wet	4.91		88.8	10-200			
Surrogate: D7-NMeFOSE	*20.5*		µg/kg wet	24.5		83.5	10-150			
Surrogate: D9-NEtFOSE	*20.7*		µg/kg wet	24.5		84.3	10-150			
Surrogate: 13C3-HFPO-DA	*8.13*		µg/kg wet	9.82		82.8	25-160			
MRL Check (B362575-MRL1)				Prepared: 01/05/24 Analyzed: 01/09/24						
Perfluorobutanoic acid (PFBA)	0.766	0.78	µg/kg wet	0.778		98.5	44-157			J
Perfluoropentanoic acid (PFPeA)	0.368	0.39	µg/kg wet	0.389		94.6	57-148			J
Perfluorohexanoic acid (PFHxA)	0.173	0.19	µg/kg wet	0.195		88.8	62-149			J
Perfluoroheptanoic acid (PFHpA)	0.186	0.19	µg/kg wet	0.195		95.5	56-150			J
Perfluorooctanoic acid (PFOA)	0.173	0.19	µg/kg wet	0.195		88.7	57-161			J
Perfluorononanoic acid (PFNA)	0.172	0.19	µg/kg wet	0.195		88.6	53-157			J
Perfluorodecanoic acid (PFDA)	0.171	0.19	µg/kg wet	0.195		87.9	43-158			J
Perfluoroundecanoic acid (PFUnA)	0.169	0.19	µg/kg wet	0.195		86.9	50-155			J
Perfluorododecanoic acid (PFDoA)	0.178	0.19	µg/kg wet	0.195		91.7	60-141			J
Perfluorotridecanoic acid (PFTrDA)	0.174	0.19	µg/kg wet	0.195		89.2	52-140			J
Perfluorotetradecanoic acid (PFTeDA)	0.185	0.19	µg/kg wet	0.195		95.1	52-156			J
Perfluorobutanesulfonic acid (PFBS)	0.240	0.19	µg/kg wet	0.173		139	63-145			
Perfluoropentanesulfonic acid (PFPeS)	0.175	0.19	µg/kg wet	0.183		95.7	58-144			J
Perfluorohexanesulfonic acid (PFHxS)	0.173	0.19	µg/kg wet	0.178		97.4	44-158			J
Perfluoroheptanesulfonic acid (PFHpS)	0.176	0.19	µg/kg wet	0.185		95.1	51-150			J
Perfluorooctanesulfonic acid (PFOS)	0.158	0.19	µg/kg wet	0.180		87.7	43-162			J
Perfluorononanesulfonic acid (PFNS)	0.171	0.19	µg/kg wet	0.187		91.2	46-151			J
Perfluorodecanesulfonic acid (PFDS)	0.163	0.19	µg/kg wet	0.188		86.8	50-144			J
Perfluorododecanesulfonic acid (PFDoS)	0.175	0.19	µg/kg wet	0.189		92.5	30-138			J
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	0.705	0.78	µg/kg wet	0.729		96.6	52-158			J
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	0.715	0.78	µg/kg wet	0.739		96.7	48-158			J
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	0.620	0.78	µg/kg wet	0.749		82.9	46-165			J
Perfluorooctanesulfonamide (PFOSA)	0.185	0.19	µg/kg wet	0.195		95.2	47-163			J
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	0.156	0.19	µg/kg wet	0.195		80.4	54-155			J
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	0.175	0.19	µg/kg wet	0.195		90.2	49-156			J
N-MeFOSAA (NMeFOSAA)	0.178	0.19	µg/kg wet	0.195		91.6	32-160			J
N-EtFOSAA (NEtFOSAA)	0.194	0.19	µg/kg wet	0.195		99.8	51-154			J
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	1.83	1.9	µg/kg wet	1.95		94.2	56-151			J
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	1.82	1.9	µg/kg wet	1.95		93.5	60-147			J
Hexafluoropropylene oxide dimer acid (HFPO-DA)	0.698	0.78	µg/kg wet	0.778		89.7	58-154			J
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	0.683	0.78	µg/kg wet	0.734		93.1	61-148			J
9Cl-PF3ONS (F53B Minor)	0.672	0.78	µg/kg wet	0.729		92.2	44-167			J
11Cl-PF3OUdS (F53B Major)	0.681	0.78	µg/kg wet	0.734		92.7	36-158			J
3-Perfluoropropyl propanoic acid (FPrPA) (3:3FTCA)	1.71	1.9	µg/kg wet	1.95		87.8	32-161			J
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	8.57	9.7	µg/kg wet	9.73		88.1	39-156			J

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QUALITY CONTROL

Semivolatile Organic Compounds by - LC/MS-MS - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B362575 - Draft Method 1633										
MRL Check (B362575-MRL1)				Prepared: 01/05/24 Analyzed: 01/09/24						
3-Perfluoroheptyl propanoic acid (FHpPA) (7:3FTCA)	8.25	9.7	µg/kg wet	9.73		84.8	36-149			J
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	0.330	0.39	µg/kg wet	0.346		95.3	56-144			J
Perfluoro-3-methoxypropanoic acid (PFMPA)	0.373	0.39	µg/kg wet	0.389		95.9	48-150			J
Perfluoro-4-methoxybutanoic acid (PFMBA)	0.375	0.39	µg/kg wet	0.389		96.5	49-154			J
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	0.393	0.39	µg/kg wet	0.389		101	47-160			
Surrogate: 13C4-PFBA	*7.94*		µg/kg wet	9.73		81.7	10-130			
Surrogate: 13C5-PFPeA	*3.79*		µg/kg wet	4.86		77.9	35-150			
Surrogate: 13C5-PFHxA	*1.98*		µg/kg wet	2.43		81.4	55-150			
Surrogate: 13C4-PFHpA	*1.97*		µg/kg wet	2.43		80.9	55-150			
Surrogate: 13C8-PFOA	*2.07*		µg/kg wet	2.43		85.0	60-140			
Surrogate: 13C9-PFNA	*0.978*		µg/kg wet	1.22		80.4	55-140			
Surrogate: 13C6-PFDA	*1.02*		µg/kg wet	1.22		83.5	50-140			
Surrogate: 13C7-PFUnA	*0.983*		µg/kg wet	1.22		80.8	30-140			
Surrogate: 13C2-PFDoA	*1.03*		µg/kg wet	1.22		84.8	10-150			
Surrogate: 13C2-PFTeDA	*1.00*		µg/kg wet	1.22		82.7	10-130			
Surrogate: 13C3-PFBS	*1.92*		µg/kg wet	2.43		78.9	55-150			
Surrogate: 13C3-PFHxS	*1.94*		µg/kg wet	2.43		79.8	55-150			
Surrogate: 13C8-PFOS	*1.91*		µg/kg wet	2.43		78.7	45-140			
Surrogate: 13C2-4:2FTS	*3.95*		µg/kg wet	4.86		81.2	60-200			
Surrogate: 13C2-6:2FTS	*3.76*		µg/kg wet	4.86		77.3	60-200			
Surrogate: 13C2-8:2FTS	*3.64*		µg/kg wet	4.86		74.9	50-200			
Surrogate: 13C8-PFOSA	*1.90*		µg/kg wet	2.43		78.2	30-130			
Surrogate: D3-NMeFOSA	*1.69*		µg/kg wet	2.43		69.7	15-130			
Surrogate: D5-NEtFOSA	*1.70*		µg/kg wet	2.43		69.8	10-130			
Surrogate: D3-NMeFOSAA	*4.14*		µg/kg wet	4.86		85.1	45-200			
Surrogate: D5-NEtFOSAA	*4.08*		µg/kg wet	4.86		83.8	10-200			
Surrogate: D7-NMeFOSE	*20.0*		µg/kg wet	24.3		82.2	10-150			
Surrogate: D9-NEtFOSE	*20.4*		µg/kg wet	24.3		83.7	10-150			
Surrogate: 13C3-HFPO-DA	*7.85*		µg/kg wet	9.73		80.7	25-160			

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

QUALITY CONTROL

Conventional Chemistry Parameters by EPA/APHA/SW-846 Methods (Total) - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B361242 - Draft Method 1633										
Blank (B361242-BLK1)				Prepared & Analyzed: 12/20/23						
Total Suspended Solids	ND	5.0	mg/L							
LCS (B361242-BS1)				Prepared & Analyzed: 12/20/23						
Total Suspended Solids	179	5.0	mg/L	200		89.5	64.1-125			
Batch B361285 - % Solids										
Duplicate (B361285-DUP2)	**Source: 23L2655-04**			Prepared & Analyzed: 12/20/23						
% Solids	69.8		% Wt		68.0			2.61	10	

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FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
ND	Not Detected
RL	Reporting Limit is at the level of quantitation (LOQ)
DL	Detection Limit is the lower limit of detection determined by the MDL study
MCL	Maximum Contaminant Level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
	No results have been blank subtracted unless specified in the case narrative section.
D-01	Sample extracted/prepared at a dilution due to sample matrix.
J	Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
MS-22	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is within method specified criteria.
MS-23	Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD between the two MS/MSD results is outside of the method specified criteria. Reduced precision anticipated for any reported result for this compound.
PF-06	Opening calibration verification was within control criteria. Closing calibration verification was outside of criteria and biased on the high side. Re-analysis yielded similar non-conformance.
PF-17	Extracted Internal Standard recovery is outside of control limits. Data is not significantly affected since associated analyte is not detected and bias is on the high side.
PF-17C	Extracted internal standard is outside of control limits. Analyte is a known difficult compound.
PF-18	Re-analysis confirmed Extracted Internal Standard failure due to matrix effects.
PF-22	Qualifier ion ratio >150% of associated calibration. Detection is suspect.
PF-23	Qualifier ion ratio <50% of associated calibration. Detection is suspect.
R-06	Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.
S-29	Extracted Internal Standard is outside of control limits.
Z-01	Analyte detected in method blank >1/3 MRL

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
Draft Method 1633 in Soil	
Perfluorobutanoic acid (PFBA)	NH-P,NY,PA,WV
Perfluoropentanoic acid (PFPeA)	NH-P,NY,PA,WV
Perfluorohexanoic acid (PFHxA)	NH-P,NY,PA,WV
Perfluoroheptanoic acid (PFHpA)	NH-P,NY,PA,WV
Perfluorooctanoic acid (PFOA)	NH-P,NY,PA,WV
Perfluorononanoic acid (PFNA)	NH-P,NY,PA,WV
Perfluorodecanoic acid (PFDA)	NH-P,NY,PA,WV
Perfluoroundecanoic acid (PFUnA)	NH-P,NY,PA,WV
Perfluorododecanoic acid (PFDoA)	NH-P,NY,PA,WV
Perfluorotridecanoic acid (PFTrDA)	NH-P,NY,PA,WV
Perfluorotetradecanoic acid (PFTeDA)	NH-P,PA,WV
Perfluorobutanesulfonic acid (PFBS)	NH-P,PA,WV
Perfluoropentanesulfonic acid (PFPeS)	NH-P,PA,WV
Perfluorohexanesulfonic acid (PFHxS)	NH-P,PA,WV
Perfluoroheptanesulfonic acid (PFHpS)	NH-P,PA,WV
Perfluorooctanesulfonic acid (PFOS)	NH-P,NY,PA,WV
Perfluorononanesulfonic acid (PFNS)	NH-P,PA,WV
Perfluorodecanesulfonic acid (PFDS)	NH-P,PA,WV
Perfluorododecanesulfonic acid (PFDoS)	NH-P,PA,WV
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	NH-P,PA,WV
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	NH-P,PA,WV
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	NH-P,NY,PA,WV
Perfluorooctanesulfonamide (PFOSA)	NH-P,PA,WV
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	NH-P,PA,WV
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	NH-P,PA,WV
N-MeFOSAA (NMeFOSAA)	NH-P,NY,PA,WV
N-EtFOSAA (NEtFOSAA)	NH-P,PA,WV
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	NH-P,PA,WV
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	NH-P,PA,WV
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P,PA,WV
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,PA,WV
9Cl-PF3ONS (F53B Minor)	NH-P,PA,WV
11Cl-PF3OUdS (F53B Major)	NH-P,PA,WV
3-Perfluoropropyl propanoic acid (FPrPA)(3:3FTCA)	NH-P,PA,WV
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	NH-P,PA,WV
3-Perfluoroheptyl propanoic acid (FHpPA)(7:3FTCA)	NH-P,PA,WV
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NH-P,PA,WV
Perfluoro-3-methoxypropanoic acid (PFMPA)	NH-P,PA,WV
Perfluoro-4-methoxybutanoic acid (PFMBA)	NH-P,PA,WV
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH-P,PA,WV
Draft Method 1633 in Water	
Total Suspended Solids	CT,MA,NH,NY,RI,NC,ME,VA
Perfluorobutanoic acid (PFBA)	NH-P,NY,PA,WV,CT
Perfluoropentanoic acid (PFPeA)	NH-P,NY,PA,WV,CT
Perfluorohexanoic acid (PFHxA)	NH-P,NY,PA,WV,CT
Perfluoroheptanoic acid (PFHpA)	NH-P,NY,PA,WV,CT

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CERTIFICATIONS

Certified Analyses included in this Report

Analyte	Certifications
Draft Method 1633 in Water	
Perfluorooctanoic acid (PFOA)	NH-P,NY,PA,WV,CT
Perfluorononanoic acid (PFNA)	NH-P,NY,PA,WV,CT
Perfluorodecanoic acid (PFDA)	NH-P,NY,PA,WV,CT
Perfluoroundecanoic acid (PFUnA)	NH-P,NY,PA,WV,CT
Perfluorododecanoic acid (PFDoA)	NH-P,NY,PA,WV,CT
Perfluorotridecanoic acid (PFTrDA)	NH-P,NY,PA,WV,CT
Perfluorotetradecanoic acid (PFTeDA)	NH-P,NY,PA,WV,CT
Perfluorobutanesulfonic acid (PFBS)	NH-P,NY,PA,WV,CT
Perfluoropentanesulfonic acid (PFPeS)	NH-P,NY,PA,WV,CT
Perfluorohexanesulfonic acid (PFHxS)	NH-P,NY,PA,WV,CT
Perfluoroheptanesulfonic acid (PFHpS)	NH-P,NY,PA,WV,CT
Perfluorooctanesulfonic acid (PFOS)	NH-P,NY,PA,WV,CT
Perfluorononanesulfonic acid (PFNS)	NH-P,PA,WV,CT
Perfluorodecanesulfonic acid (PFDS)	NH-P,PA,WV,CT
Perfluorododecanesulfonic acid (PFDoS)	NH-P,PA,WV,CT
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	NH-P,PA,WV,CT
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	NH-P,NY,PA,WV,CT
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	NH-P,NY,PA,WV,CT
Perfluorooctanesulfonamide (PFOSA)	NH-P,PA,WV,CT
N-methyl perfluoroocatnesulfonamide (NMeFOSA)	NH-P,PA,WV,CT
N-ethyl perfluorooctanesulfonamide (NEtFOSA)	NH-P,PA,WV,CT
N-MeFOSAA (NMeFOSAA)	NH-P,NY,PA,WV,CT
N-EtFOSAA (NEtFOSAA)	NH-P,NY,PA,WV,CT
N-methylperfluorooctanesulfonamidoethanol(NMeFOSE)	NH-P,PA,WV,CT
N-ethylperfluorooctanesulfonamidoethanol (NEtFOSE)	NH-P,PA,WV,CT
Hexafluoropropylene oxide dimer acid (HFPO-DA)	NH-P,NY,PA,WV,CT
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	NH-P,NY,PA,WV,CT
9Cl-PF3ONS (F53B Minor)	NH-P,NY,PA,WV,CT
11Cl-PF3OUdS (F53B Major)	NH-P,NY,PA,WV,CT
3-Perfluoropropyl propanoic acid (FPrPA)(3:3FTCA)	NH-P,PA,WV,CT
2H,2H,3H,3H-Perfluorooctanoic acid(FPePA)(5:3FTCA)	NH-P,PA,WV,CT
3-Perfluoroheptyl propanoic acid (FHpPA)(7:3FTCA)	NH-P,PA,WV,CT
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	NH-P,NY,PA,WV,CT
Perfluoro-3-methoxypropanoic acid (PFMPA)	NH-P,NY,PA,WV,CT
Perfluoro-4-methoxybutanoic acid (PFMBA)	NH-P,PA,WV,CT
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	NH-P,PA,WV,CT

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Con-Test, a Pace Environmental Laboratory, operates under the following certifications and accreditations:

Code	Description	Number	Expires
MA	Massachusetts DEP	M-MA100	06/30/2024
CT	Connecticut Department of Public Health	PH-0821	12/31/2024
NY	New York State Department of Health	10899 NELAP	04/1/2024
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2024
RI	Rhode Island Department of Health	LAO00373	12/30/2024
NC	North Carolina Div. of Water Quality	652	12/31/2024
ME	State of Maine	MA00100	06/9/2025
VA	Commonwealth of Virginia	460217	12/14/2024
NH-P	New Hampshire Environmental Lab	2557 NELAP	09/6/2024
PA	Commonwealth of Pennsylvania DEP	68-05812	06/30/2024
WV	West Virginia DEP Division of Water and Waste Management	419	08/31/2024

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Minneapolis, MN 55414

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

Page 1 of 11

CLIENT: SYRACUSE SAND AND GRAVEL

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: (ALPHA-OMEGA)
Address: P.O. Box 6418, Syracuse, NY 13217
Phone:
Project Name:
Project Location: ALPHA PORTLAND SITE: DEC # 734006
Project Number: TDK PROJECT NO. 2021063
Project Manager: JOHN HERRMANN, TDK ENGINEERING
Pace Analytical Quote Name/Number TDK ALPHA PORTLAND
Invoice Recipient: 00143967
Sampled By: JCH, TDK ENGINEERING

Report Turnaround Required:
7-Day ☐ 10-Day ☑
Due Date:

RUSH Approval Required:
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery:
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #:

ANALYSIS REQUESTED

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	~~Conc~~ Code	VOCs-TCL+TICs	SVOCs-TCL+TICs	METALS-TAL	PFAS	1,4-Dioxane	PCBs	VOCs-%Solids	TSS for PFAS	# of Containers	[2] Preservation Code	[3] Container Code
	SS-1	12.15.23 9:05 AM			✓	S*	A		✓	✓		✓	✓					
	"	"			✓	"	A							✓				
1	"	"			✓	"	P				✓							
	"	"					V											
	SS-2	12.15.23 10:15 AM			✓	S*	A		✓	✓		✓	✓					
	"	"			✓	"	A							✓				
2	"	"			✓	"	P				✓							
	"	"			✓	"	V	✓										
	SS-3	12.15.23 11:00 AM			✓	"	A		✓	✓		✓	✓					
	"	"			✓	"	A							✓				

Dissolved Metals Samples: ☐ Field Filtered ☐ Lab to Filter
Orthophosphate Samples: ☐ Field Filtered ☐ Lab to Filter

Comments: PLEASE FORWARD RESULTS TO: JHERRMANN@TDKENGINEERING.COM
CAT B DELIVERABLES
*SEDIMENT

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

[1] Matrix Codes:
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] Preservation Codes:
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] Container Codes:
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Relinquished by: (signature)	Date/Time: 12/18/23; 1815	
Received by: (signature)	Date/Time: 12/18/23 1215	
Relinquished by: (signature)	Date/Time: 12/18 1700	
Received by: (signature) 40, 3.8, 2.9, 3.1	Date/Time: 12/19/23 1005	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Program & Regulatory Information:
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375

Deliverables:
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Other:
NELAC and AIHA-LAP, LLC Accredited

Project Entity:
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other:
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY:
☐ Soxhlet
☐ Non Soxhlet

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Fax: 612-607-6344
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Minneapolis, MN 55414

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

CLIENT: SYRACUSE SAND AND GRAVEL
ntact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/
Company Name: (ALPHA-OMEGA)
ess: P.O. BOX 6418, SYRACUSE, NY 13217
e:
ect Name:
ect Location: ALPHA PORTLAND SITE: DEC # 734006
ect Number: TDK PROJECT NO. 2021063
ect Manager: JOHN HERRMANN, TDK ENGINEERING
Analytical Quote Name/Number TDK ALPHA PORTLAND
ice Recipient: 00143967
pled By: JCH, TDK ENGINEERING

Requested Turnaround Time:
7-Day ☐ 10-Day ☑
Due Date:

Rush: (Approval Required)
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery:
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #: CONT

ANALYSIS REQUESTED

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1] Matrix Code	~~Conc~~ Code	VOCs-TCL+TICs	SVOCs-TCL+TICs	METALS-TAL's	PFAS	1,4-Dioxane	PCBs	VOCs-% Solids	TSS for PFAS
3	SS-3	12.15.23 11:00 AM			✓	S*	P				✓				
	"	"			✓	"	V	✓							
	SS-4	12.15.23 1:39 PM			✓	"	A		✓	✓		✓	✓		
	"	"			✓	"	A							✓	
4	"	"			✓	"	P				✓				
	"	"			✓	"	V	✓							
	SS-5	12.15.23 3:25 PM			✓	"	A		✓	✓		✓	✓		
	"	"			✓	"	A							✓	
5	"	"			✓	"	P				✓				
	"	"			✓	"	V	✓							

Comments: PLEASE FORWARD RESULTS TO: JHERRMANN@TDKENGINEERING.COM
CAT B DELIVERABLES
*SEDIMENT

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature) Date/Time: 12/18/23; 12:50
Received by: (signature) Date/Time: 12/18/23 12:5
Relinquished by: (signature) Date/Time: 12/18 1700
Received by: (signature) 4.0, 3.8, 2.9, 3.1 Date/Time: 12/19/23 1005
Relinquished by: (signature) Date/Time:
Received by: (signature) Date/Time:

Program & Regulatory Information
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375

Deliverables
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Shipping
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP, LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

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Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

CLIENT: SYRACUSE SAND AND GRAVEL (ALPHA - OMEGA)

ontact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

pany Name:

ess: P.O. Box 6418, Syracuse, NY 13217

ne:

ect Name:

ect Location: ALPHA PORTLAND SITE: DEC # 734006

ect Number: TDK PROJECT NO. 2021063

ect Manager: JOHN HERRMANN, TDK ENGINEERING

e Analytical Quote Name/Number TDK ALPHA PORTLAND 00143967

ice Recipient:

pled By: JCH, TDK ENGINEERING

Turn Around Time (TAT) Requested (Pre-Approval Required)
7-Day ☐ 10-Day ☑
Due Date:

Turn Around Time (TAT) Approval Required
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

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ANALYSIS REQUESTED

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1] Matrix Code	~~Conc~~ Code	VOCs-TCL+TICs	SVOCs-TCL+TICs	METALS-TAL	PFAS	1,4-Dioxane	PCBs	VOCs-% Solids	TSS for PFAS	[2] # of Containers	[2] Preservation Code	[3] Container Code
	SS-6	12-15-23 2:45PM				S*	A		✓	✓		✓	✓					
	"	"				"	A							✓				
6	"	"				"	P				✓							
	"	"				"	V	✓										
	DUPLICATE	12-15-23				"	A		✓	✓		✓	✓					
	"	"				"	A							✓				
7	"	"				"	P				✓							
	"	"				"	V	✓										
	SS-4 MS	12-15-23 1:35PM				"	A		✓	✓		✓	✓					
	" "	"				"	A							✓				

Comments: PLEASE FORWARD RESULTS TO: JHERRMANN@TDKENGINEERING.COM

CAT B DELIVERABLES

*SEDIMENT

Dissolved Metals Samples
Field Filtered ☐
Lab to Filter ☐

Orthophosphate Samples
Field Filtered ☐
Lab to Filter ☐

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] **Container Codes:**
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time: 12/18/23 1150	
Received by: (signature) Ryan Murphy	Date/Time: 12/18/23 12:5	
Relinquished by: (signature) Ryan Murphy	Date/Time: 12/18 1700	
Received by: (signature) 4.0, 3.8, 2.9, 3.1	Date/Time: 12/19/23 1005	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Program / Regulatory Information
AWQ STDS ☐ NY TOGS ☐
NYC Sewer Discharge ☐ NY CP-51 ☐
Part 360 GW (Landfill) ☐
NY Restricted Use ☐
NY Unrestricted Use ☐
NY Part 375 ☐

Deliverables
Enhanced Data Package ☐
NYSDEC EQuIS EDD ☐
EQuIS (Standard) EDD ☐
NY Regulatory EDD ☐
NY Regs Hits-Only EDD ☐

Other
NELAC and AIHA-LAP, LLC Accredited

Project Entity
Government ☐ Municipality ☐ MWRA ☐ WRTA ☐
Federal ☐ 21 J ☐ School ☐
City ☐ Brownfield ☐ MBTA ☐

Other
Chromatogram ☐
AIHA-LAP,LLC ☐

PCB ONLY
Soxhlet ☐
Non Soxhlet ☐

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Fax: 612-607-6344
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Minneapolis, MN 55414

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

CLIENT: SYRACUSE SAND AND GRAVEL
ntact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

any Name: (ALPHA-OMEGA)
ess: P.O. Box 6418, SYRACUSE, NY 13217
e:
ect Name:
ect Location: ALPHA PORTLAND SITE: DEC # 734006
ect Number: TDK PROJECT NO. 2021063
ect Manager: JOHN HERRMANN, TDK ENGINEERING
Analytical Quote Name/Number TDK ALPHA PORTLAND
ice Recipient: 00143967
pled By: JCH, TDK ENGINEERING

Regulatory Turnaround Requirements
7-Day ☐ 10-Day ☑
Due Date:

Rush Approval Required
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #: COURT

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	Matrix Code	~~Conc~~ Code	VOCs-TCL+TICs	SVOCs-TCL+TICs	METALS-TAL	PFAS	1,4-Dioxane	PCBs	VOCs-% Solids	TSS for PFAS	# of Containers	Preservation Code	Container Code
4	SS-4	12.15.23 1:35 pm			✓	S*	P				✓							
	" "	"			✓	"	V	✓										
	SS-4 MSD	12.15.23 1:35 PM			✓	"	A		✓	✓		✓	✓					
	" "	"			✓	"	A							✓				
4	" "	"			✓	"	P				✓							
	" "	"			✓	"	V	✓										

ANALYSIS REQUESTED

Dissolved Metals Samples
☐ Field Filtered
☐ Lab to Filter

Orthophosphate Samples
☐ Field Filtered
☐ Lab to Filter

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
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A = Air
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SOL = Solid
O = Other (please define)

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H = HCL
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S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

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V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

nments: PLEASE FORWARD RESULTS TO: JHERRMANN@TDKENGINEERING.COM
CAT B DELIVERABLES
*SEDIMENT

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

inquished by: (signature)	Date/Time: 12/18/23, 12:50 pm	
eived by: (signature)	Date/Time: 12/18/23 1250	
inquished by: (signature)	Date/Time: 12/18 1700	
eived by: (signature) 4.0, 3.8, 2.9, 3.1	Date/Time: 12/19/23 1005	
inquished by: (signature)	Date/Time:	
eived by: (signature)	Date/Time:	

Program/Regulatory Information
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375

Deliverables
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Other
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP, LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

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Fax: 612-607-6344
https://www.pacelabs.com/
1800 Elm Street SE
Minneapolis, MN 55414

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

CLIENT: SYRACUSE SAND AND GRAVEL (ALPHA-OMEGA)
ntact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/
Company Name:
ess: P.O. Box 6418, Syracuse, NY 13217
e:
ect Name:
ect Location: ALPHA PORTLAND SITE: DEC # 734006
ect Number: TDK PROJECT NO. 2021063
ect Manager: JOHN HERRMANN, TDK ENGINEERING
Analytical Quote Name/Number TDK ALPHA PORTLAND
ice Recipient: 00143967
pled By: JCH, TDK ENGINEERING

Requested Turnaround Time:
7-Day ☐ 10-Day ☑
Due Date:

Rush Approval Required:
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery:
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #: Court

ANALYSIS REQUESTED

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1] Matrix Code	~~Conc~~ Code	VOCs-TCL+TICs	SVOCs-TCL+TICs	METALS-TAL	PFAS	1,4-Dioxane	PCBs	VOCs-%Solids	TSS for PFAS	# of Containers	[2] Preservation Code	[3] Container Code
	SW-1	12.15.23 9:05 AM			✓	O**	A		✓									
	"	"			✓	"	P			✓								
8	"	"			✓	"	P				✓							
	"	"			✓	"	A					✓						
	"	"			✓	"	P								✓			
	"	"			✓	"	A						✓					
	"	"			✓	"	V	✓										
	SW-2	12.15.23 10:15 AM			✓	"	A		✓									
8A	"	"			✓	"	P			✓								
9	"	"			✓	"	P				✓							

Comments: PLEASE FORWARD RESULTS TO: JHERRMANN@TDKENGINEERING.COM
CAT B DELIVERABLES
** SURFACE WATER

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Dissolved Metal Samples:
☐ Field Filtered
☐ Lab to Filter

Orthophosphate Samples:
☐ Field Filtered
☐ Lab to Filter

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] **Container Codes:**
A = Amber Glass
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P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Relinquished by: (signature)	Date/Time: 12:50 12/18/23; PM	
Received by: (signature) Ryan Murphy	Date/Time: 12/18/23 12:50	
Relinquished by: (signature) Ryan Murphy	Date/Time: 12/18 1700	
Received by: (signature) 9.0, 3.8, 2.9, 3.1	Date/Time: 12/19/23 1005	
Relinquished by: (signature)	Date/Time:	
Received by: (signature)	Date/Time:	

Program/Regulatory Information:
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375

Deliverables:
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Other:

NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP, LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

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Minneapolis, MN 55414

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

CLIENT: SYRACUSE SAND AND GRAVEL

ontact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: (ALPHA-OMEGA)
ess: P.O. Box 6418, Syracuse, NY 13217
ıe:
ect Name:
ect Location: ALPHA PORTLAND SITE: DEC # 734006
ect Number: TDK PROJECT NO. 2021063
ect Manager: JOHN HERRMANN, TDK ENGINEERING
Analytical Quote Name/Number TDK ALPHA PORTLAND
ice Recipient: 00143967
pled By: JCH, TDK ENGINEERING

Turn Around Time (TAT) Requested (in working days)
7-Day ☐ 10-Day ☑
Due Date:

TAT - Approval Required
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #: CONT

ANALYSIS REQUESTED

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1] Matrix Code	~~Conc~~ Code	VOCs-TCL+TICs	SVOCs-TCL+TICs	METALS-TAL	PFAS	1,4-Dioxane	PCBs	VOCs-% Solids	TSS for PFAS
	SW-2	12.15.23 10:15 AM			✓	D**	A					✓			
	"	"			✓	"	P								✓
	"	"			✓	"	A						✓		
	"	"			✓	"	V	✓							
	SW-3	12.15.23 11:00 AM			✓	"	A		✓						
	"	"			✓	"	P			✓					
10	"	"			✓	"	P				✓				
	"	"			✓	"	A					✓			
	"	"			✓	"	P								✓
	"	"			✓	"	A						✓		

# of Containers
[2] Preservation Code
[3] Container Code

Dissolved Metals Samples
☐ Field Filtered
☐ Lab to Filter

Orthophosphate Samples
☐ Field Filtered
☐ Lab to Filter

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
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A = Air
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S = Sulfuric Acid
B = Sodium Bisulfate
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O = Other (please define)

[3] **Container Codes:**
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ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Comments: PLEASE FORWARD RESULTS TO: JHERRMANN@TDKENGINEERING.COM
CAT B DELIVERABLES **SURFACE WATER

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

inquished by: (signature)	Date/Time: 12/18/23; 12:30 PM	
ved by: (signature)	Date/Time: 12/14/23 12:57	
inquished by: (signature)	Date/Time: 12/15 0700	
eived by: (signature) 4.0, 3.8, 2.9, 3.1	Date/Time: 12/19/23 1005	
linquished by: (signature)	Date/Time:	
ceived by: (signature)	Date/Time:	

Program / Regulatory Information
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375
Other:

Deliverables
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD
Other:

NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP, LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

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Minneapolis, MN 55414

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

CLIENT: SYRACUSE SAND AND GRAVEL (ALPHA - OMEGA)

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name:
Address: P.O. Box 6418, Syracuse, NY 13217
Phone:
Project Name:
Project Location: ALPHA PORTLAND SITE: DEC # 734006
Project Number: TDK PROJECT NO. 2021063
Project Manager: JOHN HERRMANN, TDK ENGINEERING
Pace Analytical Quote Name/Number TDK ALPHA PORTLAND
Invoice Recipient: 00143967
Sampled By: JCH, TDK ENGINEERING

Required Turnaround Time:
7-Day ☐ 10-Day ☑
Due Date:

Rush Approval Required:
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery:
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #: COVER

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1]Matrix Code	~~Conc~~ Code	VOCs-TCL+TICs	SVOCs-TCL+TICs	METALS-TAL	PFAS	1,4-Dioxane	PCBs	VOCs-% Solids	TSS for PFAS	# of Containers	[2] Preservation Code	[3] Container Code
	SW-3	12.15.23 11:00AM			✓	O**	V	✓										
	SW-4	12.15.23 12:45PM			✓	"	A		✓									
	"	"			✓	"	P			✓								
	"	"			✓	"	P				✓							
	"	"			✓	"	A					✓						
	"	"			✓	"	P								✓			
	"	"			✓	"	A						✓					
	"	"			✓	"	V	✓										
	SW-5	12.15.23 3:10PM			✓	"	A		✓									
	"	"			✓	"	P			✓								

ANALYSIS REQUESTED

Dissolved Metals Samples:
☐ Field Filtered
☐ Lab to Filter

Orthophosphate Samples:
☐ Field Filtered
☐ Lab to Filter

Comments: PLEASE FORWARD RESULTS TO: JHERRMANN@TDKENGINEERING.COM
CAT B DELIVERABLES
**SURFACE WATER

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

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GW = Ground Water
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DW = Drinking Water
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X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] **Container Codes:**
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

	Relinquished by: (signature)	Date/Time:
1		12/18/23; 12:50 pm
	Received by: (signature)	Date/Time:
2		12/18/23 1250
	Relinquished by: (signature)	Date/Time:
3		12/18 1700
	Received by: (signature)	Date/Time:
4	4.0, 3.8, 2.9, 3.1	12/19/23 1005
	Relinquished by: (signature)	Date/Time:
5		
	Received by: (signature)	Date/Time:
6		

Program/Regulatory Information:
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375

Deliverables:
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Other:

NELAC and AIHA-LAP, LLC Accredited:

Project Entity:
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other:
☐ Chromatogram
☐ AIHA-LAP, LLC

PCB ONLY:
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☐ Non Soxhlet

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Minneapolis, MN 55414

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

CLIENT: SYRACUSE SAND AND GRAVEL

ntact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

any Name: (ALPHA-OMEGA)

ss: P.O. Box 6418, SYRACUSE, NY 13217

:

ct Name:

ct Location: ALPHA PORTLAND SITE: DEC #734006

ct Number: TDK PROJECT NO. 2021063

ct Manager: JOHN HERRMANN, TDK ENGINEERING

Analytical Quote Name/Number TDK ALPHA PORTLAND

e Recipient: 00143967

led By: JCH, TDK ENGINEERING

Requested Turnaround Time:
7-Day ☐ 10-Day ☑
Due Date:

Rush Approval Required:
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery:
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #:

ANALYSIS REQUESTED

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	Matrix Code	Conc Code	VOCs-TCL+TICs	SVOCs-TCL+TICs	METALS-TAL	PFAS	1,4-Dioxane	PCBs	VOCs-% Solids	TSS for PFAS
12	SW-5	12.15.23 3:10PM			✓	O**	P				✓				
	"	"			✓	"	A					✓			
	"	"			✓	"	P								✓
	"	"			✓	"	A						✓		
	"	"			✓	"	V	✓							
	SW-6	12.15.23 2:30PM			✓	"	A		✓						
	"	"			✓	"	P			✓					
13	"	"			✓	"	P				✓				
	"	"			✓	"	A					✓			
	"	"			✓	"	P								✓

Comments: PLEASE FORWARD RESULTS TO: JHERRMANN@TDKENGINEERING.COM

CAT B DELIVERABLES

** SURFACE WATER

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Dissolved Metals Samples:
☐ Field Filtered
☐ Lab to Filter

Orthophosphate Samples:
☐ Field Filtered
☐ Lab to Filter

[1] **Matrix Codes:**
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DW = Drinking Water
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SOL = Solid
O = Other (please define)

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O = Other (please define)

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A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

	Date/Time
Relinquished by: (signature)	12/18/23; 12:50 pm
Received by: (signature)	12/18/23 12:50
Relinquished by: (signature)	12/18 1700
Received by: (signature)	12/19/23 1005
Relinquished by: (signature)	
Received by: (signature)	

Program/Regulatory Information:
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375

Deliverables:
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Other:

NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP, LLC

PCB ONLY
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Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

CLIENT: SYRACUSE SAND AND GRAVEL
ntact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/
Company Name: (ALPHA-OMEGA)
ss: P.O. BOX 6418, SYRACUSE, NY 13217
e:
ct Name:
ct Location: ALPHA PORTLAND SITE: DEC # 734006
ct Number: TDK PROJECT NO. 2021063
ct Manager: JOHN HERRMANN, TDK ENGINEERING
Analytical Quote Name/Number TDK ALPHA PORTLAND
ce Recipient: 00143967
led By: JCH, TDK ENGINEERING

Turn Around Time (TAT) Requested
7-Day ☐ 10-Day ☑
Due Date:

Pre-Approval Required?
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #: CONT.

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1] Matrix Code	~~Conc~~ Code
	SW-6	12.15.23 2:30 PM			✓	O**	A
	"				✓	"	V
	DUPLICATE	12.15.23			✓	"	A
	"	"			✓	"	P
14	"	"			✓	"	P
	"	"			✓	"	A
	"	"			✓	"	P
	"	"			✓	"	A
	"	"			✓	"	V
	SW-4 MS	"			✓	"	A

ANALYSIS REQUESTED

VOCs-TCL+TICs	SVOCs-TCL+TICs	METALS-TAL	PFAS	1,4-Dioxane	PCBs	VOCs-% Solids	TSS for PFAS
					✓		
✓							
	✓						
		✓					
			✓				
				✓			
							✓
					✓		
✓							
	✓						

# of Containers
[2] Preservation Code
[3] Container Code

Dissolved Metals Samples
☐ Field Filtered
☐ Lab to Filter

Orthophosphate Samples
☐ Field Filtered
☐ Lab to Filter

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] **Container Codes:**
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

ments: PLEASE FORWARD RESULTS TO: JHERRMANN@TDKENGINEERING.COM
CAT B DELIVERABLES
**SURFACE WATER

quished by: (signature)	Date/Time: 12:50 12/18/23; PM	
ved by: (signature)	Date/Time: 12/18/23 12:50	
quished by: (signature)	Date/Time: 12/18 1700	
ived by: (signature) 4.0, 3.8, 2.9, 5.1	Date/Time: 12/19/23 1005	
quished by: (signature)	Date/Time:	
ived by: (signature)	Date/Time:	

Program/Regulatory Information
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375

Deliverables
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Other
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP,LLC

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Pace Analytical®
Phone: 612-607-6400
Fax: 612-607-6344
https://www.pacelabs.com/
1800 Elm Street SE
Minneapolis, MN 55414

Doc # 380 Rev 1_03242017

CHAIN OF CUSTODY RECORD (New York)

CLIENT: SYRACUSE SAND AND GRAVEL

Contact: https://www.pacelabs.com/contact-us/contact-environmental-sciences/

Company Name: (ALPHA-OMEGA)
Address: P.O. Box 6418, Syracuse, NY 13217
Phone:
Bill To Name:
Project Location: ALPHA PORTLAND SITE: DEC # 734006
Project Number: TDK PROJECT NO. 2021063
Project Manager: JOHN HERRMANN, TDK ENGINEERING
Pace Analytical Quote Name/Number TDK ALPHA PORTLAND 00143967
Invoice Recipient:
Sampled By: JCH, TDK ENGINEERING

Requested Turnaround Time
7-Day ☐ 10-Day ☑
Due Date:

Rush Approval Required
1-Day ☐ 3-Day ☐
2-Day ☐ 4-Day ☐

Data Delivery
Format: PDF ☐ EXCEL ☐
Other:
CLP Like Data Pkg Required: ☐
Email To:
Fax To #: CONT

ANALYSIS REQUESTED

Pace Analytical Work Order#	Client Sample ID / Description	Beginning Date/Time	Ending Date/Time	Composite	Grab	[1] Matrix Code	~~Conc Code~~	VOCs-TCL+TICs	SVOCs-TCL+TICs	METALS-TAL	PFAS	1,4-Dioxane	PCBs	VOCs-% Solids	TSS for PFAS	# of Containers
	SW-4MS	12:18.23 12:45pm			✓	O**	P			✓						
	" "	"			✓	"	P				✓					
	" "	"			✓	"	A					✓				
	" "	"			✓	"	P								✓	
	" "	"			✓	"	A						✓			
	" "	"			✓	"	V	✓								
	SW-4 MSD	12:15.23 12:45pm			✓	"	A		✓							
	" "	"			✓	"	P			✓						
	" "	"			✓	"	P				✓					
	" "	"			✓	"	A					✓				

Comments: PLEASE FORWARD RESULTS TO: JHERRMANN@TDKENGINEERING.COM
CAT B DELIVERABLES *SURFACE WATER

Please use the following codes to indicate possible sample concentration within the Conc Code column above:
H - High; M - Medium; L - Low; C - Clean; U - Unknown

Relinquished by: (signature)	Date/Time:	Received by: (signature)	Date/Time:
	12:50 12/18/23 PM		
Relinquished by: (signature)	Date/Time:	Received by: (signature)	Date/Time:
	12/18/23 12:50		
Relinquished by: (signature)	Date/Time:	Received by: (signature)	Date/Time:
	12/18 1700		
Received by: (signature)	Date/Time:	Relinquished by: (signature)	Date/Time:
4.0, 3.8, 2.9, 5.1	12/19/23 1005		

Program & Regulatory Information
☐ AWQ STDS ☐ NY TOGS
☐ NYC Sewer Discharge ☐ NY CP-51
☐ Part 360 GW (Landfill)
☐ NY Restricted Use
☐ NY Unrestricted Use
☐ NY Part 375

Deliverables
☐ Enhanced Data Package
☐ NYSDEC EQuIS EDD
☐ EQuIS (Standard) EDD
☐ NY Regulatory EDD
☐ NY Regs Hits-Only EDD

Quote
NELAC and AIHA-LAP, LLC Accredited

Project Entity
☐ Government ☐ Municipality ☐ MWRA ☐ WRTA
☐ Federal ☐ 21 J ☐ School
☐ City ☐ Brownfield ☐ MBTA

Other
☐ Chromatogram
☐ AIHA-LAP, LLC

Dissolved Metals Samples
☐ Field Filtered
☐ Lab to Filter

Additional Dissolved Samples
☐ Field Filtered
☐ Lab to Filter

[1] **Matrix Codes:**
GW = Ground Water
WW = Waste Water
DW = Drinking Water
A = Air
S = Soil
SL = Sludge
SOL = Solid
O = Other (please define)

[2] **Preservation Codes:**
I = Iced
H = HCL
M = Methanol
N = Nitric Acid
S = Sulfuric Acid
B = Sodium Bisulfate
X = Sodium Hydroxide
T = Sodium Thiosulfate
O = Other (please define)

[3] **Container Codes:**
A = Amber Glass
G = Glass
P = Plastic
ST = Sterile
V = Vial
S = Summa Canister
T = Tedlar Bag
O = Other (please define)

PCB ONLY
☐ Soxhlet
☐ Non Soxhlet

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-ELON-0001 v07_Sample Receiving Checklist
	Effective Date: 07/13/2023

Log In Back-Sheet

Client: SYracuse Sand and Gravel

Project: Alpha Portland Site

MCP/RCP Required: NA

Deliverable Package Requirement: NA

Location: MA

PWSID# (When Applicable): NA

Arrival Method:

Courier ☑ Fed Ex ☐ Walk In ☐ Other ☐

Received By / Date / Time: ER 12/9/23 1005

Back-Sheet By / Date / Time: LA 12/9/23 1450

Temperature Method: Gun # 5

Temp ✓ < 6° C Actual Temperature: 4.0/3.8/2.9/3.1

Rush Samples: Yes / (No) Notify: _____

Short Hold: Yes / (No) Notify: _____

Login Sample Receipt Checklist – (Rejection Criteria Listing – Using Acceptance Policy) Any False statement will be brought to the attention of the Client – True or False

	True	False
Received on Ice	☑	☐
Received in Cooler	☑	☐
Custody Seal: DATE TIME	☐	☑
COC Relinquished	☑	☐
COC/Samples Labels Agree	☑	☐
All Samples in Good Condition	☑	☐
Samples Received within Holding Time	☑	☐
Is there enough Volume	☑	☐
Proper Media/Container Used	☑	☐
Splitting Samples Required	☐	☑
MS/MSD	☐	☑
Trip Blanks	☐	☑
Lab to Filters	☐	☑
COC Legible	☑	☐

COC Included: (Check all included)

Client ☑ Analysis ☑ Sampler Name ☑

Project ☑ IDs ☑ Collection Date/Time ☑

All Samples Proper pH: N/A ☐ ☐

Notes regarding Samples/COC outside of SOP:

Additional Container Notes

Note: West Virginia requires all samples to have their temperature taken. Note any outliers.

Pace ANALYTICAL SERVICES

DC#_Title: ENV-FRM-ELON-0001 v07_Sample Receiving Checklist

Effective Date: 07/13/2023

Sample				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
16oz Amb/Clear	(Circle Amb/Clear)	Soils Jars																					
8oz Amb/Clear																							
4oz Amb/Clear																							
2oz Amb/Clear																							
Unpreserved	1 Liter	Ambers																					
HCL																							
Sulfuric																							
Sulfuric	250mL																						
Phosphoric																							
HCl																							
Unpreserved	100mL																						
Unpreserved	1 Liter	Plastics																					
Sulfuric																							
Unpreserved	500mL										2		1	2	2		1						
Sulfuric																							
Unpreserved	250mL																						
Trizma																							
Sulfuric																							
Nitric																							
NaOH																							
Ammonium Acetate																							
NaOH/Zinc																							
Unpreserved		VOA Vials																					
HCl																							
MeOH																							
D.I. Water																							
BiSulfate																							
Col/Bact		Other / Fill in																					
Other							1	3		1													
125 Ml Plastic												1				3	1						

Qualtrax ID: 120836

ANALYTICAL DATA SUMMARY TABLES

Alpha Omega Products, LLC
Alpha Portland (Otisca Industries) Site
Town of Dewitt, Onondaga County, NY

TABLE 1 : ANALYTICAL DATA SUMMARY - SOILS (VOC'S)

Sampling Dates: As Noted
Analytical Method: As Indicated
Matrix: Soil

COMPOUND	SOIL CLEANUP OBJECTIVE (SCO)[1]			UNITS	SAMPLE IDENTIFICATION							
	UNR[2]	RR[3]	COMM[4]		MW - 1 (2') 11/28/2023	MW - 2 (2') 12/1/2023	MW - 2 (2') DUP 12/1/2023	MW - 4 (2') 11/29/2023	SB - 1 (2') 11/29/2023	SB - 1 (2') DUP 11/29/2023	SB - 2 (2') 11/30/2023	SB - 4 (4') 12/4/2023
1,1,1-Trichloroethane	0.68	100	500	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.27	26	240	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.33	100	240	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	3.6	52	190	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	1.1	100	500	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.02	3.1	30	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	8.4	52	190	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	2.4	49	280	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	1.8	13	130	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane (p-Dioxane)	0.1	13	130	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	0.12	100	500	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	0.05	100	500	mg/kg	0.019 J	0.0093 J	0.012 J	0.023 J	ND	0.011	ND	ND
Benzene	0.06	4.8	44	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	0.76	2.4	2.2	mg/kg	ND V-05	ND	ND	ND V-05	ND V-05	ND V-05	ND V-05	ND
Chlorobenzene	1.1	100	500	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	0.37	49	350	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Cis-1,2-Dichloroethene	0.25	100	500	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1	41	390	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	---	---	---	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-Tert-Butyl Ether	0.93	100	500	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	0.05	100	500	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	12	100	500	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	3.9	100	500	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	11	100	500	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	5.9	100	500	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1.3	19	150	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	0.7	100	500	mg/kg	0.0011 J	ND	ND	ND	ND	ND	ND	ND
Trans-1,2-Dichloroethene	0.19	0.19	500	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	0.47	21	200	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	0.02	0.9	13	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Xylene (Total)	0.26	100	500	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

[1] Ref: 6 NYCRR Chapter IV Subpart 375.6: *Remedial Program Soil Cleanup Objectives*, Effective December 14, 2006.

[2] UNR - Unrestricted Use SCO.

[3] RR - Restricted-Residential SCO.

[4] COMM - Commercial SCO.

Restricted Use SCO's pertain to protection of public health.

mg/kg - milligrams per kilogram (parts per million)

ND - Not Detected

Exceeds UNR

Exceeds UNR and RR

Exceeds UNR, RR, and COMM

J - Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

V-05 - Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

Alpha Omega Products, LLC
Alpha Portland (Otisca Industries) Site
Town of Dewitt, Onondaga County, NY

TABLE 2 : ANALYTICAL DATA SUMMARY - SOILS (SVOCs)

Sampling Dates:	As Noted
Analytical Method:	As Indicated
Matrix:	Soil

COMPOUND	SOIL CLEANUP OBJECTIVE (SCO)[1]			UNITS	SAMPLE IDENTIFICATION							
	UNR[2]	RR[3]	COMM[4]		MW - 1 (2') 11/28/2023	MW - 2 (2') 12/1/2023	MW - 2 (2') DUP 12/1/2023	MW - 4 (2') 11/29/2023	SB - 1 (2') 11/29/2023	SB - 1 (2') DUP 11/29/2023	SB - 2 (2') 11/30/2023	SB - 4 (4') 12/4/2023
2-Methylphenol (o-Cresol)	0.33	100	500	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
3-Methylphenol (m-Cresol)	0.33	100	500	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol (p-Cresol)	0.33	100	500	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20	100	500	mg/kg	ND	0.091 J	0.096 J	0.11 J	ND	ND	ND	ND
Acenaphthylene	100	100	500	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	100	100	500	mg/kg	ND	0.18 J	0.21	0.17 J	0.088 J	ND	0.091 J	ND
Benzo(a)anthracene	1	1	5.6	mg/kg	ND	0.52	0.54	0.43	0.29	0.074 J	0.25	ND
Benzo (a) pyrene	1	1	1	mg/kg	ND	0.55	0.55	0.36	0.28	ND	0.24	ND
Benzo (b) fluoranthene	1	1	5.6	mg/kg	ND	0.65	0.65	0.48	0.36	0.088 J	0.29	ND
Benzo (g,h,i) perylene	100	100	500	mg/kg	ND	0.28	0.29	0.2 J	0.16 J	ND	0.14 J	ND
Benzo (k) fluoranthene	0.8	3.9	56	mg/kg	ND	0.25	0.27	0.19 J	0.15 J	ND	0.13 J	ND
Chrysene	1	3.9	56	mg/kg	ND	0.54	0.57	0.61	0.3	0.18 J	0.26	0.094 J
Dibenz (a,h) anthracene	0.33	0.33	0.56	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	100	100	500	mg/kg	ND	1	1.1	0.78	0.54	0.097 J	0.52	0.093 J
Fluorene	30	100	500	mg/kg	ND	0.097 J	0.11 J	0.13 J	ND	ND	ND	ND
Indeno (1,2,3-cd) pyrene	0.5	0.5	5.6	mg/kg	ND	0.25	0.27	0.17 J	0.18 J	ND	0.12 J	ND
Naphthalene	12	100	500	mg/kg	ND	ND	0.091 J	0.81	ND	0.17 J	ND	0.53
Pentachlorophenol	0.8	6.7	6.7	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	100	100	500	mg/kg	ND	0.7	0.9	1.6	0.35	0.54	0.36	0.34
Phenol	0.33	100	500	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	100	100	500	mg/kg	ND	1.2	1.2	0.72	0.52	0.14 J	0.48	0.14 J

Notes:

[1] Ref: 6 NYCRR Chapter IV Subpart 375.6: *Remedial Program Soil Cleanup Objectives* , Effective December 14, 2006.

[2] UNR - Unrestricted Use SCO.

[3] RR - Restricted-Residential SCO.

[4] COMM - Commercial SCO.

Restricted Use SCO's pertain to protection of public health.

mg/kg - milligrams per kilogram (parts per million)

ND - Not Detected

Exceeds UNR

Exceeds UNR and RR

Exceeds UNR, RR, and COMM

J - Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

Alpha Omega Products, LLC
Alpha Portland (Otisca Industries) Site
Town of Dewitt, Onondaga County, NY

TABLE 3 : ANALYTICAL DATA SUMMARY - SOILS (Metals)

Sampling Dates: As Noted
Analytical Method: As Indicated
Matrix: Soil

COMPOUND	SOIL CLEANUP OBJECTIVE (SCO)[1]			UNITS	SAMPLE IDENTIFICATION							
	UNR[2]	RR[3]	COMM[4]		MW - 1 (2') 11/28/2023	MW - 2 (2') 12/1/2023	MW - 2 (2') DUP 12/1/2023	MW - 4 (2') 11/29/2023	SB - 1 (2') 11/29/2023	SB - 1 (2') DUP 11/29/2023	SB - 2 (2') 11/30/2023	SB - 4 (4') 12/4/2023
Arsenic	16	16	16	mg/kg	4.2	3.3	4.2	15	4.3	ND DL-05	3.7	2.9
Barium	350	400	400	mg/kg	44 DL-05	***620***	***470***	100	***850 MS-19***	94	***780***	47
Beryllium	7.2	72	590	mg/kg	ND	0.42 DL-05	0.41 DL-05	ND DL-05	ND DL-05	ND DL-05	ND DL-05	0.35 DL-05
Cadmium	2.5	4.3	9.3	mg/kg	0.071	ND	0.08	ND	ND Z-01	0.15	ND	ND
Chromium (Trivalent)	30	180	1,500	mg/kg	8.6	24	35	12	17	14	14	19
Chromium (Hexavalent)	1	110	400	mg/kg	ND H-10	ND H-10	ND H-10	1.9 H-10	ND H-10/MS-16	ND H-10	ND H-10	ND H-10/MS-16/W-06
Copper	50	270	270	mg/kg	9.2	26	22	12	18 MS-22	12	18	12
Lead	63	400	1,000	mg/kg	18	20	90	25	13	26	9.8	18
Manganese	2,000	2,000	10,000	mg/kg	260	420	380	280	380	270	400	160 MS-19
Mercury	0.3	0.81	2.8	mg/kg	0.1	0.06	0.048	0.083	0.087	0.13	0.059	0.03 J
Nickel	30	310	310	mg/kg	16	26	24	18	23	27	22	13
Selenium	4	180	1,500	mg/kg	ND	ND	ND	ND	ND	0.69	ND	ND Z-01
Silver	2	180	1,500	mg/kg	0.063	0.093	0.12	0.087	0.092 Z-01	0.082	0.18	0.052
Zinc	109	10,000	10,000	mg/kg	35	40	61	28	35	61	34	27

Notes:
[1] Ref: 6 NYCRR Chapter IV Subpart 375.6: *Remedial Program Soil Cleanup Objectives* , Effective December 14, 2006.
[2] UNR - Unrestricted Use SCO.
[3] RR - Restricted-Residential SCO.
[4] COMM - Commercial SCO.
Restricted Use SCO's pertain to protection of public health.
mg/kg - milligrams per kilogram (parts per million)
ND - Not Detected
Exceeds UNR
Exceeds UNR and RR
Exceeds UNR, RR, and COMM
DL-05 - Sample required a dilution due to high internal standard recovery of the lesser diluted digestion, reporting limit is elevated.
H-10 - Analysis was requested after the recommended holding time had passed.
W-06 - Elevated method reporting limit due to intense color of sample.
MS-16 - For solid method SW846-7196A, the matrix spike is outside of control limits. pH and ORP results were indicative of reducing conditions. Reanalysis is not required. Analysis is in control based on LCS recoveries.
MS-19 - Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representive of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.
MS-22 - Either matrix spike or MS duplicate is outside of control limits, but the other is within limits. RPD betweeen the two MS/MSD results is within method specified criteria.
Z-01 - Post spike recovery is outside of control limits. Analysis is in control based on laboratory fortified blank recovery. Possibility of sample matrix effects that lead to low bias for reported result cannot be eliminated.

Alpha Omega Products, LLC
Alpha Portland (Otisca Industries) Site
Town of Dewitt, Onondaga County, NY

TABLE 4 : ANALYTICAL DATA SUMMARY - SOILS (PCBs)

Sampling Dates:	As Noted
Analytical Method:	As Indicated
Matrix:	Soil

COMPOUND	SOIL CLEANUP OBJECTIVE (SCO)[1]			UNITS	SAMPLE IDENTIFICATION							
	UNR[2]	RR[3]	COMM[4]		MW - 1 (2') 11/28/2023	MW - 2 (2') 12/1/2023	MW - 2 (2') DUP 12/1/2023	MW - 4 (2') 11/29/2023	SB - 1 (2') 11/29/2023	SB - 1 (2') DUP 11/29/2023	SB - 2 (2') 11/30/2023	SB - 4 (4') 12/4/2023
Aroclor 1016	---	---	---	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1221	---	---	---	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1232	---	---	---	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1242	---	---	---	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1248	---	---	---	mg/kg	ND	ND	ND	0.047 J	ND	ND	ND	ND
Aroclor 1254	---	---	---	mg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Aroclor 1260	---	---	---	mg/kg	ND	ND	ND	ND	ND	ND	ND	0.034 J
Total PCBs	0.1	1	1	mg/kg	ND	ND	ND	0.047	ND	ND	ND	0.034

Notes:

[1] Ref: 6 NYCRR Chapter IV Subpart 375.6: *Remedial Program Soil Cleanup Objectives*, Effective December 14, 2006.

[2] UNR - Unrestricted Use SCO.

[3] RR - Restricted-Residential SCO.

[4] COMM - Commercial SCO.

Restricted Use SCO's pertain to protection of public health.

mg/kg - milligrams per kilogram (parts per million).

ND - Not Detected

Exceeds UNR

Exceeds UNR and RR

Exceeds UNR, RR, and COMM

J - Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

TABLE 5 : ANALYTICAL DATA SUMMARY - SOILS (PFAS)

Sampling Dates: As Noted
Analytical Method: As Indicated
Matrix: Soil

COMPOUND	GUIDANCE VALUE[1] (FOR ANTICIPATED SITE USE)			UNITS	SAMPLE IDENTIFICATION							
	UNR[2]	RR[3]	COMM[4]		MW - 1 (2') 11/28/2023	MW - 2 (2') 12/1/2023	MW - 2 (2') DUP 12/1/2023	MW - 4 (2') 11/29/2023	SB - 1 (2') 11/29/2023	SB - 1 (2') DUP 11/29/2023	SB - 2 (2') 11/30/2023	SB - 4 (4') 12/4/2023
Perfluorobutanoic acid	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND	0.24 J
Perfluoropentanoic acid	0.66	33.0	500	µg/kg	0.033 J	ND	ND	0.04 J	0.03 J	0.047 J	0.039 J	0.045 PF-22/J
Perfluorohexanoic acid	0.66	33.0	500	µg/kg	0.021 J	0.025 P-23/J	ND	ND	ND	0.031 J	0.041 J	0.047 J
Perfluoroheptanoic acid	0.66	33.0	500	µg/kg	0.017 J	ND	ND	0.0017 J	ND	0.035 J	0.017 J	0.09 J
Perfluorooctanoic acid	0.66	33.0	500	µg/kg	ND	0.032 J	ND	0.034 J	ND	0.053 J	ND	0.15 J
Perfluorononanoic acid	0.66	33.0	500	µg/kg	ND	ND	ND	0.041 J	ND	ND	ND	0.19 J
Perfluorodecanoic acid	0.66	33.0	500	µg/kg	ND	ND	ND	0.027 J	ND	ND	ND	0.1 J
Perfluoroundecanoic acid	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND	0.14 J
Perfluorododecanoic acid	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND	0.043 J
Perfluorotridecanoic acid	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND	0.037 J
Perfluorotetradecanoic acid	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorobutanesulfonic acid	0.88	44.0	440	µg/kg	ND	0.1 PF-23/J	ND	ND	ND	ND	ND	ND
Perfluorohexanesulfonic acid	0.88	44.0	440	µg/kg	ND	0.046 J	0.037 J	ND	0.029 J	ND	0.043 J	ND
Perfluoroheptanesulfonic acid	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanesulfonic acid	0.88	44.0	440	µg/kg	0.11 J	0.48	0.55	0.17 J	0.11 J	0.063	0.18 J	0.66
Perfluorodecanesulfonic acid	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanesulfonamide	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND	ND
N-methyl perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND	ND
N-ethyl perfluorooctanesulfonamidoacetic acid (N - EeFOSAA)	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoropentapesultonic acid	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Hexfluoropropylene oxide dimer acid	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND	ND
4, 8-Dioxa-3H-perfluorononaoic acid	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND	ND
perfluoro-3-methoxlpropanoic acid	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro-4-methoxybutanic acid	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Nonafluoro-3, 6-dioxaheptanoic acid	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND	ND
4:2 Fluorotelomer sulfonic acid	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND	ND
6:2 Fluorotelomer sulfonic acid	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND	ND
8:2 Fluorotelomer sulfonic acid	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND	ND
3:3 Fluorotelomer carboxylic acid	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND	ND
5:3 Fluorotelomer carboxylic acid	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND	ND
7:3 Fluorotelomer carboxylic acid	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND	ND
N-methylperfluorooctane sulfonamide	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND	ND
N-ethylperfluorooctane sulfonamide	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND	ND
N-methylperfluorooctane sulfonamidoethanol	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND	ND
N-ethylperfluorooctane sulfonamidoethanol	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND	ND
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonc acid	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND	ND
11-Chloroeicafluoro-3-oxaundecane-1-sulfonic acid	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorododecanesulfonic acid	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Perfluorononanesulfonic acid	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoropentanesulfonic acid	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND	ND
Perfluoro sulfonic acid	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND	ND

Notes:
[1] Ref: NYSDEC Sampling, Analysis and Assessment of Per-and Polyfluoroalkyl Substances (PFAS), April 2023.
[2] UNR - Unrestricted Use SCO.
[3] RR - Restricted-Residential SCO.
[4] COMM - Commercial Use SCO.
Restricted Use SCO's pertain to protection of public health.
µg/kg - micrograms per kilogram (parts per billion).
Exceeds UNR
Exceeds UNR and RR
Exceeds UNR, RR, and COMM
J - Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
PF-22 - Qualifier ion ratio >150% of associated calibration. Detection is suspect.
PF-23 - Qualifier ion ratio <50% of associated calibration. Detection is suspect.

TABLE 6 : ANALYTICAL DATA SUMMARY - GROUNDWATER (VOC's)

Sampling Date:	As Indicated
Analytical Method:	As Indicated
Matrix:	Water

Compound	Standard or Guidance Value[1]	Units	LOCATION				
			MW-5	MW-5FD	MW-3	EQ Rinse Sample	Trip Blank
			1/16/2024	1/16/2024	1/16/2024	1/16/2024	1/16/2024
1,1,1,2 - Tetrachloroethane	---	µg/L	---	---	---	---	---
1,1,1-Trichloroethane	5	µg/L	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	µg/L	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	5	µg/L	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1	µg/L	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	µg/L	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	µg/L	ND	ND	ND	ND	ND
1,2,3 - Trichlorobenzene	---	µg/L	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	µg/L	ND	ND	ND	ND	ND
1,2-Dibromo-3-choloropropane	0.04	µg/L	ND	ND	ND	ND	ND
1,2-Dibromoethane	---	µg/L	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	3	µg/L	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.6	µg/L	ND	ND	ND	ND	ND
1,2-Dichloropropane	1	µg/L	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3	µg/L	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3	µg/L	ND	ND	ND	ND	ND
2-Butanone (MEK)	50 (GV)	µg/L	ND	ND	ND	ND	ND
2-Hexanone	50 (GV)	µg/L	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	---	µg/L	ND	ND	ND	ND	ND
Acetone	50 (GV)	µg/L	12 J	ND	ND	ND	ND
Benzene	1	µg/L	ND	ND	ND	ND	ND
Bromochloromethane	---	µg/L	ND	ND	ND	ND	ND
Bromodichloromethane	50 (GV)	µg/L	ND	ND	ND	ND	ND
Bromoform	50 (GV)	µg/L	ND	ND	ND	ND	ND
Bromomethane	5	µg/L	ND	ND	ND	ND	ND
Carbon Disulfide	60 (GV)	µg/L	ND V-05	ND V-05	ND V-05	ND V-05	ND V-05
Carbon Tetrachloride	5	µg/L	ND	ND	ND	ND	ND
Chlorobenzene	5	µg/L	ND	ND	ND	ND	ND
Chloroethane	5	µg/L	ND	ND	ND	ND	ND
Chloroform	7	µg/L	ND	ND	ND	4.2	ND
Chloromethane	---	µg/L	ND	ND	ND	ND	ND
Cis-1,2-Dichloroethene	5	µg/L	0.58 J	0.37 J	ND	ND	ND
Cis-1,3-Dichloropropene	0.4[2]	µg/L	ND	ND	ND	ND	ND
Cyclohexane	---	µg/L	ND	ND	ND	ND	ND
Dichlorodifluoromethane	5	µg/L	ND	ND	ND	ND	ND
Ethylbenzene	5	µg/L	ND	ND	ND	ND	ND
Freon-113	5	µg/L	ND	ND	ND	ND	ND
Isopropylbenzene	5	µg/L	ND	ND	ND	ND	ND
Methyl-Tert-Butyl-Ether	10 (GV)	µg/L	ND	ND	ND	ND	ND
Methylene Acetate	---	µg/L	ND	ND	ND	ND	ND
Methyl Cyclohexane	---	µg/L	ND	ND	ND	ND	ND
Methylene Chloride	5	µg/L	ND	ND	ND	ND	ND
Styrene	5	µg/L	ND	ND	ND	ND	ND

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Town of Dewitt, Onondaga County, NY

TABLE 6 : ANALYTICAL DATA SUMMARY - GROUNDWATER (VOC's) CONT'D

Compound	Standard or Guidance Value[1]	Units	LOCATION				
			MW-5	MW-5FD	MW-3	EQ Rinse Sample	Trip Blank
			1/16/2024	1/16/2024	1/16/2024	1/16/2024	1/16/2024
Tetrachloroethene	5	µg/L	ND	ND	ND	ND	ND
Toluene	5	µg/L	0.31 J	ND	ND	ND	ND
Trans-1,2-Dichloroethene	5	µg/L	ND	ND	ND	ND	ND
Trans-1,3-Dichloropropene	0.4[2]	µg/L	ND	ND	ND	ND	ND
Trichloroethene	5	µg/L	5.5	4.1	3.5	ND	ND
Trichlorofluoromethane	5	µg/L	ND	ND	ND	ND	ND
Vinyl Chloride	2	µg/L	ND	ND	ND	ND	ND
Xylenes	5[3]	µg/L	ND	ND	ND	ND	ND
1,4-Dioxane	0.35 (GV)	µg/L	ND	ND	ND	ND	ND
Sulfur Dioxide (TIC)	---	µg/L	83	17	7.5	---	---

Notes:

[1] NYSDEC *Technical and Operational Guidance Series: Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998 (including April 2000 and June 2004 Addendums)* and *6 NYCRR Part 703: Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations.* Standards or Guidance Values shown are for Class GA Groundwater.

[2] Applies to sum of Cis-1,3-Dichloropropene & Trans-1,3-Dichloropropene, respectively.
[3] Applies to m, o & p-Xylene, individually.
µg/L - micrograms per liter (parts per billion)
ND - Not Detected
--- No guidance value or standard in above references.
Exceedances are shown in **red**.
FD - Field Duplicate.
TIC - Tentatively Identified Compound - Estimated Value Reported
GV - Guidance Value
J - Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
V-05 - Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

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Town of Dewitt, Onondaga County, NY

TABLE 7 : ANALYTICAL DATA SUMMARY - GROUNDWATER (SVOC's)

Sampling Date:	As Indicated
Analytical Method:	As Indicated
Matrix:	Water

Compound	Standard or Guidance Value[1]	Units	LOCATION		
			MW-5	MW-5FD	MW-3
			1/16/2024	1/16/2024	1/16/2024
(3/4)- Methylphenol	---	µg/L	0.97 J	1.0 J	ND
1,1 -Blphenyl	---	µg/L	ND	ND	ND
2,4,5-Trichlorophenol	---	µg/L	ND	ND	ND
2,4,6-Trichlorophenol	---	µg/L	ND	ND	ND
2,4-Dichlorophenol	5	µg/L	ND	ND	ND
2,4-Dimethylphenol	50 (GV)	µg/L	ND	ND	ND
2,4-Dinitrophenol	10 (GV)	µg/L	ND V-04	ND V-04	ND V-04
2,4-Dinitrotoluene	5	µg/L	ND	ND	ND
2,6-Dinitrotoluene	5	µg/L	ND	ND	ND
2-Chloronaphthalene	10 (GV)	µg/L	ND	ND	ND
2-Chlorophenol	---	µg/L	ND	ND	ND
2- Methylnaphthalene	---	µg/L	ND	ND	ND
2-Methylphenol	---	µg/L	ND	ND	ND
2- Nitroaniline	5	µg/L	ND	ND	ND
2-Nitrophenol	---	µg/L	ND	ND	ND
3,3-Dichlorobenzidine	5	µg/L	ND	ND	ND
3-Nitroaniline	5	µg/L	ND	ND	ND
4,6-Dinitro-2-methylphenol	---	µg/L	ND	ND	ND
4-Bromophenyl phenylether	---	µg/L	ND	ND	ND
4-Chloro-3-methylphenol	---	µg/L	ND	ND	ND
4-Chloroaniline	5	µg/L	ND	ND	ND
4-Chlorophenyl phenyl ether	---	µg/L	ND	ND	ND
4-Nitraniline	---	µg/L	ND	ND	ND
4-Nitrophenol	---	µg/L	ND	ND	ND
Acenaphthene	20 (GV)	µg/L	ND	ND	ND
Acenaphthylene	---	µg/L	ND	ND	ND
Acetophenone	---	µg/L	ND	ND	ND
Anthracene	50 (GV)	µg/L	ND	ND	ND
Atrazine	7.5	µg/L	ND	ND	ND
Benzaldehyde	---	µg/L	ND	ND	ND
Benzo(a)anthracene	0.002 (GV)	µg/L	ND	ND	ND
Benzo (a) pyrene	ND	µg/L	ND	ND	ND
Benzo (b) fluoranthene	0.002 (GV)	µg/L	ND	ND	ND
Benzo (g,h,i) perylene	---	µg/L	ND	ND	ND
Benzo (k) fluoranthene	0.002 (GV)	µg/L	ND	ND	ND
bis (2-chloroethoxy) methane	5	µg/L	ND	ND	ND
bis (2-chloroethyl) ether	1	µg/L	ND	ND	ND
bis (2-chloroisopropyl) ether	---	µg/L	ND	ND	ND
bis (2-Ethylhexyl) phthalate	5	µg/L	ND	ND	ND
Butyl benzyl phthalate	---	µg/L	ND	ND	ND
Caprolactam	---	µg/L	ND	ND	ND
Carbazole	---	µg/L	ND	ND	ND

TABLE 7 : ANALYTICAL DATA SUMMARY - GROUNDWATER (SVOC's) CONT'D

Compound	Standard or Guidance Value[1]	Units	LOCATION		
			MW-5	MW-5FD	MW-3
			1/16/2024	1/16/2024	1/16/2024
Chrysene	0.002 (GV)	µg/L	ND	ND	ND
Di-n-butyl phthalate	50	µg/L	ND	ND	ND
Di-n-octyl phthalate	50 (GV)	µg/L	ND V-04	ND V-04	ND V-04/V-05
Dibenz (a,h) anthracene	---	µg/L	ND	ND	ND
Dibenzofuran	---	µg/L	ND	ND	ND
Diethyl phthalate	50 (GV)	µg/L	ND	ND	ND
Dimethyl phthalate	50 (GV)	µg/L	ND	ND	ND
Fluoranthene	50 (GV)	µg/L	ND	ND	ND
Fluorene	50 (GV)	µg/L	ND	ND	ND
Hexachlorobenzene	0.04	µg/L	ND	ND	ND
Hexachlorobutadiene	0.5	µg/L	ND V-05	ND V-05	ND
Hexachlorocyclopentadiene	5	µg/L	ND V-05	ND V-05	ND V-05
Hexachloroethane	5	µg/L	ND	ND	ND
Indeno (1,2,3-cd) pyrene	0.002 (GV)	µg/L	ND	ND	ND
Isophorone	50 (GV)	µg/L	ND	ND	ND
N-Nitrosodi-n-propylamine	---	µg/L	ND	ND	ND
N-Nitrosodiphenylamine	50 (GV)	µg/L	ND	ND	ND
Napthalene	10 (GV)	µg/L	ND	ND	ND
Nitrobenzene	0.4	µg/L	ND	ND	ND
Pentachlorophenol	1	µg/L	ND	ND	ND
Phenanthrene	50 (GV)	µg/L	ND	ND	ND
Phenol	1	µg/L	24	17	ND
Pyrene	50 (GV)	µg/L	ND	ND	ND
1,2,4,5-Tetrachlorobenzene	---	µg/L	ND	ND	ND
n-Hexadecanoic acid (TIC)	---	µg/L	11	17	---
Octadecanoic acid (TIC)	---	µg/L	16	19	---
1,4 Dioxane	0.35 (GV)	µg/L	ND	ND	ND
Benzeneatcetic acid (TIC)	---	µg/L	---	30	---

Notes:

[1] NYSDEC *Technical and Operational Guidance Series: Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998 (including April 2000 and June 2004 Addendums)* and *6 NYCRR Part 703: Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations.* Standards or Guidance Values shown are for Class GA Groundwater.

µg/L - micrograms per liter (parts per billion)
ND - Not Detected
--- No guidance value or standard in above references.
Exceedances are shown in **red**.
FD - Field Duplicate.
TIC - Tentatively Identified Compound - Estimated Value Reported.
GV - Guidance Value.
J - Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
V-04 - Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria. Reported result is estimated.
V-05 - Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

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Town of Dewitt, Onondaga County, NY

TABLE 8 : ANALYTICAL DATA SUMMARY TABLE- GROUNDWATER (METALS)

Sampling Date:	As Indicated
Analytical Method:	As Indicated
Matrix:	Water

Compound	Standard or Guidance Value[1]	Units	LOCATION		
			MW-5	MW-5FD	MW-3
			1/16/2024	1/16/2024	1/16/2024
Aluminum	---	mg/L	1.6 Z-01	1.3	0.18
Antimony	0.003	mg/L	ND	ND	ND
Arsenic	0.025	mg/L	ND	ND	ND
Barium	1.0	mg/L	0.062	0.043 J	0.076
Beryllium	0.003 (GV)	mg/L	ND	ND	ND
Cadmium	0.005	mg/L	ND	ND	ND
Calcium	---	mg/L	98 MS-19	100	57
Chromium, Hexavalent	0.05	mg/L	---	---	---
Chromium	0.05	mg/L	ND	ND	ND
Cobalt	---	mg/L	ND	ND	ND
Copper	0.20	mg/L	ND	ND	ND
Cyanide	0.20	mg/L	---	---	---
Iron	0.30	mg/L	0.12	0.079	0.32
Lead	0.025	mg/L	ND	ND	ND
Magnesium	35 (GV)	mg/L	0.060 Z-01a	ND	4.6
Manganese	0.30	mg/L	0.0029 Z-01a/J	ND	0.18
Mercury	0.0007	mg/L	ND	ND	ND
Nickel	0.10	mg/L	0.0067 J	0.0054 J	ND
Potassium	---	mg/L	68 MS-19	48	6.5
Selenium	0.010	mg/L	ND	ND	ND
Silver	0.050	mg/L	ND	ND	ND
Sodium	20	mg/L	35 MS-19	34	3.2
Thallium	0.0005 (GV)	mg/L	ND	ND	ND
Vanadium	---	mg/L	0.0083 J	ND	ND
Zinc	2.0 (GV)	mg/L	ND	ND	0.0041 J

Notes:
[1] NYSDEC *Technical and Operational Guidance Series: Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998 (including April 2000 and June 2004 Addendums)* and *6 NYCRR Part 703: Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations.* Standards and Guidance Values shown are for Class GA Groundwater.
mg/L - milligrams per liter (parts per million)
ND - Not Detected.
--- No guidance value or standard in above references.
Exceedances of groundwater standards are shown in **red**.
FD - Field Duplicate
GV - Guidance Value
J - Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
Z-01 - Matrix Spike and Matrix Spike Duplicate recoveries are outside of control limits. Analysis is in control based on Laboratory Fortified Blank and Post Digestion Spike recoveries.
Z-01a - Matrix Spike and Matrix Spike Duplicate recoveries are outside of control limits. Analysis is in control based on Laboratory Fortified Blank and Post Digestion Spike recoveries. Possibility of non-homogenous sample aliquot cannot be eliminated.
MS-19 - Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representive of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.

TABLE 9 : ANALYTICAL DATA SUMMARY - GROUNDWATER (PCB's)

Sampling Date:	As Indicated				
Analytical Method:	As Indicated				
Matrix:	Water				
Compound	Standard or Guidance Value[1]	Units	LOCATION		
			MW-5	MW-5FD	MW-3
			1/16/2024	1/16/2024	1/16/2024
Aroclor 1016	---	µg/L	ND	ND	ND
Aroclor 1221	---	µg/L	ND	ND	ND
Aroclor 1232	---	µg/L	ND	ND	ND
Aroclor 1242	---	µg/L	ND	ND	ND
Aroclor 1248	---	µg/L	ND	ND	ND
Aroclor 1254	---	µg/L	ND	ND	ND
Aroclor 1260	---	µg/L	ND	ND	ND
Aroclor 1262	---	µg/L	ND	ND	ND
Aroclor 1268	---	µg/L	ND	ND	ND
Total PCBs	0.09[2]	µg/L	ND	ND	ND

Notes:

[1] NYSDEC *Technical and Operational Guidance Series: Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998 (including April 2000 and June 2004 Addendums)* and *6 NYCRR Part 703: Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations.* Standards shown are for Class GA Groundwater.

[2] Applies to sum of Arcolors

µg/L - micrograms per liter (parts per billion)

ND - Not Detected.

--- No guidance value or standard in above references

Exceedances are shown in **red**.

TABLE 10 : ANALYTICAL DATA SUMMARY - GROUNDWATER (PFAS)

Sampling Date:	As Indicated
Analytical Method:	As Indicated
Matrix:	Water

Compound	Guidance Value (GV)[1]	Units	SAMPLE IDENTIFICATION		
			MW-3	MW-5	MW-5 (DUP)
			1/16/2024	1/16/2024	1/16/2024
Perfluorobutanoic acid	6.7	ng/L	5.9	10	8
Perfluoropentanoic acid	6.7	ng/L	ND	ND	ND
Perfluorohexanoic acid	6.7	ng/L	0.83 J	1.2	1.3
Perfluoroheptanoic acid	6.7	ng/L	0.56 J	0.74 J	0.84 J
Perfluorooctanoic acid	6.7	ng/L	0.79 J	2	1.8
Perfluorononanoic acid	6.7	ng/L	0.3 J	0.34 J	0.34 J
Perfluorodecanoic acid	6.7	ng/L	ND	ND	ND
Perfluoroundecanoic acid	6.7	ng/L	ND	ND	ND
Perfluorododecanoic acid	6.7	ng/L	ND	ND	ND
Perfluorotridecanoic acid	6.7	ng/L	ND	ND	ND
Perfluorotetradecanoic acid	6.7	ng/L	ND	ND	ND
Perfluorobutanesulfonic acid	2.7	ng/L	0.51 J	1.1	1
Perfluorohexanesulfonic acid	2.7	ng/L	0.23 J	0.69 J	0.75 J
Perfluoroheptanesulfonic acid	2.7	ng/L	ND	ND	ND
Perfluorooctanesulfonic acid	2.7	ng/L	0.81 J	2.3	2.1
Perfluorodecanesulfonic acid	2.7	ng/L	ND	ND	ND
Perfluorooctanesulfonamide	2.7	ng/L	ND	0.82 J	0.79 P-22A/J
N-methyl perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	6.7	ng/L	ND	ND	ND
N-ethyl perfluorooctanesulfonamidoacetic acid (N - EeFOSAA)	6.7	ng/L	ND	ND	ND
Perfluoropentapesultonic acid	2.7	ng/L	ND	ND	ND
Hexfluoropropylene oxide dimer acid	6.7	ng/L	ND	ND	ND
4, 8-Dioxa-3H-perfluorononaoic acid	6.7	ng/L	ND	ND	ND
perfluoro-3-methoxlpropanoic acid	6.7	ng/L	ND	ND	ND
Perfluoro-4-methoxybutanic acid	6.7	ng/L	ND	ND	ND
Nonafluoro-3, 6-dioxaheptanoic acid	6.7	ng/L	ND	ND	ND
4:2 Fluorotelomer sulfonic acid	2.7	ng/L	ND	ND	ND
6:2 Fluorotelomer sulfonic acid	2.7	ng/L	2.8 J	1.3	ND
8:2 Fluorotelomer sulfonic acid	2.7	ng/L	ND	ND	ND
3:3 Fluorotelomer carboxylic acid	6.7	ng/L	ND	ND	ND
5:3 Fluorotelomer carboxylic acid	6.7	ng/L	ND	ND	ND
7:3 Fluorotelomer carboxylic acid	6.7	ng/L	ND	ND	ND
N-methylperfluorooctane sulfonamide	6.7	ng/L	ND	ND	ND
N-ethylperfluorooctane sulfonamide	6.7	ng/L	ND	ND	ND
N-methylperfluorooctane sulfonamidoethanol	2.7	ng/L	ND	ND	ND
N-ethylperfluorooctane sulfonamidoethanol	2.7	ng/L	ND	ND	ND
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonc acid	2.7	ng/L	ND	ND	ND
11-Chloroeicafluoro-3-oxaundecane-1-sulfonic acid	2.7	ng/L	ND	ND	ND
Perfluorododecanesulfonic acid	2.7	ng/L	ND	ND	ND
Perfluorononanesulfonic acid	2.7	ng/L	ND	ND	ND

TABLE 10 : ANALYTICAL DATA SUMMARY - GROUNDWATER (PFAS) CONT'D

Compound	Guidance Value (GV)[1]	Units	SAMPLE IDENTIFICATION		
			MW-3	MW-5	MW-5 (DUP)
			1/16/2024	1/16/2024	1/16/2024
Perfluoropentanesulfonic acid	2.7	ng/L	ND	ND	ND
Perfluoro sulfonic acid	2.7	ng/L	ND	ND	ND

Notes:

[1] Ref: *NYSDEC 2023 Addendum to June 1998 Division of Water Technical and Operational Series (T.O.G.S.) No. 1.1.1.* Guidance values are for Class GA Groundwater.

ng/L - nanograms per liter (parts per trillion)

ND - Not Detected

Exceeds Guidance Value

J - Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

P-22A - Qualifier ion ratio >150% of associated calibration.

Alpha Omega Products, LLC
Alpha Portland (Otisca Industries) Site
Town of Dewitt, Onondaga County, NY

TABLE 11 : ANALYTICAL DATA SUMMARY - SEDIMENT (VOC'S)

Sampling Dates: As Noted
Analytical Method: As Indicated
Matrix: Soil

COMPOUND	SOIL CLEANUP OBJECTIVE (SCO)[1]			UNITS	SAMPLE IDENTIFICATION						
	UNR[2]	RR[3]	COMM[4]		SS - 1 12/15/2023	SS - 2 12/15/2023	SS - 3 12/15/2023	SS - 3 (DUP) 12/15/2023	SS - 4 12/15/2023	SS - 5 12/15/2023	SS - 6 12/15/2023
1,1,1-Trichloroethane	0.68	100	500	mg/kg	NS	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.27	26	240	mg/kg	NS	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.33	100	240	mg/kg	NS	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	3.6	52	190	mg/kg	NS	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	1.1	100	500	mg/kg	NS	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.02	3.1	30	mg/kg	NS	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	8.4	52	190	mg/kg	NS	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	2.4	49	280	mg/kg	NS	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	1.8	13	130	mg/kg	NS	ND	ND	ND	ND	ND	ND
1,4-Dioxane (p-Dioxane)	0.1	13	130	mg/kg	NS	ND	ND	ND	0.095 J	ND	ND
2-Butanone (MEK)	0.12	100	500	mg/kg	NS	ND	ND	ND	ND	ND	ND
Acetone	0.05	100	500	mg/kg	NS	ND	0.047 J	0.081 J	ND	0.021 J	0.012 J
Benzene	0.06	4.8	44	mg/kg	NS	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	0.76	2.4	2.2	mg/kg	NS	ND	ND	ND	ND	ND	ND
Chlorobenzene	1.1	100	500	mg/kg	NS	ND	ND	ND	ND	ND	ND
Chloroform	0.37	49	350	mg/kg	NS	ND	ND	ND	ND	ND	ND
Cis-1,2-Dichloroethene	0.25	100	500	mg/kg	NS	ND	ND	ND	ND	ND	ND
Ethylbenzene	1	41	390	mg/kg	NS	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	---	---	---	mg/kg	NS	ND	ND	ND	ND	ND	ND
Methyl-Tert-Butyl Ether	0.93	100	500	mg/kg	NS	ND	ND	ND	ND	ND	ND
Methylene Chloride	0.05	100	500	mg/kg	NS	ND	ND	ND	ND	ND	ND
n-Butylbenzene	12	100	500	mg/kg	NS	ND	ND	ND	ND	ND	ND
n-Propylbenzene	3.9	100	500	mg/kg	NS	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	11	100	500	mg/kg	NS	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	5.9	100	500	mg/kg	NS	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1.3	19	150	mg/kg	NS	ND	ND	ND	ND	ND	ND
Toluene	0.7	100	500	mg/kg	NS	ND	ND	ND	ND	ND	ND
Trans-1,2-Dichloroethene	0.19	0.19	500	mg/kg	NS	ND	ND	ND	ND	ND	ND
Trichloroethene	0.47	21	200	mg/kg	NS	ND	ND	ND	ND	ND	ND
Vinyl Chloride	0.02	0.9	13	mg/kg	NS	ND	ND	ND	ND	ND	ND
Xylene (Total)	0.26	100	500	mg/kg	NS	ND	ND	ND	ND	ND	ND

Notes:

[1] Ref: 6 NYCRR Chapter IV Subpart 375.6: *Remedial Program Soil Cleanup Objectives*, Effective December 14, 2006.

[2] UNR - Unrestricted Use SCO.

[3] RR - Restricted-Residential SCO.

[4] COMM - Commercial SCO.

Restricted Use SCO's pertain to protection of public health.
mg/kg - milligrams per kilogram (parts per million).
ND - Not Detected
NS - Not Sampled
Exceeds UNR
Exceeds UNR and RR
Exceeds UNR, RR, and COMM
J - Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

Alpha Omega Products, LLC
Alpha Portland (Otisca Industries) Site
Town of Dewitt, Onondaga County, NY

TABLE 12 : ANALYTICAL DATA SUMMARY - SEDIMENT (SVOCs)

Sampling Dates: As Noted
Analytical Method: As Indicated
Matrix: Soil

COMPOUND	SOIL CLEANUP OBJECTIVE (SCO)[1]			UNITS	SAMPLE IDENTIFICATION						
	UNR[2]	RR[3]	COMM[4]		SS - 1 12/15/2023	SS - 2 12/15/2023	SS - 3 12/15/2023	SS - 3 (DUP) 12/15/2023	SS - 4 12/15/2023	SS - 5 12/15/2023	SS - 6 12/15/2023
2-Methylphenol (o-Cresol)	0.33	100	500	mg/kg	ND	ND	ND	ND	ND	ND	ND
3-Methylphenol (m-Cresol)	0.33	100	500	mg/kg	ND	ND	ND	ND	ND	ND	ND
4-Methylphenol (p-Cresol)	0.33	100	500	mg/kg	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20	100	500	mg/kg	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	100	100	500	mg/kg	ND	ND	ND	ND	ND	ND	ND
Anthracene	100	100	500	mg/kg	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	1	1	5.6	mg/kg	ND	ND	ND	ND	ND	ND	ND
Benzo (a) pyrene	1	1	1	mg/kg	ND	ND	ND	ND	ND	ND	ND
Benzo (b) fluoranthene	1	1	5.6	mg/kg	ND	ND	ND	ND	ND	ND	ND
Benzo (g,h,i) perylene	100	100	500	mg/kg	ND	ND	ND	ND	ND	ND	ND
Benzo (k) fluoranthene	0.8	3.9	56	mg/kg	ND	ND	ND	ND	ND	ND	ND
Chrysene	1	3.9	56	mg/kg	ND	ND	ND	ND	ND	ND	ND
Dibenz (a,h) anthracene	0.33	0.33	0.56	mg/kg	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	100	100	500	mg/kg	ND	ND	ND	ND	ND	ND	0.17 J
Fluorene	30	100	500	mg/kg	ND	ND	ND	ND	ND	ND	ND
Indeno (1,2,3-cd) pyrene	0.5	0.5	5.6	mg/kg	ND	ND	ND	ND	ND	ND	ND
Naphthalene	12	100	500	mg/kg	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	0.8	6.7	6.7	mg/kg	ND V-05	ND V-05	ND V-05	ND V-05	ND V-05	ND V-05	ND V-05
Phenanthrene	100	100	500	mg/kg	ND	0.73 J	ND	ND	ND	ND	ND
Phenol	0.33	100	500	mg/kg	ND	ND	ND	ND	ND	ND	ND
Pyrene	100	100	500	mg/kg	ND	ND	ND	ND	ND	ND	0.18 J

Notes:
[1] Ref: 6 NYCRR Chapter IV Subpart 375.6: *Remedial Program Soil Cleanup Objectives* , Effective December 14, 2006.
[2] UNR - Unrestricted Use SCO.
[3] RR - Restricted-Residential SCO.
[4] COMM - Commercial SCO.
[5] Includes m&p isomers.
Restricted Use SCO's pertain to protection of public health.
mg/kg - milligrams per kilogram (parts per million).
ND - Not Detected
Exceeds UNR
Exceeds UNR and RR
Exceeds UNR, RR, and COMM
J - Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
V-05 - Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

TABLE 13 : ANALYTICAL DATA SUMMARY - SEDIMENT (Metals)

Sampling Dates: As Noted
Analytical Method: As Indicated
Matrix: Soil

COMPOUND	SOIL CLEANUP OBJECTIVE (SCO)[1]			UNITS	SAMPLE IDENTIFICATION						
	UNR[2]	RR[3]	COMM[4]		SS - 1 12/15/2023	SS - 2 12/15/2023	SS - 3 12/15/2023	SS - 3 (DUP) 12/15/2023	SS - 4 12/15/2023	SS - 5 12/15/2023	SS - 6 12/15/2023
Arsenic	16	16	16	mg/kg	11	***44***	ND	ND	3.2 Z-02/J	1.9 J	2.6 J
Barium	350	400	400	mg/kg	260	91	150	200	31 Z-02	97	81
Beryllium	7.2	72	590	mg/kg	0.47	0.26 J	0.42 J	0.52 J	0.27 Z-02	0.28 J	0.23
Cadmium	2.5	4.3	9.3	mg/kg	0.3 J	ND	ND	ND	ND Z-02	ND	ND
Chromium (Trivalent)	30	180	1,500	mg/kg	13	11	17	21	10 Z-02	8.6	8.4
Chromium (Hexavalent)	1	110	400	mg/kg	ND H-10/W-06	ND H-10/W-06	ND H-10/W-06	ND H-10/W-06	ND H-10/MS-16	ND H-10/W-06	ND H-10
Copper	50	270	270	mg/kg	25	15	15	18	10	12	9.5
Lead	63	400	1,000	mg/kg	22	21	16	21	8 MS-19	11	110
Manganese	2,000	2,000	10,000	mg/kg	***2,400***	180	220	280	260	350	270
Mercury	0.3[5]	0.81	2.8	mg/kg	0.015 J	0.041 J	ND	0.099 J	ND	0.032 J	0.03 J
Nickel	30	310	310	mg/kg	26	31	15	18	18 Z-02	11	7.9
Selenium	4	180	1,500	mg/kg	ND	ND	ND	ND	ND Z-01	ND	ND
Silver	2	180	1,500	mg/kg	ND	ND	ND	ND	ND	ND	ND
Zinc	109	10,000	10,000	mg/kg	190	30	93	110	23 Z-02	46	52

Notes:
[1] Ref: 6 NYCRR Chapter IV Subpart 375.6: *Remedial Program Soil Cleanup Objectives*, Effective December 14, 2006.
[2] UNR - Unrestricted Use SCO.
[3] RR - Restricted-Residential SCO.
[4] COMM - Commercial SCO.
Restricted Use SCO's pertain to protection of public health.
mg/kg - milligrams per kilogram (parts per million).
ND - Not Detected
Exceeds UNR
Exceeds UNR and RR
Exceeds UNR, RR, and COMM
J - Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
H-10 - Analysis was requested after the recommended holding time has passed.
W-06 - Elevated method reporting limit due to intense color of sample.
Z-01 - Matrix Spike, spike duplicate and post spike recovery is outside of control limits. Possibility of matrix effects that lead to low bias or non-homogeneous sample aliquot cannot be eliminated. BS/BSD is within criteria.
Z-02 - Post spike recovery is outside the control limits. Analysis is in control based on laboratory fortified blank and dilution check recovery. Possibility of sample metrix effects that lead to low bias for reported result cannot be eliminated.
MS-16 - For solid method SW846-7196A, the matrix spike is outside of control limits. pH and ORP results were indicative of reducing conditions. Reanalysis is not required. Analysis is in control based on LCS recoveries.
MS-19 - Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representive of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.

TABLE 14 : ANALYTICAL DATA SUMMARY - SEDIMENT (PCBs)

Sampling Dates: As Noted
Analytical Method: As Indicated
Matrix: Soil

COMPOUND	SOIL CLEANUP OBJECTIVE (SCO)[1]			UNITS	SAMPLE IDENTIFICATION						
	UNR[2]	RR[3]	COMM[4]		SS - 1 12/15/2023	SS - 2 12/15/2023	SS - 3 12/15/2023	SS - 3 (DUP) 12/15/2023	SS - 4 12/15/2023	SS - 5 12/15/2023	SS - 6 12/15/2023
Aroclor 1016	---	---	---	mg/kg	ND	ND	ND	ND	ND	ND	ND
Aroclor 1221	---	---	---	mg/kg	ND	ND	ND	ND	ND	ND	ND
Aroclor 1232	---	---	---	mg/kg	ND	ND	ND	ND	ND	ND	ND
Aroclor 1242	---	---	---	mg/kg	ND	ND	ND	ND	ND	ND	ND
Aroclor 1248	---	---	---	mg/kg	ND	ND	ND	ND	ND	ND	ND
Aroclor 1254	---	---	---	mg/kg	ND	ND	ND	ND	ND	ND	0.049 J
Aroclor 1260	---	---	---	mg/kg	ND	0.092 J	0.28 J	0.24 J	ND	ND	ND
Total PCBs	0.1	1	1	mg/kg	ND	0.092	0.28	0.24	ND	ND	0.049

Notes:
[1] Ref: 6 NYCRR Chapter IV Subpart 375.6: *Remedial Program Soil Cleanup Objectives* , Effective December 14, 2006.
[2] UNR - Unrestricted Use SCO.
[3] RR - Restricted-Residential SCO.
[4] COMM - Commercial SCO.
Restricted Use SCO's pertain to protection of public health.
mg/kg - milligrams per kilogram (parts per million).
ND - Not Detected
Exceeds UNR
Exceeds UNR and RR
Exceeds UNR, RR, and COMM
J - Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

Alpha Omega Products, LLC
Alpha Portland (Otisca Industries) Site
Town of Dewitt, Onondaga County, NY

TABLE 15 : ANALYTICAL DATA SUMMARY - SEDIMENT (PFAS)

Sampling Dates: As Noted
Analytical Method: As Indicated
Matrix: Soil

COMPOUND	GUIDANCE VALUE[1] (FOR ANTICIPATED SITE USE)			UNITS	SAMPLE IDENTIFICATION						
	UNR[2]	RR[3]	COMM[4]		SS - 1 12/15/2023	SS - 2 12/15/2023	SS - 3 12/15/2023	SS - 3 (DUP) 12/15/2023	SS - 4 12/15/2023	SS - 5 12/15/2023	SS - 6 12/15/2023
Perfluorobutanoic acid	0.66	33.0	500	µg/kg	ND	ND	0.28 J	0.32 J	ND	0.28 J	ND
Perfluoropentanoic acid	0.66	33.0	500	µg/kg	ND	0.027 J	ND	ND	ND	0.34 J	ND
Perfluorohexanoic acid	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	0.22	ND
Perfluoroheptanoic acid	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	0.16	ND
Perfluorooctanoic acid	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	0.43	ND
Perfluorononanoic acid	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	0.16 J	ND
Perfluorodecanoic acid	0.66	33.0	500	µg/kg	ND	ND	ND	0.034 PF-23/J	ND	0.083 J	ND
Perfluoroundecanoic acid	0.66	33.0	500	µg/kg	ND	0.044 J	0.15 J	0.14 J	0.027 J	0.18 J	ND
Perfluorododecanoic acid	0.66	33.0	500	µg/kg	ND	0.024 J	0.056 J	0.059 J	ND	0.056 J	ND
Perfluorotridecanoic acid	0.66	33.0	500	µg/kg	ND	ND	0.061 J	0.09 J	ND	0.054 J	ND
Perfluorotetradecanoic acid	0.66	33.0	500	µg/kg	ND	ND	ND	0.039 J	ND	0.026 J	ND
Perfluorobutanesulfonic acid	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND
Perfluorohexanesulfonic acid	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	0.028 J	ND
Perfluoroheptanesulfonic acid	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanesulfonic acid	0.88	44.0	440	µg/kg	ND	0.25	0.61	0.67	0.059 PF-23/J	0.6	ND
Perfluorodecanesulfonic acid	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanesulfonamide	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND
N-methyl perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND
N-ethyl perfluorooctanesulfonamidoacetic acid (N - EeFOSAA)	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND
Perfluoropentapesultonic acid	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND
Hexfluoropropylene oxide dimer acid	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND
4, 8-Dioxa-3H-perfluorononaoic acid	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND
perfluoro-3-methoxlpropanoic acid	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND
Perfluoro-4-methoxybutanic acid	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND
Nonafluoro-3, 6-dioxaheptanoic acid	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND
4:2 Fluorotelomer sulfonic acid	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND
6:2 Fluorotelomer sulfonic acid	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND
8:2 Fluorotelomer sulfonic acid	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND
3:3 Fluorotelomer carboxylic acid	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND
5:3 Fluorotelomer carboxylic acid	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND
7:3 Fluorotelomer carboxylic acid	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND
N-methylperfluorooctane sulfonamide	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND
N-ethylperfluorooctane sulfonamide	0.66	33.0	500	µg/kg	ND	ND	ND	ND	ND	ND	ND
N-methylperfluorooctane sulfonamidoethanol	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND
N-ethylperfluorooctane sulfonamidoethanol	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonc acid	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND
11-Chloroeicafluoro-3-oxaundecane-1-sulfonic acid	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND
Perfluorododecanesulfonic acid	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND
Perfluorononanesulfonic acid	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND
Perfluoropentanesulfonic acid	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND
Perfluoro sulfonic acid	0.88	44.0	440	µg/kg	ND	ND	ND	ND	ND	ND	ND

Notes:
[1] Ref: NYSDEC Sampling, Analysis and Assessment of Per-and Polyfluoroalkyl Substances (PFAS), April 2023.
[2] UNR - Unrestricted Use SCO.
[3] RR - Restricted-Residential SCO.
[4] COMM - Commercial Use SCO.
Restricted Use SCO's pertain to protection of public health.
µg/kg - micrograms per kilogram (parts per billion).
Exceeds UNR
Exceeds UNR and RR
Exceeds UNR, RR, and COMM
J - Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).
PF-23 - Qualifier ion ratio <50% of associated calibration. Detection is suspect.

Alpha Omega Products, LLC
Alpha Portland (Otisca Industries) Site
Town of Dewitt, Onondaga County, NY

TABLE 16 : ANALYTICAL DATA SUMMARY - SURFACE WATER (VOC's)

Sampling Date:	As Indicated
Analytical Method:	As Indicated
Matrix:	Water

Compound	Standard or Guidance Value (GV)[1]	Units	SAMPLE IDENTIFICATION						
			SW-1	SW-2	SW-3	SW-3 DUP	SW-4	SW-5	SW-6
			12/15/2023	12/15/2023	12/15/2023	12/15/2023	12/15/2023	12/15/2023	12/15/2023
1,1,1-Trichloroethane	---	µg/L	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	---	µg/L	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane (FREON 113)	---	µg/L	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	---	µg/L	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	---	µg/L	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	---	µg/L	ND	ND	ND	ND	ND	ND	ND
1,2,3 - Trichlorobenzene	---	µg/L	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	µg/L	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-choloropropane	---	µg/L	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	---	µg/L	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5	µg/L	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	---	µg/L	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5	µg/L	ND	ND	ND	ND	ND	ND	ND
1,2 - Dichloropropane	---	µg/L	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	5	µg/L	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane (p-Dioxane)	18,000	µg/L	ND	ND	ND	ND	ND	ND	ND
2-Butanone	---	µg/L	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	---	µg/L	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Acetone	---	µg/L	ND	3.7 J	3.9 J	3.7 J	3.3 J	3.4 J	ND
Benzene	10	µg/L	ND	ND	ND	ND	ND	ND	ND
Bromochloromethane	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Bromoform	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Bromomethane	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Carbon Disulfide	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	µg/L	ND	ND	ND	ND	ND	ND	ND
Chlorodifluoromethane	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Chloroethane	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Chloroform	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Chloromethane	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Cis-1,2-Dichloroethene	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Cis-1,3-Dichloropropene	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Methylene Acetate	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Methyl-Tert-Butyl-Ether	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Methylcyclohexane	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	200	µg/L	ND	ND	ND	ND	ND	ND	ND
Styrene	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	1 (GV)	µg/L	ND	ND	ND	ND	ND	ND	ND
Toluene	6000	µg/L	ND	ND	ND	ND	ND	ND	ND
Trans-1,2-Dichloroethene	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Trans-1,3-Dichloropropene	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	40	µg/L	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5	µg/L	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Xylenes	---	µg/L	ND	ND	ND	ND	ND	ND	ND

Notes:

6 NYCRR Part 703: *Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations* and NYSDEC *Technical and Operational Guidance Series (TOGS) 1.1.1: Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations,* June 1998 (Including April 2000, June 2004 and February 2023 Addendums). Standard or Guidance Value is for Class C Surface Water.

µg/L - micrograms per liter (parts per billion)
ND - Not Detected
--- No Standard or Guidance Value in above reference
Exceeds Guidance Value
Exceeds Standard
J - Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

Alpha Omega Products, LLC
Alpha Portland (Otisca Industries) Site
Town of Dewitt, Onondaga County, NY

TABLE 17 : ANALYTICAL DATA SUMMARY - SURFACE WATER (SVOC's)

Sampling Date:	As Indicated
Analytical Method:	As Indicated
Matrix:	Water

Compound	Standard or Guidance Value (GV)[1]	Units	SAMPLE IDENTIFICATION						
			SW-1	SW-2	SW-3	SW-3 DUP	SW-4	SW-5	SW-6
			12/15/2023	12/15/2023	12/15/2023	12/15/2023	12/15/2023	12/15/2023	12/15/2023
(3+4)- Methylphenol	---	µg/L	ND	ND	ND	ND	ND	ND	ND
1,1 -Biphenyl	---	µg/L	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	---	µg/L	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	---	µg/L	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	1	µg/L	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	5	µg/L	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	5	µg/L	ND V-04	ND V-04	ND V-04	ND V-04	ND V-04	ND V-04	ND V-04
2,4-Dinitrotoluene	---	µg/L	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	---	µg/L	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	---	µg/L	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	---	µg/L	ND	ND	ND	ND	ND	ND	ND
2- Methylnaphthalene	4.7 (GV)	µg/L	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	---	µg/L	ND	ND	ND	ND	ND	ND	ND
2- Nitroaniline	---	µg/L	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	---	µg/L	ND	ND	ND	ND	ND	ND	ND
3,3-Dichlorobenzidine	---	µg/L	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	---	µg/L	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	---	µg/L	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenylether	---	µg/L	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	---	µg/L	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	---	µg/L	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	---	µg/L	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	---	µg/L	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20	µg/L	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Acetophenone	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Anthracene	3.8 (GV)	µg/L	ND	ND	ND	ND	0.84 J	ND	ND
Atrazine	0.005	µg/L	ND	ND	ND	ND	ND	ND	ND
Benzaldehyde	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.03 (GV)	µg/L	ND	0.47 J	ND	ND	2.50 J	ND	ND
Benzo (a) pyrene	---	µg/L	ND	ND	ND	ND	0.89 J	ND	ND
Benzo (b) fluoranthene	---	µg/L	ND	ND	ND	ND	1.60 J	ND	ND
Benzo (g,h,i) perylene	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Benzo (k) fluoranthene	---	µg/L	ND	ND	ND	ND	0.73 J	ND	ND
bis (2-chloroethoxy) methane	---	µg/L	ND	ND	ND	ND	ND	ND	ND
bis (2-chloroethyl) ether	---	µg/L	ND	ND	ND	ND	ND	ND	ND
bis (2-chloroisopropyl) ether	---	µg/L	ND	ND	ND	ND	ND	ND	ND
bis (2-Ethylhexyl) phthalate	0.6	µg/L	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Caprolactam	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Carbazole	---	µg/L	ND	ND	ND	ND	0.53	ND	ND
Chrysene	---	µg/L	ND	ND	ND	ND	2.70 J	ND	ND
Di-n-butyl phthalate	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	---	µg/L	ND V-04	ND V-04	ND V-04	ND V-04	ND V-04	ND V-04	ND V-04
Dibenz (a,h) anthracene	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	---	µg/L	ND	1.5 J	ND	ND	9.2	ND	ND
Fluorene	0.54 (GV)	µg/L	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.00003	µg/L	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.01	µg/L	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	0.45	µg/L	ND V-05	ND V-05	ND V-05	ND V-05	ND V-05	ND V-05	ND V-05
Hexachloroethane	0.6	µg/L	ND	ND	ND	ND	ND MS-09	ND	ND
Indeno (1,2,3-cd) pyrene	---	µg/L	ND	ND	ND	ND	0.44 J	ND	ND
Isophorone	---	µg/L	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	---	µg/L	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Napthalene	13 (GV)	µg/L	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	1	µg/L	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	5 (GV)	µg/L	ND	ND	ND	ND	2.5 J	ND	ND
Phenol	1	µg/L	ND	ND	ND	ND	ND	ND	ND
Pyrene	4.6 (GV)	µg/L	ND	0.99 J	ND	ND	6.1	ND	ND

Notes:

6 NYCRR Part 703: *Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations* and NYSDEC *Technical and Operational Guidance Series (TOGS) 1.1.1: Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations* , June 1998 (Including April 2000, June 2004 and February 2023 Addendums). Standard or Guidance Value is for Class C Surface Water.

µg/L - micrograms per liter (parts per billion)

ND - Not Detected

--- No Standards or Guidance Value in above reference

Exceeds Guidance Value

Exceeds Standard

J - Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

V-04 - Initial calibration did not meet method specifications. Compound was calibrated using a response factor where %RSD is outside of method specified criteria. Reported result is estimated.

V-05 - Continuing calibration verification (CCV) did not meet method specifications and was biased on the low side for this compound.

MS-09 - Matrix spike recovery and/or matrix spike duplicate recovery outside of control limits. Possibility of sample metrix effects that lead to a low bias for reported result or non-homogeneous sample aliquots cannot be eliminated.

Alpha Omega Products, LLC
Alpha Portland (Otisca Industries) Site
Town of Dewitt, Onondaga County, NY

TABLE 18 : ANALYTICAL DATA SUMMARY - SURFACE WATER (METALS)

Sampling Date:	As Indicated
Analytical Method:	As Indicated
Matrix:	Water

Compound	Standard or Guidance Value (GV)[1]	Units	SAMPLE IDENTIFICATION						
			SW-1	SW-2	SW-3	SW-3 DUP	SW-4	SW-5	SW-6
			12/15/2023	12/15/2023	12/15/2023	12/15/2023	12/15/2023	12/15/2023	12/15/2023
Aluminum	100 (GV)	µg/L	210	42 J	24 J	ND	80	20 J	ND
Antimony	3	µg/L	ND	ND	ND	ND	ND	ND	ND
Arsenic	150	µg/L	ND	ND	ND	ND	ND	ND	ND
Barium	---	µg/L	120	140	140	130	68	210	220
Beryllium	11 (GV)	µg/L	ND	ND	ND	ND	ND	ND	ND
Cadmium	0.85[2]	µg/L	ND	ND	ND	ND	ND	ND	ND
Calcium	---	µg/L	95,000	79,000 MS-19	80,000	81,000	69,000	87,000	89,000
Chromium, Hexavalent	11	µg/L	ND	ND	ND	ND	ND	ND	ND
Chromium	0.86[2]	µg/L	ND	ND	ND	ND	ND	ND	ND
Cobalt	5	µg/L	ND	ND	ND	ND	ND	ND	ND
Copper	0.96[2]	µg/L	**8.9 J**	ND	ND	ND	ND	ND	ND
Cyanide	5.2 (GV)	µg/L	ND	ND	ND	ND	ND	ND	ND
Iron	---	µg/L	890	74	73	57	480	330	250
Lead	1.46[2]	µg/L	ND	ND	ND	ND	ND	ND	ND
Magnesium	---	µg/L	22,000	18,000	18,000	18,000	4,000	20,000	20,000
Manganese	---	µg/L	180	16	17	16	47	51	33
Mercury	0.0007	µg/L	ND	ND	ND	ND	ND	ND	ND
Nickel	0.997[2]	µg/L	**2.7 J**	ND	ND	ND	ND	ND	ND
Potassium	---	µg/L	3,100	2,900	2,800	2,800	4,500	2,800	2,900
Selenium	4.6	µg/L	ND	ND	ND	ND	ND	ND	ND
Silver	0.1	µg/L	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	µg/L	**61,000**	**65,000**	**61,000**	**62,000**	1,400 J	**72,000**	**72,000**
Thallium	8	µg/L	ND	ND	ND	ND	ND	ND	ND
Vanadium	14	µg/L	ND	ND	ND	ND	ND	ND	ND
Zinc	2,000 (GV)	µg/L	17	ND	ND	ND	5 J	ND	ND

Notes:

6 NYCRR Part 703: *Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations* and NYSDEC T*echnical and Operational Guidance Series (TOGS) 1.1.1: Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations* , June 1998 (Including April 2000, June 2004 and February 2023 Addendums). Standard or Guidance Value is for Class C Surface Water.

[2] Does not reflect adjustment for hardness

µg/L - micrograms per liter (parts per billion)

ND - Not Detected

--- No Standard or Guidance Value in above reference

Exceeds Guidance Value

Exceeds Standard

J - Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

MS-19 - Sample to spike ratio is greater than or equal to 4:1. Spiked amount is not representive of the native amount in the sample. Appropriate or meaningful recoveries cannot be calculated.

Alpha Omega Products, LLC
Alpha Portland (Otisca Industries) Site
Town of Dewitt, Onondaga County, NY

TABLE 19 : ANALYTICAL DATA SUMMARY - SURFACE WATER (PCB's)

Sampling Date:	As Indicated
Analytical Method:	As Indicated
Matrix:	Water

Compound	Standard or Guidance Value (GV)[1]	Units	SAMPLE IDENTIFICATION						
			SW-1	SW-2	SW-3	SW-3 DUP	SW-4	SW-5	SW-6
			12/15/2023	12/15/2023	12/15/2023	12/15/2023	12/15/2023	12/15/2023	12/15/2023
Arcolor 1016	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Arcolor 1221	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Arcolor 1232	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Arcolor 1242	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Arcolor 1248	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Arcolor 1254	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Arcolor 1260	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Total PCBs	0.000001	µg/L	ND	ND	ND	ND	ND	ND	ND

Notes:
6 NYCRR Part 703: *Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations* and NYSDEC *Technical and Operational Guidance Series (TOGS) 1.1.1: Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations* , June 1998 (Including April 2000, June 2004 and Februrary 2023 Addendums). Standard or Guidance Value is for Class C Surface Water.
µg/L - micrograms per liter (parts per billion)
ND - Not Detected
--- No Standard or Guidance Value in above reference
Exceeds Guidance Value
Exceeds Standard

Alpha Omega Products, LLC
Alpha Portland (Otisca Industries) Site
Town of Dewitt, Onondaga County, NY

TABLE 20 : ANALYTICAL DATA SUMMARY - SURFACE WATER (PFAS)

Sampling Date: As Indicated
Analytical Method: As Indicated
Matrix: Water

Compound	Standard or Guidance Value (GV)[1]	Units	SAMPLE IDENTIFICATION						
			SW-1	SW-2	SW-3	SW-3 (DUP)	SW-4	SW-5	SW-6
			12/15/2023	12/15/2023	12/15/2023	12/15/2023	12/15/2023	12/15/2023	12/15/2023
Perfluorobutanoic acid	---	µg/L	0.0051	0.0047	0.0038	0.0029 J	0.0081 R-06	0.0025 J	0.0039
Perfluoropentanoic acid	---	µg/L	ND	0.0027	0.0032	0.0026	0.0013 R-06/J	0.002	0.0027
Perfluorohexanoic acid	---	µg/L	0.00053 J	0.0017	0.0016	0.0013	0.0012	0.0013	0.0016
Perfluoroheptanoic acid	---	µg/L	0.00033 J	0.00062 J	0.00051 J	0.00058 J	0.0016	0.00051 J	0.00058 J
Perfluorooctanoic acid	---	µg/L	ND	0.0012	0.001	0.0012	0.0016	ND	0.0015
Perfluorononanoic acid	---	µg/L	ND	0.00041 J	0.00032 J	0.00029 J	0.00067 J	ND	0.00033 J
Perfluorodecanoic acid	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Perfluoroundecanoic acid	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Perfluorododecanoic acid	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Perfluorotridecanoic acid	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Perfluorotetradecanoic acid	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Perfluorobutanesulfonic acid	160	µg/L	0.0011	0.00097	0.00097	0.0011 Z-01	0.00059	0.00089 Z-01	0.00085 J
Perfluorohexanesulfonic acid	160	µg/L	0.00052 J	0.0004 J	0.00042 J	0.00036 J	0.00027 J	0.00028 J	0.00034 J
Perfluoroheptanesulfonic acid	160	µg/L	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanesulfonic acid	160	µg/L	0.00083 J	0.0018	0.0014	0.0012	0.0012 R-06	0.00073 J	0.0012
Perfluorodecanesulfonic acid	160	µg/L	ND	ND	ND	ND	ND	ND	ND
Perfluorooctanesulfonamide	160	µg/L	0.00038 J	0.00029 J	ND	ND	0.00032 R-06/J	0.00035 J	ND
N-methyl perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	---	µg/L	ND	ND	ND	ND	ND	ND	ND
N-ethyl perfluorooctanesulfonamidoacetic acid (N - EeFOSAA)	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Perfluoropentapesultonic acid	160	µg/L	ND	ND	ND	ND	ND	ND	ND
Hexfluoropropylene oxide dimer acid	---	µg/L	ND	ND	ND	ND	ND	ND	ND
4, 8-Dioxa-3H-perfluorononaoic acid	---	µg/L	ND	ND	ND	ND	ND	ND	ND
perfluoro-3-methoxlpropanoic acid	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Perfluoro-4-methoxybutanic acid	---	µg/L	ND	ND	ND	ND	ND	ND	ND
Nonafluoro-3, 6-dioxaheptanoic acid	---	µg/L	ND	ND	ND	ND	ND	ND	ND
4:2 Fluorotelomer sulfonic acid	160	µg/L	ND	ND	ND	ND	ND	ND	ND
6:2 Fluorotelomer sulfonic acid	160	µg/L	ND	ND	ND	ND	ND	ND	ND
8:2 Fluorotelomer sulfonic acid	160	µg/L	ND	ND	ND	ND	ND	ND	ND
3:3 Fluorotelomer carboxylic acid	---	µg/L	ND	ND	ND	ND	ND	ND	ND
5:3 Fluorotelomer carboxylic acid	---	µg/L	ND	ND	ND	ND	ND	ND	ND
7:3 Fluorotelomer carboxylic acid	---	µg/L	ND	ND	ND	ND	ND	ND	ND
N-methylperfluorooctane sulfonamide	---	µg/L	ND	ND	ND	ND	ND	ND	ND
N-ethylperfluorooctane sulfonamide	---	µg/L	ND	ND	ND	ND	ND	ND	ND
N-methylperfluorooctane sulfonamidoethanol	160	µg/L	ND	ND	ND	ND	ND	ND	ND
N-ethylperfluorooctane sulfonamidoethanol	160	µg/L	ND	ND	ND	ND	ND	ND	ND
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonc acid	160	µg/L	ND	ND	ND	ND	ND	ND	ND
11-Chloroeicafluoro-3-oxaundecane-1-sulfonic acid	160	µg/L	ND	ND	ND	ND	ND	ND	ND
Perfluorododecanesulfonic acid	160	µg/L	ND	ND	ND	ND	ND	ND	ND
Perfluorononanesulfonic acid	160	µg/L	ND	ND	ND	ND	ND	ND	ND
Perfluoropentanesulfonic acid	160	µg/L	ND	ND	ND	ND	ND	ND	ND
Perfluoro sulfonic acid	160	µg/L	ND	ND	ND	ND	ND	ND	ND

Notes:

NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1: Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998 (Including April 2000, June 2004 and February 2023 Addendums). Standard or Guidance Value is for Class C Surface Water.

[1] Ref: NYSDEC 2023 Addendum to June 1998 Division of Water Technical and Operational Series (T.O.G.S.) No. 1.1.1. Guidance values are for Class C surface water.

µg/L - micrograms per liter (parts per billion)

ND - Not Detected

--- No Guidance Value in above reference

Exceeds Guidance Value

Exceeds Standard

J - Detected but below the Reporting Limit (lowest calibration standard); therefore, result is an estimated concentration (CLP J-Flag).

Z-01 -Analyte detected in method blank > 1/3 MRL

R-06 - Matrix spike duplicate RPD is outside of control limits. Reduced precision is anticipated for reported result for this compound in this sample.

INVESTIGATION-DERIVED WASTE (IDW) MANAGEMENT DOCUMENTATION

NON-HAZARDOUS WASTE MANIFEST

SO 524024

...nt or type (Form designed for use on elite (12 pitch) typewriter)

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N/A

Manifest Document No. 24-0083

2. Page 1 of 1

3. Generator's Name and Mailing Address
Alpha Cement
Ogle Road
Jamesville, NY 13811

SAME

4. Generator's Phone (607 793-4202)

5. Transporter 1 Company Name: Paragon Environmental Construction, Inc.

6. US EPA ID Number: NYR 000119289

A. State Transporter's ID: 7A-516

B. Transporter 1 Phone: (315) 699-0840

7. Transporter 2 Company Name

8. US EPA ID Number

C. State Transporter's ID

D. Transporter 2 Phone

9. Designated Facility Name and Site Address
Industrial Oil Tank Svc., Inc.
120 Dry Road
Oriskany, NY 13424

10. US EPA ID Number: NYR000005298

E. State Facility's ID

F. Facility's Phone: (315) 736-6080

11. WASTE DESCRIPTION	Containers No.	Containers Type	13. Total Quantity	14. Unit Wt./Vol.
a. Non-DOT Regulated Liquid	1	DM	25	G
b. Non-DOT Regulated Solids	1	DM	125.	lbs
c.				
d.				

Rec. 2 drums

G. Additional Descriptions for Materials Listed Above
A). Non RCRA Liquids Water Profile #5083470
B). Non RCRA Solids Drill Cuttings Profile #5033471

H. Handling Codes for Wastes Listed Above
A). R
B). L

15. Special Handling Instructions and Additional Information
Emergency Contact: Paragon Environmental Construction, Inc. @ 315-699-0840

GENERATOR

16. **GENERATOR'S CERTIFICATION:** I hereby certify that the contents of this shipment are fully and accurately described and are in all respects in proper condition for transport. The materials described on this manifest are not subject to federal hazardous waste regulations.

Printed/Typed Name: on behalf of Alpha Cement - Reynolds
Signature: Reynolds
Date: Month 9 Day 12 Year 24

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Reynolds
Signature: Reynolds
Date: Month 9 Day 12 Year 24

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of the waste materials covered by this manifest, except as noted in item 19.
Printed/Typed Name: Brad A. Jones
Signature
Date: Month 9 Day 13 Year 24

NON-HAZARDOUS WASTE

PRINTED ON RECYCLED PAPER USING SOYBEAN INK
PRINTED WITH SOY INK

CAMP FIELD LOG

Alpha Omega Products, LLC
Alpha Portland (Otisca Industries) Site
Town of Dewitt, Onondaga County, NY

COMMUNITY AIR MONITORING PROGRAM (CAMP) FIELD LOG						
Soil Boring	**Date**	**Time**	**Photoionization Detection Readings [Ambient Air] Parts Per Million (ppm)**			
			Upwind	Downwind	Between Boring & Residences	Between Boring & School
MW-1	11/27/23	10:00 am	0	0	0	0
		10:35 am	0	0	0	0
		11:15 am	0	0	0	0
		11:20 am	0	0	0	0
		11:35 am	0	0	0	0
		10:35 am	0	0	0	0
		12:00 pm	0	0	0	0
		12:27 pm	0	0	0	0
		1:03 pm	0	0	0	0
		1:32 pm	0	0	0	0
		2:08 pm	0	0	0	0
MW-4	11/27/23	2:50 pm	0	0	0	0
		3:18 pm	0	0	0	0
MW-4	11/28/23	8:20 am	0	0	0	0
		8.42 am	0	0	0	0
		9:13 am	0	0	0	0
MW-1	11/28/23	10:15 am	0	0	0	0
SB-1	11/28/23	12:30 pm	0	0	0	0
		12:58 pm	0	0	0	0
		1:23 pm	0	0	0	0
		1:51 pm	0	0	0	0
		2:24 pm	0	0	0	0

Weather: 11/27/24: 40 deg F, Partly Cloudy, Wind from N-NW
11/28/24: 28 deg F, Partly Cloudy, Wind from N-NW

Notes:

1. Upwind perimeter: 25 feet from soil borings.
2. Downwind perimeter/between boring & school or residences: 50 feet from soil boring.
3. Photoionization Detection (PID) Readings obtained using MiniRAE 3000 PID meter.

TDK Engineering Associates, PC

Alpha Omega Products, LLC
Alpha Portland (Otisca Industries) Site
Town of Dewitt, Onondaga County, NY

COMMUNITY AIR MONITORING PROGRAM (CAMP) FIELD LOG						
Soil Boring	**Date**	**Time**	**Photoionization Detection Readings [Ambient Air] Parts Per Million (ppm)**			
			Upwind	Downwind	Between Boring & Residences	Between Boring & School
MW-2	11/29/23	9:17 am	0	0	0	0
		9:50 am	0	0	0	0
		10:22 am	0	0	0	0
		10:51 am	0	0	0	0
		11:23 am	0	0	0	0
		11:58 am	0	0	0	0
		1:27 pm	0	0	0	0
		2:01 pm	0	0	0	0
		2:30 pm	0	0	0	0
		3:02 pm	0	0	0	0
		3:34 pm	0	0	0	0
SB-2	11/30/23	9:12 am	0	0	0	0
		9:41 am	0	0	0	0
		10:18 am	0	0	0	0
MW-5	11/30/23	12:32 pm	0	0	0	0
		1:05 pm	0	0	0	0
		1:32 pm	0	0	0	0
		2:10 pm	0	0	0	0
		2:42 pm	0	0	0	0
		3:17 pm	0	0	0	0

Weather: 11/29/24: 32 deg F, Cloudy, Wind from S-SW
11/30/24: 35 deg F, Sunny, Wind from S-SW

Notes:

1. Upwind perimeter: 25 feet from soil borings.
2. Downwind perimeter/between boring & school or residences: 50 feet from soil boring.
3. Photoionization Detection (PID) Readings obtained using MiniRAE 3000 PID meter.

TDK Engineering Associates, PC

Alpha Omega Products, LLC
Alpha Portland (Otisca Industries) Site
Town of Dewitt, Onondaga County, NY

COMMUNITY AIR MONITORING PROGRAM (CAMP) FIELD LOG						
Soil Boring	**Date**	**Time**	**Photoionization Detection Readings [Ambient Air] Parts Per Million (ppm)**			
			Upwind	Downwind	Between Boring & Residences	Between Boring & School
MW-3	12/01/23	9:48 am	0	0	0	0
		10:25 am	0	0	0	0
		10:50 am	0	0	0	0
		11:18 am	0	0	0	0
SB-4	12/04/23	8:35 am	0	0	0	0
		9:10 am	0	0	0	0
		9:38 am	0	0	0	0
		10:03 am	0	0	0	0
		10:35 am	0	0	0	0

Weather: 12/1/24: 47 deg F, Cloudy, Wind from S-SW
12/4/24: 40 deg F, Cloudy, Intermittent Light Rain, Wind from S-SW

Notes:

1. Upwind perimeter: 25 feet from soil borings.
2. Downwind perimeter/between boring & school or residences: 50 feet from soil boring.
3. Photoionization Detection (PID) Readings obtained using MiniRAE 3000 PID meter.